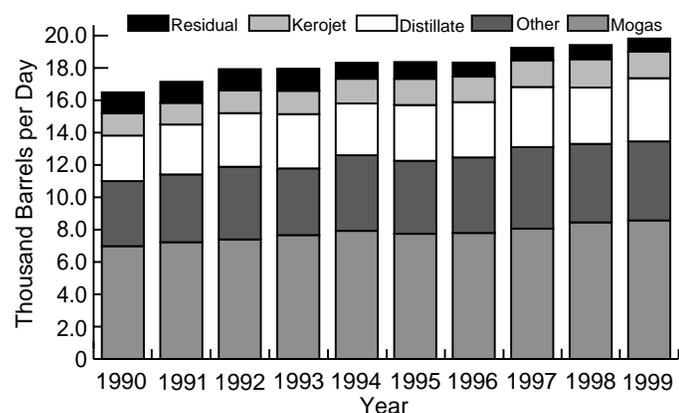


Highlights

A robust U.S. economy continued this year with modest inflation, except for energy commodities, and low unemployment rates.¹ The long-term warming trend continued in 1999, marking the second warmest year on record according to data from the National Oceanic and Atmospheric Administration.² December's temperatures were more of the same. Heating degree days data reflect temperatures that were 9.7 percent warmer than normal for the U.S. although cooler than this time last year by 2.9 percent.³ Despite the lack of weather related demand, total demand for refined petroleum products, measured as product supplied, reached the **highest daily average for December⁴ since 1978** at 19.8 million barrels per day (Table & Figure H1). For the year, demand for refined petroleum products was up over 2.2 percent from the previous high set last year.

Figure H1. Total Demand, 1990-Current, Comparison in December for Petroleum Products



Source: Energy Information Administration, *Petroleum Supply Annual*, DOE/EIA-0340 (various issues), and *Petroleum Supply Monthly*, DOE/EIA-0109 (various issues).

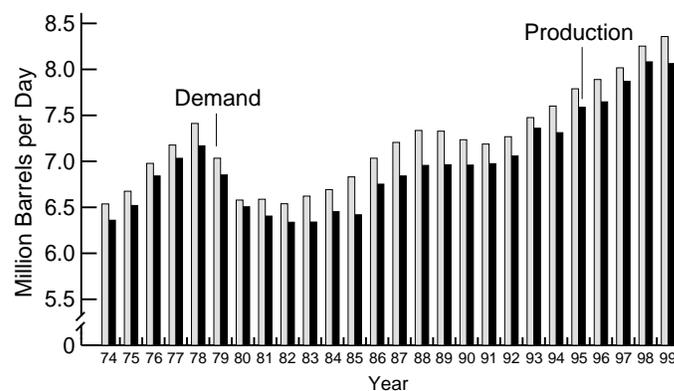
December and year-to-date 1999 highlights:

- **Demand** for finished motor gasoline set a **December record high** at 8.6 million barrels per day. For the year, demand is also at a record pace, 8.4 million barrels per day. Finished motor gasoline **production** trails 1998's averages for both the month and the year at 8.3 million barrels per day and 8.1 million barrels per day, respectively. **Stocks** of finished motor gasoline ended the year totaling 151.8 million barrels, the lowest total for December since this data series began in 1981.
- **Demand** for distillate fuel oil reached the highest average for the month in 10 years at 3.9 million barrels per day. **Demand** for the year averaged 3.5 million barrels per day, a **record high**. Distillate fuel oil **exports** averaged 157 thousand barrels per day. Total **stocks** of distillate fuel oil ended the month at 120.1 million barrels, the lowest level for the month in 10 years.
- **Demand** for residual fuel oil remains lackluster at 801 thousand barrels per day for December and 824 thousand

barrels per day for 1999. Residual fuel oil **production** at 643 thousand barrels per day dropped to **the lowest daily average for the month in more than 30 years**. **Stocks** of residual fuel oil also ended the month **at their lowest December total in more than 30 years**, at 35.1 million barrels.

