

Petroleum Supply Monthly

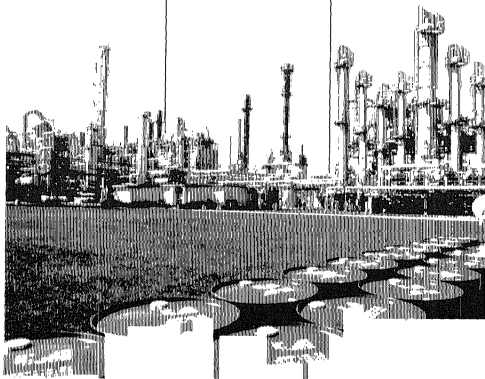
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EIA Petroleum Data Available On Magnetic Tapes

The Energy Information Administration (EIA) has announced that petroleum supply statistics are now available on two magnetic tapes. One tape contains final 1983 petroleum supply statistics by month, taken from the *Petroleum Supply Annual*; the other contains 1984 statistics to date by month, from the *Petroleum Supply Monthly*. The first monthly tape released will be for the period January through June 1984. The monthly tape will be updated each month with the latest month's statistics. Both tapes include full documentation.

Tapes will be sold for \$140 each and should be referenced by NTIS number:

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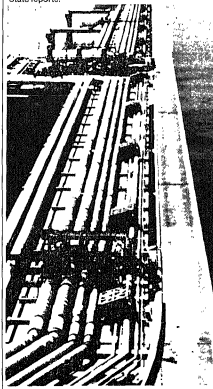
EIA Program Contact: Joseph E. Kelly, 202/252-4810

EIA Media Contact (NEIC): Leola Withrow, 202/252-1171

DOE Press Contact: Bob White, 202/252-5610

This Month in the PSM

This issue of the *Petroleum Supply Monthly* focuses on crude oil production statistics. "Comparisons of Independent Statistics on Petroleum Supply," compares data from EIA's *Petroleum Supply Annual* with statistics from independent sources both inside and outside EIA. This article, which begins on page xiii discusses EIA data series for crude oil imports, motor gasoline supplied, and distillate and residual fuel oil supplied, as well as crude oil production. A companion article, "An Evaluation of Crude Oil Production Statistics" beginning on page xvii compares crude oil production volumes reported in EIA's petroleum supply publications with those shown in State reports.



Petroleum Focus

Petroleum Supply Summary	xi
Comparisons of Independent Statistics on Petroleum Supply	xiii
An Evaluation of Crude Oil Production Statistics	xvii

Summary Statistics—through October 1984

Crude Oil and Petroleum Products Overview ..	2
Crude Oil Supply and Disposition	6
Crude Oil and Petroleum Products Imports ..	8
Finished Motor Gasoline Supply and Disposition	11
Distillate Fuel Oil Supply and Disposition ..	13
Residual Fuel Oil Supply and Disposition ..	15
Liquefied Petroleum Gases Supply and Disposition	17
Other Petroleum Products Supply and Disposition	18
Sources	19

Detailed Statistics—September 1984

National Statistics

1. U.S. Petroleum Balance	23
2. Supply and Disposition of Crude Oil and Petroleum Products	24
3. Year-to-Date Supply and Disposition of Crude Oil and Petroleum Products	25
4. Daily Average Supply and Disposition of Crude Oil and Petroleum Products	26
5. Year-to-Date Daily Average Supply and Disposition of Crude Oil and Petroleum Products	27

Supply and Disposition of Crude Oil and Petroleum Products by PAD Districts

6. PAD District I	28
7. PAD District II	29
8. PAD District III	30
9. PAD District IV	31
10. PAD District V	32

Production of Crude Oil and Lease Condensates

11. Production by PAD District and State, July 1984	33
---	----

Natural Gas Processing

12. Plant Production of Petroleum Products by PAD Districts	34
---	----

Refinery Operations by PAD District

13. Refinery Input of Crude Oil and Petroleum Products	35
14. Refinery Production of Petroleum Products	36
15. Percent Refinery Yield of Petroleum Products	37

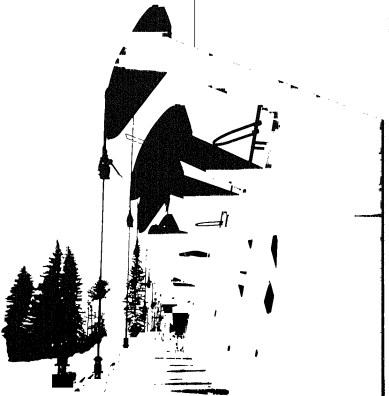
Contents (Continued)

	Page		Page
Imports and Exports of Crude Oil and Petroleum Products		Explanatory Notes	
16. Imports by PAD District	38	1. Data Collection Methodology	81
17. Year-to-Date Imports by PAD District	39	1.1 Weekly Petroleum Supply Reporting System (WPSRS)	81
18. Imports by Source and PAD District	40	1.2 Monthly Petroleum Supply Reporting System (MPSRS)	82
19. Year-to-Date Imports by Source and PAD District	44	1.3 Census Import (IM-145) and Export (EM-522 and EM-594) Data	84
20. Exports by PAD District	49	2. Supply	85
21. Year-to-Date Exports by PAD District	50	3. Domestic Crude Oil Production	85
22. Exports by Destination	51	4. Disposition	86
23. Year-to-Date Exports by Destination	53	5. Stocks	86
Stocks		6. Average Stock Levels	86
24. Stocks of Crude Oil and Petroleum Products by PAD District	55	7. Movements	87
25. Refinery and Bulk Terminal Stocks of Selected Petroleum Products by State	60	8. Preliminary Monthly Statistics	87
Transportation of Crude Oil and Petroleum Products Between PAD Districts		9. Notes on Tables	87
26. Movements by Pipeline, Tanker, and Barge	61	10. New Stock Basis	89
27. Movements by Pipeline	61	11. Stocks of Alaskan Crude Oil	90
28. Movements by Tanker and Barge	62	12. Changes in Petroleum Industry Reporting	90
29. Net Movements by Pipeline, Tanker, and Barge	63	13. NGL Import/Export Algorithm	93
Heavy Fuel Oils by Sulfur Content		Figures	
30. Production of Residual Fuel Oil	64	Petroleum Overview	4
31. Stocks of Residual Fuel Oil	64	Petroleum Products Supplied	4
32. Movements by Tanker and Barge	64	Crude Oil Supply and Disposition	5
33. Imports of Residual Fuel Oil by Country of Origin	65	Crude Oil Ending Stocks	5
34. Imports of Residual Fuel Oil by State of Entry	66	Motor Gasoline Supply and Disposition	10
Glossary		Motor Gasoline Ending Stocks	10
Definitions of Petroleum Products and Others Terms	69	Distillate Fuel Oil Supply and Disposition	12
Bureau of Mines Petroleum Refining Districts and PAD Districts	75	Distillate Fuel Oil Ending Stocks	12
Maps		Residual Fuel Oil Supply and Disposition	14
PAD Districts	76	Residual Fuel Oil Ending Stocks	14
Bureau of Mines Refinery Districts	76	Liquefied Petroleum Gases Supply and Disposition	16
District Map, Oil and Gas Division, Railroad Commission of Texas	77	Liquefied Petroleum Gases Ending Stocks	16
		Photo Credit	
		<i>Oil and Gas Journal</i> , page v (Courtesy of American Petroleum Institute Photo Library).	

Articles

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

U.S. Petroleum Developments: 1981.....	Mar 1982
Timeliness and Accuracy of Selected Monthly Petroleum Supply Data.....	Apr 1982
Focus on Motor Gasoline Statistics.....	Apr 1982
Focus on Crude Oil Production Data.....	Apr 1982
Motor Gasoline Outlook: Summer 1982.....	May 1982
Gasoline Use in the United States.....	May 1982
The Impact of Changing Vehicle Characteristics and Use on Motor Gasoline Demand.....	May 1982
1982 EIA Petroleum Refinery Survey Results.....	Jun 1982
What is a Refinery?.....	Jun 1982
Mid-year Petroleum Supply Review.....	Jul 1982
Petroleum Imports and Exports.....	Aug 1982
Refinery Shutdowns During 1982.....	Sep 1982
Distillate Fuel Oil Outlook: Winter 1982-83.....	Sep 1982
Recent Trends in Fuel Oil.....	Sep 1982
Futures Trading on Heating Oil Markets.....	Sep 1982
U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves, 1981 Annual Report.....	Oct 1982
Trends in Domestic Crude Oil Production and Reserves.....	Nov 1982
Major Energy Companies' Investment and Resource Development Patterns, 1974-80.....	Nov 1982
U.S. Petroleum Developments: 1982.....	Jan 1983
Trends in Petroleum Products Consumption, 1971-1982.....	Jan 1983
Refinery Shutdowns During 1982.....	Feb 1983
U.S. Petroleum Imports and Exports.....	Feb 1983
Petroleum Supply Reporting System Overview.....	Mar 1983
Summer Gasoline Overview.....	May 1983
Principal Factors Influencing Motor Gasoline Demand.....	May 1983
U.S. Petroleum Refinery Trends and Outlook.....	Jun 1983
Mid-Year Petroleum Review.....	Jul 1983
Timeliness and Accuracy of Selected Petroleum Supply Data Series.....	Aug 1983
Distillate Fuel Oil Overview: Winter 1983-84.....	Sep 1983
Fuel Oil Trends.....	Sep 1983
U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves.....	Sep 1983
LPG Market Trends.....	Nov 1983
National Petroleum Council Revises Minimum Operating Inventory Estimates.....	Dec(1) 1983
U.S. Petroleum Developments: 1983.....	Dec(2) 1983
An Overview of Petroleum Transportation.....	Dec(3) 1983
EIA Revises Petroleum Supply Reporting System.....	Jan 1984
Trends in Petroleum Product Consumption.....	Jan 1984
Petroleum Consumption in the Industrial Sector.....	Jan 1984
Motor Gasoline Outlook for Summer 1984.....	Feb 1984
Recent Motor Gasoline Trends.....	Feb 1984
New Patterns Emerging In U.S. Petroleum Imports and Exports.....	Feb 1984
Refinery Capacity Trends and Outlook.....	Apr 1984
Mid-Year Petroleum Review.....	Jun 1984
Timeliness and Accuracy of Selected Petroleum Supply Data Series.....	Jun 1984
Winter 1984-1985 Distillate Fuel Oil Outlook.....	Jul 1984
Distillate Fuel Oil Overview.....	Jul 1984
Recent Trends in Primary Petroleum Storage Capacity.....	Aug 1984
U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves.....	Aug 1984



Petroleum Supply Summary

Average Volume for Period (Million Barrels Per Day)	October			Cumulative January Through October		
	1984	1983	% Change	1984	1983	% Change
Products Supplied						
Motor Gasoline	6.7	6.6	1.5	6.7	6.6	1.4
Distillate Fuel Oil	2.6	2.6	0.4	2.6	2.6	0.6
Residual Fuel Oil	1.0	1.2	-18.0	1.4	1.4	-2.3
Other Products	5.1	4.5	12.6	4.8	4.4	8.7
Total	15.4	15.0	3.1	15.7	15.1	4.5
Crude Inputs to Refineries	12.2	11.8	3.7	12.1	11.7	3.5
Production						
Crude Oil, Natural Gas Liquids, and Other ¹	10.8	10.4	1.1	10.4	10.3	1.0
Imports						
Crude Oil ²	3.6	3.2	10.8	3.2	3.1	4.2
SPR	0.1	0.2	-31.7	0.2	0.2	-23.8
Products	1.8	1.8	1.7	2.0	1.7	16.7
Total	5.6	5.3	6.0	5.4	5.0	7.1
Exports						
Crude Oil	0.2	0.1	15.7	0.2	0.2	7.1
Products	0.5	0.4	15.1	0.5	0.6	-13.3
Total	0.7	0.6	15.3	0.7	0.8	-8.9
Stock Withdrawal						
Crude Oil ³	-0.2	-0.1	—	(s)	(s)	—
Products	-0.5	-0.4	—	-0.1	0.1	—
Stocks at End of Period (Million Barrels)						
Crude Oil						
SPR	436	367	18.7			
Other	337	349	-3.4			
Total	773	716	7.9			
Products						
Motor Gasoline ³	230	227	1.3			
Distillate Fuel Oil	155	163	-4.8			
Residual Fuel Oil	50	51	-2.7			
Other	326	350	-7.0			
Total	761	791	-3.8			
Total Crude Oil and Products	1,534	1,508	1.7			

1 Includes alcohol and other hydrocarbon liquids.

2 Excludes Strategic Petroleum Reserve (SPR).

3 Including blending components.

(s) = Less than 0.05 million barrels per day.

NOTE: Percent changes are based on unrounded values. October 1984 data are estimates based on weekly data, except for exports, NGL production, other hydrocarbons, and alcohol which are September 1984 monthly values. Totals may not be equal to sum of components due to independent rounding.

Source: Energy Information Administration, *Petroleum Supply Monthly*, September 1984.

Comparisons of Independent Statistics on Petroleum Supply

The Petroleum Supply Division of the Energy Information Administration (EIA) operates a Petroleum Supply Reporting System (PSRS) that includes weekly, monthly, and annual surveys. Statistics based on weekly data and preliminary monthly data are published in the *Petroleum Supply Monthly (PSM)*. Final statistics for each year are published in the *Petroleum Supply Annual (PSA)*. Comparisons between the PSM and PSA statistics, such as the comparison of data for 1981 through 1983 published in the June 1984 PSM, help EIA assess, maintain, and improve the quality of its data.

To assess the quality of EIA's petroleum supply data further, this article compares final annual statistics from the PSA, (and its predecessor, the *Petroleum Statement, Annual*) with statistics from independent data sources both inside and outside EIA. The comparisons cover statistics for 1979 through 1983. Adjustments have been made, where possible, to some of the statistics to account for differences in coverage, definitions, and units of measure (see footnotes in Tables 1-5). When the statistical series differ widely among themselves, it suggests that there are problems with one or more of the series, or that they measure different phenomena. When all of the series are in close agreement, there is no indication of inaccuracy.

From 1981 to 1983, many significant changes were made to the petroleum supply survey forms, processing procedures, and publications. A description of these changes was published in the June 1984 PSM. The comparisons presented here indicate that these changes have maintained or improved the quality of the PSA statistics.

Statistics on crude oil production are in close agreement for all 5 years. Agreement on crude oil imports is nearly as close. Agreement between the PSA motor gasoline supply statistics and comparable statistics improved dramatically in 1981, when a major change was made to the collection of motor gasoline data (See Note 12, page 90). The overall pattern is one of consistent improvement, sometimes appearing to occur in the petroleum supply series, sometimes in the others.

Crude Oil Production

Data on crude oil production developed for the PSA are based on data reported to EIA by State agencies and the U.S. Minerals Management Service. These data were compared with data developed by four other sources (Table 1).

Table 1. Comparison of Estimates for Crude Oil (Including Lease Condensate) Production

	Reference Estimate	Comparative Estimates			EIA Reserves and Natural Gas Division ⁶
	EIA, <i>Petroleum Supply Annual</i> ¹	American Petroleum Institute ²	Bureau of the Census ³	Oil & Gas Journal ⁴	
Volume (Million Barrels ⁵)					
1983	3,171	3,175	N/A	3,161	3,177
1982	3,157	3,164	N/A	3,156	3,107
1981	3,129	3,140	3,112	3,135	3,110
1980	3,146	3,180	3,137	3,147	3,134
1979	3,121	3,130	3,047	3,168	3,102
Comparative Estimate as a Percent of the Reference Estimate					
1983	—	100.1	N/A	99.7	100.2
1982	—	100.2	N/A	100.0	98.4
1981	—	100.4	99.5	100.2	99.4
1980	—	100.4	99.7	100.0	99.6
1979	—	100.3	97.6	101.5	99.4

N/A = Not available

¹From Table 2 in EIA's *Petroleum Supply Annual*, 1981 through 1983 and Table 8 in EIA's *Petroleum Statement, Annual*, 1979 and 1980.

²From issues of the American Petroleum Institute's *Monthly Statistical Report*. Annual values were obtained by summing monthly values.

³From Table 1 of the Bureau of the Census' *Annual Survey of Oil and Gas*, 1979 through 1981. This survey was discontinued in 1982.

⁴From issues of the *Oil and Gas Journal*. This journal publishes weekly averages of crude oil production in thousand barrels per day. These averages are used to produce monthly totals as follows: First, each week's average is used as a daily production estimate for each of the days the week covers. Then, for each month, the production estimates for the days covered by the month are summed. These totals are converted from thousand to million barrels.

⁵From EIA's U.S. *Crude Oil, Natural Gas, and Natural Gas Liquids Reserves Annual Report*, 1979 through 1983. Form EIA-23 is the source for crude oil production data in these publications.

⁶Volumes are rounded to the nearest million barrels. One barrel equals 42 U.S. gallons.

Note: Geographic coverage is the 50 United States and the District of Columbia with adjacent areas of the Outer Continental Shelf.

Source: Energy Information Administration, *Petroleum Supply Annual*, DOE/EIA-0340, *Petroleum Statement, Annual*, DOE/EIA-0106, U.S. *Crude Oil, Natural Gas, and Natural Gas Liquids Reserves Annual Report*, DOE/EIA-0218; Bureau of the Census, *Annual Survey of Oil and Gas*; American Petroleum Institute, *Monthly Statistical Report*; *Oil and Gas Journal*.

- EIA conducts an "Annual Survey of Oil and Gas Reserves," Form EIA-23. This survey is not part of the PSRS, however, the report covers production information for crude oil and lease condensate. The data from this survey have differed by less than 1 percent from the PSRS data in 4 of the 5 years studied.
- Prior to 1982, the Industry Division of the Bureau of the Census conducted surveys that collected information on oil and gas field exploration, development, and production. The results of these surveys were published in the *Current Industrial Report, Annual Survey of Oil and Gas*. After its report on 1981 production, this survey was discontinued. In 1979 Census data differed from PSA data by 2.4 percent; the 1980 and 1981 data were within 0.5 percent.
- The American Petroleum Institute (API) *Monthly Statistical Report* is used as one of the comparative sources for crude oil (and lease condensate) production data. The API statistics compared here are based upon API monthly estimates. API data differed from PSA data by less than 0.5 percent in all 5 years studied.
- Each week statistics on a number of petroleum-related subjects, are published in the *Oil and Gas Journal*. Included is a weekly production report based on the *Journal's* estimate of crude oil and lease condensate production. From 1980 through 1983 the *Oil and Gas Journal* estimates were within 0.3 percent of the PSA data.

Crude Oil Imports

The PSRS data on imports of crude oil are collected using Form EIA-814, Monthly Imports Report. These data have remained within about 2 percent of estimates by the Bureau of the Census and the API since 1979 (Table 2).

- Data from the Census Bureau's *U.S. Imports for Consumption and General Imports* series are compiled utilizing U.S. Customs Service documents on imports into the United States and its territories. Because these data contain imports into U.S. territories and PSA statistics do not, territorial imports reported in the Census Bureau's *U.S. Imports for Consumption and General Imports* publication were extracted from the Census total. In 1983, Census data differed from PSA data by 1.3 percent.
- Estimates of crude oil imports are published by the API in its *Monthly Statistical Report*. Because the API estimates do not include imports for the Strategic Petroleum Reserve, imports for the Strategic Petroleum Reserve were added to the API estimates. There was a 1.4 percent difference between API estimates and the PSA in 1983.

Motor Gasoline Supplied

Beginning in 1981, the EIA made several changes to the motor gasoline portion of the PSRS. These changes in-

Table 2. Comparison of Estimates for Crude Oil Imports

	Reference Estimate	Comparative Estimates	
	EIA, <i>Petroleum Supply Annual</i> ¹	American Petroleum Institute ²	Census/ Customs Estimate ³
Volume (Million Barrels) ⁴			
1983	1,215	1,232	1,199
1982	1,273	1,275	1,300
1981	1,606	1,617	1,635
1980	1,928	1,917	1,942
1979	2,380	2,346	2,415
Comparative Estimate as a Percent of the Reference Estimate			
1983	—	101.4	98.7
1982	—	100.2	102.1
1981	—	100.7	101.9
1980	—	99.5	100.8
1979	—	98.6	101.5

¹From Table 1 in EIA's *Petroleum Supply Annual*, 1961 through 1983 and Table 1 in EIA's *Petroleum Statement, Annual*, 1979 and 1980. This table also includes imports for the Strategic Petroleum Reserve (SPR) which were 85.3 million in 1983, 90.2 million in 1982, 93.3 million in 1981, 16.1 million in 1980, and 24.4 million in 1979.

²Estimate equals the sum of the annual estimate of imports derived from API's *Monthly Statistical Report* (which excludes imports for SPR), and the EIA estimates for imports for the SPR which are listed in footnote 1 above. Annual values were obtained by summing monthly values.

³Data on imports to Puerto Rico and the Virgin Islands which are included in the source for these estimates have been excluded from these estimates in keeping with the geographic coverage of the table. Data are from the Bureau of the Census, Trade Information Branch, FT-246 Annual, *U.S. Imports for Consumption and General Imports: TSUSA*, and IA-245X Annual, *U.S. Imports for Consumption and General Imports: TSUSA*, 1980 through 1983. Data for 1979 are from computer printouts of the Bureau of the Census Report IM-245X dated December 19, 1980.

⁴Volumes are rounded to the nearest million barrels. One barrel equals 42 U.S. gallons.

Note: Geographic coverage is the 50 United States and the District of Columbia.

Source: Energy Information Administration, *An Assessment of the Accuracy of Principal Data Series of the Energy Information Administration*, DOE/EIA-0282, *Petroleum Supply Annual*, DOE/EIA-0340, *Petroleum Statement, Annual*, DOE/EIA-0108; Bureau of the Census, *U.S. Imports for Consumption and General Imports: TSUSA*, FT-246, IA-245, and IM-245X; American Petroleum Institute, *Monthly Statistical Report*.

Table 3. Comparison of Estimates for Motor Gasoline Supplied for Domestic Use

	Reference Estimate	Comparative Estimates		
	EIA, Petroleum Supply Annual ¹	EIA, Petroleum Marketing Division ²	American Petroleum Institute ³	Federal Highway Administration ⁴
Volume (Million Barrels ⁵)				
1983	2,417	2,495	2,420	2,434
1982	2,387	2,451	2,376	2,413
1981	2,404	2,431	2,379	2,446
1980	2,408	2,573	2,523	2,486
1979	2,568	2,748	2,579	2,649
Comparative Estimate as a Percent of the Reference Estimate				
1983	—	103.2	100.1	100.7
1982	—	102.7	99.5	101.1
1981	—	101.1	99.0	101.7
1980	—	106.9	104.8	103.2
1979	—	107.0	100.4	103.2

¹Data from Table 2 in EIA's *Petroleum Supply Annual*, 1981 through 1983 and Table 2 in EIA's *Petroleum Statement, Annual*, 1979 and 1980.

²Data from the EIA-25, "Prime Suppliers Report" (computer printouts), 1979-1982. Prime supplier usually is the supplier or producer which makes the first sale of any product into the State. In 1983, the EIA-25 was incorporated into the EIA-782C, "Monthly Report of Petroleum Products Sold into States for Consumption."

³API publishes monthly estimates in thousand barrels per month of the volume of motor gasoline delivered from primary storage. The initial published monthly estimate is derived from API sources, but in later API publications the estimates are revised using EIA data. The values shown in the table are equal to the sums of the initial published API monthly estimates of motor gasoline.

⁴Data from Federal Highway Administration, *Highway Statistics*, Tables MF-21A and MF-24.

⁵Volumes are rounded to the nearest million barrels. One barrel equals 42 U.S. gallons.

Note: Geographic coverage is the 50 United States and the District of Columbia, except where indicated.

Source: Energy Information Administration, *Petroleum Supply Annual*, DOE/EIA-0340, *Petroleum Statement, Annual*, DOE/EIA-0108, *An Assessment of the Accuracy of Principal Data Series of the Energy Information Administration*, DOE/EIA-0292, EIA-25, "Prime Suppliers Report," EIA-782C "Monthly Report of Petroleum Products Sold into States for Consumption", Federal Highway Administration, *Highway Statistics*; American Petroleum Institute, *Monthly Statistical Report*

cluded expansion of the refinery survey to include non-refined blenders and the separation of blending components from finished motor gasoline as a reporting category. Also, survey forms were modified to more accurately describe refinery operations. Beginning in 1981, comparisons with three independent statistics show significant improvement in the PSRS motor gasoline data (Table 3). Prior to 1981, differences in estimates ranged as high as 7.0 percent. In 1983, two of the three comparative estimates were within 0.7 percent.

- The EIA's Petroleum Marketing Division surveys "Petroleum Product Sales into States for Consumption," Form EIA-782C. EIA-782C statistics may differ from the PSRS supply statistics by the amount of stock changes in the local distribution systems. The two statistics closed to within 1.1 percent after the PSRS changes in 1981, but have drifted to a 3.2-percent difference in 1983. This may be due to double-counting by the EIA-782C survey or incomplete coverage by the PSRS. The PSRS data on motor gasoline are being studied to check the current coverage of blending operations.
- The API's initial monthly estimates of motor gasoline supply are based on API sources. From 1981 through 1983 API estimates were within 1.0 percent of the PSA data. API surveys a sample of companies for each product for their *Weekly Statistical Report*. These data form the basis for the monthly estimates appearing in API's *Monthly Statistical Report*.

- The Federal Highway Administration publishes statistics on motor fuel use in their annual *Highway Statistics* publication. The Federal Highway Administration's total gasoline use data (with aviation gasoline deducted) were compared with PSRS motor gasoline supplied data. As does the EIA-782C survey, the Federal Highway Administration system measures sales rather than supply. The differences between the series have diminished each year; from 1980 through 1983 the differences decreased from 3.2 percent to 0.7 percent.

Distillate and Residual Fuel Oil Supplied

In 1981, EIA improved the procedures for calculating distillate fuel oil and residual fuel oil supply statistics. Comparisons of the PSRS statistics with the EIA-782C data (Tables 4 and 5) show that significant improvements in the closeness of the statistics have occurred since 1981 for both distillate fuel oil (including kerosene) and residual fuel oil. In 1983, the difference for distillate fuel oil was 1.7 percent compared with 5.3 percent in 1979. The difference for residual fuel oil was 1.7 percent in 1983, a considerable improvement from 23.4 percent in 1979. Since the PSRS statistics have stayed relatively close to the comparable API statistics, the improvements appear mostly to reflect improvements in the EIA-782C data.

Table 4. Comparison of Estimates for Distillate Fuel Oil (Including Kerosene) Supplied for Domestic Use

	Reference Estimate	Comparative Estimates	
	EIA, <i>Petroleum Supply Annual</i> ¹	EIA, Petroleum Marketing Division ²	American Petroleum Institute ³
Volume (Million Barrels ⁴)			
1983	1,028	1,045	1,027
1982	1,021	1,054	1,031
1981	1,079	1,067	1,108
1980	1,107	1,181	1,141
1979	1,277	1,345	1,291
Comparative Estimate as a Percent of the Reference Estimate			
1983	—	101.7	99.9
1982	—	103.2	101.0
1981	—	98.9	102.8
1980	—	108.7	103.1
1979	—	105.3	101.1

¹Data from EIA's *Petroleum Supply Annual*, Table 2, 1981 through 1983 and *Petroleum Statement, Annual*, Table 2, 1979 and 1980.

²Data from the EIA-25, "Prime Suppliers Report" (computer printouts), 1979-1982. Prime supplier usually is the supplier or producer which makes the first sale of any product into the State. In 1983, the EIA-25 was incorporated into the EIA-782C, "Monthly Report of Petroleum Products Sold into States for Consumption."

³API publishes monthly estimates in thousand barrels per month of the volume of distillate and kerosene delivered from primary storage. The initial published monthly estimate is derived from API sources, but in later API publications the estimates are revised using EIA data. The values shown in the table are equal to the sums of the initial published API monthly estimates of distillate and kerosene. In 1982, API discontinued publishing kerosene as a separate category, PSA data for kerosene supplied have been added to API distillate totals (47 million barrels in 1982 and 46 million barrels in 1983).

⁴Volumes are rounded to the nearest million barrels. One barrel equals 42 U.S. gallons.

Note: Geographic coverage is the 50 United States and the District of Columbia.

Sources: Energy Information Administration, *Petroleum Supply Annual*, DOE/EIA-0340, *Petroleum Statement, Annual*, DOE/EIA-0106, *An Assessment of the Accuracy of Principal Data Series of the Energy Information Administration*, DOE/EIA-0292, EIA-25, "Prime Suppliers Report," EIA-782C, "Monthly Report of Petroleum Products Sold into States for Consumption"; American Petroleum Institute, *Monthly Statistical Report*.

Table 5. Comparison of Estimates for Residual Fuel Oil Supplied for Domestic Use

	Reference Estimate	Comparative Estimates	
	EIA, <i>Petroleum Supply Annual</i> ¹	EIA, Petroleum Marketing Division ²	American Petroleum Institute ³
Volume (Million Barrels ⁴)			
1983	519	510	525
1982	627	584	622
1981	762	723	780
1980	918	815	937
1979	1,032	791	1,044
Comparative Estimate as a Percent of the Reference Estimate			
1983	—	98.3	101.2
1982	—	93.1	99.2
1981	—	94.9	102.4
1980	—	88.8	102.1
1979	—	76.6	101.2

¹Data from Table 2 in EIA's *Petroleum Supply Annual*, 1981 through 1983 and Table 2 in EIA's *Petroleum Statement, Annual*, 1979 and 1980.

²Data from the EIA-25, "Prime Suppliers Report" (computer printouts), 1979-1982. Prime supplier usually is the supplier or producer which makes the first sale of any product into the State. In 1983, the EIA-25 was incorporated into the EIA-782C, "Monthly Report of Petroleum Products Sold into States for Consumption."

³API publishes monthly estimates in thousand barrels per month of the volume of residual oil delivered from primary storage. The initial published monthly estimate is derived from API sources, but in later API publications the estimates are revised using EIA data. The values shown in the table are equal to the sums of the initial published API monthly estimates of residual oil.

⁴Volumes are rounded to the nearest million barrels. One barrel equals 42 U.S. gallons.

Note: Geographic coverage is the 50 United States and the District of Columbia.

Sources: Energy Information Administration, *Petroleum Supply Annual*, DOE/EIA-0340, *Petroleum Statement, Annual*, DOE/EIA-0106, EIA-25, "Prime Suppliers Report," EIA-782C, "Monthly Report of Petroleum Products Sold into States for Consumption"; American Petroleum Institute, *Monthly Statistical Report*.

An Evaluation of Crude Oil Production Statistics

The Energy Information Administration (EIA) publishes domestic crude oil production data in the *Petroleum Supply Monthly (PSM)* and the *Petroleum Supply Annual (PSA)*, based on data compiled by State agencies and the U.S. Minerals Management Service¹ rather than on EIA survey data.² Although EIA surveys crude oil production annually to balance the accounting of petroleum reserves, this does not meet the need to track trends in petroleum supply.³ The accuracy of EIA's monthly reported crude oil production depends, therefore, upon the accuracy of State and Federal crude oil reporting systems. EIA recently reviewed the rules and processes governing compilation of crude oil and lease condensate production information by 11 States that account for more than 90 percent of domestic crude oil production.⁴ EIA also compared production volumes reported in EIA publications with those shown in the States' production reports to assess the accuracy of information flow between State regulatory agencies and EIA. This article presents the findings of that assessment.

State Reporting Systems

Systematic differences in definitions, rules, and regulations of the different regulatory agencies were found to have little impact on the reported data for most States.

For example, some regulatory bodies require that crude oil and lease condensate be reported separately, while others require them reported combined. EIA deals with these forms of categorization by aggregating crude oil and lease condensate in the PSM and the PSA.

A second systematic difference occurs because some States require that respondents report the volumes of liquids extracted from the producing formation, while other States have respondents report only the net volume sold and removed from the lease. The volume of petroleum liquids used on the lease for fuel or other purposes or lost through spillage usually does not exceed 1 percent of extracted production, with the exception of California.

In California a thermal enhanced oil recovery technique maximizes the total oil recovered but creates a reporting dissimilarity with other States. This technique for the production of heavy oil uses a substantial portion of the extracted oil produced as fuel to generate steam for the recovery process. While exact data on oil volumes used as fuel in the field are extremely difficult to obtain, available evidence suggests that the amount may be as much as 12 percent of extracted production in California. California producers report production as the volume extracted; therefore, it is important to remember that up to 12 percent of the production reported and published is crude oil that never leaves the lease and is unavailable for processing at refineries. During the next decade, as new petroleum recovery techniques spread, there may be an increasing gap between petroleum reported produced and petroleum available for refining.

Evaluating the State-to-EIA Information Flow

The quality of EIA's published crude oil and lease condensate production data depends on the timeliness of State reporting and on how EIA utilizes the information. Table 1 presents 1980 through 1983 annual comparisons of preliminary production data supplied by 11 States and published in the PSM, revised data published in the PSA, and final data published in each State's annual report. The table shows that about half of the major revisions to State data were incorporated in EIA's published annual figures.

The variation between the sum of final data published by EIA and the sum of final data published by the 11 States for 1980 was less than 0.1 percent. Only Kansas had a final EIA-State difference greater than 1 percent for 1980. At that time, States were queried during the summer following the report year allowing them and the U.S. Minerals Management Service time to compile the final crude oil figures used by EIA. Thus, EIA was able to publish State revisions as they became available with an accuracy of within 0.1 percent of the final State data sum. Beginning with the 1981 PSA, the publication deadline for annual data was advanced several months. States are now queried during the spring.

The 1981 schedule change for publication of the PSA makes the comparison of PSA data with final State data particularly important. While not all revisions were received and processed prior to publishing the PSA's for 1981, 1982, and 1983, EIA's comparison suggests that even if no revisions were received and processed, the crude oil production estimates published in the PSA are likely to differ from final State data by no more than 2 to 3 percent for a few States. The actual differences between the PSA and the final State figures are likely to be less than 1 percent for most States, and differences in total U.S. production should be 0.4 percent or less.

Preliminary and final EIA data for aggregated U.S. production show slightly greater divergence from final State-published data from 1981 through 1983 than the

¹The U.S. Minerals Management Service, formerly the U.S. Geological Survey, is the source of Federal offshore production information for Texas, Louisiana, and California. Federal offshore production is included in the production of the adjacent State.

²The PSM publishes a preliminary national estimate of crude oil production prepared by the Dallas Field Office. This article focuses on the individual State figures.

³EIA's Reserves and Natural Gas Division surveys natural gas and crude oil well operators and publishes annual reserve and production figures in the U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves Annual Report, DOE/EIA-0215. These crude oil production figures are used to maintain a balance in reserve accounting. These figures differ from those shown for production in the PSA and other EIA publications.

⁴The States covered in this study are Alaska, California, Colorado, Kansas, Louisiana, Michigan, Mississippi, New Mexico, Oklahoma, Texas, and Wyoming.

Table 1. Reported Annual Crude Oil Production (Including Lease Condensate) for Selected States
(Thousand Barrels, except where noted)

State	Initial EIA Production (PSM)	Final EIA Production (PSA)	Final State Annual Report Production	EIA Adjustments (PSM - PSA) ¹		Difference (PSA - Final State) ²		Difference (PSM - Final State) ³	
				Volume	Percent	Volume	Percent	Volume	Percent
1980									
Alaska	581,684	581,646	581,541	38	0.0	5	0.0	43	0.0
California	356,644	358,923	357,109	-279	-0.1	-186	-0.1	-465	-0.1
Colorado	28,566	29,802	29,802	-237	-0.8	0	0.0	-237	-0.8
Kansas	60,152	60,151	58,541	1	0.0	1,610	2.8	1,811	2.8
Louisiana	480,964	486,141	486,141	-2,177	-0.5	0	0.0	-2,177	-0.5
Michigan	32,753	33,808	33,808	-1,055	-3.1	0	0.0	-1,055	-3.1
Mississippi	36,533	35,945	35,545	588	1.6	0	0.0	588	1.6
New Mexico	75,456	75,324	75,324	132	0.2	0	0.0	132	0.2
Oklahoma	151,960	150,140	150,140	1,820	1.2	0	0.0	1,820	1.2
Texas	975,239	977,435	977,435	-2,197	-0.2	0	0.0	-2,197	-0.2
Wyoming	125,309	125,352	125,352	2,947	2.3	0	0.0	2,947	2.3
11-State Sum	2,905,295	2,905,678	2,905,249	-419	-0.0	1,428	0.0	1,010	0.0
U.S. Total	3,145,519	3,145,355	3,145,330	154	0.0	1,035	0.0	1,189	0.0
1981									
Alaska	587,337	587,337	587,339	0	0.0	-2	-0.0	-2	-0.0
California	334,958	384,958	384,992	0	0.0	-34	-0.0	-34	-0.0
Colorado	30,151	30,303	30,409	-152	-0.5	-105	-0.3	-258	-0.9
Kansas	58,810	58,810	58,810	0	0.0	0	0.0	0	0.0
Louisiana	447,158	449,315	451,216	-2,159	-0.5	-1,901	-0.4	-4,060	-0.9
Michigan	32,685	32,685	32,685	0	0.0	0	0.0	0	0.0
Mississippi	34,637	34,204	34,381	433	1.3	-177	-0.5	256	0.7
New Mexico	71,588	71,588	72,155	0	0.0	-587	-0.8	-587	-0.8
Oklahoma	153,287	154,095	154,057	-768	-0.5	-1	-0.0	-770	-0.5
Texas	945,132	945,132	944,584	0	0.0	448	0.0	448	0.0
Wyoming	130,553	130,553	122,174	0	0.0	8,389	8.9	8,389	6.9
11-State Sum	2,883,264	2,885,911	2,879,882	-2,647	-0.1	6,029	0.2	3,382	0.1
U.S. Total	3,122,410	3,128,524	3,123,229	-6,214	-0.2	5,395	0.2	-819	-0.0
1982									
Alaska	618,742	618,910	618,914	-168	-0.0	-4	-0.0	-172	-0.0
California	401,572	401,572	401,387	0	0.0	185	0.0	185	0.0
Colorado	30,582	30,545	30,788	37	0.1	-243	-0.8	-206	-0.7
Kansas	70,525	70,525	70,525	0	0.0	0	0.0	0	0.0
Louisiana	457,913	458,395	458,356	-482	-0.1	-1	-0.0	-483	-0.1
Michigan	31,177	31,462	31,462	-285	-0.9	0	0.0	-285	-0.9
Mississippi	34,080	33,047	33,047	1,033	3.1	0	0.0	1,033	3.1
New Mexico	70,833	71,024	71,024	-191	-0.3	0	0.0	-191	-0.3
Oklahoma	158,621	158,621	158,621	0	0.0	0	0.0	0	0.0
Texas	923,888	925,296	918,987	-1,428	-0.2	6,306	0.7	4,881	0.5
Wyoming	124,371	118,300	118,716	6,071	5.1	-416	-0.4	5,555	4.8
11-State Sum	2,622,284	2,817,697	2,911,837	4,587	0.2	5,830	0.2	10,417	0.4
U.S. Total	3,161,022	3,195,715	3,151,203	4,307	0.1	5,512	0.2	5,819	0.3
1983									
Alaska	625,811	625,527	625,527	284	0.0	0	0.0	284	0.0
California	404,688	404,688	405,317	0	0.0	-629	-0.2	-629	-0.2
Colorado	29,004	29,059	29,026	-46	-0.2	24	0.1	-22	-0.1
Kansas	71,595	71,594	71,594	1	0.0	0	0.0	1	0.0
Louisiana	477,553	475,599	483,977	-1,715	-0.4	-1,408	-0.3	-3,124	-0.7
Michigan	31,396	31,738	32,205	-350	-1.1	-489	-1.5	-819	-2.5
Mississippi	31,243	31,455	31,451	-212	-0.7	4	0.0	-208	-0.7
New Mexico	74,729	75,169	75,169	-440	-0.6	0	0.0	-440	-0.6
Oklahoma	158,572	158,604	158,585	368	0.2	-61	-0.0	307	0.2
Texas	900,737	902,575	904,221	-1,839	-0.2	-1,545	-0.2	-3,484	-0.4
Wyoming	114,067	119,303	121,303	-4,236	-3.8	-3,000	-2.5	-7,236	-6.0
11-State Sum	2,620,085	2,928,371	2,935,455	-8,285	-0.3	-7,084	-0.2	-15,370	-0.5
U.S. Total	3,159,375	3,170,909	3,181,930	-11,624	-0.4	-10,931	-0.3	-22,555	-0.7

¹The cumulative monthly State production from the *Petroleum Supply Monthly*, Table 11, or the *Monthly Petroleum Statement*, Table 17, minus the volume reported in the *Petroleum Supply Annual*, Table 9.

²The *Petroleum Supply Annual* final production volume minus the production published in State annual reports. Percent difference is calculated by dividing the volumetric difference by the final State production.

³The cumulative monthly State production published in the *Petroleum Supply Monthly*, Table 11, or the *Monthly Petroleum Statement*, Table 17, minus the production published in State annual reports. Percent difference is calculated by dividing the volumetric difference by the final State production.

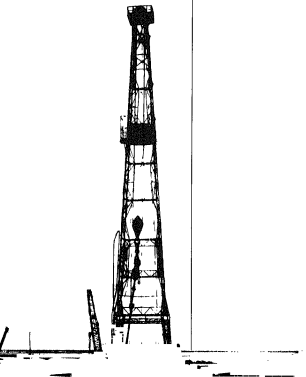
Sources: Energy Information Administration, *Petroleum Supply Monthly*, DOE/EIA-0109, *Petroleum Supply Annual*, DOE/EIA-0340, and predecessor reports, and *Evaluation of the Energy Information Administration Crude Oil and Natural Gas Production Reporting Systems*, Service Report, (Washington D.C., December 1982). Published data for individual States reported by State regulatory agencies. Federal offshore crude oil and lease condensate production reported in *Outer Continental Shelf Statistics*, U.S. Department of Interior, Geological Survey, Conservation Division, June 1981, and *Calendar Year Report*, U.S. Department of Interior, Minerals Management Service Office of Offshore Minerals Management.

did in 1980. Except for Wyoming and Michigan, less than 1 percent variation exists between final EIA and final State data between 1981 and 1983. Of 33 initial EIA-final State differences, only 5 exceeded 1 percent: in 1981, Wyoming, 6.9 percent; in 1982, Mississippi, 3.1 percent and Wyoming, 4.8 percent; and in 1983, Michigan, -2.5 percent and Wyoming, -6.0 percent. Wyoming is a special case, because the State does not publish monthly numbers. EIA estimates Wyoming's monthly production from the previous year's figures. This tends to result in larger differences in EIA's preliminary esti-

mate and the final State crude oil production figure. Wyoming accounted for the 0.2-percent difference between the final EIA sum of production and the final State sum in 1981.

In summary, EIA's review indicates that its present preliminary production data from State agencies and the U.S. Minerals Management Service, as published, closely approximate final data published by those agencies and can provide a reliable timely estimate of crude oil production at the State level.

Summary Statistics



Crude Oil¹ and Petroleum Products Overview

		Field Production			Stock Withdrawal ²		Petroleum Products Supplied	Ending Stocks ³
		Total Domestic ⁴	Crude Oil	Natural Gas Plant Production	Crude Oil ⁵	Petroleum Products		Crude Oil ⁶ and Petroleum Products
								Thousand Barrels per Day
1973	Average	10,975	9,208	1,738	11	-145	17,308	1,008
1974	Average	10,498	8,774	1,688	-62	-117	16,953	^a 1,074
1975	Average	10,045	8,375	1,633	^a -17	^a -145	16,322	1,133
1976	Average	9,774	8,132	1,603	-39	98	17,461	1,112
1977	Average	9,913	8,245	1,618	-170	-378	16,431	1,312
1978	Average	10,329	8,707	1,597	-78	172	18,847	1,279
1979	Average	10,179	8,652	1,584	-148	-25	18,513	1,341
1980	Average	10,214	8,597	1,573	-98	-42	17,056	^a 1,392
1981	Average	10,230	8,572	1,609	^a -290	^a 130	16,058	1,484
1982	January	10,128	8,509	1,578	-401	1,298	16,124	1,456
	February	10,312	8,702	1,563	-242	1,230	16,001	1,428
	March	10,284	8,687	1,572	121	1,047	15,560	1,392
	April	10,188	8,591	1,542	-37	1,583	16,046	1,346
	May	10,244	8,683	1,518	29	-66	14,847	1,347
	June	10,212	8,646	1,511	40	-489	14,998	1,360
	July	10,229	8,658	1,513	-147	-926	14,821	1,333
	August	10,215	8,634	1,524	-440	-44	14,839	1,408
	September	10,279	8,701	1,518	263	-447	15,022	1,414
	October	10,299	8,701	1,530	-548	-47	14,859	1,432
	November	10,355	8,697	1,609	-398	-361	15,008	1,455
	December	10,276	8,598	1,628	128	688	15,487	^a 1,430
	Average	10,252	8,649	1,550	-136	293	16,286	
1983	January	10,331	8,697	1,580	^a -499	^a 772	14,722	1,452
	February	10,388	8,758	1,575	-320	1,113	14,792	1,430
	March	10,275	8,700	1,541	83	1,810	15,541	1,372
	April	10,322	8,776	1,506	-402	308	14,682	1,374
	May	10,190	8,631	1,493	-15	-602	14,505	1,394
	June	10,261	8,667	1,523	-122	-276	15,289	1,405
	July	10,226	8,636	1,539	233	-909	15,019	1,426
	August	10,284	8,679	1,552	-796	-271	15,480	1,460
	September	10,447	8,764	1,602	-239	-621	15,508	1,485
	October	10,434	8,771	1,604	-374	-442	14,862	1,508
	November	10,451	8,770	1,641	114	-182	15,500	1,510
	December	9,983	8,397	1,544	-329	2,133	16,726	1,454
	Average	10,289	8,688	1,559	-214	234	15,231	
1984	January	10,282	8,659	1,585	-342	1,085	16,726	1,430
	February	10,410	8,725	1,629	188	-1,353	15,389	1,464
	March	10,354	8,718	1,588	-2	643	16,017	1,444
	April	10,347	8,688	1,616	-865	-128	15,404	1,465
	May	10,415	8,732	1,610	-616	-422	15,596	1,497
	June	10,598	8,743	1,612	-85	-77	15,887	1,502
	July	10,487	8,769	1,649	-184	-184	15,547	1,514
	August	10,476	8,781	1,663	250	165	16,130	1,500
	September*	10,464	8,769	1,665	R 266	R -738	R 15,315	R 1,514
	October**	NA	8,847	NA	-342	-495	15,478	1,534
	Average	NA	8,744	NA	-147	-138	15,732	

increases in stocks and a positive number indicates a decrease.

other hydrocarbons, and alcohol.
in Reserve.
Petroleum Reserve.respondents were added to surveys affecting stocks
See Explanatory Note 10.

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Crude Oil¹ and Petroleum Products Overview (continued)

		Imports			Exports			Net ² Imports
		Total	Crude Oil ³	Petroleum Products	Total	Crude Oil	Petroleum Products	
Thousand Barrels per Day								
1973	Average	6,256	3,244	3,012	231	2	229	6,025
1974	Average	6,112	3,477	2,635	221	3	218	5,892
1975	Average	6,066	4,105	1,951	269	6	264	5,846
1976	Average	7,313	5,207	2,026	223	8	215	7,099
1977	Average	8,907	6,615	2,193	243	50	193	9,565
1978	Average	8,363	6,356	2,096	362	158	204	8,082
1979	Average	8,466	5,519	1,837	472	235	237	7,984
1980	Average	6,909	5,263	1,646	544	287	258	6,365
1981	Average	5,996	4,396	1,599	595	228	367	5,401
1982	January	5,332	3,693	1,639	829	238	591	4,503
	February	4,807	2,990	1,817	804	304	499	4,003
	March	4,484	2,874	1,610	882	321	561	3,602
	April	4,378	2,849	1,529	786	174	611	3,593
	May	4,811	3,309	1,503	803	262	542	4,008
	June	5,327	3,636	1,491	703	94	609	4,624
	July	5,690	4,248	1,642	741	229	512	5,149
	August	5,244	3,051	1,392	868	304	564	4,386
	September	5,414	3,636	1,778	731	184	606	4,624
	October	5,305	3,670	1,636	932	270	662	4,374
	November	5,744	3,852	1,842	786	262	524	4,958
	December	4,606	3,000	1,605	860	193	667	3,746
	Average	5,113	3,486	1,625	815	236	679	4,296
1983	January	4,438	2,964	1,474	973	117	856	3,464
	February	3,726	2,267	1,459	865	262	603	2,861
	March	3,690	2,290	1,400	801	174	627	2,889
	April	4,727	3,116	1,609	809	86	721	3,916
	May	5,089	3,360	1,729	848	280	568	4,241
	June	5,326	3,577	1,749	774	144	630	4,552
	July	5,741	3,571	1,870	571	145	426	5,170
	August	5,159	4,227	1,938	663	172	491	5,486
	September	6,129	4,210	1,919	684	177	507	5,445
	October	5,258	3,446	1,812	575	140	435	4,682
	November	5,210	3,337	1,879	679	186	494	4,531
	December	5,933	3,213	1,820	639	95	544	4,394
	Average	5,051	3,329	1,722	739	164	575	4,312
1984	January	5,347	3,029	2,318	575	153	422	4,772
	February	5,643	2,852	2,691	582	185	397	5,061
	March	5,253	3,455	1,798	840	236	605	4,413
	April	5,219	3,417	1,902	685	172	483	4,664
	May	5,916	3,927	1,989	765	219	540	5,150
	June	5,304	3,410	1,893	864	222	642	4,440
	July	5,387	3,646	1,741	535	108	429	4,851
	August	5,036	3,244	1,793	732	190	542	4,305
	September*	R 5,173	R 3,284	R 1,888	664	162	502	4,510
	October**	5,572	3,731	1,842	NA	NA	NA	NA
	Average	5,395	3,414	1,961	NA	NA	NA	NA

Footnotes continued

* See Explanatory Note 9.1

** Italics denote estimates based upon preliminary data. See Explanatory Note 8.

R = Revised data. NA = Not available.

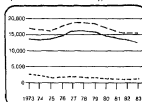
Note: Geographic coverage is the 50 United States and the District of Columbia.

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

Source: See the last page of this section.

Petroleum Overview

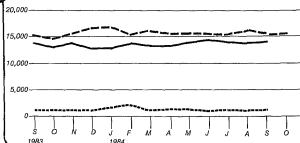
(Thousand Barrels Per Day)



Legend

- Petroleum Product Supplied
- - - Refinery Production
- ... Net Petroleum Product Imports

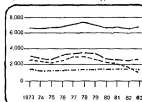
Annual



Monthly

Petroleum Products Supplied

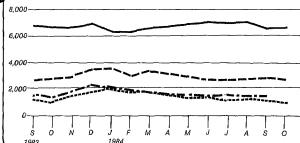
(Thousand Barrels Per Day)



Legend

- Motor Gasoline
- - - Distillate Fuel Oil
- ... Residual Fuel Oil
- . - LPG¹

Annual

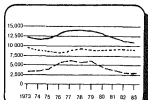


Monthly

¹ Liquefied Petroleum Gases

Crude Oil Supply and Disposition

(Thousand Barrels Per Day)

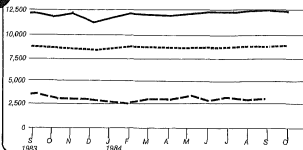


Legend

- Refinery Inputs
- - - Domestic Crude Oil Production
- ... Net Imports¹

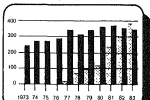
Annual

¹ Excludes SPR Imports



Crude Oil Ending Stocks

(Million Barrels)

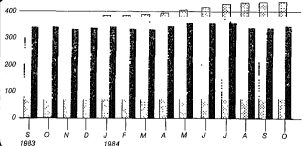


Legend

- Other Primary
- ▨ SPR
- ▤ Average Stock Range¹

Annual

¹ Level and width of Average Stock range for other primary crude oil based on 3 years of data Jul 81-Jun. 84. See Explanatory Note 6.



Monthly

Crude Oil¹ Supply and Disposition

		Supply							
		Field Production		Imports			Stock Withdrawal ²		Unaccounted for Crude Oil
		Total Domestic	Alaskan	Total	SPR ⁴	Other	SPR ⁴	Other	
Thousand Barrels per Day									
1973	Average	9,208	168	3,244		3,244		11	3
1974	Average	8,774	163	3,477		3,477		-62	-25
1975	Average	8,375	191	4,105		4,105		-17	17
1976	Average	8,192	172	5,287		5,287		-39	77
1977	Average	8,245	484	6,615	21	6,594	-30	-150	-6
1978	Average	8,707	1,229	6,366	162	6,196	-163	84	-67
1979	Average	8,552	1,401	6,519	67	6,452	-67	-61	-11
1980	Average	8,507	1,617	5,283	44	5,219	-45	-52	34
1981	Average	8,572	1,600	4,395	256	4,141	-336	* 46	83
1982	January	8,500	1,705	3,603	170	3,528	-150	-242	101
	February	8,702	1,707	2,000	150	2,830	-213	-29	156
	March	8,667	1,606	2,274	185	2,669	-235	357	2
	April	8,591	1,601	2,840	190	2,650	-233	196	231
	May	8,689	1,707	3,309	204	3,105	-176	205	111
	June	8,646	1,665	3,836	105	3,732	-105	144	133
	July	8,688	1,710	4,248	97	4,150	-67	-50	-20
	August	8,634	1,687	3,851	206	3,643	-206	-232	189
	September	8,701	1,705	3,636	139	3,497	-143	406	-210
	October	8,701	1,706	3,670	216	3,454	-216	-332	-242
	November	8,697	1,676	3,862	190	3,683	-179	-219	-124
	December	8,586	1,682	3,000	124	2,877	-125	252	35
	Average	8,648	1,686	3,488	168	3,323	-174	38	71
1983	January	8,687	1,732	2,564	218	2,746	-219	* -280	170
	February	8,758	1,717	2,267	197	2,070	-187	-123	262
	March	8,700	1,732	2,280	201	2,099	-184	267	31
	April	8,775	1,721	3,118	206	2,913	-197	-205	98
	May	8,631	1,662	3,360	268	3,071	-263	278	164
	June	8,567	1,687	3,577	180	3,387	-188	66	370
	July	8,536	1,716	3,671	274	3,597	-264	497	-167
	August	8,579	1,687	4,227	350	3,876	-350	-438	201
	September	8,784	1,738	4,210	308	3,901	-307	66	30
	October	8,771	1,733	3,446	202	3,244	-201	-73	44
	November	8,770	1,720	3,337	171	3,166	-135	250	34
	December	8,397	1,711	3,213	193	3,020	-252	-78	117
	Average	8,688	1,714	3,329	234	3,096	-234	20	114
1984	January	8,650	1,741	3,029	200	2,829	-173	-169	451
	February	8,726	1,740	2,982	88	2,888	-86	282	487
	March	8,718	1,740	3,485	146	3,207	-147	145	66
	April	8,688	1,725	3,417	170	3,247	-170	-386	590
	May	8,752	1,793	3,527	246	3,601	-246	-371	463
	June	8,743	1,792	3,410	308	3,101	-309	214	490
	July	8,760	1,760	3,646	329	3,317	-328	144	25
	August	8,781	1,725	3,244	180	3,064	-179	429	393
	September*	8,750	1,725	R 3,294	R 53	R 3,240	R -53	R 320	234
	October*	8,847	1,708	3,737	138	3,593	-138	-204	NA
	Average	8,744	1,746	3,414	186	3,227	-184	38	NA

¹ Includes lease condensate.² Stocks are totals as of end of period.³ A negative number indicates an increase in stocks and a positive number indicates a decrease.⁴ Strategic Petroleum Reserve.⁵ Beginning in January 1983, crude oil used directly as fuel is shown as product supplied.⁶ Stocks of Alaskan crude oil in transit were included beginning in January 1981. Stock withdrawals are calculated using new basis stock levels. See Explanatory Notes 10 and 11.

Footnotes continued on following page.

Crude Oil¹ Supply and Disposition (continued)

		Supply	Disposition				Ending Stocks ²		
		Crude Used Directly ⁵	Crude Losses	Refinery Inputs	Exports	Products Supplied ⁶	Total Crude Oil	SPR ⁴	Other Primary
Thousand Barrels per Day							Million Barrels		
1973	Average	-18	13	12,431	2	NA	242		242
1974	Average	-15	13	12,133	3	NA	265		265
1975	Average	-17	13	12,442	6	NA	271		271
1976	Average	-18	15	13,416	8	NA	285		285
1977	Average	-14	16	14,602	50	NA	348	7	340
1978	Average	-14	16	14,739	158	NA	376	67	369
1979	Average	-13	16	14,648	235	NA	430	91	359
1980	Average	-13	16	13,481	287	NA	* 465	108	* 358
1981	Average	-38	5	12,470	228	NA	504	230	383
1982	January	-63	3	11,500	238	NA	606	235	371
	February	-64	2	11,296	304	NA	613	241	372
	March	-63	5	11,276	321	NA	609	249	361
	April	-65	3	11,392	174	NA	610	256	355
	May	-62	3	11,806	262	NA	609	261	348
	June	-60	7	12,494	94	NA	608	264	344
	July	-60	3	12,446	228	NA	613	267	346
	August	-57	2	11,871	304	NA	626	274	353
	September	-56	4	12,146	184	NA	619	278	341
	October	-51	2	11,749	270	NA	636	285	351
	November	-51	1	11,724	262	NA	648	290	358
	December	-53	1	11,514	190	NA	* 644	294	350
	Average	-58	3	11,774	236	NA			
1983	January	NA	2	11,143	117	71	660	301	360
	February	NA	3	10,633	262	71	669	306	363
	March	NA	2	10,850	174	70	667	312	355
	April	NA	2	11,433	88	68	679	318	361
	May	NA	1	11,800	280	63	679	327	353
	June	NA	(*)	12,284	144	64	683	332	351
	July	NA	2	12,360	146	65	676	341	335
	August	NA	1	12,162	172	64	700	352	349
	September	NA	1	12,482	177	66	708	361	347
	October	NA	1	11,782	140	63	716	367	340
	November	NA	2	12,004	186	64	713	371	341
	December	NA	1	11,234	66	67	723	379	344
	Average	NA	2	11,845	184	66			
1984	January	NA	1	11,579	153	64	733	384	346
	February	NA	1	12,100	185	65	727	387	340
	March	NA	2	11,936	236	62	728	392	336
	April	NA	(*)	11,883	172	64	744	397	348
	May	NA	2	12,243	219	62	764	404	359
	June	NA	2	12,283	222	61	766	414	353
	July	NA	1	12,087	108	60	772	424	348
	August	NA	1	12,403	190	63	764	420	335
	September*	NA	-2	R 12,327	162	66	R 756	R 431	R 325
	October**	NA	NA	12,219	NA	NA	773	438	337
	Average	NA	NA	12,105	NA	NA			

Footnotes continued.

* See Explanatory Note 3.2.

** Italics denote estimates based upon preliminary data. See Explanatory Note 8.

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

Note. Geographic coverage is the 50 United States and the District of Columbia.

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

Source: See the last page of this section.

Crude Oil and Petroleum Product Imports

		Imports from OPEC Sources ¹									
		Algeria	Libya	Saudi Arabia	United Arab Emirates	Indonesia	Iran	Nigeria	Venezuela	Other OPEC ²	Total Arab OPEC ³
		Thousand Barrels per Day									
1973	Average	136	164	486	71	213	223	459	1,135	108	2,993
1974	Average	100	4	461	74	300	469	713	978	88	3,280
1975	Average	282	232	715	117	390	280	762	702	122	3,601
1976	Average	432	453	1,230	254	539	298	1,025	700	134	5,086
1977	Average	559	723	1,380	335	641	535	1,143	890	287	6,193
1978	Average	649	854	1,144	385	573	555	919	845	226	5,751
1979	Average	636	858	1,356	281	420	304	1,080	890	212	5,637
1980	Average	488	554	1,261	172	348	9	857	481	130	4,300
1981	Average	311	319	1,129	81	366	0	620	406	90	3,323
1982	January	254	161	877	111	289	0	663	376	128	2,859
	February	139	92	602	89	244	0	584	365	102	2,297
	March	91	37	555	155	200	0	522	399	91	2,051
	April	85	0	511	122	215	0	427	428	85	1,871
	May	179	0	601	116	236	0	222	422	54	1,830
	June	115	0	503	94	215	72	537	361	110	2,086
	July	159	0	660	108	327	69	910	358	95	2,685
	August	181	0	489	133	271	27	574	299	133	2,107
	September	179	0	432	57	191	21	477	518	69	1,943
	October	248	7	494	61	242	108	313	504	106	2,084
	November	247	14	488	47	283	34	479	528	115	2,235
	December	155	0	237	12	265	88	462	369	73	1,690
	Average	170	26	552	92	248	35	514	412	97	2,146
1983	January	207	0	282	47	255	43	186	337	54	1,412
	February	115	0	214	8	217	0	92	293	28	1,058
	March	63	0	103	0	138	0	121	440	201	1,085
	April	227	0	162	(*)	210	0	189	523	125	1,432
	May	289	0	122	12	405	37	385	435	69	1,771
	June	300	0	188	40	466	38	467	335	138	1,973
	July	283	0	192	64	464	112	525	434	187	2,251
	August	378	0	448	52	433	213	454	511	230	2,728
	September	423	0	587	21	501	86	324	432	221	2,585
	October	251	0	628	16	368	12	307	337	169	2,108
	November	184	0	545	56	302	21	215	452	135	1,910
	December	144	0	569	45	294	9	329	415	163	1,989
	Average	240	0	337	30	338	48	392	422	144	1,582
1984	January	242	0	463	114	278	0	243	547	51	1,639
	February	348	0	324	33	267	0	244	481	174	1,731
	March	283	0	307	112	284	67	280	354	127	1,792
	April	280	0	320	95	221	0	288	561	158	1,644
	May	456	0	329	240	480	0	289	621	242	2,657
	June	284	0	411	46	415	0	243	574	139	2,112
	July	332	0	429	112	384	0	204	535	242	2,237
	August	404	0	438	82	281	0	114	487	216	2,021
	September	343	0	159	113	333	17	160	689	147	1,961
	Average	330	0	354	106	327	9	227	541	166	2,061

¹ Excludes petroleum imported into the United States indirectly from OPEC countries, primarily from Caribbean and West European areas, as refined petroleum products which were refined from crude oil produced in OPEC countries.

² Includes Ecuador, Gabon, Iraq, Kuwait, and Qatar.

³ Includes Algeria, Libya, Saudi Arabia, United Arab Emirates, Iraq, Kuwait, and Qatar. Footnotes continued on following page.

Crude Oil and Petroleum Product Imports (continued)

		Imports from Non-OPEC Sources ⁴										
		Bahamas	Canada	Mexico	Netherlands Antilles	Trinidad and Tobago	United Kingdom	Puerto Rico	Virgin Islands	Other Non OPEC	Total Non OPEC	Total Imports
		Thousand Barrels per Day										
1973	Average	174	1,326	16	585	255	15	80	329	465	3,263	6,259
1974	Average	164	1,070	8	511	251	8	90	381	340	2,832	6,112
1975	Average	152	846	71	332	242	14	90	406	300	2,454	6,056
1976	Average	118	599	87	275	274	31	88	422	353	2,247	7,313
1977	Average	171	517	178	211	269	128	105	466	850	2,614	8,907
1978	Average	160	467	318	220	253	180	94	429	494	2,613	8,363
1979	Average	147	538	439	231	190	202	92	431	548	2,810	8,456
1980	Average	78	455	533	225	178	178	88	388	481	2,609	6,905
1981	Average	74	447	522	107	133	375	62	327	534	2,672	5,996
1982	January	58	513	425	179	106	346	62	334	452	2,474	5,332
	February	67	537	476	221	120	181	38	362	508	2,510	4,807
	March	43	437	503	189	118	294	62	307	480	2,433	4,484
	April	82	360	476	184	168	247	38	288	680	2,507	4,387
	May	77	419	786	152	95	516	47	302	807	2,961	4,811
	June	32	481	797	148	129	557	58	322	708	3,231	5,327
	July	64	536	783	158	118	433	38	378	688	3,204	5,890
	August	80	443	853	145	106	520	24	317	850	3,137	5,244
	September	92	493	897	195	89	631	51	278	746	3,472	5,414
	October	45	459	682	148	109	666	52	262	601	3,222	5,306
	November	51	553	660	212	90	623	81	334	706	3,506	5,744
	December	88	561	689	174	102	438	48	336	480	2,916	4,606
	Average	65	482	685	175	112	456	60	316	627	2,960	5,113
1983	January	66	534	649	226	73	314	40	289	821	3,026	4,438
	February	92	586	722	183	81	183	50	182	558	2,658	3,726
	March	86	488	775	167	78	240	43	182	585	2,624	3,680
	April	174	454	861	216	85	421	20	183	759	3,295	4,727
	May	135	518	944	153	108	464	42	235	689	3,316	5,089
	June	137	586	830	173	120	440	48	262	757	3,353	5,326
	July	69	634	849	198	107	369	37	364	864	3,490	5,741
	August	144	542	906	197	90	461	40	313	738	3,431	6,159
	September	148	533	849	261	62	475	30	307	845	3,534	6,129
	October	171	532	771	172	106	414	48	357	589	3,151	5,258
	November	148	556	726	144	110	334	55	427	801	3,300	5,210
	December	127	604	710	153	113	429	22	278	626	3,063	5,033
	Average	125	647	826	189	96	382	40	282	701	3,168	5,051
1984	January	152	624	705	277	54	382	53	390	772	3,406	5,347
	February	142	620	747	268	77	336	56	418	1,063	3,772	5,643
	March	88	726	707	160	93	400	34	247	996	3,460	5,253
	April	88	691	859	207	91	282	37	257	863	3,375	5,319
	May	31	715	875	192	57	418	38	338	796	3,259	5,918
	June	50	499	732	234	104	318	53	268	934	3,182	5,304
	July	14	574	736	98	120	382	27	292	924	3,150	5,387
	August	57	551	621	205	95	386	34	236	826	3,015	5,036
	September	101	537	762	133	103	490	38	245	803	3,213	5,173
	Average	80	618	727	200	89	378	41	288	887	3,313	6,376

Footnotes continued

⁴ Includes petroleum imported into the United States indirectly from OPEC countries, primarily from Caribbean and West European areas, as refined petroleum products which were refined from crude oil produced in OPEC countries.

(*) = Less than 500 barrels per day.

Note: Beginning in October 1977, Strategic Petroleum Reserve Imports are included.

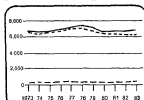
Total may not equal sum of components due to independent rounding.

Geographic coverage: The 50 United States and the District of Columbia.

Source: See the last page of this section.

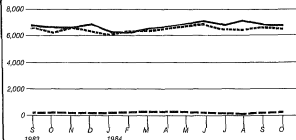
Motor Gasoline Supply and Disposition

(Thousand Barrels Per Day)



Annual

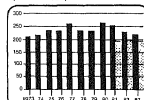
Legend
 — Product Supplied
 - - - Finished Gasoline Production
 . . . Finished Gasoline Imports



Monthly

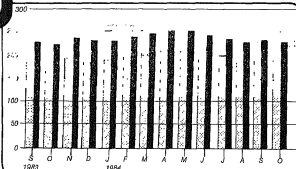
Motor Gasoline Ending Stocks

(Million Barrels)



Annual

Legend
 ■ Total Motor Gasoline¹
 □ Finished Motor Gasoline
 ▨ Average Stock Range²



Monthly

¹ Includes motor gasoline blending components and finished motor gasoline.

² Level and width of Average Stock Range for total motor gasoline based on 3 years of data, Jul. 81-Jun. 84. See Explanatory Note 6.

Finished Motor Gasoline Supply and Disposition

		Supply			Disposition			Ending Stocks ¹		
		Total Production	Imports ²	Stock Withdrawals ³	Exports	Products Supplied			Total Motor Gasoline ⁵	Finished Motor Gasoline
						Total	Unleaded ⁴	Unleaded		
Thousand Barrels per Day								Percent of Total	Million Barrels	
1973	Average	6,535	134	9	4	6,674	NA	NA	209	
1974	Average	6,360	204	-24	2	6,537	NA	NA	^a 218	
1975	Average	6,520	164	^a -28	2	6,875	NA	NA	235	
1976	Average	6,841	131	10	3	6,978	NA	NA	231	
1977	Average	7,033	217	-72	2	7,177	1,076	27.5	258	
1978	Average	7,169	190	54	1	7,412	2,521	34.0	238	
1979	Average	6,852	181	2	0	7,034	2,795	39.8	237	
1980	Average	6,506	140	-88	1	6,579	3,067	46.6	^a 261	
1981	Average ⁷	6,405	157	^a 26	2	6,588	3,264	49.5	253	
1982	January	6,167	128	-316	18	5,961	3,067	51.5	261	213
	February	5,889	133	172	8	6,196	3,210	51.8	257	208
	March	5,984	183	334	44	6,466	3,358	51.9	247	198
	April	6,085	185	650	33	6,897	3,495	50.7	221	179
	May	6,319	182	177	23	6,555	3,415	51.3	214	173
	June	6,754	230	-134	14	6,835	3,565	52.2	219	177
	July	6,765	225	-175	24	6,790	3,577	52.7	226	183
	August	6,419	291	-61	16	6,614	3,526	53.3	227	185
	September	6,527	223	-188	22	6,531	3,404	52.1	234	191
	October	6,262	185	-42	15	6,391	3,351	52.4	234	192
	November	6,273	211	101	11	6,574	3,451	52.5	^a 230	189
	December	6,542	176	-160	7	6,549	3,485	53.2	^a 235	^a 194
	Average	5,338	197	25	20	5,539	3,409	52.1		
1983	January	6,065	153	^a -167	0	6,051	3,364	55.8	250	207
	February	5,948	128	24	0	6,000	3,264	54.4	250	207
	March	5,905	186	768	23	6,836	3,622	53.0	223	183
	April	6,201	255	-3	1	6,452	3,492	54.1	221	183
	May	6,397	305	-63	1	6,617	3,558	53.8	223	185
	June	6,655	277	84	22	6,994	3,792	54.2	223	183
	July	6,707	302	-235	18	6,765	3,748	55.4	231	190
	August	6,537	250	161	13	6,936	3,836	55.3	226	185
	September	6,611	279	-149	14	6,727	3,691	54.9	228	189
	October	6,188	330	72	2	6,588	3,711	56.3	227	187
	November	6,634	269	-205	2	6,603	3,692	55.9	236	196
	December	6,308	224	339	25	6,646	3,866	57.9	222	186
	Average	6,340	247	45	10	6,622	3,647	55.1		
1984	January	6,037	233	-1	1	6,268	3,606	57.5	225	186
	February	6,320	303	-384	2	6,237	3,585	57.5	237	197
	March	6,375	343	-197	9	6,512	3,747	57.5	243	203
	April	6,526	308	-153	0	6,682	3,854	57.7	248	207
	May	6,650	329	-106	0	6,873	3,980	58.1	253	211
	June	6,620	272	217	17	7,062	4,210	59.4	245	204
	July	6,481	247	130	8	6,649	4,094	59.8	239	200
	August	6,436	243	437	1	7,114	4,263	60.2	225	187
	September*	R 6,545	R 333	R -263	2	R 6,614	3,982	59.8	R 235	R 194
	October**	6,414	325	-47	NA	6,688	NA	NA	230	192
	Average	6,440	293	-34	NA	6,896	NA	NA		

¹ Stocks are totals as of end of period.