- **Demand** for kerosene-type jet fuel averaged 1.7 million barrels per day, 97 thousand barrels per day shy of the December record high. Over the past 12 months, demand for kerosene-type jet fuel averaged a **record** 1.7 million barrels per day. **Production** of kerosene-type jet fuel averaged 1.6 million barrels per day, for both December and the year. **Stocks** of kerosene-type jet fuel ended the month at 40.9 million barrels, the lowest month-end total for December since 1996.
- Propane **stocks** were drawn down a staggering 12.0 million barrels to end the month at 42.5 million barrels. Propane inventories ended the year just below the normal seasonal range.
- Domestic **production** of crude oil averaged 6.1 million barrels per day, a slight increase compared to last December. Production of crude oil for the year averaged 5.9 million barrels per day, the lowest average since 1950. Compared to last December, Alaskan field production of crude oil was **down 7.3 percent to 1.1 million barrels per day**. Over the last 12 months, imports of crude oil poured into the U.S. at a rate of 8.6 million barrels per day. Excluding the Strategic Petroleum Reserve (SPR), crude oil **stocks** ended the month at **290.8 million barrels**.
- Crude oil **inputs** averaged 14.5 million barrels per day during December and 14.8 million barrels per day for 1999.

Figure H2. Finished Motor Gasoline, Year-to-Date December Comparisons, 1974-1999



Source: Energy Information Administration, *Petroleum Supply Annual*, DOE/EIA-0340 (various issues), and *Petroleum Supply Monthly*, DOE/EIA-0109 (various issues).

¹“U.S. Consumer Prices Tame, Economy Strong”, *Reuters*, January 14, 2000, accessible via the Internet at <http://dailynews.yahoo.com/>.

²“U.S. 1999 Temperatures Second-Warmest of Century”, *Reuters*, December 28, 1999, accessible via the Internet at <http://dailynews.yahoo.com/>.

³“Heating Degree Day Data Monthly Summary, Monthly Data for December 1999”, *National Oceanic and Atmospheric Administration*, accessible via the Internet at <http://www.cpc.ncep.noaa.gov/>.

⁴December 1999 data are monthly-from-weekly estimates based on the Energy Information Administration's Weekly Petroleum Supply Reporting System.

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

Category	1999			1998	January - December	
	Estimated December	November	Difference ^a	December	1999	1998
Products Supplied	19.8	19.0	0.8	19.4	19.3	18.9
Finished Motor Gasoline.....	8.6	8.2	0.3	8.5	8.4	8.3
Distillate Fuel Oil.....	3.9	3.6	0.3	3.5	3.5	3.5
Residual Fuel Oil	0.8	0.8	(s)	0.9	0.8	0.9
Jet Fuel.....	1.7	1.6	(s)	1.7	1.7	1.6
Other Petroleum Products ^b	4.9	4.8	0.1	4.9	4.9	4.7
Crude Oil Inputs	14.5	14.7	-0.2	14.8	14.8	14.9
Operating Utilization Rate (%)	90.4	93.2	-2.8	96.0	93.7	96.9
Imports	9.8	9.9	-0.1	10.3	10.5	10.7
Crude Oil	8.1	8.2	-0.1	8.4	8.6	8.7
Strategic Petroleum Reserve	(s)	(s)	(s)	0.0	(s)	0.0
Other.....	8.1	8.2	-0.1	8.4	8.6	8.7
Products	1.7	1.7	(s)	1.9	2.0	2.0
Finished Motor Gasoline.....	0.3	0.3	(s)	0.3	0.4	0.3
Distillate Fuel Oil.....	0.2	0.2	(s)	0.2	0.2	0.2
Residual Fuel Oil	0.2	0.2	(s)	0.3	0.2	0.3
Jet Fuel.....	0.1	0.1	(s)	0.1	0.1	0.1
Other Petroleum Products ^c	1.0	0.9	(s)	0.9	1.0	1.1
Exports	1.0	1.0	(s)	0.9	0.9	0.9
Crude Oil	0.1	0.1	(s)	0.1	0.1	0.1
Products	0.9	0.9	(s)	0.8	0.8	0.8
Total Net Imports	8.8	9.0	-0.1	9.4	9.6	9.8
Stock Change^d	-1.6	-0.5	-1.0	-0.8	-0.4	0.2
Crude Oil	-0.3	-0.3	(s)	-0.3	-0.1	0.1
Products	-1.3	-0.2	-1.0	-0.5	-0.3	0.2
Total Stocks	1,510	1,563	-53	1,647	—	—
(million barrels)						
Crude Oil	858	866	-8	895	—	—
Strategic Petroleum Reserve ^e	568	569	-1	571	—	—
Other.....	291	297	-6	324	—	—
Products	652	697	-45	752	—	—
Finished Motor Gasoline.....	152	160	-9	172	—	—
Distillate Fuel Oil.....	120	141	-21	156	—	—
Residual Fuel Oil	35	40	-5	45	—	—
Jet Fuel.....	41	41	(s)	45	—	—
Other Petroleum Products ^c	304	314	-11	335	—	—