² Beginning in 1981, excludes blending components.

³ A negative number indicates an increase in stocks and a positive number indicates a decrease.

⁴ Includes gasoline.

⁵ Includes motor gasoline blending components.

⁶ In January 1975, 1981, and 1983, numerous respondents were added to surveys affecting stocks reported and stock withdrawal calculations. See Explanatory Note 10.

⁷ Beginning in January 1981, survey forms were modified. See Explanatory Note 12.

⁸ See Explanatory Note 9.3.

** Italic denote estimates based upon preliminary data. See Explanatory Note 6.

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

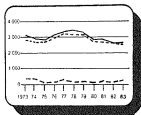
Note: Geographic coverage is the 50 United States and the District of Columbia.

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

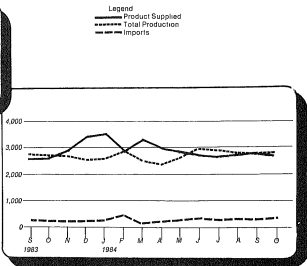
Source: See the last page of this section.

Distillate Fuel Oil Supply and Disposition

(Thousand Barrels Per Day)



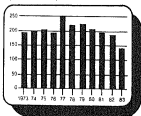
Annual



Monthly

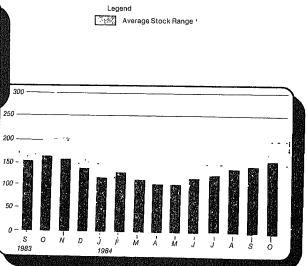
Distillate Fuel Oil Ending Stocks

(Million Barrels)



Annual

* Level and width of Average Stock Range for distillate fuel oil is based on 3 years on data Jul 81-Jun 84. See Explanatory Note 6



Monthly

Distillate Fuel Oil Supply and Disposition

		Supply			Disposition		Ending Stocks ¹	
		Total Production	Imports	Stock Withdrawals ²	Crude Used Directly ³	Exports	Products Supplied ³	
Thousand Barrels per Day								Milions Barrels
1973	Average	2,822	382	-115	2	8	3,092	198
1974	Average	2,669	288	-9	2	2	2,948	⁴ 200
1975	Average	2,654	155	⁴ 40	2	1	2,851	209
1976	Average	2,924	146	62	1	1	3,133	186
1977	Average	3,278	250	-176	1	1	3,352	250
1978	Average	3,167	173	93	1	3	3,432	216
1979	Average	3,153	193	-34	1	3	3,311	229
1980	Average	2,662	142	64	1	3	2,868	⁴ 205
1981	Average ⁵	2,613	173	⁴ 38	10	5	2,829	192
1982	January	2,606	97	676	10	90	3,484	164
	February	2,427	132	605	11	90	3,085	147
	March	2,268	46	682	10	84	2,945	126
	April	2,356	59	612	13	64	2,978	108
	May	2,616	74	-183	10	75	2,444	114
	June	2,729	102	-335	10	55	2,452	124
	July	2,734	125	-789	11	24	2,050	148
	August	2,507	80	-339	10	40	2,210	159
	September	2,657	61	-85	12	139	2,507	161
	October	2,838	91	-289	8	66	2,581	170
	November	2,880	145	-514	8	24	2,475	186
	December	2,655	109	225	10	143	2,855	⁴ 179
	Average	2,606	93	35	10	74	2,671	
1983	January	2,321	60	⁴ 580	NA	173	2,797	168
	February	2,135	59	691	NA	105	2,790	148
	March	1,593	42	971	NA	59	2,947	118
	April	2,171	73	560	NA	47	2,697	103
	May	2,444	147	-186	NA	50	2,354	109
	June	2,546	179	-161	NA	40	2,524	114
	July	2,604	267	-546	NA	55	2,270	131
	August	2,615	301	-379	NA	43	2,495	142
	September	2,739	256	-386	NA	37	2,575	154
	October	2,681	280	-276	NA	55	2,611	163
	November	2,680	203	45	NA	54	2,874	161
	December	2,522	221	676	NA	54	3,365	140
	Average	2,456	174	124	NA	64	2,896	
1984	January	2,585	270	676	NA	40	3,480	119
	February	2,864	458	-439	NA	41	2,842	132
	March	2,480	115	727	NA	66	3,266	110
	April	2,347	220	393	NA	32	2,829	98
	May	2,633	252	-10	NA	48	2,827	98
	June	2,679	286	-490	NA	53	2,602	113
	July	2,736	186	-375	NA	40	2,518	125
	August	2,678	263	-291	NA	74	2,575	134
	September*	R 2,724	R 285	R -322	NA	22	R 2,665	R 143
	October**	2,739	350	-405	NA	NA	2,637	155
	Average	2,665	267	-50	NA	NA	2,833	

¹ Stocks are totals as of end of period.

² A negative number indicates an increase in stocks and a positive number indicates a decrease.

³ Beginning in January 1983, product supplied for distillate fuel oil does not include crude oil used directly. See Explanatory Note 4.

⁴ In January 1975, 1981, and 1983, numerous respondents were added to surveys affecting stocks reported and stock withdrawal calculations. See Explanatory Note 10.

⁵ Beginning in January 1981, survey forms were modified. See Explanatory Note 12.

* See Explanatory Note 9.4.

** Italicized figures denote estimates based upon preliminary data. See Explanatory Note 8.

NA = Revised data. NA = Not available. (P) = Less than 500 barrels per day.

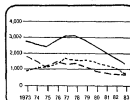
Note: Geographic coverage is the 50 United States and the District of Columbia.

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

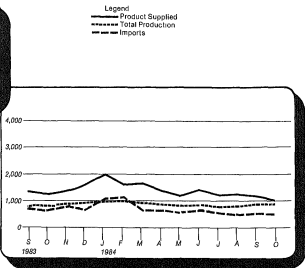
Source: See the last page of this section.

Residual Fuel Oil Supply and Disposition

(Thousand Barrels Per Day)



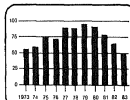
Annual



Monthly

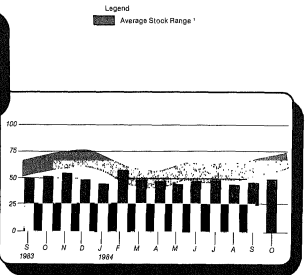
Residual Fuel Oil Ending Stocks

(Million Barrels)



Annual

¹ Level and width of Average Stock Range for residual fuel oil based on 3 years of data, Jul. 81-Jun. 84. See Explanatory Note 6.



Monthly

Residual Fuel Oil Supply and Disposition

		Supply				Disposition		Ending Stocks ¹
		Total Production	Imports	Stock Withdrawals ²	Crude Used Directly ³	Exports	Products Supplied ³	
Thousand Barrels per Day								Million Barrels
1973	Average	971	1,853	5	17	23	2,822	53
1974	Average	1,070	1,887	-17	13	14	2,839	⁴ 80
1975	Average	1,235	1,223	-2	15	15	2,462	74
1976	Average	1,377	1,413	5	17	12	2,881	72
1977	Average	1,754	1,359	-48	13	6	3,071	80
1978	Average	1,667	1,355	-1	13	13	3,023	80
1979	Average	1,887	1,151	-15	12	8	2,828	96
1980	Average	1,580	939	10	12	33	2,598	⁴ 92
1981	Average ⁵	1,321	800	⁴ 37	48	118	2,088	78
1982	January	1,235	831	301	53	235	2,165	68
	February	1,186	866	383	53	213	2,344	58
	March	1,123	912	12	53	197	1,903	58
	April	1,166	788	150	52	234	1,823	64
	May	1,128	742	-172	52	191	1,580	58
	June	1,074	652	-57	50	217	1,501	81
	July	1,028	657	56	49	239	1,550	59
	August	965	551	203	47	235	1,631	53
	September	1,008	872	-308	44	148	1,470	62
	October	955	783	-57	43	234	1,480	64
	November	986	837	-64	43	182	1,591	66
	December	989	747	6	43	186	1,598	⁴ 66
	Average	1,070	778	32	48	208	1,716	
1983	January	972	691	⁴ 258	NA	294	1,626	61
	February	857	647	257	NA	191	1,570	53
	March	835	686	227	NA	169	1,579	46
	April	941	753	-10	NA	310	1,374	47
	May	936	738	-141	NA	190	1,342	51
	June	828	677	36	NA	218	1,323	50
	July	789	684	-64	NA	60	1,280	52
	August	710	739	115	NA	185	1,400	48
	September	826	706	-47	NA	134	1,351	50
	October	807	638	-60	NA	153	1,243	51
	November	845	780	-67	NA	167	1,362	54
	December	897	649	182	NA	141	1,587	48
	Average	852	689	55	NA	188	1,421	
1984	January	953	1,081	119	NA	151	1,981	45
	February	1,003	1,107	-420	NA	87	1,602	58
	March	867	833	321	NA	204	1,637	48
	April	840	837	8	NA	130	1,357	47
	May	829	554	35	NA	200	1,218	46
	June	841	676	-17	NA	176	1,324	47
	July	792	586	-77	NA	99	1,213	49
	August	808	372	146	NA	260	1,266	45
	September*	R 851	R 586	R -77	NA	214	R 1,165	R 47
	October**	853	533	-174	NA	NA	1,019	50
	Average	857	684	-11	NA	NA	1,378	

¹ Stocks are totals as of end of period.

² A negative number indicates an increase in stocks and a positive number indicates a decrease.

³ Beginning in January 1983, product supplied for residual fuel oil does not include crude oil used directly. See Explanatory Note 4.

⁴ In January 1975, 1981, and 1983, numerous respondents were added to surveys affecting stocks reported and stock withdrawal calculations. See Explanatory Note 10.

⁵ Beginning in January 1981, survey forms were modified. See Explanatory Note 12.

* See Explanatory Note 9, 4.

** Italics denote estimates based upon preliminary data. See Explanatory Note 8.

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

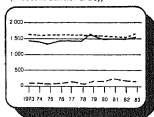
Note: Geographic coverage is the 50 United States and the District of Columbia.

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

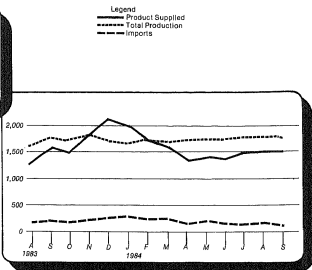
Source: See the last page of this section.

Liquefied Petroleum Gases Supply and Disposition

(Thousand Barrels Per Day)



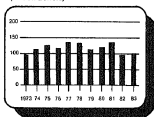
Annual



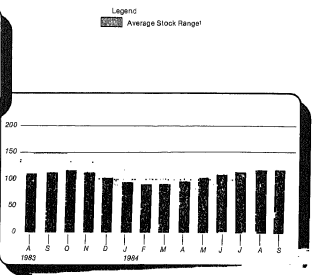
Monthly

Liquefied Petroleum Gases Ending Stocks

(Million Barrels)



Annual



Monthly

* Level and width of Average Stock Ranges for liquefied petroleum gas based on 3 years of data: Jul 81-Jun, 84. See Explanatory Note 6.

Liquefied Petroleum Gases¹ Supply and Disposition

		Supply			Disposition			Ending Stocks ²
		Total Production	Imports	Stock Withdrawals ³	Refinery Inputs	Exports	Products Supplied	
		Thousand Barrels per Day						Million Barrels
1973	Average	1,600	132	-35	220	27	1,449	99
1974	Average	1,565	123	-38	220	25	1,406	⁴ 113
1976	Average	1,527	112	⁴ -30	246	26	1,333	125
1976	Average	1,535	130	24	260	25	1,404	116
1977	Average	1,566	161	-55	233	18	1,422	136
1978	Average	1,537	123	12	239	20	1,413	132
1979	Average	1,556	217	70	236	15	1,592	111
1980	Average	1,535	216	-27	233	21	1,469	⁴ 120
1981	Average	1,571	244	⁴ -18	289	42	1,466	135
1982	January	1,665	314	443	391	67	1,863	121
	February	1,468	291	243	327	51	1,621	114
	March	1,544	223	211	289	74	1,615	106
	April	1,506	188	98	257	77	1,458	105
	May	1,585	186	-71	234	43	1,403	107
	June	1,515	192	-86	262	106	1,254	109
	July	1,476	227	-13	253	37	1,399	110
	August	1,511	125	-45	254	61	1,276	111
	September	1,538	247	37	274	85	1,463	110
	October	1,517	194	97	306	81	1,421	107
	November	1,542	267	175	363	37	1,583	102
	December	1,580	256	256	395	56	1,642	⁴ 94
	Average	1,523	226	111	300	65	1,499	
1983	January	1,611	240	⁴ 520	313	110	1,939	86
	February	1,600	305	128	244	76	1,713	82
	March	1,543	166	-9	197	127	1,377	82
	April	1,607	124	-156	198	116	1,260	87
	May	1,613	167	-225	207	94	1,263	94
	June	1,664	172	-334	203	59	1,241	104
	July	1,656	191	-221	217	55	1,354	111
	August	1,586	160	-199	229	29	1,289	117
	September	1,705	178	-30	236	68	1,531	118
	October	1,688	160	-81	266	32	1,467	120
	November	1,785	180	70	362	33	1,640	118
	December	1,645	247	575	363	66	2,036	⁴ 101
	Average	1,642	190	4	253	73	1,599	
1984	January	1,610	269	⁴ 470	333	23	1,983	93
	February	1,690	237	146	323	41	1,708	89
	March	1,695	241	12	289	68	1,581	89
	April	1,711	155	-170	253	54	1,389	94
	May	1,709	211	-221	244	42	1,412	101
	June	1,714	158	-163	257	53	1,394	106
	July	1,750	132	-136	232	43	1,469	111
	August	1,744	154	-132	241	34	1,491	115
	September*	1,704	128	-24	283	26	1,499	115
	Average	1,702	187	-27	270	43	1,549	

¹ Includes ethane, propane, normal butane, and isobutane.

² Beginning in January 1984, unfractionated stream is reported by individual product.

³ Stocks are totals as of end of period.

⁴ A negative number indicates an increase in stocks and a positive number indicates a decrease.

⁵ In January 1975, 1981, 1983, and 1984, a new stock base was established.

* affecting stocks reported and stock withdrawal calculations. See Explanatory Note 10.

⁶ See Explanatory Note 9.5.

Note: Geographic coverage is the 50 United States and the District of Columbia.

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

Source: See the last page of this section.

Other Petroleum Products¹ Supply and Disposition

		Supply			Disposition			Ending Stocks ²
		Total Production	Imports	Stock Withdrawal ³	Refinery Inputs	Exports	Products Supplied	
Thousand Barrels per Day								Million Barrels
1973	Average	3,693	502	-8	760	166	3,270	208
1974	Average	3,558	432	-28	665	174	3,123	⁴ 218
1975	Average	3,424	277	⁴ -2	537	180	3,002	219
1976	Average	3,643	206	-5	624	175	3,145	220
1977	Average	3,912	205	-27	514	165	3,410	230
1978	Average	4,046	168	14	492	167	3,568	225
1979	Average	4,153	195	-37	352	209	3,749	238
1980	Average	3,856	210	-23	311	198	3,634	⁴ 247
1981	Average	3,738	226	⁴ 46	723	199	3,088	282
1982	January	3,171	289	-7	524	180	2,631	282
	February	3,403	305	-153	663	138	2,755	287
	March	3,466	243	-181	725	161	2,631	293
	April	3,408	309	73	796	204	2,790	290
	May	3,317	318	184	824	210	2,765	285
	June	3,547	315	123	812	215	2,954	281
	July	3,680	406	-1	856	187	3,023	281
	August	3,583	346	217	743	202	3,201	274
	September	3,533	375	165	749	213	3,051	271
	October	3,529	383	244	915	266	2,976	264
	November	3,498	423	-28	837	269	2,788	264
	December	3,324	313	366	885	275	2,842	⁴ 253
	Average	3,453	334	80	787	211	2,869	
1983	January	3,194	322	⁴ -419	588	271	2,239	271
	February	3,229	321	12	673	232	2,658	270
	March	3,581	319	-147	572	249	2,732	275
	April	3,599	404	-24	582	247	2,840	276
	May	3,405	374	35	705	242	2,866	275
	June	3,610	444	96	717	292	3,144	272
	July	3,636	426	148	735	269	3,265	267
	August	3,695	462	30	658	242	3,297	266
	September	3,792	497	-8	796	236	3,255	266
	October	3,578	424	-107	711	195	2,890	270
	November	3,568	441	95	912	238	2,457	267
	December	3,123	479	361	883	257	2,823	⁴ 256
	Average	3,469	411	6	712	242	2,923	
1984	January	3,391	486	⁴ -177	561	207	2,931	253
	February	3,582	596	-296	761	225	2,935	261
	March	3,510	466	-218	530	258	2,869	268
	April	3,584	582	-207	627	268	3,063	274
	May	3,683	642	-118	775	257	3,175	277
	June	3,863	521	404	1,229	343	3,213	265
	July	3,866	567	278	1,034	296	3,438	257
	August	3,855	561	24	648	172	3,821	256
	September ⁴	3,788	539	-51	712	238	3,305	268
	Average	3,678	550	-35	762	245	3,185	

¹ Includes pentanes plus, other hydrocarbons and alcohol, unfinished oils, gasoline blending components and all finished petroleum products except finished motor gasoline, distillate fuel oil, residual fuel oil, and liquefied petroleum gases.

² Stocks are totals as of end of period.

³ A negative number indicates an increase in stocks and a positive number indicates a decrease.

⁴ In January 1975, 1981, 1983, and 1984, a new stock basis was established affecting stocks reported and stock withdrawal calculations. See Explanatory Note 10.

* See Explanatory Note 8 B.

Note: Geographic coverage is the 50 United States and the District of Columbia.

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

Source: See the last page of this section.

Sources

1. 1973 through 1978: U.S. Department of the Interior, Bureau of Mines, Mineral Industry Surveys, *Petroleum Statement, Annual and PAD Districts Supply/Demand, Annual*.
2. 1977 through 1980: Energy Information Administration (EIA), *Energy Data Reports, Petroleum Statement, Annual and PAD Districts Supply/Demand, Annual*, and unleaded gasoline data from *Monthly Petroleum Statistics Report*.
3. January 1981 through December 1983: EIA, *Petroleum Supply Annual*.
4. January 1984 through September 1984: Detailed statistics in appropriate issues of the *Petroleum Supply Monthly*. (See Explanatory Notes 8.1 through 9.6).
5. October 1984: Estimates based on EIA weekly data (except domestic crude oil production) (see Explanatory Note 1.1).
6. January 1984 through October 1984: Domestic crude oil production estimate based on historical statistics from State Conservation Agencies and the U.S. Geological Survey. (See Explanatory Note 3).



Table 1. U.S. Petroleum Balance, September 1984

	Current Month		Year-to-date	
	Thousand Barrels	Thousand Barrels per Day	Thousand Barrels	Thousand Barrels per Day
Crude Oil (Including Lease Condensate)				
Field Production				
(1) Alaska	251,756	1,756	8,479,622	1,750
(2) Lower 48 States	2,211,017	7,034	61,963,280	6,983
(3) Total U.S.	2,462,767	8,790	69,442,902	6,733
Net Imports				
(4) Imports (Gross Excluding SPR)	97,268	3,240	2,752,070	3,188
(5) SPR Imports	1,999	53	52,284	592
(6) Exports	4,846	162	90,000	103
(7) Imports (Net Including SPR)	93,961	3,132	2,704,354	3,195
Other Sources				
(8) SPR Withdrawal (+) or Addition (-)	-1,802	-53	-51,000	-100
(9) Other Stock Withdrawal (+) or Addition (-)	9,598	320	17,845	55
(10) Product Supplied and Leaves	-1,928	-64	-17,264	-64
(11) Unaccounted for ¹	7,018	234	90,537	392
(12) Total Other Sources	12,892	436	44,848	104
(13) Crude Input to Refineries	368,619	12,527	3,313,109	12,692
(14) = (3) + (7) + (12)				
Natural Gas Plant Liquids (NGPL)				
Field Production				
(15) Net Imports ²	1,666	54	11,003	62
(16) Stock Withdrawal (+) or Addition (-) ³	733	24	-1,090	-4
(17) Total NGPL Supply	52,624	1,704	495,593	1,663
Other Liquids				
Unrefined Oils and Gasoline Blending Components, Total				
(18) Stock Withdrawal (+) or Addition (-)	-4,118	-137	-4,216	-15
(19) Imports	9,207	307	84,386	308
(20) Other Hydrocarbons and Alcohol New Supply (Field Production)	1,169	40	12,146	47
(21) Refinery Processing Gain ⁴	17,235	575	15,182	562
(22) Crude Oil Product Supplied	1,920	65	17,284	63
(23) Total Other Liquids	25,560	892	281,524	924
(24) = (18) through (23)				
(25) Total Production of Products ⁵	447,537	14,931	4,603,219	14,768
(26) = (14) + (17) + (24)				
Net Imports of Refined Products⁶				
(27) Imports (Gross)	45,273	1,569	450,480	1,644
(28) Exports	15,009	502	138,298	506
(29) Imports (Net)	30,264	1,067	311,803	1,138
(30) Total New Supply of Products	478,141	15,930	4,242,076	15,847
(31) = (25) + (29)				
(32) Refined Products Stock Withdrawal (+) or Addition (-) ⁷	-10,703	-363	-21,861	-79
(33) Total Petroleum Products Supplied for Domestic Use ⁸	467,438	15,567	4,220,215	15,768
(34) = (31) + (32)				
Finished Motor Gasoline				
(35) Distillate Fuel Oil	79,944	2,665	782,958	2,657
(36) Residual Fuel Oil	34,164	1,165	386,986	1,416
(37) Liquefied Petroleum Gases ⁹	44,169	1,489	424,282	1,549
(38) Other A ¹⁰	90,155	3,168	875,713	3,165
(39) Crude Oil ¹¹	1,503	49	17,284	63
(40) Total Product Supplied	459,438	15,315	4,226,368	15,766
(41) = (34) through (39)				
Ending Stocks, All Oils				
(42) Crude Oil and Lease Condensate (Excluding SPR)	325,391	---	325,321	---
(43) Strategic Petroleum Reserve (SPR)	431,869	---	431,800	---
(44) Unrefined Oils	335,471	---	335,471	---
(45) Gasoline Blending Components ¹²	40,765	---	40,765	---
(46) Petroleum Plus	9,815	---	9,815	---
(47) Finished Refined Products ¹³	598,731	---	598,731	---
(48) Total Stocks	1,554,162	---	1,514,182	---

1. A balancing item.

2. Includes products in the petroleum plus category only.

3. For products included see Explanatory Note 9.7.

4. Includes petroleum plus, other liquids, and all refined petroleum

products except refined motor gasoline, distillate fuel oil, residual fuel

oil and liquefied petroleum gases.

5. Includes other hydrocarbons and alcohol.

6. = Estimated.

7. = Not Applicable.

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

Source and estimation procedures: See Explanatory Notes 1, 2 and 3.

Table 2. Supply and Disposition of Crude Oil and Petroleum Products, September 1984
(Thousand Barrels)

Commodity	Supply			Disposition		
	Field Production	Refinery Production	Imports	Stocks Withdrawal (+) or Addition (-)	Used in Combustion Engines	Exports
Crude Oil (including lease condensate)	6,262,757	0	36,007	7,266	7,016	4,646
Natural Gas Liquids and URGs	40,693	10,545	5,748	20	0	1,983
Petroleum Fuels	9,293	0	1,915	753	0	45,324
Liquid Petroleum Gases	40,580	0	3,632	-713	0	5,915
Shale	15,634	582	352	454	0	44,966
Oil Shale	13,967	4,419	1,222	-352	0	11,710
Normal Butane	1,426	1,426	0	0	0	30,390
Isobutane	3,008	-925	819	28	0	4,232
Other Liquids	1,186	0	9,207	-4,316	0	-64
Other Hydrocarbons and Alcohol	1,166	0	0	-8	0	-7,712
Motor Gasoline	0	0	6,630	-2,415	0	1,180
Motor Gasoline Blending Components	0	0	2,592	-1,522	0	40,115
Aviation Gasoline Blending Components	0	0	0	-104	0	216
Finished Petroleum Products	114	495,351	41,441	-17,260	0	14,262
Finished Motor Gasoline	1	193,345	9,086	-7,660	0	415,634
Finished Motor Gasoline Blending Components	1	76,268	4,840	-2,712	0	136,408
Finished Aviation Gasoline	1	125,077	5,181	-18	0	87,214
Aviation Gasoline Blending Components	0	61	0	-16	0	106,546
Aviation Gasoline Blending Components	0	6,842	0	44	0	748
Kerosene-Type Jet Fuel	0	27,669	963	374	0	6,966
Kerosene-Type Jet Fuel	0	27,669	963	374	0	7,016
Kerosene-Type Jet Fuel	0	27,669	963	374	0	29,239
Aviation Gasoline Blending Components	0	3,734	208	-592	0	34,414
Aviation Gasoline Blending Components	47	81,693	0,943	-3,676	0	148,214
Aviation Gasoline Blending Components	0	3,857	17,695	-4,297	0	46,371
Aviation Gasoline Blending Components	0	1,297	0	0	0	34,364
Aviation Gasoline Blending Components	0	5,386	0	143	0	4,602
Other Oils > 400 Deg. for Term. Feed Use	0	1,794	1,063	-227	0	1,609
Special Naphthas	0	376	0	-276	0	4,823
Lubricants	0	5,266	376	-276	0	3,557
Lubricants	0	5,266	376	-276	0	4,823
Petroleum Coke	0	509	73	-56	0	7,223
Petroleum Coke	0	13,300	0	0	0	16,912
Asphalt and Road Oil	0	10,471	1,091	2,445	0	15,903
Asphalt and Road Oil	0	10,471	1,091	2,445	0	15,919
Stiff Oil	0	16,919	0	0	0	1,479
Miscellaneous Products	65	1,595	43	35	0	0
Total	313,330	416,696	155,361	-14,102	7,016	439,435
						1,314,162

1 Unaccounted for crude oil is a balancing item

(+) = Less than 500 barrels

(-) = Estimated

Notes: Total may not equal sum of components due to independent rounding

Source and revision procedures: See Explanatory Notes on Data Collection and Estimation

Table 3. Year-to-Date Supply and Disposition of Crude Oil and Petroleum Products, January - September 1984
(Thousand Barrels)

Commodity	Supply			Disposition			
	Field Production	Refinery Production	Imports	Stock Withdrawal (-) or Addition (+)	Unaccounted For Crude Oil	Crude Losses	Refinery Inputs
Crude Oil (including lease condensate)	E 2,292,772	0	925,554	-24,135	96,537	270	3,293,109
Natural Gas Liquids and Liquids	443,603	102,806	83,552	-8,584	0	0	125,829
Petroleum Gas	80,095	0	12,232	-1,950	0	0	34,719
Liquid Petroleum Gases	365,508	102,806	61,320	-7,534	0	0	55,729
Propane	142,540	76,086	20,174	-8,200	0	0	14,100
Isobutane	55,432	18,879	5,148	-1,173	0	0	1,586
Isobutane	24,306	-135	8,778	1,278	0	0	39,923
Isobutane	12,788	0	84,281	-4,216	0	0	32,577
Other Hydrocarbons and Alcohol	12,788	0	84,281	-4,216	0	0	153,007
Unrefined Oil	0	0	63,979	-49	0	0	12,739
Unrefined Oil	0	0	25,411	-3,155	0	0	110,276
Aviation Gasoline Blending Components	0	0	0	1	0	0	35,074
Aviation Gasoline Blending Components	0	0	0	0	0	0	0
Finished Petroleum Products	1,427	3,644,501	392,169	-14,147	0	0	126,909
Finished Motor Gasoline	498	1,784,007	79,715	-9,265	0	0	1,263
Finished Leaded Motor Gasoline	339	716,594	35,729	-6,170	0	0	1,263
Finished Unleaded Motor Gasoline	168	1,067,413	42,987	-15,135	0	0	1,070,033
Finished Aviation Gasoline	0	0	4,395	-128	0	0	0
Finished Jet Fuel	0	57,582	14,832	-1,405	0	0	30,437
Kerosene-Type Jet Fuel	0	250,340	13,391	-5,840	0	0	1,154
Kerosene	0	29,147	2,102	-1,139	0	0	39
Distillation Fuel Oil	306	727,661	70,474	-2,812	0	0	12,738
Residual Fuel Oil	0	237,642	195,256	-2,137	0	0	46,468
Naphtha < 400 Deg. for Petro. Feed, Use	0	34,954	8,865	-1,38	0	0	1,732
Other Gas > 400 Deg. for Petro. Feed, Use	-50	69,539	0	148	0	0	4,114
Special Naphthas	0	13,291	15,073	312	0	0	645
Lubricants	0	4,911	2,894	-415	0	0	4,172
Asphalt and Road Oil	0	120,086	5,526	526	0	0	33,608
Petroleum Coke	0	156,130	2,880	2,880	0	0	153
Asphalt and Road Oil	0	156,130	2,880	2,880	0	0	114,853
Seal Gas	0	0	0	0	0	0	0
Miscellaneous Products	604	15,986	3,035	-65	0	0	293
Total	2,853,599	3,747,307	1,472,052	-61,062	96,537	270	3,596,605
							180,312
							4,320,316
							1,314,162

1 Unaccounted for crude oil is a balancing item.

(N) = Net, 500 barrels.

(E) = Estimated.

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

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 4. Daily Average Supply and Disposition of Crude Oil and Petroleum Products, September 1984
(Thousand Barrels per Day)

Commodity	Supply				Disposition				
	Field Production	Refinery Production	Imports	Stocks Withdrawal (+) or Addition (-)	Unaccounted for Crude Oil	Crude Losses	Refinery Inputs	Exports	Products Supplied
Crude Oil (including lease condensate)	E 6,778	0	3,334	286	234	-2	12,327	162	66
Natural Gas Liquids and LRGs									
Petroleum Gas	1,662	362	182	1	0	0	521	26	1,051
Liquefied Petroleum Gas	309	0	64	24	0	0	246	(N)	122
Ethane	521	352	125	-24	0	0	283	(N)	26
Propane	312	312	14	14	0	0	3	(N)	772
Normal Butane	532	283	37	-61	0	0	182	6	142
Isobutane	108	-1	21	3	0	0	126	(N)	-3
Other Liquids	40	0	307	-137	0	0	466	8	-257
Other Hydrocarbons and Alcohol	40	0	0	(N)	0	0	39	0	-132
Unidentified Crude Oil	0	0	221	-81	0	0	233	0	-85
Misc. Gasoline Blending Components	0	0	0	-4	0	0	-3	0	(N)
Aviation Gasoline Blending Components	0	0	0	0	0	0	0	0	0
Finished Petroleum Products	4	13,445	1,381	-650	0	0	0	476	13,854
Finished Motor Gasoline	(N)	6,545	333	-363	0	0	0	2	9,514
Finished Diesel Motor Gasoline	(N)	2,542	191	-170	0	0	0	2	3,562
Finished Aviation Gasoline	0	4,035	172	-122	0	0	0	0	4,085
Naphtas-Type Jet Fuel	0	238	2	-1	0	0	0	0	240
Kerosene-Type Jet Fuel	0	229	0	0	0	0	0	0	230
Kerosene	0	933	30	12	0	0	0	1	975
Aviation Fuel Oil	0	134	7	-17	0	0	0	0	144
Heating Fuel Oil	2	2,723	245	-322	0	0	0	32	3,075
Other Oils > 400 Deg. for Petro. Feed Use	0	951	595	-77	0	0	0	0	1,519
Other Oils > 400 Deg. for Petro. Feed Use	0	115	443	-1	0	0	0	4	1,653
Solvent Naphthas	0	178	0	5	0	0	0	22	181
Lubricants	0	58	38	-8	0	0	0	1	85
Other Petro. Products	0	176	13	-8	0	0	0	12	167
Asphalt and Road Oil	0	17	2	-2	0	0	0	0	16
Other Petro. Products	0	443	0	52	0	0	0	186	241
Sol Gas	0	516	33	0	0	0	0	(N)	533
Miscellaneous Products	2	44	1	3	0	0	0	1	49
Total	10,484	13,887	5,173	-470	234	-2	13,322	664	15,315

1 Unaccounted for crude oil is a balancing item

(N) = Less than 500 barrels

E = Estimated

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

Source and estimation procedure: See Explanatory Notes on Data Collection and Estimation

Table 5. Year-to-date Daily Average Supply and Disposition of Crude Oil and Petroleum Products, January - September 1984
(Thousand Barrels per Day)

Commodity	Supply			Disposition					
	Field Production	Refinery Production	Imports	Stock Withdrawals (+) or Additions (-)	Uncounted For Crude Oil	Crude Losses	Refinery Inputs	Exports	Products Supplied
Crude Oil (including lease condensate)	8,733	0	3,378	-125	352	1	12,052	183	63
Natural Gas Liquids and LUBS									
Petroleum Fuel	1,619	375	232	-31	0	0	474	45	1,676
Unfinished Petroleum Gases	352	0	45	-4	0	0	203	2	127
Gasoline	1,327	375	187	-27	0	0	270	43	1,549
Ethane	506	23	74	4	0	0	0	0	569
Propane	820	281	61	-82	0	0	0	4	800
Normal Butane	202	73	32	-4	0	0	146	10	147
Isobutane	98	-1	21	5	0	0	119	2	2
Other Liquids	47	0	300	-15	0	0	559	0	-319
Other Hydrocarbons and Alcohol	47	0	0	(b)	0	0	46	0	0
Motor Gasoline Blending Components	0	0	283	-4	0	0	402	0	-179
Aviation Gasoline Blending Components	0	0	17	-12	0	0	110	0	-47
			(b)	(b)	0	0	(b)	0	(b)
Finished Petroleum Products	5	13,301	1,457	-52	0	0	0	483	14,248
Finished Motor Gasoline	2	6,461	280	-33	0	0	0	0	5,695
Finished Leaded Motor Gasoline	1	2,615	134	23	0	0	0	0	2,766
Finished Unleaded Motor Gasoline	1	3,826	156	-35	0	0	0	0	3,827
Other Motor Gasoline	0	0	15	(b)	0	0	0	0	0
Jet Fuel	0	211	35	0	0	0	0	0	23
Naphtha-Type Jet Fuel	0	211	15	-9	0	0	0	1	223
Kerosene-Type Jet Fuel	0	214	48	-21	0	0	0	4	926
Kerosene	(b)	106	8	-4	0	0	0	(b)	110
Distillate Fuel Oil	1	2,556	257	-10	0	0	0	46	2,857
Residual Fuel Oil	0	807	713	8	0	0	0	170	1,419
Naphtha < 400 Deg for Petro. Feed Use	0	128	33	-1	0	0	0	6	133
Other Oils > 400 Deg for Petro. Feed Use	0	254	65	1	0	0	0	239	0
Special Naphthenes	(b)	16	65	-2	0	0	0	15	239
Other Naphthenes	0	152	1	-2	0	0	0	0	137
Waxes	0	15	1	1	0	0	0	1	15
Petroleum Coke	0	441	0	2	0	0	0	196	247
Asphalt and Road Oil	0	399	10	11	0	0	0	419	1
Still Gas	0	560	0	0	0	0	0	0	965
Miscellaneous Products	2	58	11	(b)	0	0	0	1	70
Total	10,404	13,676	5,375	-223	352	1	13,124	691	15,786

¹ Unaccounted for crude oil is a balancing item

(b) = Less than 500 barrels

± = Estimated

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

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 6. PAD District 1, Supply and Disposition of Crude Oil and Petroleum Products, September 1984
(Thousand Barrels)

Commodity	Field Production	Refinery Production	Imports	Stocks withdrawn (+) or added (-) Adj. L-3	Unaccounted for Crude Oil	Net Receipts	Crude Losses	Refinery Inputs	Exports	Products Supplied	Ending Stocks
Crude Oil (including lease condensate)	5 1,722	0	25,643	3,796	-844	1,857	0	35,084	0	0	12,412
Natural Gas Liquids and LRLs	919	989	1,555	-707	0	3,023	0	187	26	5,265	4,230
Leased Petroleum Gases	785	949	521	-702	0	3,023	0	145	35	4,444	4,182
Petroleum Plus	134	0	734	-5	0	0	0	41	0	692	46
Other Liquids	19	0	1,767	135	0	870	0	2,950	0	432	17,389
Crude Hydrocarbons and Alcohol	19	0	0	18	0	0	0	0	0	0	0
Motor Gasoline	0	0	623	-54	0	386	0	645	0	-377	12,444
Motor Gasoline Blending Components	0	0	1,144	692	0	174	0	1,201	0	809	5,426
Aviation Gasoline Blending Components	0	0	0	0	0	0	0	0	0	0	0
Refined Petroleum Products	0	37,958	33,596	-10,046	0	85,556	0	0	799	126,394	165,264
Furnish Motor Gasoline	0	17,852	8,322	229	0	33,138	0	0	0	539,271	539,271
Furnish Motor Gasoline	0	17,852	8,322	229	0	33,138	0	0	0	22,726	25,713
Furnish Unleaded Motor Gasoline	0	11,957	4,445	-212	0	26,857	0	0	0	42,948	33,758
Furnish Aviation Gasoline	0	11	61	-1	0	847	0	0	0	318	382
Naphtha-Type Jet Fuel	0	525	0	186	0	323	0	0	0	1,024	821
Kerosene	0	1,382	828	-239	0	9,209	0	0	0	11,181	9,441
Jet Fuel	0	86	203	-240	0	270	0	0	0	0	0
Residual Fuel Oil	0	7,580	3,135	-3,135	0	14,420	0	0	0	21,350	57,449
Special Naphtha	0	3,770	14,111	-3,770	0	-420	0	0	0	16,955	20,009
Special Naphtha	0	37	227	20	0	-183	0	0	35	132	288
Lubricants	0	540	313	216	0	599	0	0	0	453	611
Waxes	0	60	29	-2	0	5	0	0	54	1,804	3,103
Waxes	0	1,080	79	1,080	0	0	0	0	0	279	855
Asphalt and Road Oil	0	1,255	79	1,001	0	262	0	0	245	6,351	3,428
Shall Gas	0	1,255	79	1,001	0	262	0	0	1	1,545	0
Miscellaneous Products	0	166	(b)	80	0	85	0	0	14	317	214
Total	2,660	38,943	85,532	-6,941	-844	71,006	0	37,231	735	132,992	169,125

(b) Unaccounted for crude oil is a balancing item

(c) Less than 500 barrels

(d) Estimated

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

Source and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 7. PAD District II, Supply and Disposition of Crude Oil and Petroleum Products, September 1984
(Thousand Barrels)

Commodity	Supply			Disposition							
	Field Production	Refinery Production	Imports	Stock Withdrawal (-) or Addition (+)	Unaccounted For Crude Oil	Net Receipts	Crude Losses	Refinery Inputs	Exports	Products Supplied	Ending Stocks
Crude Oil (including lease condensate)	31,332	0	13,045	4,370	36,734	19	-42	85,108	434	0	70,218
Natural Gas Liquids and LRGs	10,245	2,235	2,463	965	0	1,928	0	4,704	13	13,120	30,494
Liquid Petroleum Gases	8,784	2,258	2,463	233	0	1,560	0	2,813	12	12,450	33,642
Petroleum Plus	1,461	0	0	732	0	369	0	1,891	1	670	2,852
Other Liquids	137	0	271	-2,224	0	374	0	-1,447	0	5	20,790
Other Hydrocarbons and Alcohol	137	0	0	13	0	0	0	150	0	0	120
Unfinished Oil	0	0	271	-1,486	0	344	0	-1,207	0	306	16,482
Motor Gasoline Blending Components	0	0	0	-723	0	30	0	-373	0	-392	8,003
Aviation Gasoline Blending Components	0	0	0	-18	0	0	0	-17	0	-1	95
Finished Petroleum Products	18	89,452	948	-2,514	0	23,005	0	0	298	113,401	126,103
Finished Motor Gasoline	0	49,069	319	-3,476	0	17,016	0	0	0	62,926	58,916
Finished Leaded Motor Gasoline	0	20,325	283	-304	0	8,443	0	0	1	27,967	28,349
Finished Unleaded Motor Gasoline	0	28,744	66	-2,542	0	8,573	0	0	0	34,961	30,569
Finished Aviation Gasoline	0	141	0	-48	0	123	0	0	0	176	608
Finished Jet Fuel	0	9,851	0	-543	0	1,111	0	0	0	1,011	1,468
Finished Turbine Jet Fuel	0	4,381	0	-543	0	1,048	0	0	0	8,076	8,076
Kerosene-Type Jet Fuel	0	775	0	-210	0	94	0	0	0	681	2,417
Distillate Fuel Oil	0	18,276	382	-649	0	6,161	0	0	19	25,487	35,610
Residual Fuel Oil	0	1,745	67	145	0	-141	0	0	0	1,816	3,497
Asphalts and Other Oils for Petro. Feed	0	912	4	7	0	73	0	0	27	909	180
Special Naphthas	0	412	68	-65	0	142	0	0	4	546	438
Special Naphthas	0	83	16	-15	0	129	0	0	16	1,003	2,069
Waxes	0	48	12	-15	0	0	0	0	0	1,461	72
Petroleum Coke	0	2,574	0	36	0	0	0	0	0	232	2,377
Asphalt and Road Oil	0	5,200	92	733	0	283	0	0	2	6,266	6,953
Still Gas	0	3,176	0	0	0	0	0	0	0	3,176	0
Miscellaneous Products	16	191	31	-30	0	-104	0	0	2	99	291
Total	41,726	91,687	16,728	297	36,734	29,267	-42	89,365	733	186,526	259,595

¹ Unaccounted for crude oil is a balancing item

(V) = Less than 500 barrels

E = Estimated

Note: Total may not equal sum of components due to independent rounding
Source and correction procedures: See Explanatory Notes on Data Collection and Estimation

Table 3. PAD District III, Supply and Disposition of Crude Oil and Petroleum Products, September 1984
(Thousand Barrels)

Commodity	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Line-Stocks Counted For Crude Oil	Net Receipts	Crude Losses	Disposition			Ending Stocks
								Refinery Inputs	Exports	Products Supplied	
Crude Oil (including lease condensate)	0	0	31,174	-942	-26,555	16,881	-16	167,892	(%)	24	585,538
Natural Gas Liquids and LRLs	34,789	5,853	1,017	-493	0	-3,426	0	9,446	615	27,267	86,201
Liquefied Petroleum Gases	28,332	5,032	190	-430	0	-3,311	0	4,409	615	25,160	73,604
Petroleum Fuels	6,237	0	838	43	0	-127	0	5,037	0	2,104	6,387
Other Liquids	805	0	8,455	-1,847	0	-944	0	12,484	0	-7,215	68,686
Other Hydrocarbons and Alcohol	805	0	0	0	0	0	0	805	0	0	91
Unrefined Oil	0	0	5,724	1,074	0	-740	0	10,273	0	-4,205	50,231
Motor Gasoline Blending Components	0	0	721	-2,553	0	-204	0	1,474	0	-3,070	18,043
Aviation Gasoline Blending Components	0	0	0	-48	0	0	0	-48	0	0	181
Finished Petroleum Products	0	182,337	5,320	-7,478	0	-64,076	0	0	5,363	50,252	138,736
Finished Motor Gasoline	1	31,672	216	-1,447	0	-87,794	0	0	37	29,821	51,725
Finished Motor Gasoline	1	34,265	211	-1,863	0	-21,531	0	0	37	11,056	22,267
Finished Unleaded Motor Gasoline	0	57,277	395	-2,584	0	-36,253	0	0	0	10,755	28,326
Finished Aviation Gasoline	0	253	0	111	0	-387	0	0	0	-22	754
Aviation Type Jet Fuel	0	3,481	0	-173	0	-455	0	0	0	2,033	2,714
Kerosene Type Jet Fuel	0	14,014	0	-596	0	-11,241	0	0	0	1,279	12,714
Aviation Turbine Fuel	0	2,775	0	-101	0	-1,674	0	0	0	2,271	2,449
Residual Fuel Oil	47	39,532	1	-1,300	0	-21,150	0	0	451	18,030	32,827
Special Naphtha and Other Oils for Petro. Feed	0	10,369	2,647	-628	0	-299	0	0	2,327	9,462	9,836
Naphtha and Other Oils for Petro. Feed	0	7,292	1,582	138	0	-80	0	0	480	8,202	2,841
Special Naphtha	0	1,171	773	-173	0	-325	0	0	0	1,422	1,532
Other Petro. Feed	0	3,518	27	-812	0	-700	0	0	0	1,376	5,131
Other Petro. Feed	0	288	26	-27	0	-25	0	0	29	27	27
Petroleum Coke	0	8,075	0	-257	0	-257	0	0	0	3,117	4,095
Asphalt and Road Oil	0	2,469	44	263	0	-546	0	0	0	2,327	2,565
Soil Gas	0	0	0	0	0	0	0	0	0	0	0
Miscellaneous Products	47	759	11	-17	0	19	0	0	0	803	972
Total	183,172	196,190	63,873	-10,303	-26,555	-81,379	-16	199,922	6,576	119,278	863,123

(+) Unaccounted for crude oil is a balancing item

(%) = Less than 500 barrels

E = Estimated

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

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation

Table 8. PAD District IV, Supply and Disposition of Crude Oil and Petroleum Products, September 1964
(Thousand Barrels)

Commodity	Supply			Disposition							
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil	Net Receipts	Crude Losses	Refinery Inputs	Exports	Products Supplied	Ending Stocks
Crude Oil (including lease condensates)	57,028	0	229	-245	-4,532	0	0	13,246	0	4	13,323
Natural Gas Liquids and LUBS	2,614	121	369	758	0	-1,514	0	500	7	2,851	1,286
Unrefined Petroleum Gases	2,607	121	328	800	0	-1,272	0	399	7	1,522	1,020
Petroleum Gas	807	0	39	-32	0	-262	0	144	0	428	266
Other Liquids	0	0	0	-163	0	0	0	-433	0	279	4,225
Other Hydrocarbons and Alcohol	0	0	0	0	0	0	0	0	0	0	0
Unrefined Oil	0	0	0	-224	0	0	0	-489	0	255	2,682
Motor Gasoline Blending Components	0	0	0	71	0	0	0	95	0	15	1,534
Aviation Gasoline Blending Components	0	0	0	0	0	0	0	0	0	0	0
Refined Petroleum Products	2,13,389	144	144	503	0	158	0	0	7	14,381	11,323
Finished Motor Gasoline	0	6,851	50	106	0	145	0	0	0	7,152	4,690
Finished Unleaded Motor Gasoline	0	3,823	50	212	0	-58	0	0	0	4,127	2,687
Finished Lead Motor Gasoline	0	2,838	1	-105	0	203	0	0	0	3,036	2,002
Finished Aviation Gasoline	0	23	0	-2	0	27	0	0	0	48	50
Naphtha-Type Jet Fuel	0	477	0	-28	0	-179	0	0	0	270	256
Kerosene-Type Jet Fuel	0	590	0	107	0	475	0	0	0	1,144	581
Diesel Fuel Oil	0	0	0	0	0	0	0	0	0	0	0
Residual Fuel Oil	0	3,414	78	165	0	-506	0	0	0	3,339	3,346
Naphtha and Other Oils for Petro. Prod.	6	307	7	-7	0	0	0	0	0	307	535
Special Naphthas	0	4	0	-2	0	0	0	0	1	-1	7
Lubricants	0	30	0	-2	0	0	0	0	0	2	2
Waxes	0	50	0	-12	0	0	0	0	2	26	69
Petroleum Coke	0	258	0	-10	0	0	0	0	0	38	12
Sulfur and Road Oil	0	443	0	133	0	0	0	0	3	1,126	1,126
Still Gas	0	441	0	0	0	0	0	0	0	5,106	1,286
Miscellaneous Products	2	50	0	-3	0	0	0	0	0	491	0
Total	10,844	13,591	1,512	853	-4,532	-1,356	0	13,313	14	16,265	30,176

1. Unaccounted for crude oil is a balancing item.

(*) = Less than 500 barrels.

0 = Estimated.

Note: Total may not equal sum of components due to independent rounding. Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 10. PAD District V, Supply and Disposition of Crude Oil and Petroleum Products, September 1984
(Thousands Barrels)

Commodity	Supply				Disposition						
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil	Net Receipts	Crude Losses	Refinery Inputs	Exports	Products Supplied	Ending Stocks
Crude Oil (including lease condensate)	E 15,203	0	4,846	1,967	2,253	-15,797	-15	58,380	4,412	1,955	74,719
Natural Gas Liquids and LPGs	1,096	1,347	943	-113	0	0	0	1,027	125	1,820	2,886
Liquefied Petroleum Gases	612	1,347	330	-108	0	0	0	767	125	1,280	2,843
Petroleum Gases	484	0	313	-5	0	0	0	250	0	532	52
Other Liquids	225	0	714	-810	0	0	0	1,333	0	-1,254	31,785
Other Hydrocarbons and Alcohols	225	0	0	-1	0	0	0	224	0	0	6
Unrefined Oil	0	0	2	-1,221	0	0	0	564	0	-1,783	26,432
Motor Gasoline Blending Components	0	0	712	431	0	0	0	564	0	579	7,107
Aviation Gasoline Blending Components	0	0	0	-19	0	0	0	-19	0	0	30
Finished Petroleum Products	0	75,695	5,459	1,899	0	2,670	0	0	7,328	71,455	51,922
Finished Motor Gasoline	0	32,801	770	-322	0	1,485	0	0	0	32,871	19,549
Finished Unleaded Motor Gasoline	0	11,450	430	-78	0	1,485	0	0	0	13,673	8,159
Finished Aviation Gasoline	0	19,041	531	-244	0	650	0	0	0	19,748	10,990
Kerosene-Type Jet Fuel	0	265	0	-56	0	0	0	0	0	229	644
Kerosene	0	1,623	0	75	0	390	0	0	0	1,958	1,039
Distillate Fuel Oil	0	7,622	74	487	0	212	0	0	27	8,135	3,295
Residual Fuel Oil	0	67	109	-180	0	449	0	0	85	12,176	11,182
Naphtha and Other Oils for Petro. Feed	0	9,819	344	1,316	0	0	0	0	0	2,685	7,594
Special Naphtha	0	339	0	7	0	0	0	0	0	212	165
Lubricants	0	110	18	25	0	0	0	0	0	1	251
Waxes	0	309	20	58	0	-38	0	0	0	30	1,254
Petroleum Coke	0	75	0	1	0	0	0	0	0	2	36
Asphalt and Road Oil	0	3,714	0	1	0	0	0	0	0	3,067	1,555
Still Gas	0	2,613	139	220	0	0	0	0	0	2,865	1,985
Miscellaneous Products	0	3,526	0	68	0	0	0	0	0	3,626	0
Total	89,524	74,373	7,795	1,942	2,253	-16,278	-15	70,749	11,638	74,037	161,381

(1) Unaccounted for crude oil is a balancing item.

(2) = Less than 500 barrels.

E = Estimated

Note: Total may not equal sum of components due to independent rounding.
Source: Petroleum Administration for Defense, Office of Petroleum Resources, Data Collection and Estimation

Table 11. Production of Crude Oil (including Lease Condensate) by PAD District and State, for the Most Currently Available Month, July 1984
(Thousand Barrels)

PAD District and State		Total	Daily Average	Production	
PAD District I		1,143	37	Total	
Florida		1,143	37	Daily Average	
New York		71	2		
Pennsylvania		363	12		
Virginia		6	0		
West Virginia		309	10		
Adjustment 2		-41	-1		
Total PAD District I		1,561	50		
PAD District II		2,470	80	Total	
Illinois		454	15	Daily Average	
Kansas		6,264	203		
Kentucky		669	22		
Michigan		2,588	83		
Missouri		22	1		
Minnesota		538	17		
North Dakota		4,585	145		
Ohio		1,271	41		
Oklahoma		14,519	468		
South Dakota		114	4		
Tennessee		-1,139	-37		
Adjustment 2		-1,139	-37		
Adjustment 3		-1,139	-37		
Total PAD District II		32,407	1,045		
PAD District III		1,753	57	Total	
Alabama		1,753	57	Daily Average	
Arkansas		1,600	52		
Louisiana		40,842	1,317		
Gulf Coast		40,842	1,317		
Past of State		2,669	87		
Total Louisiana		43,541	1,403		
Mississippi		2,025	62		
New Mexico		582	19		
Northwestern		6,043	195		
Southeastern		6,043	195		
Total New Mexico		6,625	214		
THRC District 01		2,169	70	Total	
THRC District 02		3,370	108	Daily Average	
THRC District 03		10,494	338		
THRC District 04		2,571	83		
THRC District 05		642	21		
THRC District 06, including East Texas		3,638	117		
THRC District 07		3,058	98		
THRC District 08		3,058	98		
THRC District 09		18,191	587		
THRC District 10		3,410	110		
THRC District 11		1,947	60		
THRC District 12		4,139	134		
Total Texas		75,127	2,456		
Adjustment 2		-1,869	-63		
Total PAD District III		130,508	4,211		
PAD District IV		2,430	78	Total	
Colorado		2,430	78	Daily Average	
Montana		2,347	75		
Utah		2,728	88		
Wyoming		10,112	(N)		
Adjustment 2		1	0		
Total PAD District IV		17,624	559		
PAD District V		1,871	60	Total	
Alaska		1,871	60	Daily Average	
South Alaska		50,658	1,534		
North Slope		2,307	74		
Adjustment for Alaska ²		56,058	1,769		
Total Alaska		18	1		
Arizona		6,834	214		
California		21,494	692		
Central Coastal		6,132	191		
East Coastal		3,732	117		
North		34,851	1,124		
South		150	5		
Total California		-308	-14		
Nevada		89,423	2,885		
Adjustment for Arizona, California, and Nevada ²		271,843	8,769		
Total PAD District V					
United States Total					

¹ Includes the following offshore production (thousand barrels):
Alaska State - 1,855
California Federal - 2,692, State - 3,435
Louisiana Federal - E27,975, State - 2,364
Texas Federal - E1,745, State- 120,
U.S. Total - E35,898

² These adjustments are used to reconcile the national and PADCO totals. They are based on the difference between the national and PADCO totals and the difference between the national and PADCO totals of the U.S. and Alaska. These amounts in the Summary Statistics portion of the issue and with the PADCO level figures published in a previous issue. Final data at the State, PAD District and national levels will be published without adjustments in the Petroleum Supply Annual

(N) = Less than 500 barrels

Note: Total may not equal sum of components due to independent rounding
Source: See Explanatory Notes on Data Collection and Estimation
E = Estimated

Table 12. Natural Gas Processing Plant Production of Petroleum Products by PAD District,¹ September 1994
(Thousand Barrels)

Commodity	PAD District I			PAD District II					PAD District III				PAD District IV			United States
	East Coast	Appalachian	Total	Ill. Ky	W. Va.	Ohio	Total	Texas	Gulf Coast	No. La.	New Mexico	Total	Rocky Mt.	West Coast	Cons.	
Natural Gas Liquids	402	517	919	1,774	506	7,592	10,245	19,885	2,516	7,180	562	4,237	34,789	2,814	1,095	49,893
Petroleum Plus	68	86	154	0	289	129	1,401	3,703	334	1,580	208	683	8,357	807	484	9,283
Cracked Petroleum Gases	104	41	145	1,515	385	5,853	7,754	16,182	2,582	3,600	454	3,74	28,392	2,007	612	32,003
Ethane	104	41	145	0	145	145	1,410	3,703	334	1,580	208	683	8,357	807	484	9,283
Propane	138	208	347	1	635	213	2,449	3,703	6,182	1,056	1,381	1,285	10,728	1,137	356	15,564
Normal Butane	73	74	147	0	203	139	1,053	2,588	104	654	131	656	4,138	430	179	5,561
Isobutane	15	29	48	0	164	31	441	635	1,504	165	552	55	302	2,118	134	3,098
Refined Petroleum Products	0	0	0	1	0	15	16	35	47	4	3	7	58	2	0	114
Furnish Motor Gasoline	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	1
Furnish Aviation Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Furnish Unleaded Motor Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Furnish Aviation Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Naphtha-Type Jet Fuel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Kerosene-Type Jet Fuel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Kerosene	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
Distillate Fuel Oil	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Special Naphtha	0	0	0	0	0	0	0	0	47	0	0	0	47	0	0	47
Miscellaneous Products	0	0	0	1	0	15	16	33	0	4	3	7	47	2	0	65
Total Production	402	517	919	1,775	506	7,577	10,261	19,920	2,863	7,183	625	4,244	34,885	2,816	1,096	49,977

¹ Production represents quantity of natural gas processing plant output less value to fractionating facilities.
Source: See Explanatory Notes on Data Collection and Interpretation

Table 15. Percent Refinery Yield of Petroleum Products by PAD District, September 1984

Commodity	PAD District I			PAD District II					PAD District III					PAD District IV		United States
	East Coast	Appalachian	Total	Appalachian	Mid. Atl.	Wisc. & Ky	Okla. & Kans.	Total	Texas	Gulf Coast	La. & Ark.	New Mexico	Total	Rocky Mt.	West Coast	
Finished Motor Gasoline ¹	46.6	38.4	45.8	51.8	54.6	47.7	52.6	53.1	45.0	45.6	45.5	45.4	44.8	40.4	42.2	46.4
Low-Speed Diesel Fuel	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Medium-Speed Diesel Fuel	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Aviation Gasoline	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Jet Fuel	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Kerosene-Type Jet Fuel	4.2	0.0	3.8	6.7	6.7	4.7	4.7	5.2	6.9	6.2	11.5	1.3	7.9	4.6	11.1	7.4
Kerosene	2.1	3.3	5.6	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2
Distillate Fuel Oil	20.4	28.5	21.1	25.0	20.7	24.1	28.3	23.0	24.2	22.3	20.5	32.1	21.7	22.2	17.3	21.5
Residual Fuel Oil	10.6	2.2	10.0	3.9	2.4	2.5	1.0	2.1	4.6	7.0	4.7	4.0	3.5	2.4	14.2	6.8
Naphtin < 400 Deg F. Petro. Feed Use	5.0	0.0	5.0	0.0	0.0	0.0	0.0	5.0	9.6	2.2	2.2	2.2	2.2	0.0	2.2	9.9
Other Oils > 400 Deg F. Petro. Feed Use	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	3.4	2.5	0.0	0.0	0.0	0.0	0.0
Special Naphtin	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other Petro. Feed Use	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Waxes	9.1	12.8	15.0	0.0	1.0	0.0	1.7	10.0	1.1	2.1	1.4	7.3	0.0	2.0	2.2	5.6
Petroleum Coke	3.3	7.0	3.0	1.5	3.2	3.0	2.9	3.1	1.7	3.3	3.7	1.3	6.2	1.8	5.4	3.5
Asphalt and Road Oil	9.6	3.8	9.2	6.4	5.7	13.7	4.1	6.2	3.6	5.0	2.0	20.3	6.8	1.9	7.1	3.8
Still Gas	4.3	4.4	4.3	3.0	4.1	3.1	3.3	3.8	2.9	5.2	4.2	2.8	2.9	4.5	3.6	4.5
Miscellaneous Products	3.1	1.9	5.2	2.1	2.1	2.3	4.4	2.2	2.0	5.5	4.4	7.7	0.4	4.4	2.2	3.3
Processing Gains ² or Losses ³	-4.8	-1.0	-4.5	-4.3	-4.8	-3.4	-3.0	-4.2	2.7	-5.6	-5.2	1.1	-1.1	-1.5	-5.3	-4.5

1 Based on crude oil input and net output of unfinished oils.

2 Based on total finished motor gasoline output plus net output of motor gasoline blending components, minus output of natural gas plant liquids, other hydrocarbons and alcohol.

3 Based on finished aviation gasoline output plus net output of aviation gasoline blending components.

4 Represents the difference between input and production.

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

Note: See Explanatory 2.

Source: See Explanatory Notes on Data Collection and Estimation.

Table 16. Imports of Crude Oil and Petroleum Products by PAD District, September 1994
(Thousand Barrels)

Commodity	I	II	III	IV	V	Total
Crude Oil (including lease condensate) 1 2	28,453	13,245	51,174	989	4,946	98,837
Natural Gas Liquids						
Ethane	1,355	2,463	1,637	369	643	5,746
Propane Plus	734	0	838	133	110	3,915
Unrefined Petroleum Gases	921	2,463	189	329	256	3,958
Propene	0	0	0	0	0	553
Butane	0	116	82	148	63	1,722
Normal Butane	105	1,238	82	190	161	868
Isobutane	190	1,043	161	73	107	619
Other Liquids 1						
Unrefined Oils 1	1,707	271	6,455	0	714	8,207
Motor Gasolines Blending Components	523	271	5,734	0	2	6,630
Aviation Gasoline Blending Components	1,141	0	781	0	712	2,576
Aviation Gasoline Blending Components	0	0	0	0	0	0
Finished Petroleum Products	35,656	948	5,239	144	1,663	41,441
Finished Motor Gasoline	8,332	310	516	50	770	9,980
Finished Leaded Motor Gasoline	2,522	253	211	50	438	4,840
Finished Unleaded Motor Gasoline	4,466	0	305	1	331	5,148
Finished Aviation Gasoline	61	0	0	0	0	61
Aviation-Type Jet Fuel	0	0	0	0	0	0
Kerosene-Type Jet Fuel	829	0	0	0	74	903
Kerosene	0	0	0	0	0	0
Borered Diesel Fuel	0	0	0	0	0	0
Other	829	0	0	0	74	903
Kerosene	0	0	0	0	0	0
Diesel Fuel Oil	0	0	0	0	74	74
Borered Ships Bunkers	208	382	1	78	103	593
Other	7,978	0	0	0	0	8,343
Residual Fuel Oil	0	0	0	0	0	0
Borered Fuel Oil	7,978	382	1	78	103	8,543
Other	14,501	67	2,547	7	344	17,866
Borered Ships Bunkers	0	67	2,547	0	0	2,614
Other	14,501	0	0	0	0	14,501
Naphtala < 400 Deg. for Petro Feed Use	11	4	1,263	0	344	17,866
Other Oils > 400 Deg. for Petro Feed Use	0	0	0	0	0	0
Naphtala	227	63	773	0	0	1,253
Other	0	0	0	0	0	0
Waxes	313	16	27	0	19	1,083
Asphalt and Road Oil	29	12	27	0	20	378
Miscellaneous Products	44	32	29	0	3	73
Other	0	0	0	0	0	0
Miscellaneous Products	0	31	11	0	130	1,001
Total Imports	65,322	16,726	63,875	1,532	7,766	185,201

¹ Crude oil and unfinished oils are reported by the PAD District in which they were produced.

are to be processed; all other products are reported by the PAD District of entry
Includes crude oil imported for storage in the Strategic Petroleum Reserve

5) = Less than 500 barrels

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

Source: See Explanatory Notes on Data Collection and Estimation

Table 17. Year-to-Date Imports of Crude Oil and Petroleum Products by PAD District, January - September 1984
(Thousand Barrels)

Commodity	Petroleum Administration for Defense Districts				
	I	II	III	IV	TOTAL
Crude Oil (including lease condensate) 1 2	244,397	437,428	482,957	8,642	52,220
Natural Gas Liquids	12,295	30,661	5,577	4,205	925,554
Petroleum Gas	8,111	0	2,425	894	4,724
Liquefied Petroleum Gases	4,184	36,681	3,152	3,401	53,553
Ethane	1	20,157	0	0	12,282
Propane	2,997	10,481	1,427	0	51,300
Normal Butane	1,072	3,614	1,287	1,709	20,150
Isobutane	714	2,469	529	1,016	16,618
Other Liquids 1	27,205	3,195	43,235	0	8,775
Unfinished Oil 1	16,090	2,120	40,528	0	84,396
Motor Gasoline Blending Components	11,155	75	2,957	0	83,970
Aviation Gasoline Blending Components	0	0	0	0	20,411
Finished Petroleum Products	326,440	9,711	47,248	1,011	395,160
Finished Motor Gasoline	66,579	1,162	5,035	581	78,416
Finished Locomotive Gasoline	30,285	794	3,241	553	38,729
Finished Unfinished Motor Gasoline	35,294	368	2,594	26	42,867
Finished Aviation Gasoline	2,595	0	0	0	506
Naphtalene-Type Jet Fuel	11,535	0	1,280	0	4,102
Kerosene-Type Jet Fuel	0	0	0	0	13,061
Specialty Jet Fuel	0	0	0	0	0
Other	11,425	0	0	0	1,258
Kerosene	2,174	0	0	0	13,091
Distillate Fuel Oil	94,265	2,415	1,029	1,095	2,150
Blended Ship Bunkers	0	0	0	0	1,569
Other	94,265	2,415	1,029	1,095	70,474
Other Fuel Oil	195,659	1,644	10,845	115	1,269
Blended Ship Bunkers	0	0	0	0	3,712
Other	195,659	1,644	10,845	115	70,474
Naphtalene < 400 Deg. for Petro. Feed Use	725	108	8,032	115	3,712
Other Oils > 400 Deg. for Petro. Feed Use	0	0	0	0	2,712
Special Naphtalene	2,652	3,729	6,547	4	185,258
Lubricants	1,814	101	307	1	16,073
Waxes	134	35	183	0	2,654
Asphalt and Road Oil	2,106	125	143	37	399
Nonferrous Products	1,102	268	1,472	32	2,680
Total Imports	610,336	198,944	676,128	14,749	81,445
					1,472,652

1 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.

2 Included crude oil imported for storage in the Strategic Petroleum Reserve.

(a) = Less than 500 barrels.

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

Source: See Supplementary Notes on Data Collection and Expansion.

Table 18. Imports of Crude Oil and Petroleum Products by Source and PAD District, September 1984
(Thousand Barrels)

Source	Crude Oil 1	LPG	Unrefined Oil	Gasoline Blanding Components	Finished Motor Gasoline	Jet Fuel	Kerosene	Dist. Fuel Oil	Heated Fuel Oil	Special Naphthas	Other Products 2	Total Products	Total Petroleum	Total Daily Average
All PAD Districts														
Arab OPEC														
Algeria	5,507	132	0	158	0	0	0	832	940	243	2,393	4,597	10,354	343
Libya	500	0	0	0	0	0	0	0	0	0	0	0	590	20
Saudi Arabia	799	0	0	0	0	0	0	0	334	0	0	334	1,123	38
United Arab Emirates	4,353	145	0	664	367	0	0	411	546	0	0	1,357	4,768	169
Subtotal Arab OPEC	13,027	276	0	822	367	0	0	1,243	1,820	243	2,393	7,134	20,161	612
Other OPEC														
Equatorial Guinea	1,110	0	0	0	0	0	0	0	178	0	0	178	1,288	43
Gabon	1,898	0	0	0	0	0	0	0	0	0	0	0	1,388	47
Indonesia	8,832	0	396	0	88	23	0	9	132	259	545	1,462	9,994	333
Iran	916	0	0	0	0	0	0	0	0	0	0	0	516	17
Nigeria	1,520	0	0	0	2,491	112	113	2,639	4,702	0	575	12,144	19,739	169
Subtotal Other OPEC	24,236	0	1,506	0	2,579	135	113	2,642	5,679	259	1,120	14,364	30,660	1,389
Other														
Angola	2,753	0	0	0	0	0	0	0	0	0	0	0	2,753	91
Australia	0	0	0	0	146	0	0	0	2	9	0	157	157	5
Bahamas	0	0	702	253	731	292	0	408	1,208	0	0	3,034	3,034	101
Canada	0	3,384	397	0	838	0	0	1,058	220	96	0	1,577	16,517	55
China	9,546	0	0	0	0	0	0	0	185	0	0	185	9,732	34
Egypt	494	0	0	0	0	0	0	0	0	0	0	0	494	16
France	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Germany	20,199	190	1,377	0	287	64	0	1	604	0	136	2,660	22,859	762
Netherlands	1	0	0	0	232	0	0	305	0	0	0	544	545	18
Netherlands Antilles	0	0	859	0	211	0	0	280	2,841	35	27	3,883	3,883	130
Norway	4,700	0	0	0	0	0	0	0	0	0	0	4,700	4,700	157
People's Republic of China	538	0	0	1,032	343	0	0	0	0	0	0	1,340	1,709	57
Peru	0	0	188	0	0	0	0	0	272	0	0	272	470	16
Puerto Rico	0	0	50	0	505	0	0	70	0	212	397	1,154	1,134	38
Romania	0	0	0	479	995	0	0	0	1,475	1,475	0	1,475	1,475	49
Spain	0	0	0	0	0	0	0	0	2	142	146	144	144	5
Trinidad and Tobago	2,736	0	0	0	0	0	0	284	0	0	0	284	3,082	103
United Kingdom	14,489	0	0	0	213	0	0	0	0	0	0	213	14,701	490
Virgin Islands	0	0	1,031	0	1,137	381	68	1,035	3,711	0	0	7,263	7,263	245
Zaire	973	0	0	0	0	0	0	0	0	0	0	0	973	32
Other Western Hemisphere	0	0	0	0	0	0	0	0	0	58	0	58	58	2
Hong Kong	4,345	0	0	0	1,418	51	0	1,365	490	187	80	3,570	7,952	265
Other Eastern Hemisphere	61,483	132	4,704	1,764	7,051	769	95	4,768	10,367	972	1,262	34,896	96,379	3,213
Subtotal Other	98,007	3,632	6,030	2,576	8,888	903	203	8,543	17,896	1,053	4,768	36,191	155,201	5,173
Total Imports														
PAD District 1														
Arab OPEC														
Algeria	1,504	132	0	0	0	0	0	0	0	0	0	0	1,504	121
Libya	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal Arab OPEC	1,504	132	0	0	0	0	0	0	0	0	0	0	1,504	121

See footnotes at end of table.