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

^b Includes crude oil product supplied, natural gas liquids, liquefied refinery gases (LRG's), other liquids, and all finished petroleum products except finished motor gasoline, distillate fuel oil, residual fuel oil, and jet fuel.

^c Includes natural gas liquids, liquefied refinery gases (LRG's), other liquids, and all finished petroleum products except finished motor gasoline, jet fuel, distillate fuel oil, and residual fuel oil.

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

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

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

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

Source: Energy Information Administration (EIA), 1998, *Petroleum Supply Annual*, Volume 2; appropriate issues of the *Petroleum Supply Monthly* and the *Weekly Petroleum Status Report*.

Data for the current month are preliminary estimates, based on weekly submissions. For an explanation of estimation methodology and accuracy, see Appendix A of *Weekly Petroleum Status Report* and the article, "Accuracy of Petroleum Supply Data", published in the December 1999, *Petroleum Supply Monthly*.

Table H2. U.S. Refinery Inputs, Capacities¹ and Utilization Rates: 1998-1999
(Thousand Barrels per Day, Except Where Noted)

Item	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
1998												
Gross Refinery Inputs	14,661	14,262	14,901	15,301	15,464	15,671	15,705	15,806	15,040	14,222	15,095	15,169
Operating Refinery Capacity ²	15,538	15,558	15,550	15,547	15,573	15,686	15,691	15,685	15,699	15,343	15,478	15,797
Idle Capacity ³	173	158	184	144	135	135	135	143	129	537	449	154
Idle Three Months or Less	47	20	46	0	0	0	0	14	0	420	369	37
Idle More than Three Months	127	138	138	144	135	135	135	129	129	117	80	117
Operable Refinery Capacity	15,711	15,716	15,735	15,692	15,708	15,821	15,826	15,828	15,828	15,880	15,927	15,951
Utilization Rate (percent)												
Operating Capacity	94.4	91.7	95.8	98.4	99.3	99.9	100.1	100.8	95.8	92.7	97.5	96.0
Operable Capacity	93.3	90.7	94.7	97.5	98.4	99.1	99.2	99.9	95.0	89.6	94.8	95.1
1999												
Gross Refinery Inputs	14,762	14,719	14,802	15,333	15,253	15,195	15,447	15,546	15,353	14,861	15,026	
Operating Refinery Capacity ²	15,953	15,955	16,139	16,140	15,984	16,137	16,134	16,134	16,164	16,118	16,124	
Idle Capacity ³	200	227	131	132	288	139	153	153	153	199	204	
Idle Three Months or Less	71	98	2	0	158	7	21	48	14	46	51	
Idle More than Three Months	129	129	129	132	130	132	132	105	139	153	153	
Operable Refinery Capacity	16,153	16,181	16,270	16,271	16,271	16,276	16,287	16,287	16,317	16,317	16,327	
Utilization Rate (percent)												
Operating Capacity	92.5	92.3	91.7	95.0	95.4	94.2	95.7	96.4	95.0	92.2	93.2	
Operable Capacity	91.4	91.0	91.0	94.2	93.7	93.4	94.8	95.4	94.1	91.1	92.0	

¹Capacities are on a calendar day basis.

²Operating capacity equals the operable capacity less the total idle capacity.

³Idle capacity is the component of operable capacity that is not in operation and not under active repair, but is capable of being placed in operation within 30 days; and capacity not in operation but is under active repair that can be completed within 90 days.