Table 18. Imports of Crude Oil and Petroleum Products by Source and PAD District, September 1984
(Thousand Barrels) (continued)

Source	Code Oil	LPG	Unre- fined Crude	Gasoline Blending Compo- nents	Finished Motor Gasoline	Jet Fuel	Kero- sine	Died Fuel Oil	Road Fuel Oil	Special Naphtha	Other Pro- ducts	Total Pro- ducts	Total Petro- leum	Total (Daily Average)
PAD District I														
Saudi Arabia	1,591	195	0	0	0	0	0	0	0	0	0	125	1,705	57
United Arab Emirates	389	0	0	0	357	0	0	411	0	0	0	1,433	1,832	61
Subtotal Arab OPEC	3,085	295	0	0	694	357	0	1,243	525	0	0	534	3,570	238
Other OPEC														
Ecuador	0	0	0	0	0	0	0	0	178	0	0	178	178	6
Gabon	805	0	0	0	0	0	0	0	0	0	0	805	20	0
Indonesia	2,035	0	0	0	0	0	0	0	0	0	0	2,035	50	0
Nigeria	1,303	0	0	0	0	0	0	0	448	0	0	448	1,752	58
Venezuela	2,445	0	0	0	2,491	112	113	2,478	4,410	0	0	474	10,078	12,423
Subtotal Other OPEC	6,238	0	0	0	2,491	112	113	2,478	5,037	0	0	474	10,705	17,943
Other														
Algeria	2,026	0	0	0	0	0	0	0	0	0	0	0	2,026	67
Bahamas	0	0	0	0	0	0	0	408	1,288	0	0	1,696	1,696	56
Brazil	0	0	0	0	730	0	0	0	847	0	0	1,577	1,677	58
Canada	1,155	264	124	0	365	0	7	817	144	15	303	1,939	3,114	104
Colombia	0	0	0	0	0	0	0	0	185	0	0	185	335	11
Congo	450	0	0	0	0	0	0	0	0	0	0	0	450	16
Egypt	0	0	0	0	0	0	0	0	0	0	0	0	0	0
France	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Germany	3,284	0	0	0	287	64	0	0	293	0	60	705	4,688	138
Italy	0	0	0	0	232	0	0	305	0	0	0	537	537	18
Netherlands	0	0	0	0	0	0	0	220	2,467	0	0	2,687	2,687	90
Norway	1,449	0	0	0	0	0	0	0	0	0	0	0	1,449	52
People's Republic of China	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peru	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Portugal	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Romania	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Saudi Arabia	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Spain	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sweden	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Switzerland	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Turkey	0	0	0	0	0	0	0	0	0	0	0	0	0	0
United Kingdom	0	0	0	0	0	0	0	0	0	0	0	0	0	0
United States	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Yugoslavia	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Zaire	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Western Hemisphere	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Eastern Hemisphere	1,099	0	0	0	1,384	0	0	1,319	282	0	25	2,061	4,069	135
Subtotal Other	18,721	269	623	479	5,484	717	95	4,226	9,359	227	918	22,404	41,125	1,371
Total Imports	28,843	521	633	1,144	8,332	829	208	7,978	14,901	227	1,915	30,078	65,322	2,177
PAD District II														
Algeria	535	0	0	0	0	0	0	0	0	0	0	0	535	18
Subtotal Arab OPEC	535	0	0	0	0	0	0	0	0	0	0	0	535	18
Other OPEC														
Ecuador	246	0	0	0	0	0	0	0	0	0	0	0	246	12
Iran	91	0	0	0	0	0	0	0	0	0	0	0	91	17
Nigeria	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal Other OPEC	337	0	0	0	0	0	0	0	0	0	0	0	337	29
Other														
France	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Germany	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Italy	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Netherlands	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Spain	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sweden	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Switzerland	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Turkey	0	0	0	0	0	0	0	0	0	0	0	0	0	0
United Kingdom	0	0	0	0	0	0	0	0	0	0	0	0	0	0
United States	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Yugoslavia	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Zaire	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Western Hemisphere	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Eastern Hemisphere	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Imports	0	0	0	0	0	0	0	0	0	0	0	0	0	0

See footnotes at end of table.

Table 18. Imports of Crude Oil and Petroleum Products by Source and PAO District, September 1984
(Thousand Barrels) (continued)

Source	Crude Oil	LPG	Unleaded Gasoline Only	Gasoline Blending Stock	Motor Gasoline	Jet Fuel	Kerosene	Diesel Fuel	Road Fuel	Special Naphtha	Other Products	Total Production	Total Imports	Total (Daily Average)
PAO District II														
Other														
Brazil	6,346	2,403	271	0	310	0	0	327	67	0	0	0	0	0
Canada	0	0	0	0	0	0	0	0	0	0	0	0	0	0
France	3,274	0	0	0	0	0	0	0	0	0	0	0	0	0
Mexico	537	0	0	0	0	0	0	0	0	0	0	0	0	0
Norway	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Spain	0	0	0	0	0	0	0	0	0	0	0	0	0	0
United Kingdom	870	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Eastern Hemisphere	11,647	2,463	271	0	219	0	0	327	67	0	0	0	0	0
Subtotal Other	13,045	2,463	271	0	319	0	0	382	67	0	0	0	0	0
Total Imports	13,045	2,463	271	0	319	0	0	382	67	0	0	0	0	0
PAO District III														
Arab OPEC														
Algeria	3,467	0	0	158	0	0	0	0	414	243	1,869	2,684	6,151	325
Iran	590	0	0	0	0	0	0	0	0	0	0	0	590	30
Kuwait	599	0	0	0	0	0	0	0	594	0	0	0	1,193	36
Saudi Arabia	3,422	0	0	0	0	0	0	0	0	0	0	0	3,422	126
United Arab Emirates	999	0	0	0	0	0	0	0	0	0	0	0	999	35
Subtotal Arab OPEC	8,967	0	0	158	0	0	0	0	648	243	1,869	2,684	11,545	51
Other OPEC														
Egypt	764	0	0	0	0	0	0	0	0	0	0	0	764	416
Gabon	793	0	0	0	0	0	0	0	0	0	0	0	793	35
Indonesia	1,218	0	398	0	0	0	0	0	0	0	0	0	2,616	94
Nigeria	2,854	0	0	0	0	0	0	0	163	0	232	897	3,815	34
Venezuela	6,208	0	1,930	0	0	0	0	0	347	0	34	1,613	3,047	102
Subtotal Other OPEC	12,567	0	1,938	0	0	0	0	0	510	239	268	2,872	15,339	271
Other														
Argentina	726	0	0	0	0	0	0	0	0	0	0	0	726	24
Australia	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bahamas	0	0	792	250	0	0	0	0	0	0	0	1,048	0	35
Canada	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Congo	682	0	0	0	0	0	0	0	0	0	0	0	682	23
Egypt	0	0	0	0	0	0	0	0	0	0	0	0	0	0
France	13,541	159	1,377	0	0	0	0	0	308	0	0	4	15,498	512
Germany	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Italy	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Netherlands	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Norway	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	2,598	0	869	0	213	0	0	0	174	35	27	307	3,397	7
People's Republic of China	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peru	398	0	0	0	0	0	0	0	0	0	0	0	398	1
Romania	0	0	198	0	0	0	0	0	0	0	0	0	198	1
Spain	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sweden	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trinidad and Tobago	2,345	0	0	0	0	0	0	0	0	0	0	0	2,345	7
United Kingdom	5,877	0	0	0	0	0	0	0	0	0	0	0	5,877	2
Virgin Islands	0	0	592	0	0	0	0	0	0	0	0	0	592	1

See footnotes at end of table

Table 19. Year-to-Date Imports of Crude Oil and Petroleum Products by Source and PAD District, January - September 1984
(Thousand Barrels)

Source	Crude Oil	LPG	Unre- served Oil	Gasoline and Lubricants	Finished Motor Gasoline	Jet Fuel	Kero- sene	Distil Fuel Oil	Resid Fuel Oil	Special Naphtha	Other Prod- ucts	Total Prod- ucts	Total Petrol- eum	Total (Daily Average)
Arab OPEC														
Algeria	54,307	387	595	158	434	327	0	5,132	18,172	3,210	8,840	96,226	92,544	320
Iraq	2,769	0	0	0	0	0	0	0	0	0	0	0	2,769	10
Kuwait	5,550	0	0	0	0	0	0	4,019	4,019	0	0	0	9,569	35
Qatar	1,487	0	0	0	0	0	0	0	0	0	0	0	1,487	5
Saudi Arabia	83,279	97	1,119	0	0	0	0	0	0	0	0	0	83,376	304
United Arab Emirates	2,718	0	1,345	1,657	327	291	0	4,111	1,819	0	0	0	97,038	354
Saudi Arab OPEC	179,275	1,284	2,768	1,815	791	548	0	6,549	23,465	3,210	10,715	51,171	230,445	841
Other OPEC														
Ecuador	13,439	0	0	0	0	0	0	0	2,581	0	0	0	16,020	58
Gabon	15,405	0	0	0	0	0	0	0	246	60	0	0	306	13
Indonesia	77,105	1,366	2,332	0	1,244	190	0	340	5,467	954	618	12,910	83,715	327
Iran	2,393	0	1,532	0	0	0	0	0	0	0	0	0	2,393	9
Yemen	53,617	0	0	0	0	0	0	0	33	0	0	0	53,650	197
Venezuela	69,469	0	3,965	790	16,779	4,132	113	16,819	32,557	1,082	2,746	56,817	384,589	1,220
Subtotal Other OPEC	327,462	1,366	9,700	790	18,022	4,323	113	17,222	41,354	1,082	2,746	56,817	384,589	1,220
Other														
Angola	24,183	0	0	0	0	0	0	0	609	0	0	0	24,992	91
Australia	3,372	427	0	0	585	76	0	107	1,502	0	203	2,884	6,537	24
Bahamas	0	0	7,011	253	0	950	89	4,864	6,584	0	2,552	21,893	21,893	80
Bolivia	200	0	0	0	0	0	0	0	0	0	0	0	200	1
Brazil	2	0	0	0	6,373	0	0	0	6,114	200	34	14,722	14,722	54
Canada	60,384	46,371	3,024	79	5,119	212	50	6,220	6,525	4,372	3,618	79,306	168,860	616
Chad	9,774	0	0	0	0	0	0	0	0	0	0	0	9,774	36
China	3,135	0	0	0	0	0	0	0	1,591	0	0	0	3,135	11
Egypt	0	0	0	0	0	0	0	0	0	0	0	0	0	0
France	0	0	0	0	573	0	0	0	299	0	0	0	573	3
Ghana	0	0	0	0	0	0	0	0	250	0	0	0	250	1
Guatemala	0	0	0	0	0	0	0	0	1,892	0	0	0	1,892	7
Laos	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Malaysia	0	0	125	0	158	7	0	20	92	0	0	0	408	1
Mexico	179,006	1,919	9,932	3,511	9719	308	0	1,027	1,652	300	773	20,992	199,088	727
Netherlands	1,045	0	0	0	578	6,070	186	7,183	1,415	340	776	16,340	17,386	63
Netherlands Antilles	0	26	9,106	498	6,397	933	0	2,671	34,467	35	328	54,811	54,811	200
Norway	32,122	0	0	0	0	451	0	386	0	0	0	0	32,122	120
Oman	2,109	0	0	0	0	0	0	0	1,259	0	0	0	2,109	8
Pakistan	0	0	0	0	0	0	0	0	0	0	0	0	0	0
People's Republic of China	324	0	484	6,711	1,115	223	0	0	0	347	30	1,239	3,547	12
Romania	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Russia	0	0	1,298	0	3,458	453	0	0	4,869	0	0	0	5,167	22
Spain	0	0	0	0	1,167	1,016	0	1,081	0	0	0	0	1,167	43
Tanzania	0	0	218	0	0	0	0	0	389	453	3,034	11,818	11,818	43
Togo	0	0	0	0	0	0	0	0	782	12	171	3,488	3,488	13
Trinidad and Tobago	21,276	0	0	0	0	0	0	0	1,731	7	16	2,272	24,250	89
Tunisia	4	0	0	0	0	0	0	0	0	0	0	0	0	0
United Kingdom	98,470	535	737	570	2,631	325	0	1,63	655	156	715	6,477	102,347	376
United States	0	0	9,935	12,115	5,222	1,083	0	13,265	38,655	425	359	81,116	81,116	293
Zaire	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Western Hemisphere	8,910	0	0	0	0	0	0	0	0	0	0	0	8,910	31
Hemisphere	721	137	1,022	28	221	6	6	381	6,852	297	162	9,754	10,482	36
Netherlands	32,935	2	0	0	8,681	1,663	89	4,863	11,678	1,574	2,154	40,402	72,492	265
Subtotal Other	329,327	48,660	61,304	17,606	60,022	12,742	2,067	47,728	120,268	11,770	17,264	289,010	567,537	3,319

Other includes all and of safety

Table 18. Year-to-Date Imports of Crude Oil and Petroleum Products by Source and PAD District, January - September 1984
(continued)

Source	Crude Oil 1	LPG	Unrefined Oils	Gasoline Blending Components	Finished Motor Gasoline	Jet Fuel	Kerosene	Dist. Fuel Oil	Resid. Fuel Oil	Special Naphtha	Other Products	Total Products	Total Petro. (Daily Average)
Total Imports	925,554	51,300	63,970	20,411	79,415	17,273	2,180	70,474	185,256	16,073	30,748	547,089	1,472,652
All PAD Districts													
PAD District 1													
Arab OPEC													
Algeria	14,133	387	0	0	434	327	0	5,082	14,762	218	2,019	24,207	38,241
Kuwait	253	0	0	0	0	0	0	0	0	0	0	0	953
Saudi Arabia	21,248	917	887	0	0	0	0	0	0	0	0	0	23,032
United Arab Emirates	835	0	1,857	0	357	0	0	411	434	0	1,338	4,107	5,033
Subtotal Arab OPEC	36,469	1,294	887	1,857	791	327	0	6,483	15,195	218	3,356	30,189	66,658
Other OPEC													
Qatar	302	0	0	0	0	0	0	0	2,351	0	0	2,351	2,883
Indonesia	5,202	0	0	0	0	0	0	0	345	60	0	305	3,899
Malaysia	18,215	0	228	0	0	0	0	0	1,317	0	0	1,317	20,432
Nigeria	17,119	0	0	0	0	0	0	50	1,259	0	0	1,309	15,418
Venezuela	20,058	0	0	0	14,242	3,720	113	18,774	20,530	0	1,812	48,710	84,785
Subtotal Other OPEC	61,357	0	228	0	14,242	3,720	113	18,824	24,934	60	1,812	71,853	133,180
Other													
Armenia	15,251	0	0	0	0	0	0	0	509	0	0	509	16,070
Australia	0	0	0	0	0	0	0	0	746	0	0	746	746
Bahrain	0	0	481	0	0	950	69	4,316	6,094	0	180	12,579	12,579
Brazil	2	0	0	0	4,887	0	0	0	7,850	0	1	12,038	12,039
Canada	9,910	2,241	180	0	2,562	0	50	5,555	4,816	176	2,037	17,410	27,330
China	3,341	0	0	0	0	0	0	0	1,891	0	0	1,891	2,873
France	2,451	0	0	0	0	0	0	0	299	0	0	299	532
Ghana	0	0	0	0	373	0	0	0	0	0	1	573	573
India	0	0	0	0	0	0	0	0	350	0	0	350	350
Libya	0	0	0	0	0	0	0	0	1,582	0	0	1,582	1,582
Mexico	26,318	0	0	0	520	279	0	885	918	251	349	6,477	32,750
Netherlands	6,070	0	0	0	1,418	146	0	7,183	1,418	36	251	15,252	15,252
Netherlands Antilles	0	0	7,178	426	5,108	853	0	2,513	34,121	0	122	50,361	50,361
Norway	20,127	0	0	0	0	48	0	296	0	0	0	486	20,352
Other	2,592	0	0	0	0	0	0	0	385	0	0	385	75
People's Republic of China	0	0	0	0	0	0	0	0	0	0	0	0	0
Pakistan	0	0	0	0	0	0	0	0	0	0	0	0	0
Puerto Rico	2	0	0	0	0	0	0	0	0	0	0	0	0
Romania	0	1,286	0	0	3,456	453	0	842	4,036	0	0	4,036	5,796
Spain	0	232	4,331	2,262	0	0	0	0	0	1,222	1,580	8,932	8,932
Sweden	0	0	0	0	1,167	825	0	122	782	183	163	3,050	3,050
Switzerland	0	0	13	0	0	0	0	504	1,731	7	0	2,235	2,235
Tanzania and Togo	4,126	0	0	0	0	0	0	0	0	0	0	0	0
Tunisia	4	0	0	0	0	0	0	0	0	0	0	0	0
United Kingdom	49,702	525	471	79	2,704	154	0	107	656	181	287	5,037	54,729
United States	0	0	4,437	0	13,118	5,297	1,862	13,996	55,025	0	0	74,037	74,037
Virgin Islands	0	0	0	0	0	0	0	0	0	0	0	0	0
Zaire	4,218	0	0	0	0	0	0	0	0	0	0	0	0
Other Western Hemisphere	0	127	611	0	221	0	0	32	8,552	0	0	7,880	7,880
Other Eastern Hemisphere	5,912	2	145	1,285	8,165	827	80	4,262	7,140	439	1,101	24,788	31,599
Subtotal Other	148,570	2,950	14,565	8,487	51,245	10,623	2,061	41,055	119,750	2,374	5,750	263,946	470,516

See footnotes at end of table

Table 19. Year-to-date imports of Crude Oil and Petroleum Products by Source and PAD District, January - September 1984
(Thousand Barrels)
(continued)

Source	Crude Oil 1	LPG	Unrefined Oil	Gasoline Blending Components	Finished Motor Gasoline	Jet Fuel	Kerosene	Dist. Fuel Oil	Road Fuel Oil	Special Naphthas	Other Products	Total Products	Total Petroleum
Total Imports	244,397	4,184	16,000	11,155	66,579	14,120	2,174	84,266	169,239	2,632	14,721	365,940	610,316
PAD District I													
Arab OPEC													
Algeria	7,129	0	0	0	0	0	0	0	0	0	0	0	7,129
Iran	1,536	0	0	0	0	0	0	0	0	0	0	0	1,536
Saudi Arabia	2,291	0	0	0	0	0	0	0	0	0	0	0	2,291
United Arab Emirates	2,069	0	0	0	0	0	0	0	0	0	0	0	2,069
Subtotal Arab OPEC	11,689	0	0	0	0	0	0	0	0	0	0	0	11,689
Other OPEC													
Indonesia	2,481	0	0	0	0	0	0	0	0	0	0	0	2,481
Iraq	1,556	0	0	0	0	0	0	0	0	0	0	0	1,556
Nigeria	7,263	0	203	0	0	0	0	0	0	0	0	0	7,466
Venezuela	417	0	0	0	0	0	0	55	0	0	0	55	472
Subtotal Other OPEC	11,657	0	203	0	0	0	0	55	0	0	0	55	11,965
Other													
Australia	0	0	0	0	0	0	0	0	0	0	0	0	0
Bahamas	0	0	218	0	0	0	0	0	0	0	0	218	218
Brazil	0	0	0	0	0	0	0	0	0	0	0	0	0
Canada	65,542	36,659	2,699	75	1,182	0	0	3,300	1,644	3,729	758	49,263	114,626
Congo	1,957	0	0	0	0	0	0	0	0	0	0	0	1,957
France	0	0	0	0	0	0	0	0	0	0	0	0	0
Germany	34,532	0	0	0	0	0	0	0	0	0	0	0	34,532
Italy	1,075	0	0	0	0	0	0	0	0	0	0	0	1,075
Netherlands	1,075	0	0	0	0	0	0	0	0	0	0	0	1,075
Norway	222	0	0	0	0	0	0	0	0	0	0	0	222
Peru	0	0	0	0	0	0	0	0	0	0	0	0	0
Spain	0	0	0	0	0	0	0	0	0	0	0	0	0
Trinidad and Tobago	5,758	0	0	0	0	0	0	0	0	0	0	0	5,758
United Kingdom	2,598	1	0	0	0	0	0	0	0	0	0	0	2,599
Other Western Hemisphere	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Eastern Hemisphere	1,093	0	0	0	0	0	0	0	0	0	0	0	1,093
Subtotal Other	114,101	36,661	2,120	75	1,182	0	0	3,300	1,644	3,729	751	49,263	163,509
Total Imports	137,428	36,661	1,123	158	1,182	0	0	2,515	1,644	3,729	751	49,263	165,984

PAD District II

Arab OPEC													
Algeria	32,110	0	345	158	0	0	0	0	0	0	0	0	32,453
Iran	2,769	0	0	0	0	0	0	0	0	0	0	0	2,769
Iraq	3,048	0	0	0	0	0	0	4,019	0	0	0	4,019	9,117
Saudi Arabia	70,440	0	0	0	0	0	0	0	0	0	0	0	70,440
United Arab Emirates	18,268	0	780	0	0	0	0	1,013	0	0	0	1,013	21,453
Subtotal Arab OPEC	130,183	0	1,123	158	0	0	0	5,032	0	0	0	5,032	135,373
Other													
Australia	0	0	0	0	0	0	0	0	0	0	0	0	0
Bahamas	0	0	0	0	0	0	0	0	0	0	0	0	0
Brazil	0	0	0	0	0	0	0	0	0	0	0	0	0
Canada	0	0	0	0	0	0	0	0	0	0	0	0	0
Congo	0	0	0	0	0	0	0	0	0	0	0	0	0
France	0	0	0	0	0	0	0	0	0	0	0	0	0
Germany	0	0	0	0	0	0	0	0	0	0	0	0	0
Italy	0	0	0	0	0	0	0	0	0	0	0	0	0
Netherlands	0	0	0	0	0	0	0	0	0	0	0	0	0
Norway	0	0	0	0	0	0	0	0	0	0	0	0	0
Peru	0	0	0	0	0	0	0	0	0	0	0	0	0
Spain	0	0	0	0	0	0	0	0	0	0	0	0	0
Trinidad and Tobago	0	0	0	0	0	0	0	0	0	0	0	0	0
United Kingdom	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Western Hemisphere	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Eastern Hemisphere	0	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal Other	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Imports	130,183	0	1,123	158	0	0	0	5,032	0	0	0	5,032	135,373

See footnotes at end of table.

Table 13. Year-to-Date Imports of Crude Oil and Petroleum Products by Source and PAD District, January - September 1984
(Thousand Barrels)
(continued)

Source	Crude Oil 1	LPG	Unrefined Oils	Gasoline Blending Components	Finished Motor Gasoline	Jet Fuel	Kerosene	Dist. Fuel Oil	Resid. Fuel Oil	Special Naphthas	Other Products 2	Total Products	Total Petroleum	Total (Daily Average)
PAD District III														
Other OPEC														
Algeria	10,319	0	0	0	0	0	0	0	0	0	0	0	0	10,319
Colombia	10,343	0	0	0	0	0	0	0	0	0	0	0	0	10,343
Indonesia	10,321	1,358	398	0	0	0	0	0	2,580	497	302	5,133	8,133	24,354
Iran	1,032	0	0	0	0	0	0	0	0	0	0	0	0	1,032
Nigeria	35,125	0	1,379	0	0	0	0	0	386	0	248	1,865	2,410	37,080
Venezuela	49,369	0	5,696	780	2,290	0	0	3	2,156	68	201	11,191	59,580	217
Subtotal Other OPEC	125,405	1,356	7,461	780	2,290	0	0	3	5,062	565	752	18,279	142,665	521
Other														
Angola	8,892	0	0	0	0	0	0	0	0	0	0	0	0	8,892
Australia	2	0	0	0	0	0	0	0	519	0	164	654	685	3
Bahamas	0	0	6,312	253	0	0	0	349	0	0	2,172	9,085	9,086	33
Bolivia	260	0	0	0	0	0	0	0	0	0	0	0	0	260
Brazil	0	0	0	0	1,366	0	0	0	264	360	23	1,894	1,894	7
Canada	0	0	0	0	0	0	0	0	0	216	71	317	319	1
Costa Rica	3,876	0	0	0	0	0	0	0	0	0	0	0	0	3,876
Cuba	874	0	0	0	0	0	0	0	0	0	0	0	0	874
France	0	0	(a)	0	0	0	(b)	0	0	0	0	0	0	0
Malaysia	0	0	125	0	0	0	0	0	0	0	15	15	15	(a)
Mexico	117,667	1,789	9,632	284	439	29	0	0	688	3	203	13,347	191,214	479
Netherlands	1	0	160	0	0	0	0	0	0	0	0	525	525	2
Netherlands Antilles	25	0	2,120	0	1,269	0	0	350	174	315	86	4,091	4,291	15
Norway	10,023	(b)	0	0	0	361	0	0	0	0	0	361	11,201	41
Other Western Hemisphere	1,116	0	0	0	0	0	0	0	85	0	0	85	1,199	6
People's Republic of China	698	0	803	0	0	0	0	0	0	0	30	834	1,251	5
Puerto Rico	0	0	755	0	0	223	0	0	262	0	0	1,239	1,239	6
Romania	0	0	0	0	305	0	0	0	0	2,034	0	2,034	2,034	7
Saudi Arabia	0	0	216	0	0	190	0	0	0	239	0	544	544	2
Singapore and Hong Kong	12,094	0	0	0	0	0	0	0	0	12	18	436	458	2
Tunisia	0	0	0	0	0	0	0	0	0	0	0	0	0	0
United Kingdom	45,170	0	265	291	127	171	0	(b)	0	156	435	1,437	45,609	162
Virgin Islands	0	0	5,367	0	0	0	0	0	1,296	355	334	7,661	7,661	28
Zaire	4,292	0	0	0	0	0	0	0	0	0	0	0	0	4,292
Other Western Hemisphere	721	0	1,038	39	0	0	6	12	0	297	154	1,635	2,937	8
Other Eastern Hemisphere	22,654	0	6,039	18	0	693	0	56	2,325	1,023	182	10,295	30,295	129
Subtotal Other Hemisphere	225,279	1,797	31,842	1,839	3,546	1,668	6	976	6,483	4,369	4,598	37,772	286,052	1,044
Total Imports	492,897	3,152	40,636	2,697	5,836	1,688	6	1,029	19,845	8,347	12,832	96,260	578,126	2,114
PAD District IV														
Other														
Canada	8,642	3,491	0	0	561	0	0	1,995	115	4	801	6,107	14,749	54
France	0	0	0	0	0	0	0	0	0	0	0	0	0	0
See footnotes at end of table														

Table 19. Year-to-Date Imports of Crude Oil and Petroleum Products by Source and PAD District, January - September 1984
(Thousand Barrels)
(continued)

Source	Crude Oil 1	LPG	Unrefined Oil	Gasoil Blending Components	Finished Motor Gasoline	Jet Fuel	Kerosene	Dist. Fuel Oil	Resid. Fuel Oil	Special Naphtas	Other Products 2	Total Products	Total Petro-learn	Total (Daily Average)
PAD District IV														
Other Eastern Hemisphere	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal Other	0,642	3,401	0	0	561	0	0	1,095	115	4	931	6,107	14,749	64
Total Imports	6,642	3,401	0	0	561	0	0	1,695	115	4	931	6,107	14,749	56
PAD District V														
Arab OPEC	934	0	253	0	0	0	0	0	0	0	0	253	1,187	4
Algeria	0	0	253	0	0	0	0	0	0	0	0	253	1,187	4
Libya	0	0	253	0	0	0	0	0	0	0	0	253	1,187	4
United Arab Emirates	0	0	253	0	0	0	0	0	0	0	0	253	1,187	4
Subtotal Arab OPEC	934	0	774	0	0	0	0	0	0	0	0	774	1,707	6
Other OPEC	360	0	0	0	0	0	0	0	0	0	0	0	360	1
Ecuador	360	0	0	0	0	0	0	0	0	0	0	0	360	1
Venezuela	360	0	0	0	0	0	0	0	0	0	0	0	360	1
Subtotal Other OPEC	40,062	0	1,808	0	1,491	563	0	340	1,497	467	381	6,377	46,621	170
Other	3,571	427	0	0	595	75	0	167	237	0	44	1,235	5,105	13
Portugal	0	0	0	0	0	0	0	0	0	0	0	0	0	0
France	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Canada	6,226	3,424	157	0	1,031	215	0	211	70	197	82	5,385	11,925	42
Malaysia	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mexico	0	0	0	0	153	7	0	20	59	0	284	284	284	1
Netherlands	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Norway	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sweden	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Switzerland	0	0	0	0	0	0	0	0	0	0	0	0	0	0
United Kingdom	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Spain	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Portugal	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Portugal's Republic of China	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Puerto Rico	0	0	0	0	0	0	0	0	0	0	0	0	0	0
United States	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Eastern Hemisphere	1,404	0	1,022	215	890	323	0	318	1,524	0	318	3,181	3,181	1
Subtotal Other	11,234	3,501	1,630	5,374	3,780	971	0	1,229	2,214	575	1,332	21,676	33,105	121
Total Imports	52,220	3,901	4,271	5,374	5,279	1,284	0	1,569	3,712	1,142	1,713	29,229	81,445	297

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

2 Includes motor gasoline, aviation gasoline, blending components, waxes, asphalt, lubricants, pentanes

(n) = Less than 500 barrels or less than 500 tonnes per day

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

Sources: See Explanatory Notes on Data Collection and Estimation.

Table 20. Exports of Crude Oil and Petroleum Products by PAD District, September 1984
(Thousand Barrels)

Commodity	Petroleum Administration for Defense District				
	I	II	III	IV	Total
Crude Oil (including lease condensate) 1	0	434	(N)	0	4,412
Natural Gas Liquids	26	13	615	7	126
Pentanes Plus	0	1	0	0	0
Liquefied Petroleum Gases	26	12	615	7	126
Ethane	1	1	0	0	(N)
Propane	0	10	587	7	51
Normal Butane	16	1	78	75	614
Isobutane	0	1	0	0	0
Fractionated Motor Gasoline	0	2	37	0	48
Naphthalene-Type Jet Fuel	0	0	(N)	0	0
Kerosene-Type Jet Fuel	0	0	0	0	27
Aviation Turbine Fuel Oil	0	0	0	0	0
Industrial Fuel Oil	109	(N)	461	0	655
Residual Fuel Oil	219	0	2,327	0	6,430
Naphtha < 400 Deg. for Petrochem. Feedstock	35	11	57	1	111
Other Oils > 400 Deg. for Petrochem. Feedstock	(N)	17	423	0	205
Special Naphthas	4	4	25	1	34
Lubricants	94	18	257	2	370
Waxes	4	1	27	0	37
Petroleum Coke	245	252	2,327	3	5,067
Asphalt	1	2	(N)	0	4
Nonpetroleum Products	14	2	8	0	26
Total Product Exports	730	298	6,076	14	15,060
Total Exports	735	732	6,076	14	15,015

Exports of crude oil are prohibited by law. However, some crude oil is exchanged with

Canada on a barrel for barrel basis, and crude oil is shipped to U.S. Territories

(especially Puerto Rico and the Virgin Islands) to be refined there. The Statistical

Tracking System counts these exchanges and shipments as imports and exports

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

1. This may not equal sum of components due to independent rounding

Source: See Explanatory Notes on Data Collection and Estimation

Table 21. Year-to-Date Exports of Crude Oil and Petroleum Products by PAD District, January - September 1964
(Thousand Barrels)

Commodity	Petroleum Administration for Defense Districts					
	I	II	III	IV	V	Total
Crude Oil (including lease condensate) ¹	0	4,377	(5)	0	45,683	50,060
Natural Gas Liquids	364	4,410	6,079	7	1,497	12,337
Petroleum Fuel	0	0	0	0	0	0
Liquid Petroleum Gases	34	3,791	5,079	7	1,497	11,688
Ethane	1	1,250	(5)	0	0	2,250
Propane	154	1,103	5,048	7	0	8,212
Normal Butane	179	711	1,032	(6)	896	2,810
Isobutane	0	649	0	0	0	649
Petroleum Motor Gasoline	144	4	367	0	1,369	1,884
Kerosene-Type Jet Fuel	(5)	0	200	0	0	195
Kerosene-Type Jet Fuel	176	139	453	0	0	768
Kerosene	15	0	1	0	0	16
Distillate Fuel Oil	741	50	9,242	(6)	0	10,038
Residual Fuel Oil	1,084	0	18,140	0	29	19,253
Naphtas < 400 Deg for Petrochem Feedstock	493	89	984	8	170	1,734
Other Oils > 400 Deg for Petrochem Feedstock	3	253	3,360	0	469	4,125
Special Naphtas	52	76	265	0	251	644
Asphalt	894	239	2,369	12	359	4,172
Petroleum Coke	42	2,877	256	0	33	3,508
Miscellaneous Products	2,074	7	27,077	7	22,234	53,600
Asphalt	47	62	156	4	11	280
Miscellaneous Products	137	16	106	1	30	290
Total Product Exports	6,248	7,638	61,129	42	64,208	139,247
Total Exports	6,248	12,015	61,129	42	109,890	189,312

¹ Exports of crude oil are prohibited by law. However, some crude oil is exchanged with Canada on board for petroleum products.

(a) Exports to Puerto Rico and the Virgin Islands to be added there. The Statistical Tracking Systems count these exchanges and shipments as imports and exports.

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

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

Sources: See Explanatory Notes on Data Collection and Estimation.

Table 22. Exports of Crude Oil and Petroleum Products by Destination, September 1984
(Thousand Barrels)

Destination	Crude Oil	LPG	Finished Motor Gasoline	Jet Fuel	Dist. Fuel Oil	Residual Fuel Oil	Special Naphtas	Lubricants	Waxes	Petro-chem. Code	Asphalt	Crack2	Total	Total Daily Average
Argentina	0	0	0	0	0	0	0	0	0	0	0	0	1	2
Armenia	0	0	0	0	0	0	0	0	0	0	0	0	12	64
Australia	0	0	0	0	0	0	0	0	0	0	0	0	1	110
Bahrain	0	0	0	0	107	0	0	0	0	0	0	0	0	0
Belgium & Luxembourg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Brazil	0	0	0	0	0	0	0	0	0	0	0	0	2	80
Canada	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cameroon	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chile	434	0	0	0	0	0	0	0	0	0	0	0	52	1,077
China	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Colombia	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Costa Rica	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cuba	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Czechoslovakia	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Denmark	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dominican Republic	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ecuador	0	0	0	0	0	0	0	0	0	0	0	0	0	0
El Salvador	0	0	0	0	0	0	0	0	0	0	0	0	0	0
France	0	0	0	0	0	0	0	0	0	0	0	0	0	0
French Pacific Isl.	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ghana	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Greece	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Guatemala	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Honduras	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hong Kong	0	0	0	0	0	0	0	0	0	0	0	0	0	0
India	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Indonesia	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Iran	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Israel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Italy	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Japan	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jordan	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Korea, Republic of	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Kuwait	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lebanon	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Libya	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Malaysia	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Netherlands	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Netherlands Antilles	0	0	0	0	0	0	0	0	0	0	0	0	0	0
New Zealand	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nicaragua	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Norway	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pacific Trust Terr.	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Panama	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peru	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Philippines	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Portugal	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Republic of South Africa	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Saudi Arabia	0	0	0	0	0	0	0	0	0	0	0	0	0	0

See footnotes at end of table

Table 23. Year-to-Date Exports of Crude Oil and Petroleum Products by Destination, January - September 1984
(Thousand Barrels)

Destination	Crude Oil	LPG	Finished Motor Gasoline	Jet Fuel	Dist. Fuel Oil	Residual Fuel Oil	Specialty Naphthas	Waxes	Petro-learn Cable	Asphalt	Other	Total	Total (Daily Average)
Argentina	0	1	0	431	0	0	4	111	3	1	0	161	710
Australia	0	6	209	0	0	0	32	59	1	1,294	1	103	2,564
Bahamas	0	72	0	0	0	0	0	0	0	0	0	7	1,817
Bahrain	0	0	0	0	0	0	0	0	0	0	0	0	0
Belgium & Luxembourg	0	0	0	0	0	0	0	0	0	0	0	0	0
Brazil	0	0	0	0	0	0	0	0	0	0	0	0	0
Bulgaria	0	0	0	0	0	0	0	0	0	0	0	0	0
Canada	0	0	0	0	0	0	0	0	0	0	0	0	0
Chad	0	0	0	0	0	0	0	0	0	0	0	0	0
China (Taiwan)	0	0	0	0	0	0	0	0	0	0	0	0	0
Colombia	0	0	0	0	0	0	0	0	0	0	0	0	0
Costa Rica	0	0	0	0	0	0	0	0	0	0	0	0	0
Cuba	0	0	0	0	0	0	0	0	0	0	0	0	0
Czechoslovakia	0	0	0	0	0	0	0	0	0	0	0	0	0
Dominican Republic	0	0	0	0	0	0	0	0	0	0	0	0	0
Egypt	0	0	0	0	0	0	0	0	0	0	0	0	0
El Salvador	0	0	0	0	0	0	0	0	0	0	0	0	0
France	0	0	0	0	0	0	0	0	0	0	0	0	0
French Pacific Isl.	0	0	0	0	0	0	0	0	0	0	0	0	0
Germany	0	0	0	0	0	0	0	0	0	0	0	0	0
Ghana	0	0	0	0	0	0	0	0	0	0	0	0	0
Greece	0	0	0	0	0	0	0	0	0	0	0	0	0
Guatemala	0	0	0	0	0	0	0	0	0	0	0	0	0
Haiti	0	0	0	0	0	0	0	0	0	0	0	0	0
Hong Kong	0	0	0	0	0	0	0	0	0	0	0	0	0
India	0	0	0	0	0	0	0	0	0	0	0	0	0
Indonesia	0	0	0	0	0	0	0	0	0	0	0	0	0
Iran	0	0	0	0	0	0	0	0	0	0	0	0	0
Italy	0	0	0	0	0	0	0	0	0	0	0	0	0
Ivory Coast	0	0	0	0	0	0	0	0	0	0	0	0	0
Jamaica	0	0	0	0	0	0	0	0	0	0	0	0	0
Japan	0	0	0	0	0	0	0	0	0	0	0	0	0
Korea	0	0	0	0	0	0	0	0	0	0	0	0	0
Kuwait	0	0	0	0	0	0	0	0	0	0	0	0	0
Lebanon	0	0	0	0	0	0	0	0	0	0	0	0	0
Libya	0	0	0	0	0	0	0	0	0	0	0	0	0
Mexico	0	0	0	0	0	0	0	0	0	0	0	0	0
Netherlands	0	0	0	0	0	0	0	0	0	0	0	0	0
Netherlands Antilles	0	0	0	0	0	0	0	0	0	0	0	0	0
New Zealand	0	0	0	0	0	0	0	0	0	0	0	0	0
Nicaragua	0	0	0	0	0	0	0	0	0	0	0	0	0
Norway	0	0	0	0	0	0	0	0	0	0	0	0	0
Pacific Trust Terr.	0	0	0	0	0	0	0	0	0	0	0	0	0
Panama	0	0	0	0	0	0	0	0	0	0	0	0	0
Peru	0	0	0	0	0	0	0	0	0	0	0	0	0
Philippines	0	0	0	0	0	0	0	0	0	0	0	0	0
Portugal	0	0	0	0	0	0	0	0	0	0	0	0	0
Rip. of South Africa	0	0	0	0	0	0	0	0	0	0	0	0	0

See footnotes at end of table.

Table 23. Year-to-Date Exports of Crude Oil and Petroleum Products by Destination, January - September 1984
(Thousand Barrels)
(continued)

Destination	Crude Oil ¹	LPG	Finished Motor Gasoline	Jet Fuel	Dist Fuel Oil	Residual Fuel Oil	Special Naphtha	Lubricants	Waxes	Petro-chem Feedstocks	Asphalt	Char ²	Total	Total (Daily Average)
Saudi Arabia	0	65	0	0	0	0	1	140	(a)	0	0	0	25	221
Singapore	0	12	0	0	100	2,108	32	89	1	23	(a)	0	11	2,944
Spain	0	4	0	0	529	2,025	0	379	1	4,619	(a)	0	254	7,866
Switzerland	0	0	0	0	0	0	0	11	0	58	0	0	1	70
Sweden	0	3	0	0	0	0	0	12	1	315	(a)	0	5	338
Switzerland	0	0	0	0	0	0	0	5	1	0	0	0	4	13
Thailand	0	0	30	0	0	0	1	43	(a)	0	0	0	121	196
Taiwan	0	43	0	206	0	0	5	15	(a)	0	0	0	3	272
Tanzania and Tobago	0	0	0	0	0	0	0	0	0	257	0	0	174	352
Turkey	0	0	0	0	0	0	0	70	0	237	(a)	0	24	332
United Arab Emirates	0	48	0	0	0	0	0	41	3	35	15	0	24	1,711
United Kingdom	0	0	0	0	0	1,478	0	269	0	257	0	0	0	505
U.S.S.R.	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Venezuela	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Yugoslavia	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	50,065	11,883	1,363	1,354	12,728	46,468	648	4,172	338	53,609	150	6,814	189,312	891

¹ Exports of crude oil are prohibited by law. However, some crude oil is exchanged with Canada on a barrel for barrel basis, and crude oil is shipped to U.S. Territories (especially Puerto Rico and the Virgin Islands) to be refined there. The Statistical

Tracking System counts these exchanges and shipments as imports and exports.

² Includes petroleum coke, kerosene, naphtha, less than 400 degrees F., other oils greater than 400 degrees F., and miscellaneous products.

(a) = 400 barrels per day; (b) = 400 barrels per day; (c) = 400 barrels per day.

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

Sources: See Explanatory Notes on Data Collection and Estimation.

Table 24. Stocks of Crude Oil and Petroleum Products by PAD District, September 30, 1984
(Thousand Barrels)

Commodity	PAD District I			PAD District II					PAD District III				PAD District IV		United States		
	East Coast	Appalachian	Total	Appalachian	Ind. Ill. Ky	Minn. Wis.	Okla. Kans. Mo.	Total	Texas Gulf Coast	Texas Gulf Coast	No. La. Ark.	New Mexico	Total	Rocky Mtn.		Dist. IV West Coast	
Crude Oil (incl. lease condensate)																	
Refinery	—	—	10,982	—	—	—	—	13,229	—	—	—	—	47,938	2,141	20,688	95,108	
Task Farms and Pipelines	—	—	1,370	—	—	—	—	95,270	—	—	—	—	98,787	9,919	24,982	181,209	
Leases	—	—	60	—	—	—	—	1,589	—	—	—	—	16,844	1,273	1,320	21,089	
Strategic Petroleum Reserve	—	—	0	—	—	—	—	0	—	—	—	—	—	—	—	431,069	
Alaskan In-Transit	—	—	0	—	—	—	—	0	—	—	—	—	0	—	27,329	27,938	
Total	—	—	12,412	—	—	—	—	70,219	—	—	—	—	985,638	13,333	74,799	756,400	
Total Stocks, All Oils (incl. Crude Oil)																	
Refinery	25,730	2,719	30,648	937	41,220	6,153	16,460	64,830	10,294	75,644	46,421	5,472	1,349	138,179	11,009	59,331	312,780
Bulk Terminal	—	—	119,091	—	—	—	—	86,935	—	—	—	—	—	90,882	3,042	22,626	322,149
Pipeline	—	—	28,695	—	—	—	—	35,849	—	—	—	—	—	41,313	2,941	4,441	113,180
Natural Gas Processing Plant	227	51	288	0	601	46	1,095	1,802	1,312	3,883	437	63	273	6,188	213	194	9,055
Total	—	—	187,423	—	—	—	—	189,277	—	—	—	—	—	277,555	16,845	86,582	797,782
Petroleum Plus																	
Refinery	13	0	13	0	36	80	152	269	102	249	132	16	7	506	21	17	825
Bulk Terminal	—	—	23	—	—	—	—	1,861	—	—	—	—	—	3,583	1	0	5,469
Pipeline	—	—	0	—	—	—	—	404	—	—	—	—	—	1,354	159	5	1,521
Natural Gas Processing Plant	4	8	12	0	42	16	231	519	438	519	138	20	41	1,154	86	30	1,621
Total	—	—	48	—	—	—	—	2,892	—	—	—	—	—	6,097	266	52	5,615
Liquefied Petroleum Gases																	
Refinery	997	11	998	241	2,497	1,53	714	3,605	221	1,065	1,891	50	27	3,054	354	796	8,647
Bulk Terminal	—	—	1,386	—	—	—	—	22,392	—	—	—	—	—	60,076	116	1,283	95,005
Pipeline	—	—	1,642	—	—	—	—	5,165	—	—	—	—	—	5,628	421	0	13,567
Natural Gas Processing Plant	283	43	418	0	616	30	834	1,580	910	3,363	259	41	232	4,945	127	154	5,862
Total	—	—	4,182	—	—	—	—	33,642	—	—	—	—	—	73,604	1,020	2,843	115,397
Ethane																	
Refinery	26	0	26	0	1	10	0	11	0	0	0	0	8	0	0	0	46
Bulk Terminal	—	—	0	—	—	—	—	2,639	—	—	—	—	—	13,023	0	0	15,628
Pipeline	—	—	0	—	—	—	—	1,307	—	—	—	—	—	1,342	128	0	3,377
Natural Gas Processing Plant	0	0	0	0	23	0	212	59	964	0	1	7	981	2	0	1,289	0
Total	—	—	26	—	—	—	—	4,182	—	—	—	—	—	15,970	130	0	20,318

See footnotes at end of table.

Table 24. Stocks of Crude Oil and Petroleum Products by PAD District, September 30, 1984
(Thousand Barrels) (continued)

Commodity	PAD District I				PAD District II				PAD District III				PAD District IV		United States
	East Coast	Appalachian	Appalachian	Total	Ind. Ill. Ky.	Wisc. Minn.	Kans. Mo.	Okla.	Texas Gulf Coast	La. Gulf Coast	No. Ark.	New Mexico	Total	Respy Mt.	
Motor Gasoline Blending Components															
Refinery	5,303	98	5,401	30	5,306	701	1,818	7,855	1,558	9,757	5,934	284	17,443	1,533	8,608
Bulk Terminal	---	---	27	---	---	---	---	130	---	---	---	---	600	1	199
Pipeline	---	---	0	---	---	---	---	18	---	---	---	---	---	0	18
Total	---	---	5,428	---	---	---	---	8,003	---	---	---	---	18,043	1,534	7,107
Aviation Gasoline Blending Components															
Refinery	0	0	0	0	0	0	38	95	0	10	181	0	191	0	30
Bulk Terminal	---	---	---	---	---	---	---	95	---	---	---	---	---	---	30
Pipeline	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Total	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Total Finished Motor Gasoline	5,359	234	5,593	110	5,666	1,017	3,098	10,091	2,179	10,375	9,200	1,071	19,038	1,938	7,215
Refinery	---	---	35,435	---	---	---	---	31,525	---	---	---	---	13,433	1,678	10,545
Bulk Terminal	---	---	14,440	---	---	---	---	17,300	---	---	---	---	19,254	1,003	17,006
Pipeline	---	---	96,471	---	---	---	---	58,916	---	---	---	---	51,725	4,559	19,949
Total	---	---	149,346	---	---	---	---	107,741	---	---	---	---	84,412	6,640	47,460
Finished Leaded Motor Gasoline	2,350	119	2,469	75	2,537	530	1,737	4,779	1,269	4,607	2,068	530	107	8,589	1,105
Refinery	---	---	18,017	---	---	---	---	15,804	---	---	---	---	---	5,855	964
Bulk Terminal	---	---	5,227	---	---	---	---	7,985	---	---	---	---	---	7,943	708
Pipeline	---	---	25,719	---	---	---	---	28,348	---	---	---	---	---	25,397	2,667
Total	---	---	48,963	---	---	---	---	52,137	---	---	---	---	---	49,195	3,279
Finished Unleaded Motor Gasoline	3,000	116	3,134	35	3,429	487	1,261	5,312	910	5,748	3,134	541	106	10,439	833
Refinery	---	---	21,418	---	---	---	---	18,921	---	---	---	---	---	7,578	714
Bulk Terminal	---	---	9,216	---	---	---	---	9,330	---	---	---	---	---	11,311	455
Pipeline	---	---	32,758	---	---	---	---	30,568	---	---	---	---	---	25,538	2,502
Total	---	---	63,392	---	---	---	---	58,819	---	---	---	---	---	44,425	2,671
Finished Aviation Gasoline	46	0	46	0	46	0	13	110	77	305	143	0	535	40	556
Refinery	---	---	223	---	---	---	---	418	---	---	---	---	---	108	10
Bulk Terminal	---	---	12	---	---	---	---	81	---	---	---	---	---	15	0
Pipeline	---	---	0	0	0	0	0	88	0	0	0	0	88	0	0
Total	---	---	235	---	---	---	---	587	---	---	---	---	---	133	10
Total	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

See footnotes at end of table.

Table 24. Stocks of Crude Oil and Petroleum Products by PAD District, September 30, 1984
(Thousand Barrels) (continued)

Commodity	PAD District I				PAD District II				PAD District III				PAD District IV		United States	
	East Coast	Appalachian	Total	Ind. Ill. &2	Whic. Ky.	Min. Wisc.	Okla. Kans. Mo.	Texas Gulf Coast	La Gulf Coast	No. La. Ark.	New Mexico	Total	Rocky Mts.	West Coast		
Propane for Petrochemical Feedstock Use																
Railroad	67	0	67	0	100	0	2	102	4	8	140	0	0	152	0	321
Total	67	0	67	0	100	0	2	102	4	8	140	0	0	152	0	321
Propane For Other Uses																
Bulk Terminal	742	6	748	1	1,600	26	225	1,852	68	84	1,101	4	3	1,950	176	4,341
Pipeline	—	—	—	—	—	—	—	15,887	—	—	—	—	—	30,734	117	552
Propane	—	—	—	—	—	—	—	3,510	—	—	—	—	—	2,655	170	7,764
Natural Gas Processing Plant	308	42	350	0	476	18	418	912	501	1,051	165	18	139	1,664	82	3,242
Total	—	—	—	—	—	—	—	22,171	—	—	—	—	—	36,453	547	63,756
Normal Butane For Petro. Feed Use																
Railroad	0	0	0	0	0	29	0	29	0	7	0	1	0	6	5	44
Total	0	0	0	0	0	29	0	29	0	7	0	1	0	6	5	44
Normal Butane For Other Uses																
Railroad	52	5	57	212	539	52	329	1,142	91	764	205	26	16	1,122	117	2,851
Bulk Terminal	—	—	—	—	—	—	—	2,715	—	—	—	—	—	1,198	81	1,581
Pipeline	—	—	—	—	—	—	—	823	—	—	—	—	—	1,198	81	1,581
Propane	28	0	28	0	84	10	147	241	283	301	83	14	63	1,264	30	1,581
Total	—	—	—	—	—	—	—	5,005	—	—	—	—	—	14,253	237	16,518
Isobutane																
Bulk Terminal	0	0	0	38	257	36	148	489	56	174	245	19	6	504	54	1,045
Pipeline	—	—	—	—	—	—	—	1,057	—	—	—	—	—	5,302	0	213
Propane	—	—	—	—	—	—	—	515	—	—	—	—	—	395	48	953
Natural Gas Processing Plant	1	1	2	0	33	2	57	82	67	487	50	6	14	625	5	731
Total	—	—	—	—	—	—	—	2,143	—	—	—	—	—	6,858	101	9,331
Other Hydrocarbons and Alcohol																
Railroad	117	0	117	0	119	0	1	120	1	88	2	0	0	91	0	334
Total	117	0	117	0	119	0	1	120	1	88	2	0	0	91	0	334
Unfinished Oils																
Crude Oil	3,298	121	3,419	46	2,857	137	1,055	4,095	681	7,580	5,511	241	26	14,061	380	4,902
Naphtas and Lighter	2,411	4	2,415	0	2,159	4	552	2,715	808	6,537	2,287	57	40	9,857	630	3,516
Kerosene and Lighter Gas Oil	5,076	287	5,363	113	5,443	345	1,791	7,532	962	9,773	7,795	387	136	16,993	972	18,103
Heavy Gas Oil	1,037	272	1,309	2	2,823	4	1,311	4,140	469	3,376	2,435	98	0	7,350	702	5,000
Residual	117,660	684	12,444	161	13,885	590	4,549	16,462	2,698	27,278	13,038	743	214	50,231	2,682	24,682
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	106,471

See footnote at end of table

Table 24. Stocks of Crude Oil and Petroleum Products by PAD District, September 30, 1984
(Thousand Barrels) (continued)

Commodity	PAD District I			PAD District II					PAD District III					PAD District IV		United States		
	East Coast	Appalachian	Total	Appalachian	Ind., Ill., Ky.	Mid., Wisc., Mo.	Okla., Kans., Minn.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico	Total				
Naphtha-Type Jet Fuel																		
Refinery	121	25	146	0	421	0	0	145	657	424	960	409	153	124	2,290	215	752	3,850
Bulk Terminal	—	—	500	—	—	—	—	—	651	—	—	—	—	—	155	13	505	1,825
Pipeline	—	—	175	—	—	—	—	—	158	—	—	—	—	—	478	128	402	1,341
Total	—	—	821	—	—	—	—	—	1,466	—	—	—	—	—	2,714	356	1,659	7,016
Kerosene-Type Jet Fuel																		
Refinery	1,027	0	1,027	38	1,338	160	—	—	1,871	412	3,108	3,344	9	74	6,547	370	2,883	12,698
Bulk Terminal	—	—	4,284	—	—	—	—	—	3,362	—	—	—	—	—	1,919	205	1,747	13,547
Pipeline	—	—	4,130	—	—	—	—	—	2,512	—	—	—	—	—	4,401	189	1,581	11,669
Total	—	—	9,441	—	—	—	—	—	8,875	—	—	—	—	—	12,867	764	3,261	28,228
Kerosene																		
Refinery	220	96	316	0	535	33	—	—	939	66	526	595	63	14	1,265	0	107	2,720
Bulk Terminal	—	—	3,326	—	—	—	—	—	1,250	—	—	—	—	—	711	31	29	5,427
Pipeline	—	—	182	—	—	—	—	—	178	—	—	—	—	—	480	0	0	843
Natural Gas Processing Plant	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	2
Total	—	—	3,667	—	—	—	—	—	2,417	—	—	—	—	—	2,448	31	225	8,585
Distillate Fuel Oils																		
Refinery	5,130	369	5,509	68	6,259	1,679	3,860	—	11,316	1,138	10,032	4,108	1,200	177	16,785	1,938	5,160	40,749
Bulk Terminal	—	—	43,614	—	—	—	—	—	18,484	—	—	—	—	—	6,323	806	4,601	72,698
Pipeline	—	—	8,108	—	—	—	—	—	8,090	—	—	—	—	—	8,437	802	1,205	28,996
Natural Gas Processing Plant	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	1
Total	—	—	57,248	—	—	—	—	—	38,610	—	—	—	—	—	32,527	3,348	11,162	143,214
Residual Fuel Oils																		
Refinery	2,113	67	2,180	39	1,510	319	188	—	2,056	394	4,267	2,194	147	18	8,818	538	8,267	17,860
Bulk Terminal	—	—	22,834	—	—	—	—	—	1,441	—	—	—	—	—	3,050	0	1,990	25,965
Pipeline	—	—	22,834	—	—	—	—	—	1,441	—	—	—	—	—	3,050	0	1,990	25,965
Total	—	—	25,008	—	—	—	—	—	3,497	—	—	—	—	—	9,838	520	8,088	46,971
Naphtha < 400 Deg. Petro. Feedstock																		
Refinery	264	0	264	0	92	0	61	153	76	757	475	46	0	1,354	0	79	1,850	7
Total	264	0	264	0	92	0	61	153	76	757	475	46	0	1,354	0	79	1,850	7
Other Oils > 400 Deg. Petro. Feedstock																		
Refinery	4	0	4	0	27	0	0	37	318	992	180	0	0	1,457	7	54	1,609	7
Total	4	0	4	0	27	0	0	37	318	992	180	0	0	1,457	7	54	1,609	7

See footnotes at end of table.

Table 24. Stocks of Crude Oil and Petroleum Products by PAD District, September 30, 1984
(Thousand Barrels) (continued)

Commodity	PAD District I			PAD District II						PAD District III				PAD District IV		United States
	East Coast	Appalachian	Total	Appalachian	Midwest	Northwest	Central	South	Southwest	Texas Gulf Coast	Louisiana Gulf Coast	Arkansas	New Mexico	Rocky Mts.	West Coast	
Special Naphtha																
Refinery	18	31	49	0	136	0	160	296	24	1,180	100	120	0	1,434	9	223
Bulk Terminal	—	—	562	—	—	—	—	142	—	—	—	—	—	34	0	28
Natural Gas Processing Plant	0	0	0	0	0	0	0	54	0	0	0	0	0	64	0	4
Total	—	—	611	—	—	—	—	438	—	—	—	—	—	1,532	9	251
Lubricants																
Refinery	1,115	888	2,013	0	830	0	673	1,479	28	3,573	1,647	997	0	5,945	67	439
Bulk Terminal	—	—	1,172	—	—	—	—	686	—	—	—	—	—	2	0	235
Total	—	—	3,185	—	—	—	—	2,065	—	—	—	—	—	6,113	69	1,264
Waxes																
Refinery	0	82	82	0	30	0	42	72	13	224	119	48	0	404	12	39
Total	—	—	82	—	—	—	—	72	—	—	—	—	—	404	12	659
Petroleum Coke																
Refinery	865	0	865	0	258	162	770	0	394	880	206	206	0	1,458	169	4,957
Total	865	0	865	0	258	162	770	0	394	880	206	206	0	1,458	169	4,957
Asphalt and Road Oil																
Refinery	—	—	—	148	2,397	1,238	724	4,511	456	324	419	689	188	2,095	1,084	10,477
Bulk Terminal	1,217	—	1,217	—	—	—	—	2,442	—	—	—	—	—	500	174	1,508
Total	—	—	2,434	—	—	—	—	6,953	—	—	—	—	—	2,595	1,258	11,985
Miscellaneous Products																
Refinery	141	19	160	1	108	4	10	123	31	380	30	45	0	556	21	144
Bulk Terminal	—	—	54	—	—	—	—	31	—	—	—	—	—	187	3	126
Pipeline	—	—	—	—	—	—	—	134	—	—	—	—	—	285	0	103
Natural Gas Processing Plant	0	0	0	0	3	0	0	12	0	0	0	2	0	14	0	17
Total	—	—	214	—	—	—	—	331	—	—	—	—	—	972	24	373
Total Stocks, All Oils	—	—	126,835	—	—	—	—	258,985	—	—	—	—	—	865,193	30,178	1,514,162

1. Includes 33,070 thousand barrels of domestic crude oil.
Source: See Explanatory Notes on Data Collection and Estimation.
— Not Applicable

Table 25. Refinery and Bulk Terminal Stocks of Selected Petroleum Products by State, September 30, 1984
(Thousand Barrels)

State	Leaded Motor Gasoline	Unleaded Motor Gasoline	Kerosene	Diesel Fuel Oil	Residual Fuel Oil
PAD District I Total	20,446	24,242	3,085	49,143	25,004
Connecticut	666	669	117	2,254	376
Delaware	1,048	1,052	282	3,713	3,211
District of Columbia	2,292	3,524	382	1,400	1,400
Florida	1,568	1,593	113	1,509	548
Georgia	352	546	53	1,084	797
Illinois	1,124	1,182	71	3,748	872
Massachusetts	82	118	10	3,748	872
New Hampshire	2,622	3,772	694	12,469	9,252
New Jersey	3,622	2,988	542	18,128	3,224
New York	1,397	1,558	484	1,804	559
North Carolina	2,700	3,020	684	5,039	2,429
Pennsylvania	4,521	4,521	1,387	1,487	1,590
Rhode Island	827	1,024	136	1,487	1,590
South Carolina	1,702	1,702	280	2,203	1,215
Virginia	216	290	53	281	41
West Virginia	216	290	53	281	41
PAD District II Total	20,303	24,233	2,269	20,810	3,487
Alabama	3,312	3,312	382	1,025	631
Arkansas	2,585	2,585	397	4,850	933
California	683	689	w	1,076	w
Florida	1,429	1,429	28	1,290	76
Kansas	1,048	1,048	207	1,391	715
Kentucky	1,048	1,048	228	2,056	342
Louisiana	1,048	1,048	228	2,056	342
Michigan	1,048	1,048	228	2,056	342
Minnesota	1,048	1,048	228	2,056	342
Missouri	1,048	1,048	228	2,056	342
Nebraska	395	395	0	229	0
North & South Dakota	395	395	0	229	0
Ohio	2,512	2,512	342	543	w
Oklahoma	1,048	1,048	342	3,203	437
Tennessee	1,106	1,325	61	1,037	164
Texas	1,106	1,325	61	1,037	164
Wisconsin	1,124	1,049	w	1,035	189
PAD District III Total	14,454	18,017	1,566	23,009	9,438
Alabama	356	356	97	1,025	631
Arkansas	2,585	2,585	397	4,850	933
California	1,820	3,270	561	4,271	3,715
Colorado	1,432	1,539	23	1,759	459
Mississippi	281	238	w	265	16
New Mexico	945	11,922	1,267	15,095	5,375
Texas	945	11,922	1,267	15,095	5,375
PAD District IV Total	2,689	1,507	31	2,744	539
California	150	346	0	437	144
Idaho	150	346	0	172	0
Montana	615	355	w	815	90
Utah	349	219	0	534	174
Wyoming	380	400	w	785	131
PAD District V Total	8,551	9,810	226	9,331	7,647
Arizona	484	275	w	1,125	0
California	439	373	w	333	0
Colorado	4,428	6,574	113	5,229	5,702
Hawaii	245	242	0	279	w
Nevada	182	242	w	94	w
Northern	624	368	w	779	285
Oregon	1,579	1,368	w	2,001	1,136
Washington	1,579	1,368	w	2,001	1,136
United States Total	65,443	75,149	5,147	114,677	46,325

w = Withheld to avoid disclosure of individual company data
Source: See Explanatory Notes on Data Collection and Estimation

Table 26. Movements of Crude Oil and Petroleum Products by Pipeline, Tanker, and Barge between PAD Districts, September 1984
(Thousand Barrels)

Commodity	From I to					From II to					From III to					From IV to				
	I	II	III	IV	V	I	II	III	IV	V	I	II	III	IV	V	I	II	III	IV	V
Crude Oil (Tanker and Barge only)	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,376	0	10,081	0
Petroleum Products	8,673					3,176	8,602	2,193			75,043	31,798			1,543	1,825	758			
Petroleum Refinery Gas	0	0	0	0	0	1,077	1,077	0	0	0	0	1,318			0	138	114			0
Motor Gasoline	0	0	0	0	0	1,158	5,359	71	0	0	1,865	7,444			0	701	842			0
Unrefined Oil	10	0	0	0	0	0	0	0	0	0	458	384			0	0	0			0
Motor Gasoline Blending Components	0	0	0	0	0	0	0	0	0	0	174	30			0	0	0			0
Aviation Gasoline Blending Components	0	0	0	0	0	0	0	0	0	0	48,860	14,375			0	0	0			0
Aviation Gasoline	6,028					1,225	1,272	1,322			0	0			0	57	0			0
Finished Motor Gasoline	2,028					356	897	712			14,860	7,268			0	438	342			0
Finished Aviation Gasoline	2,064					875	511	645			35,046	7,207			0	411	226			0
Finished Unrefined Motor Gasoline	0	0	0	0	0	0	0	0	0	0	237	140			0	0	0			0
Finished Aviation Gasoline	140					29	99	0			0	484	26			244	69			0
Kerosene-Type Jet Fuel	918					102	35	54			5,163	2,335			0	116	0			0
Distillate Fuel Oil	2,153					265	444	208			16,592	4,813			0	336	0			0
Residual Fuel Oil	0	0	0	0	0	58	42	0			342	0			0	160	0			0
Naphtha and Other Oil for Petro						0	0	0			0	0			0	0	0			0
Feedstock	61					7	0	0			101	19			0	0	0			0
Special Naphtha	0	0	0	0	0	0	0	0			183	142			0	0	0			0
Other Petro	37					26	37	0			600	202			12	0	0			0
Waxes	0	0	0	0	0	0	0	0			5	0			0	0	0			0
Asphalt and Road Oil	0	0	0	0	0	118	0	0			165	401			0	0	0			0
Other Petroleum Products	35					102	76	0			57	13			0	0	0			0
Macellaneous Products						0	0	0			0	0			0	0	0			0
Total All Products	8,682	186	0	3,176	8,902	2,199	0	75,043	31,798	0	1,543	1,825	758	976	1,376	0	16,321	0		0

See footnotes at end of table.

Table 27. Movements of Petroleum Products by Pipeline between PAD Districts, September 1984
(Thousand Barrels)

Commodity	From I to					From II to					From III to					From IV to				
	I	II	III	IV	V	I	II	III	IV	V	I	II	III	IV	V	I	II	III	IV	V
Refined Gas	0	0	0	0	0	1,077	0	0	0	0	1,318				0	128	114			0
Petroleum Refinery Gas	0	0	0	0	0	1,158	8,336	71	1,749	7,444	0	0	0	0	0	701	842	0	0	0
Motor Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Motor Gasoline Blending Components	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aviation Gasoline	4,261					632	1,776	1,352	34,057	14,162	0	0	0	0	0	0	0	0	0	0
Aviation Gasoline Blending Components	2,028					254	867	712	11,896	6,893	0	438	342	0	0	0	0	0	0	0
Finished Motor Gasoline	2,028					728	911	640	22,250	7,268	0	411	226	0	0	0	0	0	0	0
Finished Aviation Gasoline	2,064					0	59	0	419	198	0	264	83	0	0	0	0	0	0	0
Finished Unrefined Motor Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Finished Aviation Gasoline	140					94	32	541	7,273	2,504	0	149	4	0	0	64	0	0	0	0
Kerosene-Type Jet Fuel	918					0	0	0	284	0	0	0	0	0	0	0	0	0	0	0
Distillate Fuel Oil	1,639					232	444	208	13,559	4,837	0	289	356	0	0	150	0	0	0	0
Residual Fuel Oil	0	0	0	0	0	58	42	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Petroleum Products	0	0	0	0	0	94	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	8,105	0	2,660	8,746	2,199	57,500	29,437	0	1,531	1,825	758	976	0	0	0	0	0	0	0	0

Source: See Explanatory Notes on Data Collection and Estimation.

Table 28. Movements of Crude Oil and Petroleum Products by Tanker and Barge between PAD Districts, September 1984
(Thousand Barrels)

Commodity	From I to			From II to			From III to			From V to		
	I	II	V	I	II	V	I	II	V	I	II	V
Crude Oil	19	0	0	0	0	0	0	0	0	0	1,876	0
Petroleum Products	2,798	196	0	615	196	0	17,683	1,546	2,683	13,364	2,311	0
Liquefied Petroleum Gases	0	0	0	0	0	0	0	0	0	0	0	0
Unrefined Oil	90	0	0	0	0	0	116	0	0	116	0	0
Motor Gasoline Blending Components	0	0	0	0	0	0	408	0	273	131	324	0
Motor Gasoline	1,648	0	0	247	0	0	174	0	0	174	30	0
Unrefined Motor Gasoline	0	0	0	0	0	0	9,881	600	548	8,733	613	0
Finished Motor Gasoline	0	0	0	0	0	0	1,016	0	0	1,016	0	0
Finished Unrefined Motor Gasoline	741	0	0	147	0	0	8,865	524	548	2,950	365	0
Finished Aviation Gasoline	0	0	0	0	0	0	218	19	61	138	4	0
Naphtia-Type Jet Fuel	140	40	0	29	0	0	65	0	0	65	0	0
Kerosene-Type Jet Fuel	173	0	0	9	0	0	2,146	60	341	1,725	271	0
Domestic Fuel Oil	61	0	0	0	0	0	91	0	72	19	0	0
Domestic Fuel Oil	603	0	0	62	0	0	3,123	267	588	1,958	276	0
Residual Fuel Oil	0	0	0	0	0	0	342	0	0	342	0	0
Naphtia and Other Oil for Petro Feed Use	51	100	0	7	0	0	101	0	191	0	19	0
Special Naphtias	0	0	0	0	0	0	183	0	36	147	163	0
Lubricants	0	37	0	36	37	0	500	0	459	141	202	12
Waxes	0	0	0	0	0	0	5	0	5	0	0	0
Upstart and Road Oil	0	0	0	116	0	0	145	0	90	96	401	0
Naphtiaous Products	55	10	0	8	76	0	57	0	37	0	19	0
Total	2,787	196	0	615	196	0	17,683	1,546	2,683	13,364	2,311	0
										1,876	0	18,021

Source: See Explanatory Notes on Data Collection and Estimation.