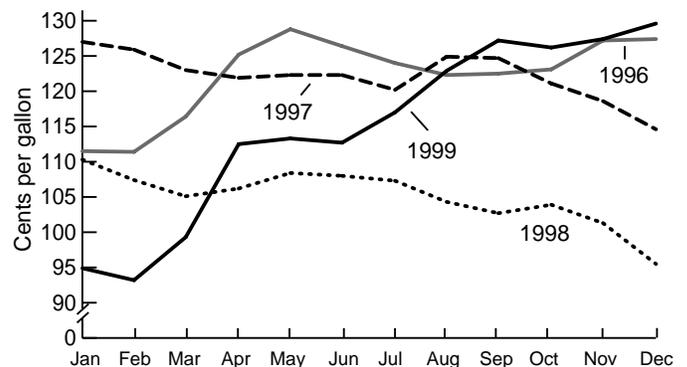
Note: Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration (EIA), 1998, *Petroleum Supply Annual*, Volume 2, Table 16; EIA, *Petroleum Supply Monthly*, 1999 data issue, Table 28.

Motor Gasoline

December **demand** for finished motor gasoline averaged 8.6 million barrels per day, an increase of 1.4 percent compared to the previous record high for the month. Over the past year, demand averaged 8.4 million barrels per day, an increase of 1.2 percent from the prior record high (Figure H2). Gasoline prices continued their climb, reaching the highest price for the year. Consumers, on average, paid \$1.296 a gallon (including taxes) in December (Figure H3).⁵ **Production** of finished motor gasoline averaged 8.3 million barrels per day, 77 thousand barrels per day below the December record. The combination of higher crude oil prices and refineries facing poor processing margins led to lower runs in December.⁶ Over the past 12 months, production averaged 8.1 million barrels per day. December's daily average for **imports**, 279 thousand barrels per day, was normal for this time of year. For the year, imports of finished motor gasoline were an impressive 357 thousand barrels per day. While imports were up for the year, **exports** dropped off to 105 thousand barrels per day. **Stocks of finished motor gasoline ended the month at their lowest month-end total since August 1997 and the lowest for December since records for this data series began in 1981.** Finished motor gasoline **stocks** dwindled to 151.8 million barrels. Motor gasoline stocks of other finished accounted for 112.8 million barrels, reformulated for 38.2 million barrels, and oxygenated for 0.8 million barrels.

Figure H3. Retail Prices for Conventional Motor Gasoline, 1996-current



Source: Energy Information Administration, *Weekly Petroleum Status Report*, DOE/EIA-0208 (various issues).

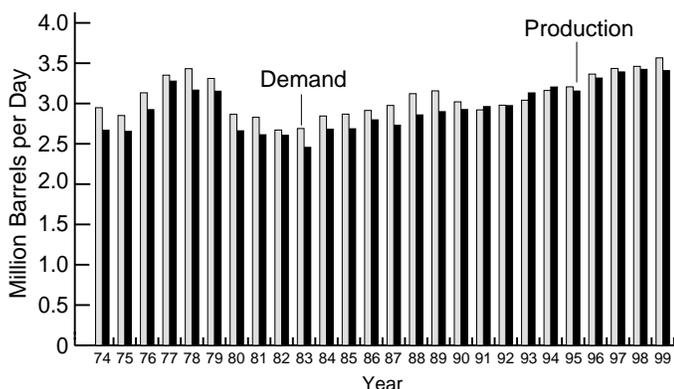
⁵Table 16. U.S. Retail Motor Gasoline and On-Highway Diesel Fuel Prices, 1998 to Present", *Weekly Petroleum Status Report*, January 7, 2000, p. 27.

⁶"Rash Of Refinery Run Cuts Could Crimp Gasoline Production", *Oil Price Information Service*, December 27, 1999, p. 10.

Distillate Fuel Oil

Demand for distillate fuel oil averaged 3.9 million barrels per day, the highest average for this time of year in a decade. Demand set a record high for the year averaging 3.5 million barrels per day (Figure H4). Increases in railroad traffic reflect the increased demand for distillates used as a transportation fuel.⁷ Lower runs at refineries also affected production of distillates. December distillate fuel oil **production** averaged 3.4 million barrels per day, the lowest average for the month since 1995. The yearly average for distillate fuel oil production was also 3.4 million barrels per day, slightly less than 1998's average. **Imports** were normal for the month at 202 thousand barrels per day and for the year at 215 thousand barrels per day. Exports of distillates were normal over the last 12 months, averaging 157 thousand barrels per day. Total **stocks** of distillate fuel oil ended the month at 120.1 million barrels. This is the lowest month-end total since June 1997 and the lowest for December since 1989. Compared to last December, low-sulfur distillate fuel oil stocks were down 15.0 percent at 65.2 million barrels. High-sulfur distillate stocks, typically heating oils, ended the month down 30.8 percent at 54.9 million barrels. Although the declines appear considerable compared to this time last year, only high-sulfur distillates are unusually low for the month.