Table 29. Net Movements of Crude Oil and Petroleum Products by Pipeline, Tanker and Barge between PAD Districts, September 1984
(Thousand Barrels)

Commodity	PAD District I			PAD District II			PAD District III			PAD District IV			PAD District V		
	Receipts into PAD I	Ship- ments from PAD I	Net Receipts into PAD I	Receipts into PAD II	Ship- ments from PAD II	Net Receipts into PAD II	Receipts into PAD III	Ship- ments from PAD III	Net Receipts into PAD III	Receipts into PAD IV	Ship- ments from PAD IV	Net Receipts into PAD IV	Receipts into PAD V	Ship- ments from PAD V	Net Receipts into PAD V
Crude Oil (Tanker and Barge only)	1,275	19	1,257	19	0	19	16,881	0	16,861	0	0	0	0	13,757	-13,757
Petroleum Products	78,715	9,069	69,149	42,284	14,276	28,136	8,944	103,354	-95,460	2,159	3,555	-1,356	2,519	40	2,479
Unrefined Petroleum	0	0	0	1,446	1,077	369	1,191	1,318	-127	0	342	-342	0	0	0
Unrefined Petroleum Gasoline	3,023	0	3,023	8,145	6,585	1,560	5,698	9,109	-3,311	71	1,343	-1,272	0	0	0
Unrefined Petroleum Kerosene	406	10	396	344	0	344	0	740	-740	0	0	0	0	0	0
Unrefined Petroleum Diesel	174	0	174	30	0	30	0	294	-294	0	0	0	0	0	0
Unrefined Petroleum Jet Fuel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unrefined Petroleum Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Refined Petroleum	45,187	6,029	39,158	37,935	4,320	33,615	17,704	85,567	-51,952	1,352	1,307	-1,485	1,449	0	1,449
Refined Motor Gasoline	11,161	1,231	9,930	10,275	1,033	9,242	167	22,398	-21,331	71	770	-693	665	0	665
Refined Aviation Gasoline	28,621	3,064	25,557	10,989	2,429	8,560	911	37,154	-36,253	640	437	-203	620	0	620
Refined Kerosene	257	10	247	150	27	123	0	397	-397	27	0	27	0	0	0
Refined Diesel	513	180	333	220	68	141	99	754	-655	0	179	-179	360	0	360
Refined Jet Fuel	9,322	313	9,009	2,622	676	1,946	32	11,873	-11,841	541	68	473	213	0	213
Refined Other	375	96	279	96	0	96	0	173	-173	0	0	0	0	0	0
Refined Petroleum Gasoline	18,257	2,199	16,058	7,183	94	6,141	444	21,501	-21,150	296	516	-309	449	0	449
Refined Petroleum Kerosene	440	0	440	0	141	-141	43	342	-399	0	0	0	0	0	0
Refined Petroleum Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Refined Petroleum Jet Fuel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Refined Petroleum Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Special Naphtha	183	0	183	142	0	142	0	335	-335	0	0	0	0	0	0
Lubricants	626	37	589	202	73	159	114	814	-700	0	0	0	12	40	-28
Waxes	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0
Asphalt and Road Oil	363	0	363	401	119	283	0	546	-546	0	0	0	0	0	0
Miscellaneous Products	188	74	114	178	178	-104	95	76	19	0	0	0	0	0	0
Total All Products	80,994	9,098	71,006	42,482	14,276	28,207	26,775	108,354	-81,579	2,199	3,555	-1,356	2,519	16,797	-16,278

Source: See Explanatory Notes on Data Collection and Estimation

Table 30. Production of Residual Fuel Oil by Sulfur Content, September 1984
(Thousand Barrels)

Commodity	PAD District I			PAD District II					PAD District III					PAD District IV		
	East Coast	Appalachian	Total	Ind. & Ky	W. Va.	Ohio	Pa.	Del.	La.	Gu.	Ark.	Miss.	Total	Rocky Mt.	West Coast	United States
Residual Fuel Oil	3,526	61	3,587	68	1,351	225	201	1,745	708	6,556	2,659	213	5	10,369	307	9,819
0.00 to 0.30% Sulfur	738	14	752	0	80	0	0	80	33	154	336	17	0	527	1	526
0.31 to 1.00% Sulfur	2,603	0	2,603	30	268	0	85	413	572	1,048	1,541	95	0	3,256	53	3,232
Greater Than 1.00% Sulfur	185	45	230	38	863	225	118	1,242	101	5,344	951	30	0	6,426	153	6,254

Source: See Explanatory Notes on Data Collection and Estimation

Table 31. Stocks of Residual Fuel Oil by Sulfur Content, September 1984
(Thousand Barrels)

Commodity	PAD District I			PAD District II					PAD District III					PAD District IV		
	East Coast	Appalachian	Total	Ind. & Ky	W. Va.	Ohio	Pa.	Del.	La.	Gu.	Ark.	Miss.	Total	Rocky Mt.	West Coast	United States
Residual Fuel Oil — 0.00 to 0.30% Sulfur	428	12	440	0	78	4	0	82	86	51	210	14	11	372	81	345
Refinery	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Bulk Terminal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Residual Fuel Oil — 0.31 to 1.00% Sulfur	1,082	3	1,085	38	441	0	123	600	138	784	980	77	0	1,979	168	1,455
Refinery	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Bulk Terminal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Residual Fuel Oil — Greater Than 1.00% Sulfur	603	52	655	3	981	315	85	1,374	170	3,232	1,004	55	5	4,487	350	11,913
Refinery	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Bulk Terminal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Source: See Explanatory Notes on Data Collection and Estimation

— Not Applicable

Table 32. Movements of Residual Fuel Oil by Tanker and Barge between PAD Districts, by Sulfur Content, September 1984
(Thousand Barrels)

Commodity	From I to			From II to					From III to					From V to		
	II	III	V	I	III	V	I	Now Eng.	Cent. Atl.	Low Atl.	II	V	I	II	III	
Residual Fuel Oil	0	0	0	98	43	0	342	0	70	272	0	0	0	0	0	0
0.00 to 0.30% Sulfur	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.31 to 1.00% Sulfur	0	0	0	0	0	0	70	0	70	0	0	0	0	0	0	0
Greater Than 1.00% Sulfur	0	0	0	98	43	0	272	0	0	272	0	0	0	0	0	0

Source: See Explanatory Notes on Data Collection and Estimation

Table 33. Imports of Residual Fuel Oil by Sulfur Content by Country of Origin, September 1984
(Thousand Barrels)

Country	Residual Fuel Oil			Total
	0.00 to 0.30%	0.31 to 1.00%	Greater Than 1.00%	
Arab OPEC				
Algeria	588	352	0	940
Iraq	0	0	0	0
Kuwait	0	0	324	324
Libya	0	0	0	0
Oman	0	0	0	0
Qatar	0	0	0	0
Saudi Arabia	0	0	0	0
United Arab Emirates	0	0	546	546
Subtotal Arab OPEC	588	352	870	1,810
Other OPEC				
Ecuador	0	0	178	178
Indonesia	0	0	0	0
Iran	0	86	46	132
Nigeria	163	449	0	612
Venezuela	1,038	1,069	2,650	4,757
Subtotal Other OPEC	1,201	1,604	2,874	5,679
Other				
Australia	0	0	0	0
Bahamas	0	0	0	0
Bolivia	655	210	483	1,348
Brazil	0	0	0	0
Brunei	947	0	0	947
Canada	0	0	0	0
Costa Rica	71	90	109	270
Congo	0	185	0	185
France	0	0	0	0
Ghana	0	0	0	0
Libya	0	0	0	0
Malaysia	0	0	0	0
Mexico	1	0	0	1
Netherlands	275	0	602	877
Netherlands Antilles	0	0	2,706	2,706
Norway	0	0	0	0
People's Republic of China	0	0	0	0
Puerto Rico	0	0	272	272
Romania	0	0	0	0
Spain	0	0	0	0
Syria	0	0	0	0
Trinidad	0	0	0	0
United Kingdom	0	0	0	0
Virgin Islands	1,432	1,659	620	3,711
Yugoslavia	0	0	0	0
Zaire	0	0	0	0

See footnotes at end of table

Table 33. Imports of Residual Fuel Oil by Sulfur Content by Country of Origin, September 1984
(continued)

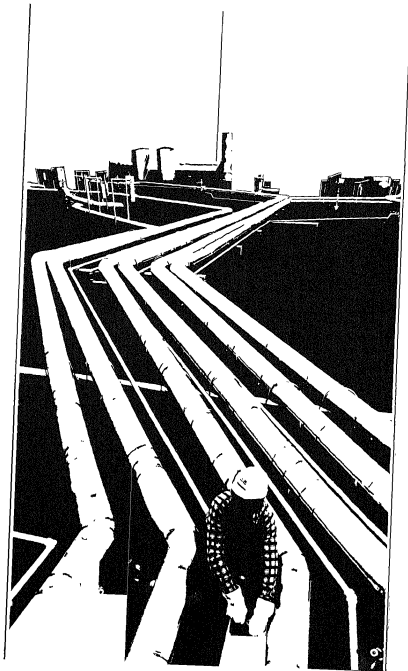
Country	Residual Fuel Oil			Total
	0.00 to 0.20%	0.21 to 1.00%	Greater Than 1.00%	
Other				
Other Western Hemisphere	0	0	0	0
Other Western Hemisphere	16	177	510	493
Subtotal Other	3,391	2,200	4,705	10,297
Total Imports	5,170	4,235	8,460	17,865

(*) = Less than 500 barrels.
Note: Total may not equal sum of components due to independent rounding.
Source: See Explanatory Notes on Data Collection and Estimation.

Table 34. Imports of Residual Fuel Oil by Sulfur Content by State of Entry, September 1984
(continued)

State	Residual Fuel Oil			Total
	0.00 to 0.20%	0.21 to 1.00%	Greater Than 1.00%	
PAD District I				
Alaska	4,393	3,629	6,977	14,999
Florida	229	815	281	1,460
Georgia	0	0	15	16
Missile	0	250	533	783
Maryland	0	0	453	453
Massachusetts	0	0	1,210	1,210
New Hampshire	0	0	85	85
New Jersey	516	1,080	1,747	3,403
New York	3,006	1,062	2,011	6,080
North Carolina	0	0	15	15
North Dakota	140	348	420	908
South Carolina	0	0	90	90
Vermont	11	0	11	22
Virginia	275	0	326	601
PAD District II				
Michigan	49	0	18	67
Minnesota	49	0	0	49
Missouri	0	0	12	12
North Dakota	1	0	6	7
PAD District III				
Louisiana	839	347	1,361	2,547
Texas	839	347	1,361	2,547
PAD District IV				
Montana	1	0	6	7
PAD District V				
California	(*)	266	70	344
Colorado	(*)	0	2	2
Idaho	(*)	282	75	358
Washington	(*)	3	0	3
All PAD Districts	5,170	4,235	8,460	17,865

(*) = Less than 500 barrels.
Note: Total may not equal sum of components due to independent rounding.
Source: See Explanatory Notes on Data Collection and Estimation.



Definitions of Petroleum Products and Other Terms

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

Alkylation. A refinery process for chemically combining isoparaffin with olefin hydrocarbons. The product, alkylate, 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:

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

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

Asphalt. A dark-brown-to-black cement-like material containing bitumens as the predominant constituents, 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 of 42 U.S. gallons per short ton.

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

Aviation Gasoline Blending Components. Finished components in the gasoline range which will be used for blending or compounding into finished aviation gasoline.

Aviation Gasoline (Finished). All special grades of gasoline for use in aviation reciprocating engines, as given in ASTM Specification D910 and Military Specification MIL-G5572. Excludes blending components which will be used in blending or compounding into finished aviation gasoline.

Barril. 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 and wax to barrels are given in the definitions for these products.

Barrels Per Calendar Day. See *Operable Capacity*.

Barrels Per Stream Day. See *Operable Capacity*.

Bi-Metallic. A term used to describe a type of catalyst. A catalytic process utilizing a catalyst comprised of two metals (e.g. platinum, rhenium).

Butane. A normally gaseous straight-chain or branch-chain hydrocarbon, $(\text{C}_4\text{H}_{10})$. It is extracted from natural gas or refinery gas streams. It includes isobutane and normal butane and is covered by ASTM Specification D1835 and Gas Processors Association Specifications for commercial butane.

Isobutane. A normally gaseous branch-chain hydrocarbon, $(\text{C}_4\text{H}_{10})$. It is a colorless paraffinic gas that boils at a temperature of 10.9 degrees F. It is extracted from natural gas or refinery gas streams.

Normal Butane. A normally gaseous straight-chain hydrocarbon, $(\text{C}_4\text{H}_{10})$. It is a colorless paraffinic gas that boils at a temperature of 31.1 degrees F. It is extracted from natural gas or refinery gas streams.

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

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 Hydrocracking. A refining process for converting middle boiling or residual material to high-octane gasoline, reformer charge stock, jet fuel and/or high grade fuel oil. Hydrocracking is an efficient, relatively low temperature process using hydrogen and a catalyst.

Catalytic Hydrotreating. A process for treating petroleum fractions (e.g. distillate fuel oil and residual oil) and unfinished oils (e.g. naphthas, reformer feeds and heavy gas oils) in the presence of catalysts and substantial quantities of hydrogen to upgrade their quality.

Catalytic Reforming. The use of controlled heat and pressure with catalysts to effect the rearrangement of certain hydrocarbon molecules without altering their composition appreciably; the conversion of low-octane gasoline fractions into higher octane stocks suitable for blending into finished gasoline; also the conversion of naphthas to obtain a more volatile product of higher octane number.

Conventional. A term used to describe a type of catalyst. A catalytic process utilizing a catalyst comprised of a metal and a non-metal (e.g. platinum, alumina).

Coal. A generic term applied to carbonaceous rocks that were formed by the partial or complete decomposition of vegetation. These stratified carbonaceous rocks are either solid or brittle and are highly combustible. In-

cludes lignite, bituminous coal, and anthracite which conform to ASTM Specification D388.

Crude Distillation. The refining process of separating crude oil components by heating and subsequent condensing of the fractions by cooling.

Crude Oil (including Lease Condensate). A mixture of hydrocarbons that existed 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 U.S.C. 1331.

Foreign. Crude oil produced outside the United States. Imported Athabasca hydrocarbons are included.

Delayed Coking. A process to produce low Conradson carbon gas oil for catalytic cracking feedstock and for gasoline.

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.

No. 1 Fuel Oil. A light distillate fuel oil intended for use in vaporizing pot-type burners. ASTM Specification D396 specifies for this grade maximum distillation temperatures of 400 degrees F. at the 10-percent point and 550 degrees F. at the 90-percent point, and kinematic viscosities between 1.4 and 2.2 centistokes at 100 degrees F.

No. 2 Fuel Oil. A distillate fuel oil for use in atomizing-type burners for domestic heating or for moderate capacity commercial-industrial burner units. ASTM Specification D396 specifies for this grade distillation temperatures at the 90-percent point between 540 degrees and 640 degrees F., and kinematic viscosities between 2.0 and 3.6 centistokes at 100 degrees F.

No. 1 and No. 2 Diesel Fuel Oils. Distillate fuel oils used in compression-ignition engines, as given by ASTM Specification D975:

No. 1-D. A volatile distillate fuel oil with a boiling range between 300-575 degrees F. and used in high-speed diesel engines generally operated under variations in speed and load. Includes type C-B diesel fuel used for city buses and similar operations. Properties are defined in ASTM Specification D975.

No. 2-D. A gas oil type distillate of lower volatility with distillation temperatures at the 90-percent point between 540-640 degrees F. for use in high-speed diesel engines generally operated under uniform speed and load conditions. Includes Type R-R diesel fuel used for railroad locomotive engines, and Type T-T for diesel-engine trucks. Properties are defined in ASTM Specification D975.

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; its kinematic viscosity is between 5.6 and 28.4 centistokes at 100 degrees F. Also included is No. 4-D, a fuel oil for low- and medium-speed diesel engines that conforms to ASTM Specification D975.

Eastern Hemisphere. That half of the earth east of the Atlantic Ocean which includes Europe, Asia, Africa and Australia. The Hawaiian Foreign Trade Zone is in this hemisphere.

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

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

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

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

Fluid Coking. A thermal process utilizing the fluidized-solids technique for continuous conversion of heavy, low-grade oils into lighter products.

Gasohol. See *Motor Gasoline (Finished)*.

Gas Oil. A liquid petroleum distillate having a viscosity intermediate between that of kerosene and lubricating oil. Derives its name from having originally been used in the manufacture of illuminating gas. Now supplies distillate-type fuel oils and diesel fuel, also cracked to produce gasoline.

Gasoline Blending Components. Finished components in the gasoline range which will be used for blending or compounding into finished aviation or motor gasoline.

Idle Capacity. The component of operable capacity that is not in operation and not under active repairs, but capable of being placed in operation within 30 days; and capacity not in operation but under active repairs 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 sand oil, gilsonite, and shale oil.

Isobutane. See *Butane*.

Isomerization. A refining process which alters the fundamental arrangement of atoms in the molecule. Used to convert normal butane into isobutane, an alkylation process feedstock, and normal pentane and hexane into isopentane and isohexane, high-octane gasoline components.

Kerosene. A petroleum distillate that boils at a temperature between 300-550 degrees F., that has a flash point higher than 100 degrees F. by ASTM Method D56, that has a gravity range from 40-46 degrees API, and that has a burning point in the range of 150-175 degrees F. Included are the two classifications recognized by ASTM D3699: No. 1-K and No. 2-K, and all grades of kerosene called range or stove oil which have properties similar to No. 1 fuel oil, but with a gravity of about 43 degrees API and a maximum end-point of 625 degrees F. 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 an average gravity of 40.7 degrees API, and a 10 percent distillation temperature of 400 degrees F. It is covered by ASTM Specification D1555 and Military Specification MIL-T-5624L (Grades JP-5 and JP-8). A relatively low-freezing point distillate of the kerosene type; it is used primarily for commercial turbojet and turbo-prop aircraft engines.

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

Liquefied Petroleum Gases (LPG). Ethane, Ethylene, propane, propylene, normal butane, butylene, and isobutane 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. Excludes still gas used for chemical or rubber manufacture which is reported as a petrochemical feedstock and also excludes liquefied petroleum gases intended for blending into gasoline which are reported as gasoline blending components. Liquefied refinery gases are reported for use as petrochemical feedstock or other uses.

Lubricating Oils. A substance used to reduce friction between bearing surfaces. Petroleum lubricants may be produced either from distillates or residues. Other substances may be added to impart or improve certain required properties. "Lubricants" includes all grades of lubricating oils from spindle oil to cylinder oil and those used in greases. The three categories include:

Bright Stock. A refined, high viscosity lubricating oil base stock that is usually made from a residuum by a treatment such as deasphalting, acid treatment, or solvent extraction.

Neutral. A distillate lubricating oil base stock with a viscosity that is usually not above 550 Saybolt Universal Seconds (SUS) at 100 degrees F. It is prepared by a treatment such as hydrofining, acid treatment, or solvent extraction.

Other. A lubricating oil base stock used in finished lubricating oils and greases, including black, coastal, and red oils.

Middle Distillates. A general classification that includes distillate fuel oil and kerosene.

Miscellaneous Products. Includes all finished products not classified elsewhere, e.g., petrolatum, absorption oils, ram-jet fuel, petroleum rocket fuels, synthetic natural gas feedstocks, specialty oils and medicinal oils.

Motor Gasoline Blending Components. Finished components in the gasoline range which will be used for blending or compounding into finished motor gasoline. Pool gasoline is included in this category.

Motor Gasoline (Finished). A complex mixture of relatively volatile hydrocarbons, with or without small quantities of additives, that have been blended to form a fuel suitable for use in spark-ignition engines. Specifications for motor gasoline, as given in ASTM Specification D439 or Federal Specification VV-G-1690B, include a boiling range of 122-158 degrees F. at the 10-percent point to 365-374 degrees F. at the 90-percent point and a Reid vapor pressure range from 9 to 15 psi. "Motor gasoline" includes finished leaded gasoline, finished unleaded gasoline, and gasohol. Blendstock is excluded until blending has been completed. Alcohol that is to be used in the blending of gasohol is also excluded.

Finished Leaded Gasoline. Contains more than 0.05 gram of lead per gallon or more than 0.005 gram of phosphorus per gallon. The actual lead content of any given gallon, however, may vary as a function of the size of the producer and company according to specific Environmental Protection Agency waiver provisions. Premium and regular grades are included, depending on the octane rating. Includes leaded gasohol. Blendstock is excluded until blending has been completed. Alcohol that is to be used in the blending of gasohol is also excluded.

Finished Unleaded Gasoline. Contains not more than 0.05 gram of lead per gallon and not more than 0.005 gram of phosphorus per gallon. Premium and regular grades are included, depending on the octane rating. Includes unleaded gasohol. Blend stock is excluded until blending has been completed. Alcohol that is to be used in the blending of gasohol is also excluded.

Gasohol. A blend of finished motor gasoline (leaded or unleaded) and alcohol (generally ethanol but sometimes methanol) in which 10 percent or more of the product is alcohol.

Naphtha-Type Jet Fuel. A fuel in the heavy naphtha boiling range with an average gravity of 52.8 degrees API and 20 to 90 percent distillation temperatures of 290 degrees to 470 degrees F, meeting Military Specification MIL-T-5624L (Grade JP-4). JP-4 is used for turbojet and turboprop aircraft engines, primarily by the military. Excludes ram-jet and petroleum rocket fuels.

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

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

Natural Gas Plant Liquids. Natural gas liquids recovered from natural gas in gas processing plants, and in some situations, from natural gas field facilities. Natural gas liquids extracted by fractionators are also included. These liquids are defined according to the published specification of the Gas Processors Association and the American Society for Testing and Materials and are classified as follows: Ethane, propane, normal butane, isobutane, pentanes plus, and other products from natural gas processing plants (i.e., products meeting the standards for finished petroleum products produced at natural gas processing plants, such as finished motor gasoline, finished aviation gasoline, special naphthas, kerosene, distillate fuel oil, and miscellaneous products).

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

Normal Butane. See Butane.

OPEC. The acronym for the Organization of Petroleum Exporting Countries, oil-producing and 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, Ecuador, Gabon, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, United Arab Emirates, and Venezuela.

Operable Capacity. The amount of capacity that, at the beginning of the period, is in operation; not in operation, and not under active repairs but capable of being placed in operation within 30 days; or not in operation but under active repairs 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.

Barrels Per Calendar Day. The maximum number of barrels of input that can be processed in an atmos-

pheric distillation facility during a twenty-four 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.

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 and product slate conditions.

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

Other Hydrocarbons. Materials received by a refinery and consumed as raw materials. 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.

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

Petrochemical Feedstock Use. 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 400 degrees F, end-point" and "Other oils over 400 degrees F, end point."

Naphtha-Less Than 400 Degrees F. End-Point. A naphtha with an end point of less than 400 degrees F, that is intended for use as a petrochemical feedstock.

Other Oils-Over 400 Degrees F. End-Point. Oils with an end point over 400 degrees F, that is intended for use as a petrochemical feedstock.

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 of 42 U.S. gallons 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 (i.e., 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 refinery 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, naphtha less than 400 F. end-point, other oils over 400 F. end-point, special naphthas, lubricants, waxes, petroleum coke, asphalt, road oil, still gas, and miscellaneous products.

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

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.

Primary Stocks. Stocks of 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 from Alaska, or that is stored on Federal leases or in the Strategic Petroleum Reserve is included. Primary Stocks excludes stocks of foreign origin that are held in bonded warehouse storage.

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

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

Residual Fuel Oil. The topped crude of refinery operations which includes No. 5 and No. 6 fuel oils as defined in ASTM Specification D396 and Federal Specification VV-F-815C, Navy Special fuel oil as defined in Military Specification MIL-F-859E including Amendment 2 (NATO Symbol F-77), and Bunker C fuel oil. Residual fuel oil is used for the production of electric power, space heating, vessel bunkering, and various industrial purposes. Imports of residual fuel oil include "Imported Crude Oil Burned as Fuel."

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

Special Naphthas. All finished products within the gasoline range that are used as paint thinners, cleaners, or solvents. These products are refined to a specified flash point and have a boiling range of 90 degrees to 220 degrees F. "Special naphthas" includes 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 gas 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 reported for petrochemical feedstock use and/or refinery fuel use.

Petrochemical Feedstock Use. Includes all refinery streams which are used by chemical or rubber manufacturing operations for further processing, less the amount of such streams returned to the source refinery. Finished petrochemical products are not included. For example, polyethylene, butadiene, etc. are considered petrochemical products; therefore, only their feedstock equivalents are included.

Fuel Use. All other still gas.

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

Thermal Cracking. A refining process in which heat and pressure are used to break down, rearrange, or combine hydrocarbon molecules. Thermal cracking is used to increase the yield of gasoline obtainable from crude oil.

Unfinished Oils. Includes all oils requiring further processing, except those requiring only mechanical blending.

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

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 vacuum-still bottoms produced on the primary distillation unit are cracked to increase production of distillate products.

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 pre-

dominates. 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. gallon 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 degrees F. (D1321)-60 maximum
Viscosity at 210 degrees 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 degrees 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 degrees F. (D88)-59.9 SUS (10.18 centistokes) maximum. Oil Content (D721)-0.51 percent minimum to 15 percent maximum.

Western Hemisphere. That half of the earth that includes North and South America and adjacent islands

Bureau of Mines Petroleum Refining Districts and PAD Districts

The following are the Bureau of Mines petroleum refining districts which make up the 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 #1: The State of West Virginia and those parts of the States of Pennsylvania and New York not included in the East Coast District.

PAD District II

Appalachian #2: The following counties of the State of Ohio: Erie, Huron, Crawford, Marion, Delaware, Franklin, Pickaway, Ross, Pike, Scioto, and all counties east thereof.

Indiana—Illinois—Kentucky: The States of Indiana, Illinois, Kentucky, Tennessee, Michigan, and that part of the State of Ohio not included in the Appalachian District.

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.

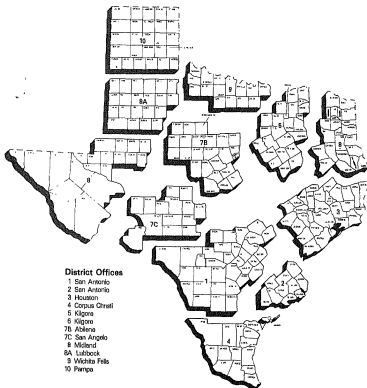
PAD District IV

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

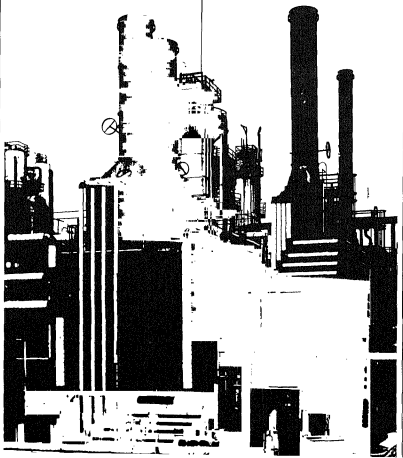
PAD District V

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

District Map Oil and Gas Division Railroad Commission of Texas



Explanatory Notes



Explanatory Notes

Note 1: Data Collection Methodology

Background

Beginning in January 1983, the Energy Information Administration (EIA) unified its petroleum supply data collection activities into the Petroleum Supply Reporting System (PSRS). The 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 primary focus of the consolidation has been to revise the weekly and monthly survey reporting forms to assure consistency in form layout, preparation instructions, and definitions. As a result, a new set of survey forms were implemented in January 1983. The following are the new form numbers and their corresponding predecessor forms:

New Form Number	Name	Old Form Number
EIA-800	Weekly Refinery Report	EIA-161
EIA-801	Weekly Bulk Terminal Report	EIA-162
EIA-802	Weekly Product Pipeline Report	EIA-163
EIA-803	Weekly Crude Oil Stocks Report	EIA-164
EIA-804	Weekly Imports Report	EIA-165
EIA-805	Weekly Shipments from Puerto Rico to the United States Report	—
EIA-810	Monthly Refinery Report	EIA-87
EIA-811	Monthly Bulk Terminal Report	EIA-88
EIA-812	Monthly Product Pipeline Report	EIA-89
EIA-813	Monthly Crude Oil Report	EIA-90
ERA-60	Monthly Imports Report	ERA-60
EIA-815	Monthly Shipments from Puerto Rico to the United States Report	FEA-P133-M-0
EIA-816	Monthly Natural Gas Liquids Report	EIA-84
EIA-817	Monthly Tanker and Barge Movement Report	EIA-170

Forms EIA-800 through 805 comprise the Weekly Petroleum Supply Reporting System (WPSRS). This system is designed to collect basic refinery operations and product stock data for major products on a weekly basis. Data from the WPSRS are published in the *Weekly Petroleum Status Report (WPSR)* and are also used to calculate the preliminary statistics in the "Summary Statistics" section of the *Petroleum Supply Monthly*

(PSM). A description of the WPSRS survey forms follows in Note 1.1.

Forms EIA-810-813, 815-817 and ERA-60 comprise the Monthly Petroleum Supply Reporting System (MPSRS). These surveys collect detailed refinery operations data, refinery, bulk terminal and pipeline stocks data, crude oil and petroleum product imports data and movements of petroleum products and crude oil between PAD Districts data. These surveys are the primary source of data for the "Summary Statistics" and "Detailed Statistics" sections of the PSM. A description of MPSRS survey forms follows in Note 1.2.

Data are also obtained in magnetic tape form from the Bureau of the Census on a monthly basis. These tapes contain aggregated import and export statistics that are used in the preparation of the PSM. A description of the Census data follows in Note 1.3.

Note 1.1: Weekly Petroleum Supply Reporting System (WPSRS)

Background

The EIA first began publishing weekly petroleum supply statistics in April 1979 in response to the Iranian oil crisis. Initially, the published data were taken from the American Petroleum Institute (API) *Weekly Statistical Bulletin*. However, in January 1980 the EIA began to publish weekly statistics from its own surveys, with the exception of imports statistics which the EIA did not begin collecting until June 1980.

The weekly surveys collect data comparable to those collected on a monthly basis. Selected petroleum companies report weekly data to the EIA on crude oil and petroleum product stocks, refinery inputs and production, and crude oil and petroleum product imports. On Forms EIA-800 through EIA-803, companies report data on a custody basis. On the Form EIA-804, the importer of record reports each shipment entering the United States. On Form EIA-805, a company shipping unfinished oils and finished petroleum products into the United States from Puerto Rico reports each shipment. Current weekly data and the most recent monthly data are used to estimate the totals that are published in the *Weekly Petroleum Status Report*.

Sample Frame

The sample of companies that report weekly is selected from the universe of companies that report on the comparable monthly surveys. Sampled companies report data only for facilities in the 50 States and District of Columbia.

The sample for each survey is taken from the following universe:

EIA-800: Based on the EIA-810 universe, which includes all petroleum refineries in the United States and

its territories, industrial facilities that have crude oil distillation capacity and produce some refined petroleum products, and plants that produce finished motor gasoline through mechanical blending. The selected sample size is 215.

EIA-801: Based on the EIA-811 universe, which includes all bulk terminal facilities in the United States and its territories that have either a total bulk storage capacity of 50,000 barrels or more, or that receive petroleum products by tanker, barge, or pipeline. The selected sample size is 93.

EIA-802: Based on the EIA-812 universe, which includes all petroleum product pipeline companies in the United States and its territories that transport refined petroleum products, including interstate, intrastate and intracompany pipeline movements. Pipeline companies that transport only natural gas liquids are not included in the EIA-802 frame. Only those pipeline companies that transport products covered in the weekly survey are included. The selected sample size is 65.

EIA-803: Based on the EIA-813 universe, which consists of all companies which carry or store crude oil of 1,000 barrels or more in the 50 States, and the District of Columbia. Included are gathering and trunk pipeline companies (including interstate, intrastate, and intracompany pipelines), crude oil producers, terminal operators, storers of crude oil, and companies transporting Alaskan crude oil by water.

EIA-804: Based on the ERA-60 universe, which includes all importers of record of crude oil and petroleum products into the United States and Puerto Rico. The selected sample size is 65.

EIA-805: Based on the EIA-815 universe, which includes all shippers of unfinished oils and petroleum products into the United States from Puerto Rico. Four companies report.

Sampling Method

The cut-off method is the sampling procedure used for all weekly surveys except the EIA-802, which uses the monthly universe in its entirety. In the cut-off method, companies are ranked from largest to smallest on the basis of the quantities reported during some previous 12-month period. Companies are chosen for the sampling, beginning with the largest and adding companies until the total sample covers 90 percent of the total for the previous time period for each product published in the *Weekly Petroleum Status Report*.

Collection Methods

Data are collected by mail, mailgram, telephone, Telex, and Telefax on a weekly basis. The report period closes each Friday at 7 a.m. All canvassed firms and terminal operations companies must file by 5 p.m. on the following Monday.

Estimation and Imputation

After company reports have been checked and entered into the weekly data base, weekly totals for given products are estimated by using the following formula.

The total reported by all companies for the most recent month (M_t) is divided by the amount reported by the sample of companies for the most recent month (M_s). The result is multiplied by the amount reported by the sample of companies for the current week (W_s). The answer, W_t , is an estimate of the amount that would have been reported by all companies for the current week if all companies reported each week.

$$W_t = \frac{M_t}{M_s} (W_s)$$

This procedure is used to estimate total weekly inputs to refineries and production.

To estimate stocks of finished products, the preceding procedure is followed separately for refineries, bulk terminals, and pipelines. Total estimates are formed by summing over establishment types.

Weekly imports data are highly variable on a company-by-company basis or a week-by-week basis. Therefore, an exponentially smoothed ratio has been developed. The estimate of weekly imports is the sum of the smoothed ratio multiplied by the weekly values and estimates for shipments from Puerto Rico. Imports of other oils includes an adjustment from Census data for unlicensed products because of coverage differences between the monthly imports data and Census data.

Explicit imputation is done for companies which do not respond in a given week. The imputed values are exponentially smoothed means of recent reports from the specific company.

Response Rates

The response rate for the published estimates is usually between 95 and 98 percent.

Note 1.2: Monthly Petroleum Supply Reporting System (MPSRS)

Background

The MPSRS was implemented in January 1983 as the result of an extensive effort to integrate the collection and processing of petroleum supply data that have been collected on other survey forms for many years. The collection of monthly petroleum supply statistics began as early as 1918 when the Bureau of Mines (BOM) began collecting data on refinery operations and crude oil stocks and movements. The collection systems

were further expanded to include natural gas plant liquids production and storage in 1925, imports of crude oil and petroleum products and storage and movements 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 is the first effort to make them all consistent and comparable.