Figure H4. Distillate, Year-to-Date December Comparisons, 1974-1999



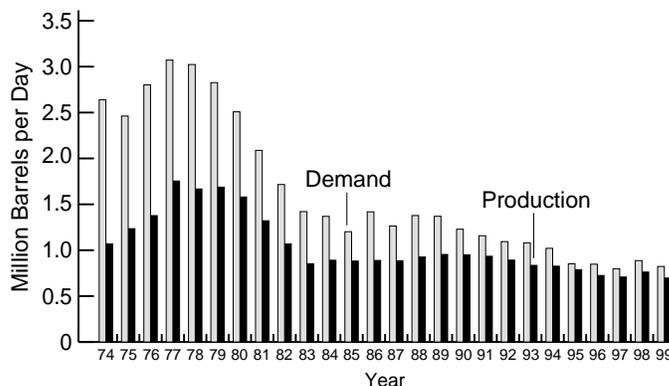
Source: Energy Information Administration, *Petroleum Supply Annual*, DOE/EIA-0340 (various issues), and *Petroleum Supply Monthly*, DOE/EIA-0109 (various issues).

Residual Fuel Oil

Moderate temperatures and basic economics continue to dampen demand from the utilities for residual fuel oil. Utilities, which use residual fuel oil as a source for power generation, found natural gas prices more competitive combined with an abundance of economical hydroelectric and nuclear generated supply.⁸ Residual fuel oil **demand** was normal for the month at 801 thousand barrels per day. Demand for residual fuel oil over the past 12 months averaged 824 thousand barrels per day, the second lowest average in more than 30 years. **Production** of residual fuel

oil declined to the lowest average for the month in more than 30 years at 643 thousand barrels per day. The average for the year dropped to 696 thousand barrels per day, the lowest average for residual fuel oil production in more than three decades (Figure H5). Residual fuel oil **imports** were below normal for both the month and year at 174 and 235 thousand barrels per day, respectively. Exports of residual fuel oil in 1999 were within the normal range averaging 128 thousand barrels per day. **Stocks** dropped to their lowest December month-end total in more than 30 years at 35.1 million barrels. This was also the lowest month-end total in more than 2 years.

Figure H5. Residual, Year-to-Date December Comparisons, 1974-1999



Source: Energy Information Administration, *Petroleum Supply Annual*, DOE/EIA-0340 (various issues), and *Petroleum Supply Monthly*, DOE/EIA-0109 (various issues).

Kerosene-Type Jet Fuel

While year 2000 concerns caused the airlines to reduce or cancel year-end flights, demand remained healthy. Airlines reportedly beefed up stocks as a precautionary move against possible supply disruptions along with a healthy demand from the trucking industry.⁹ **Demand** for kerosene-type jet fuel averaged 1.7 million barrels per day, 97 thousand barrels per day shy of the December record high. An increase in demand from the airlines is evident in the number of seats available to passengers for 1999 which increased 4.5 percent from 1998.¹⁰ Over the past 12 months, demand for kerosene-type jet fuel **set a record high** at 1.7 million barrels per day. **Production** of kerosene-type jet fuel was off from last December's record for the month, averaging 1.6 million barrels per day. Still, production of kerosene-type jet fuel for the year, averaged a record 1.6 million barrels per day. Combined **imports** of kerosene- and naphtha-type jet fuel were normal for the month at an average of 104 thousand barrels per day. Total imports of jet fuel averaged 119 thousand barrels per day for the year, slightly less than 1998's average. The U.S. exported, on average, 30 thousand barrels per day of kerosene- and naphtha-type jet fuel. End-of-month kerosene-type jet fuel **stocks** totaled 40.9 million barrels. Stocks of kerosene-type jet fuel dropped to their lowest month-end total since March and the lowest for December since 1996.

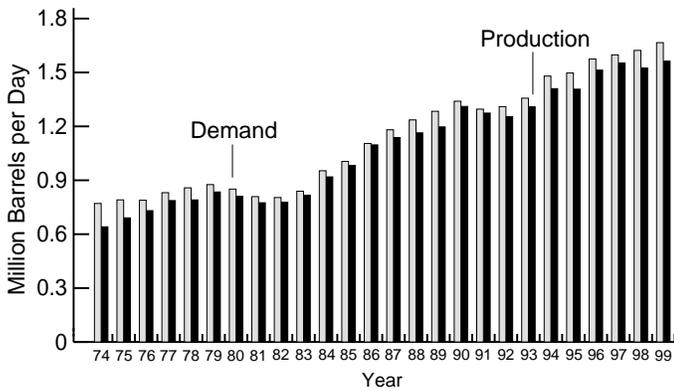
⁷"U.S. Railroads In 1999 Set Records For Intermodal, Total Volume", *Association of American Railroads*, January 6, 2000, accessible via the Internet at <http://www.aar.org/>.

⁸"January Gas Prices Well Above 1999; Market Still Awaits Cold Weather Blast", *The Oil Daily*, January 3, 2000, p. 5.

⁹"Jet Fuel Watch, Jet Demand Keeps Prices High", *Oil Price Information Service*, December 20, 1999, p. 15.

¹⁰"Preliminary Scheduled Passenger Traffic Statistics", *Air Transport Association*, January 12, 2000, accessible via the Internet at <http://www.air-transport.org/>.

Figure H6. Kerojet, Year-to-Date December Comparisons, 1974-1999

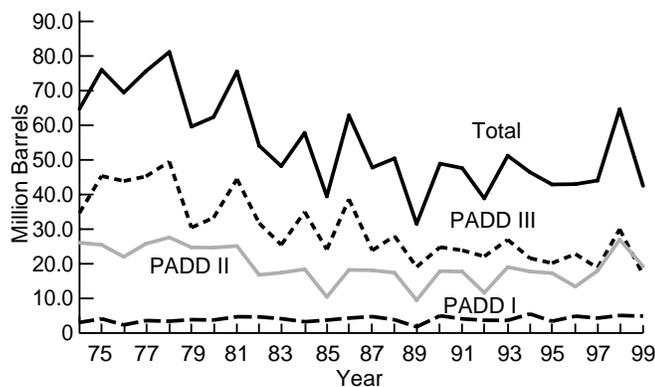


Source: Energy Information Administration, *Petroleum Supply Annual*, DOE/EIA-0340 (various issues), and *Petroleum Supply Monthly*, DOE/EIA-0109 (various issues).

Propane

Despite the warmer than normal weather throughout the U.S., propane inventories dropped to 42.5 million barrels by year's end. December's 12.0 million barrel draw was the fourth largest for this time of year in the last 26 years. The substantial draw on propane stocks was attributed to year-end tank topping and an apparent strong demand for petrochemical feedstocks. Although U.S. propane stocks ended the month down 22.1 million barrels compared to this time last year, they are only slightly below normal. Regional inventories of propane were mixed, Gulf Coast stocks dipped below normal while stocks along the East Coast and in the Midwest were in the normal range for the month. Gulf Coast inventories had a 4.0 million barrel draw for the month and ended the year at 16.9 million barrels. Propane inventories along the East Coast dropped 1.2 million barrels in December and totaled 4.9 million barrels by year's end. Midwest propane inventories dropped 5.6 million barrels to a total of 19.3 million barrels.

Figure H7. Propane Stocks, Year-to-Date December Comparisons, 1974-1999



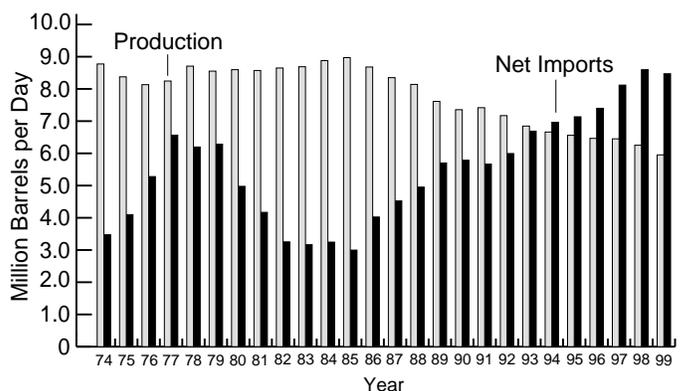
Source: Energy Information Administration, *Petroleum Supply Annual*, DOE/EIA-0340 (various issues), and *Petroleum Supply Monthly*, DOE/EIA-0109 (various issues).