Respondent Frame

EIA-810: All petroleum refineries and plants that produce finished motor gasoline through the mechanical blending of liquids which are operated or controlled in the 50 States, the District of Columbia, Puerto Rico, the Virgin Islands, the Hawaiian Foreign Trade Zone, and Guam. Approximately 313 respondents report on the EIA-810.

EIA-811: All bulk terminal facilities in the 50 States and the District of Columbia, Puerto Rico, and the Virgin Islands that (a) have a total bulk storage capacity of 50,000 barrels or more and/or (b) receive petroleum products by tanker, barge, or pipeline, regardless of ownership of the material. Approximately 328 respondents report on the EIA-811.

EIA-812: All products pipeline companies that carry petroleum products (including interstate, intrastate and intracompany pipelines) in the 50 States and the District of Columbia. Approximately 94 respondents report on the EIA-812.

EIA-813: All companies which carry or store crude oil of 1,000 barrels or more in the 50 States, and the District of Columbia. Included are gathering and trunk pipeline companies (including interstate, intrastate, and intracompany pipelines), crude oil producers, terminal operators, storers of crude oil, and companies transporting Alaskan crude oil by water.

EIA-815: All licensed Importers and Importers of record shipping petroleum products from Puerto Rico into the 50 States and the District of Columbia.

Import data from the ERA-60 and EIA-815 are integrated into the import statistics reported in the PSM.

EIA-816: All operators of facilities designed to extract liquid hydrocarbons from natural gas stream (natural gas processing plants) or to separate a hydrocarbon stream into its component products, i.e., propane, butane, natural gasoline, etc. (fractionators). Approximately 990 respondents report on the EIA-816.

EIA-817: All known companies and plants that have custody of crude oil and petroleum products transported by tanker and barge between PAD Districts or between PAD Districts and the Panama Canal. There are about 50 respondents.

ERA-60: All licensed Importers and Importers of record importing crude oil and petroleum products into the

United States and Puerto Rico. The respondent universe consisted of approximately 1,100 firms as of July 31, 1982. However, only a selected 250 importers must report each month regardless of import activity. All others must report only for a month in which they actually had imports. The respondent universe for this survey is updated whenever an import license is granted by the Office of Oil Imports of the ERA.

EIA utilizes a number of sources and methods to maintain the survey respondent lists. On a regular basis, survey managers review industry publications such as the *Oil and Gas Journal* and *LP Gas Almanac* for information on facilities or companies going into operation or closing down. These are augmented by articles in newspapers, letters from respondents indicating changes in status and information received from survey systems operated by other offices.

Periodically an extensive survey study is conducted to completely refresh the frames. This involves consolidating information from every known source including State agencies, federal agencies (e.g., EPA, Corps of Engineers, Census Bureau, etc.), and private industry directories. The effort also includes the evaluation of the impact of potential frame changes on the historical time series of 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.

Collection Methods

The data for all of the MPSRS surveys are collected monthly. Completed forms are required to be postmarked by the 20th day following the end of the report month, with the exception of the EIA-815 and ERA-60 which are due 15 work days following the end of the report month. Telephone follow-up calls are made to nonrespondents prior to the publication deadline, for their data. An automated mailing list is maintained and is used to monitor receipt of the forms.

Imputing Missing Data

Imputation is performed only for nonresponding companies that submitted reports the previous month. For such companies, previous monthly values are used for current values. The previous month's ending stocks value is used for both the current month's beginning stocks and the current month's ending stocks. In the event that the previous month's data were estimated, the respondent is contacted and requested to submit estimates. If necessary, to be followed by submission of actual data. Data for nonrespondents on the EIA-815 and 817, and ERA-60 are not imputed.

Response Rates

As of the filing deadline, the response rates of the EIA-810 through EIA-813 respondents is over 90 per-

cent. The response rate for the EIA-816 is over 85 percent and for the EIA-817 it is 98 percent. All companies that have not responded are contacted by telephone. Although data are taken by telephone to expedite processing, a certified submission is still required. Names of companies that fail to file for 2 consecutive months are forwarded for further noncompliance action.

In July 1983, the ERA-80 survey had a response rate of 99.9 percent by the filing deadline. The universe was 1,100 firms at that time. (Because this is a dynamic survey, the universe is constantly changing.) Standard follow-up of nonrespondents is made to insure that all reports are received, since data are not imputed for nonrespondents. In addition, response is cross-checked with response on the Petroleum Licensing Decrementation System (PLDS), a listing of each month's importers. The response rate is generally 98 to 99 percent by the time the data are first published.

Note 1.3: Census Import (IM-145) and Export (EM-522 and EM-594) Data

Background

Each month the EIA purchases magnetic tapes of aggregated import and export statistics from the Bureau of the Census. These data provide the only source of export statistics and are used to augment the import data collected by the EIA. Export statistics and import data from the Census tapes on liquefied petroleum gases and bonded ship bunkers are published in the PSM.

Import Statistics (IM-145)

Coverage

The import statistics reflect both government and non-government imports of merchandise from foreign countries into the U.S. Customs territory (the 50 States, the District of Columbia, and Puerto Rico), without regard to whether or not a commercial transaction is involved. In general, the statistics record the physical movement of merchandise into the United States from foreign countries, with the exception of the following types of transactions that are excluded from the statistics:

1. Merchandise in-transit through the United States, when documented with Customs as an in-transit movement.

2. Shipments from anywhere in U.S. possessions to the United States, including the Virgin Islands.

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18

Source of Import Information

The official U.S. import statistics are compiled by the Bureau of the Census from copies of the import entry and warehouse withdrawal forms that importers are required by law to file with Customs officials (Customs Forms 7501, 7505, and 7509).

Imported petroleum is reported as *Imports for Consumption*. Imports for consumption are a combination of entries for immediate consumption and withdrawals from warehouses for consumption. With certain exceptions as indicated above, these data generally reflect the total of commodities entered into U.S. consumption channels.

Country and Area of Origin

The country reported in the statistics as the country of origin is defined as the country where the merchandise was grown, mined, or manufactured. In instances where the country of origin cannot be determined, the transactions are credited to the country of shipment.

Export Statistics (EM-522 and EM-594)

Coverage

The export statistics reflect both government and non-government exports of domestic and foreign merchandise from the U.S. Customs territory (the 50 States, the District of Columbia, and Puerto Rico) to foreign countries, without regard to whether or not the exportation involves a commercial transaction. In general, the statistics record the physical movement of merchandise out of the United States to foreign countries, with the exception of the following types of transactions:

1. All shipments from U.S. possessions, regardless of whether the shipments are sent to the United States, to other U.S. possessions, or to foreign countries.

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

3. 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 Bureau of the Census primarily from copies of Shipper's Export Declarations. Exporters are required to file Shipper's Export Declarations with Customs officials. The only exceptions are those exporters who have been authorized to submit data directly to the Bureau of Census on magnetic tape, punched cards, or monthly Shipper's Summary Export Declarations.

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 2: Supply

The components of petroleum supply are field production, refinery production, imports, and stock withdrawal or addition:

Field Production is the sum of crude oil production (including lease condensate), natural gas processing plant production, and new supply (field production) of other liquids used by refineries.

Crude oil production is estimated based on data received from State conservation and revenue agencies. For further explanation, see Explanatory Note 3.

Field production of natural gas plant liquids (NGPL), including finished petroleum products, is reported monthly on survey Form EIA-816, *Monthly Natural Gas Liquids Report*. 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. For survey description and other detail, see Explanatory Note 1.2.

Refinery Production of petroleum products is reported monthly on survey Form EIA-810, *Monthly Refinery Report*. Published production of these products equals refinery production minus refinery input. Refinery production of unfinished oils and of motor and aviation gasoline blending components appears on a net basis under 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.

Imports of crude oil and petroleum products are reported monthly on Form EIA-80, *Report of Oil Imports into the United States and Puerto Rico*, and Form EIA-815, *Shipments of Refined Products (Including Unfinished Oils) from Puerto Rico to the United States*. In addition, the Census Bureau Tabulation IM-145 summarizes import data from Customs import declarations reported on Customs Forms 7501, 7505, and 7506. The most prominent difference between the EIA and Census systems appears in imports of liquefied petroleum

gases (LPG), where the Census data show a much higher level of imports than EIA data. This occurs because the EIA-80 respondent frame was built by monitoring importers of licensed products and LPGs are not licensed products. Therefore, respondents that import only LPGs have not been identified, and do not report these imports to the Department of Energy. Since these importers are required to file form 7501 with the U.S. Customs Service, EIA obtains data on imports of LPGs from Census Tabulation IM-145. Additional data taken from the IM-145 are relatively small quantities of naphtha- and kerosene-type jet fuels, distillate fuel oils, and residual fuel oils withdrawn from bonded storage for use in international trade. Even though these duty-free fuels are stored on United States shores, they did not enter the United States for domestic consumption and therefore are not included in the EIA-80 reporting system.

Stock Withdrawal (+) or Addition (-) is calculated by subtracting stocks at the end of the month from stocks at the beginning of the same month. (Note: The beginning stocks of one month are equal to the ending stocks of the previous month.) A positive result (+) would represent a withdrawal from stocks and an increase in petroleum supplies distributed for domestic consumption. A negative result (-) would represent a buildup of stocks and a reduction in the amount of petroleum supplies distributed for domestic consumption. For a description of survey forms used to make stock withdrawal or addition calculations see Explanatory Note 5.

Unaccounted-for Crude Oil is a balancing item that represents the difference between crude oil supply and disposition.

Crude oil supply is the sum of field production, imports and stock withdrawals or additions. Crude oil disposition is the sum of exports, refinery input, losses and product supplied. Unaccounted-for crude oil is calculated by subtracting crude oil supplies from crude oil disposition. 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 would indicate that more crude oil was reported to have been supplied to refiners and exporters than they reported used.

Note 3: Domestic Crude Oil Production

Data for the Crude Oil Production System (COPS) are reported to the Department of Energy by each of the State conservation agencies, which collect crude oil production values for tax purposes. The U.S. Geological Survey reports the volume of crude oil that is produced offshore in Federally-owned waters. With the exception of ten State conservation agencies, all of these reports are received monthly. After each calendar year, these monthly numbers are updated using the annual reports

from the State conservation agencies and the U.S. Geological Survey. The ten States that do not report monthly values are Indiana, Kentucky, Missouri, Arkansas, Utah, New York, Ohio, Pennsylvania, West Virginia, and Wyoming. Monthly values are estimated for these States using the individual linear trends of their historical annual crude oil production values.

There is a time lag of approximately 4 months between the end of the reporting month and the time when the monthly COPS information becomes available. Table 11 of this publication provides information on crude oil production for the most recent month for which COPS values are available. In order to present more timely crude oil production values, the EIA's Dallas Field Office prepares a series of State level estimates which are based on historical production patterns and are summed to obtain the monthly crude oil production values shown in the summary statistics of this publication.

The Individual State level estimates are either exponential curve fitted projections based on recent data or are constant level projections based on the average production rate during a recent time period. In some cases, adjustments are made to these estimates based on additional information on expected changes in production rates supplied by a State agency, a trade association, or an individual field operator.

Note 4: Disposition

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

Crude Oil Losses is the sum of crude oil losses at refineries. Crude oil losses at refineries are reported on Form EIA-810, *Refinery Report*.

Refinery Inputs of crude oil, natural gas plant liquids, and other liquids are reported monthly on survey Form EIA-810, *Monthly Refinery Report*. Published inputs of unfinished oils and of motor and aviation gasoline blending components equal refinery input minus refinery output. Refinery inputs of finished petroleum products are reported on a net basis under refinery production.

Exports of crude oil and petroleum products are compiled from Census Bureau tabulations EM-522 and EM-594. Exports include crude oil shipments to Puerto Rico, the Virgin Islands, and the Hawaiian Foreign Trade Zone, which are obtained from refinery receipts reported on Form EIA-810, by refineries located in these places.

Product Supplied for each product is calculated by summing field production plus refinery production, plus imports, plus stock withdrawal or minus stock addition, minus crude oil losses (plus net receipts when calculated on a PAD District basis), minus re-

finery input, minus exports. This formula ensures that total disposition equals total supply.

Products supplied indicates those quantities of petroleum products supplied for domestic consumption. Occasionally, the result for a product is negative because total disposition of that product exceeds total supply. Negative product supplied may occur for a number of reasons: (1) product reclassification has not been reported, (2) data were misreported or reported late, (3) in the case of calculations on a PAD District basis, the figure for net receipts was inaccurate because the coverage of interdistrict movements was incomplete.

Product supplied for crude oil is the sum of crude oil burned on leases and by pipelines as fuel oil. These data are reported on Form EIA-813, *Monthly Crude Oil Report*. Prior to January 1983, crude oil burned on leases and by pipelines as fuel oil were reported as either distillate or residual fuel oil and included in product supplied for these products.

Note 5: Stocks

Primary stocks of crude oil are the sum of ending stocks reported monthly on Form EIA-810, *Monthly Refinery Report*, and on Form EIA-813, *Monthly Crude Oil Report*. Crude oil held in the Strategic Petroleum Reserve is included unless otherwise noted. Alaskan crude oil in transit is also included. Stocks of crude oil are also reported weekly on Form EIA-800, *Weekly Refinery Report*, and on Form EIA-803, *Weekly Crude Oil Stocks Report*. Primary stocks of petroleum products are summed from data reported on Form EIA-816, *Monthly Natural Gas Liquids Report*, Form EIA-810, *Monthly Refinery Report*, Form EIA-811, *Monthly Bulk Terminal Report*, and on Form EIA-812, *Monthly Product Pipeline Report*. Primary stocks of petroleum products do not include either secondary stocks held by dealers and jobbers or stocks held by consumers. Petroleum product stocks are also reported weekly on Form EIA-800, *Weekly Refinery Report*, Form EIA-801, *Weekly Bulk Terminal Report*, and Form EIA-802, *Weekly Crude Oil Stocks Report*. For survey descriptions and other details, see Explanatory Notes 1.1 - 1.3.

Note 6: Average Stock Levels

The graphs displaying monthly stock levels of crude oil, motor gasoline, distillate fuel oil, residual fuel oil, and liquefied petroleum gases provide the user with recent data as well as a summary of data from January through December or from July through June for the most recent 3-year period. This summary takes the form of an average range that includes seasonal variation determined from a longer time period. The average range represents the historical pattern; it is not a forecast.

These curves are updated semiannually (in April and October), by basing the average ranges on a more recent time period. Each 3-year data series is adjusted by dropping the first 6 months and including the most recent 6 months.

For each data series, the monthly seasonal factors are estimated by means of a seasonal adjustment technique developed at the Bureau of the Census (Census X-11). The seasonal factors are assumed to be stable (i.e., unchanging from year to year) and additive. The series is deseasonalized by subtracting the seasonal factor for the appropriate month from the reported stock levels. The intent of deseasonalization is to remove only seasonal variation from the data. Thus, a deseasonalized series would contain the same trends and irregularities as the original data. The seasonal factors for distillate fuel oil, residual fuel oil, and liquefied petroleum gases were derived using monthly data for 1977-1983. For motor gasoline, the seasonal factors are based on monthly data for 1978-1983. In 1977, there was virtually no seasonal behavior in motor gasoline stocks. Monthly stock levels stayed at the same high level for the entire year.

After seasonal factors are derived, the most recent 3-year period (from January through December or from July through June) is deseasonalized. The average of the deseasonalized 36-month series determines the midpoint of the deseasonalized average band. The standard error of the deseasonalized 36 months is calculated adjusting for extreme data points. The width of the average range is twice this standard error.

The upper curve of the average range is defined as the average plus the seasonal factors plus the standard error. The lower curve is defined as the average plus the seasonal factors minus the standard error.

Note 7: Movements

Movements of crude oil between PAD Districts are reported on Form EIA-617, *Monthly Tanker and Barge Movement Report*, and on Form EIA-613, *Monthly Crude Oil Report*. Petroleum product movements are reported on Forms EIA-617, *Monthly Tanker and Barge Movement Report*, and EIA-612, *Monthly Product Pipeline Report*. Net receipts is the difference between total movements into and total movements out of each PAD District by pipeline, tanker, and barge. For survey descriptions and other detail, see Explanatory Note 1.2.

Note 8: Preliminary Monthly Statistics

Weekly data (Forms EIA-800, 801, 802, 803, and 804) are used to estimate the most recent monthly values for the *Summary Statistics* section. Since some of the weekly reporting periods overlap two adjacent months,

it is necessary to use weighting factors in the calculation of the monthly values.

To estimate crude oil and petroleum product imports, crude oil input to refineries and production of petroleum products for a specific month, the weekly estimates are weighted by the number of days of that month included in each week, then summed.

End-of-month stock levels of crude oil and the major products (motor gasoline, distillate fuel oil, and residual fuel oil) are calculated in a similar manner, but use only the two weekly reporting periods that cover the end-of-week stocks before and after the end of the month. The end-of-month stock level is calculated by first calculating the stock change between the two weeks. The daily stock change between the two end-of-week stock levels is then calculated. This number is multiplied by the weighting factor of the earlier of the two weeks (the week that covers the last day of the month of interest). This change is added to the earlier of the two end-of-week stock levels to estimate the end-of-month stock level.

Preliminary monthly estimates of domestic crude oil production are calculated as described in Explanatory Note 3.

Note 9: Notes on Tables

Note 9.1 Crude Oil and Petroleum Products Overview statistics on the referenced line appear in Table 4 of the Detailed Statistics, except where noted.

- Crude Oil and Petroleum Products Stock Withdrawal (+) or Addition (-), Petroleum Products Supplied, Total Imports, Crude Oil Imports, Total Exports, and Crude Oil Exports appear as labeled in Table 4. Total Production and Crude Oil Production appear under Field Production in Table 4.
- Natural Gas Plant Production is the sum of Natural Gas Liquids and Finished Petroleum Products Field Production in Table 4.
- Petroleum Products Imports is the sum of Natural Gas Liquids and LRGs, Other Liquids, and Finished Petroleum Products Imports in Table 4.
- Total Crude Oil and Petroleum Products Ending Stocks appear in thousand barrels in Table 2.

Note 9.2 Crude Oil Supply and Disposition statistics on the referenced line appear in Table 1 of the Detailed Statistics, except where noted.

- Total Domestic Field Production, Alaskan Field Production, SPR Imports, Other Imports (synonymous with Imports Gross Excl. SPR), SPR and Other Primary Stocks Withdrawal (+) or Addition (-), Unac-

counted For Crude Oil, Refinery Inputs, and Exports appear as labeled in Table 1.

- Crude Losses and Product Supplied appear as labeled in Table 4.
- SPR Ending Stocks and Other Primary Ending Stocks (synonymous with stocks excluding SPR) appear in thousand barrels in Table 1.
- Total Crude Oil Ending Stocks appear in thousand barrels in Table 2.
- Total Imports appear in Table 4.

Note 9.3 Finished Motor Gasoline Supply and Disposition statistics on the referenced line appear in Table 4 of the Detailed Statistics, except where noted.

- Total Production is the sum of Field Production and Refinery Production in Table 4.
- Imports, Stock Withdrawal (+) or Addition (-), Exports, and Product Supplied appear as labeled in Table 4.
- Unleaded Percent of Total Product Supplied represents the ratio of finished unleaded motor gasoline product supplied to total finished motor gasoline product supplied, multiplied by 100 and rounded to the nearest tenth.
- Ending stocks are aggregated from ending stocks in thousand barrels in Table 2.

Note 9.4 Distillate and Residual Fuel Oil Supply and Disposition statistics on the referenced lines appear in Table 4 of the Detailed Statistics, except where noted.

- Total Production is the sum of Field Production and Refinery Production in Table 4.
- Imports, Stock Withdrawal (+) or Addition (-), Exports, and Product Supplied appear as labeled in Table 4.
- Ending Stocks appear in thousand barrels in Table 2.

Note 9.5 Liquefied Petroleum Gases Supply and Disposition statistics represent the aggregation of statistics on ethane, propane, butane, butane-propane mixtures, ethane-propane mixtures, and isobutane. The statistics on the referenced line appear in Table 4 of the Detailed Statistics, except where noted.

- Total Production is the sum of Field Production and Refinery Production in Table 4.
- Imports, Stocks Withdrawal (+) or Addition (-), Refinery Inputs, Exports, and Product Supplied appear as labeled in Table 4.

- Ending stocks appear in thousand barrels in Table 2.

Note 9.6 Other Petroleum Products Supply and Disposition statistics represent the aggregation of statistics on natural gasoline, isopentane, unfractionated stream, plant condensate, other liquids, and all finished petroleum products except finished motor gasoline, distillate fuel oil, and residual fuel oil. The statistics on the referenced line are aggregated from Table 4 of the Detailed Statistics, except where noted.

- Total Production is the aggregated sum of Field Production and Refinery Production in Table 4.
- Imports, Stock Withdrawal (+) or Addition (-), Refinery Inputs, Exports, and Product Supplied are aggregated from Table 4.
- Ending stocks are aggregated from ending stocks in thousand barrels in Table 2.

Note 9.7 Table 1. U.S. Petroleum Balance

- Lines (1) through (3): Crude oil (including lease condensate) production for Alaska, Lower 48 States, and Total U.S. are calculated by calling the conservation agency in Alaska for Alaskan crude oil production during the month, estimating crude oil production in the United States (see Explanatory Note 3), and taking the difference to equal production in the Lower 48 States.
- Line (5): *SPR Imports* are reported on Survey Form ERA-60.
- Line (12): *Total Other Sources* equals crude oil stock withdrawal (+) or addition (-) plus unaccounted for crude oil minus crude losses in Table 2.
- Line (14): *Natural gas plant liquids (NGPL) Production* equals field production of natural gas liquids (NGL) plus field production of finished petroleum products in Table 2.
- Line (15): *NGPL Imports* equals the sum of the imports of natural gasoline and isopentane, unfractionated stream, and plant condensate imports in Table 2.
- Line (16): *NGPL Stock Withdrawal (+) or Addition (-)* is equal to the sum of stock withdrawal (+) or addition (-) of natural gasoline and isopentane, unfractionated stream, and plant condensate in Table 2.
- Line (17) equals the sum of lines (14), (15), and (16).

- Line (18): *Unfinished oils and gasoline blending components Stock Withdrawal (+) or Addition (-)* equals stock withdrawal (+) or addition (-) for other hydrocarbons and alcohol, for unfinished oils, motor gasoline blending components, and aviation gasoline blending components.

• Line (20): *Other Hydrocarbons and Alcohol New Supply* equals the field production of same in Table 2

• Line (21): *Refinery Processing Gain* is a balancing item equal to total refinery production minus total refinery input in Table 2.

• Line (23): *Total Other Liquids* equals the sum of lines (18) through (22).

• Line (24): *Total Production of Products* equals crude oil input to refineries plus field production of NGPL and finished petroleum products, plus imports of natural gasoline and isopentane, unfractionated stream, and plant condensate; plus stock withdrawal (+) or addition (-) of natural gasoline and isopentane, unfractionated stream, and plant condensate; plus stock withdrawal (+) or addition (-) of other hydrocarbons and alcohol, unfinished oils, aviation gasoline blending components, and motor gasoline blending components; plus imports of unfinished oils, aviation gasoline blending components, and motor gasoline blending components; plus field production of other hydrocarbons and alcohol; plus total refinery production; minus total refinery input; plus crude oil product supplied in Table 2.

• Line (25): *Gross Imports of Refined Products* equals imports of LPG plus imports of finished petroleum products in Table 2.

• Line (26): *Exports of Refined Products* equals exports of LPG plus exports of finished petroleum products in Table 2.

• Line (27): *Net Imports of Refined Products* equals the difference between lines (25) and (26).

• Line (28): *Total New Supply of Products* equals crude oil input to refineries plus field production of NGPL and finished petroleum products; plus imports of natural gasoline and isopentane, unfractionated stream, and plant condensate; plus stock withdrawal (+) or addition (-) of natural gasoline and isopentane, unfractionated stream, and plant condensate; plus stock withdrawal (+) or addition (-) of other hydrocarbons and alcohol, unfinished oils, aviation gasoline blending components, and motor gasoline blending components; plus imports of unfinished oils, aviation gasoline blending components, and motor gasoline blending components; plus field production of other hydrocarbons and alcohol; plus total refinery production; minus total refinery input; minus crude oil product supplied plus imports of LPG and finished petroleum products; minus exports of LPG and finished petroleum products in Table 2.

• Line (29): *Refined Products Stocks Withdrawal (+) or Addition (-)* equals the sum of stock withdrawal (+) or addition (-) for LPG and finished petroleum products in Table 2.

• Line (30): *Total Petroleum Products Supplied for Domestic Use* equals total products supplied in Table 2.

• Lines (31) through (35) equal the respective products supplied in Table 2.

• Line (36): *Other Products Supplied* equals the sum of natural gasoline and isopentane, unfractionated stream, plant condensate, aviation gasoline, naphtha < 400 Deg. F for petrochemical feedstock use, other oils > 400 Deg. F. for petrochemical feedstock use, special naphthas, lubricants, waxes, coke, asphalt, road oil, still gas, unfinished oils, motor gasoline blending components, aviation gasoline blending components and miscellaneous products supplied in Table 2.

• Line (37): *Total Product Supplied* is equal to total products supplied in Table 2.

• The sum of lines (38) and (39), stocks of *Crude Oil and Lease Condensate (Excluding SPR)* and stocks held by the *Strategic Petroleum Reserve*, equals: ending stocks of crude oil in Table 2. SPR stocks are reported on Form EIA-813.

• Line (43): stocks of *Refined Products*, equals the sum of LPG and finished petroleum product stocks in Table 2.

Note 10: New Stock Basis

In January 1975, 1981, and 1983, numerous respondents were added to bulk terminal and pipeline surveys affecting subsequent stocks reported and stock withdrawal calculations. Using the expanded coverage (new basis), the end-of-year stocks, in million barrels, would have been:

• Crude Oil: 1982 - 845 (Total) and 351 (Other Primary).

• Crude Oil and Petroleum Products: 1974 - 1,121; 1980 - 1,420; and 1982 - 1,462.

• Motor Gasoline: 1974 - 225; 1980 - 263; 1982 - 244 (Total) and 203 (Finished).

• Distillate Fuel Oil: 1974 - 224; 1980 - 205; and 1982 - 186.

• Residual Fuel Oil: 1974 - 75; 1980 - 91; and 1982 - 88.

• Liquefied Petroleum Gases: 1974 - 113; 1980 - 128; and 1982 - 103.

• Other Petroleum Products: 1974 - 220; 1980 - 249; and 1982 - 258.

• Stock withdrawal calculations beginning in 1975, 1981, 1983 were made using new basis stock levels.

In January 1984, changes were made in the reporting of natural gas liquids. As a result, unfractionated stream, which was formerly included in "Other Petroleum Prod-

ucts Supply and Disposition" table in the Summary Statistics, is now reported on a component basis (ethane, propane, normal butane, isobutane and pentanes plus). Most of these stocks will now appear in the "Liquefied Petroleum Gases Supply and Disposition" table of the Summary Statistics. This change will affect stocks reported and stock withdrawals in each table. Under the new basis, end-of-year 1983 stocks, in million barrels, would have been:

- Liquefied Petroleum Gases: 1983 - 108
- Other Petroleum Products: 1983 - 248

Note 11: Stocks of Alaskan Crude Oil

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 withdrawal calculations. Using the expanded coverage (new basis), 1980 end-of-year stocks, in million barrels, would have been 489 (Total) and 380 (Other Primary).

Note 12: Changes in Petroleum Industry Reporting

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

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 throughout 1980. However, 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. This difference increased to about 4 percent in 1979 and 5 percent in 1980. There are 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). The following table 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. 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. EIA has recently published a study of the quality of these FHWA data.⁴

⁴Office of Energy Information Validation, Energy Information Administration, U.S. Department of Energy, *Error Profile of the Motor Fuel Taxation Data used to Establish and Monitor State Emergency Conservation Targets* (Washington, D.C.: December, 1981).

**Finished Motor Gasoline Product Supplied on Old and New Basis
(Thousand Barrels per Day)**

	1979				1980			
	EIA Reported	API Recast	EIA Recast	FHWA'	EIA Reported	API Recast	EIA Recast	FHWA'
Jan	6,830	7,230	7,084- 7,246	6,984	6,323	6,789	6,630- 6,791	6,672
Feb	7,254	7,496	7,389- 7,568	7,536	6,596	6,963	6,631- 7,003	6,830
Mar	7,229	7,414	7,301- 7,483	7,316	6,406	6,753	6,607- 6,768	6,713
Apr	7,055	7,300	7,187- 7,353	7,375	6,900	7,014	6,826- 7,052	6,981
May	7,213	7,429	7,313- 7,475	7,428	6,729	6,954	6,823- 6,984	7,044
Jun	7,191	7,463	7,350- 7,518	7,441	6,657	6,966	6,624- 6,991	7,049
Jul	6,902	7,241	7,105- 7,266	7,299	6,743	6,973	6,960	7,132
Aug	7,330	7,548	7,426- 7,588	7,619	6,648	6,841	6,828	7,090
Sep	6,861	7,122	7,018- 7,262	7,232	6,510	6,692	6,662	6,665
Nov	6,791	7,068	6,956- 7,122	7,142	6,234	6,507	6,516	6,951
Dec	6,730	7,106	6,966- 7,127	7,064	6,632	6,948	6,936	6,993
Average	7,034	7,302	7,183- 7,347	7,308	6,579	6,882	6,806- 6,889	6,925

'FHWA gasoline statistics published in their 1979 Table MF-33G, 06 06 80, contain aviation gasoline as well as motor gasoline. Only motor gasoline data are included in published 1980 data. Consequently, the 1979 data shown above were reduced by subtracting aviation gasoline product supplied quantities as published by EIA in the 1979 *Petroleum Statement Annual*. The 1980 FHWA data published in their 1980 Table MF-33GA, August 1981, did not require this adjustment.

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 oil produced by a refinery is 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 sub-

tracted from distillate and residual fuel oil production to adjust for this discrepancy. Two-thirds of the difference was applied to distillate, 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. The following table presents distillate and residual fuel oil refinery production in 1980 as published (adjusted) and on the same basis as 1981 statistics are now being completed (unadjusted) to permit comparison between 1980 and 1981 data series. 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.

Adjusted and Unadjusted Refinery Production, and Unadjusted Product Supplied of Distillate and Residual Fuel Oils, by Month for 1979 and 1980 (Thousand Barrels Per Day)
1979

Month	Distillate Fuel Oil			Residual Fuel Oil			
	Adj. Ref. Prod.	Unadj. Ref. Prod.	Diff.	Unadj. Product Supplied	Adj. Ref. Prod.	Unadj. Ref. Prod.	Unadj. Product Supplied
Jan.	3,043	3,108	65	4,648	1,912	1,946	3,594
Feb.	2,888	2,945	57	4,869	1,792	1,822	3,625
Mar.	3,019	3,026	7	3,671	1,719	1,723	3,243
Apr.	2,945	2,975	32	3,040	1,639	1,656	2,524
May	3,066	3,093	27	3,025	1,596	1,600	2,517
Jun.	3,153	3,187	35	2,743	1,548	1,566	2,601
Jul.	3,305	3,344	38	2,601	1,575	1,594	2,471
Aug.	3,321	3,359	38	2,799	1,584	1,603	2,570
Sep.	3,354	3,306	- 48	2,599	1,627	1,602	2,584
Oct.	3,251	3,217	- 34	3,085	1,629	1,612	2,523
Nov.	3,239	3,200	- 39	3,208	1,736	1,716	2,795
Dec.	3,221	3,238	17	3,725	1,894	1,903	3,022
Average	3,152	3,169	16	3,327	1,687	1,695	2,934

1980

Month	Distillate Fuel Oil			Residual Fuel Oil			
	Adj. Ref. Prod.	Unadj. Ref. Prod.	Diff.	Unadj. Product Supplied	Adj. Ref. Prod.	Unadj. Ref. Prod.	Unadj. Product Supplied
Jan.	3,013	3,093	80	3,794	1,771	1,812	3,108
Feb.	2,766	2,888	122	3,834	1,773	1,836	3,188
Mar.	2,557	2,690	133	3,312	1,584	1,652	2,726
Apr.	2,460	2,554	94	2,729	1,595	1,643	2,492
May	2,474	2,610	136	2,530	1,509	1,579	2,305
Jun.	2,646	2,721	75	2,392	1,575	1,613	2,359
Jul.	2,889	2,793	94	2,343	1,480	1,528	2,339
Aug.	2,461	2,582	121	2,258	1,444	1,506	2,348
Sep.	2,686	2,726	40	2,827	1,495	1,516	2,380
Oct.	2,589	2,650	61	2,981	1,512	1,543	2,258
Nov.	2,703	2,823	120	3,069	1,579	1,641	2,513
Dec.	2,891	3,052	161	3,776	1,860	1,743	2,762
Average	2,661	2,764	103	2,969	1,580	1,634	2,562

Total Petroleum Products

The imbalance between the supply and disposition of unfinished oils and gasoline blending components is included with other products (line 35) in the U.S. Petroleum Balance (Table 1). These imbalances are reported as negative product supplied in the Other Liquids sec-

tion, Supply and Disposition Statistics (Table 2). Since these changes only involve redistribution of the volumes of gasoline, distillate and residual fuel oil, gasoline blending components, and unfinished oils, the total volume of petroleum products supplied remains unaffected by them.

Note 13: NGL Import/Export Algorithms

Beginning in January 1984, the Energy Information Administration (EIA) implemented changes in the reporting of natural gas liquid (NGL) supply data, moving from a nine-product slate to a five-component slate that corresponds to industry record-keeping practices. Changes could not be made to the import and export systems. 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 is based on information gathered from the larger importers of NGL, who were asked to provide component analyses of the products they imported during the first six months of 1983. The percentages shown in Exhibit 1 are derived from the weighted averages of the data provided by the importers.

EXHIBIT 1. ALGORITHMS FOR ALLOCATING NGL IMPORTS

PRODUCT SLATE	Ethane	Propane	Normal butane	Isobutane	Pentanes Plus
Natural Gasoline & Isopentane (EIA-814)					100%
Plant Condensate (EIA-814)					100%
Ethane (IM-145)	100%				
Butane (IM-145)			60%	40%	
Butane-Propane Mixtures (IM-145)		40%	35%	20%	5%
Ethane-Propane Mixtures (IM-145)	80%	20%			

Exports

The export algorithm is based on information gathered from the larger exporters of NGL, who were asked to provide component analyses of the products they

exported during 1983. The percentages shown in Exhibit 2 are derived from the weighted averages of the data provided by the exporters. It was necessary to derive percentages by PAD of exportation, due to the wide variation of components in the mixed streams.

EXHIBIT 2. ALGORITHMS FOR ALLOCATING NGL EXPORTS

PRODUCT	P.A.D.	Ethane	Propane	EIA Component Slate Normal Butane	Isobutane	Pentanes Plus
Ethane	All	100%				
Propane	All		100%			
Butane	All			100%		
Mixed Streams	I, IV, V		40%	60%		
	II	30%	25%	15%	15%	
	III		80%	20%		