Crude Oil

Crude oil prices made a dramatic recovery from their recent historical lows and by the end of 1999, OPEC's supply management resulted in a 35 percent increase in prices compared to 1998.¹¹ Domestic **production** of crude oil increased slightly from last December to an average of 6.1 million barrels per day. Domestic production for the year is **down 5.0 percent from 1998's average** to 5.9 million barrels per day; this represents the lowest daily average since 1950. In Alaska, field production of crude oil was off 7.3 percent compared to this time last year at 1.1 million barrels per day. Lower production in Alaska was partially attributed to an ice storm that caused a shut-in at the Endicott Field at the end of the month.¹² Declines in Alaska's North Slope output were also attributed to maintenance and natural field declines.¹³ As such, field production in Alaska was off for the year, averaging 1.1 million barrels per day which is the lowest average since 1977 when the Trans-Alaska Pipeline become operational. As crude oil prices continued to rally, **imports** of crude oil, at 8.1 million barrels per day, failed to top last December's record high for the month. Imports of crude oil also failed to top 1998's record high, averaging 8.6 million barrels per day in 1999. For the year, exports of crude oil reached 116 thousand barrels per day. Net imports of crude oil were below last year's respective highs, averaging 8.0 million barrels per day in December and 8.5 million barrels per day for the year.

End-of-month crude oil **stocks** totaled 290.8 million barrels, excluding inventories held in the Strategic Petroleum Reserve (SPR). Not only did non-SPR stocks drop 32.8 million barrels compared to last year's unusually high level, they reached a 36-month low. Total crude oil stocks ended the month at 858.4 million barrels. This includes inventories held in the SPR and non-U.S. stocks held under foreign or commercial storage agreements.

Figure H8. Crude Oil, Year-to-Date December Comparisons for Production and Net Imports, 1974-1999



Source: Energy Information Administration, *Petroleum Supply Annual*, DOE/EIA-0340 (various issues), and *Petroleum Supply Monthly*, DOE/EIA-0109 (various issues).

¹¹"1999 Oil Price Averages \$18, 35 Pct Gain", *Reuters*, December 30, 1999, accessible via the Internet at <http://companies.netscape.com/>.

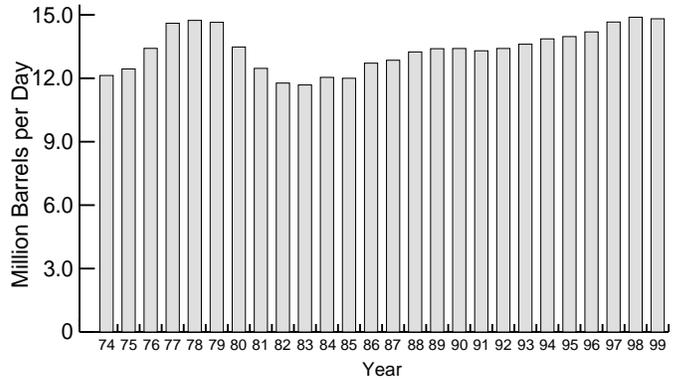
¹²"FY 2000 ANS Production", *Alaska Department of Revenue*, December 1999, accessible via the Internet at <http://www.revenue.state.ak.us/oga/>.

¹³"North Slope Production Fell for Month, Year", *The Oil Daily*, January 5, 2000, p. 6.

Refinery Operations

Due to poor refining margins, several refineries reportedly cut runs in December.¹⁴ Refinery crude oil **inputs** averaged 14.5 million barrels per day, down 2.1 percent compared to last December. However, inputs of crude oil for the year averaged 14.8 million barrels per day, the second highest average ever. The estimated refinery **operable utilization rate** (gross input divided by operable capacity) averaged 89.5 percent of capacity compared to 95.1 percent this time last year.

Figure H9. Year-to-Date December Comparisons for Crude Oil Inputs, 1974-1999



Source: Energy Information Administration, *Petroleum Supply Annual*, DOE/EIA-0340 (various issues), and *Petroleum Supply Monthly*, DOE/EIA-0109 (various issues).

¹⁴“Refinery Run Cuts, Tax Considerations Push Differentials Lower for Gulf Coast Crudes”, *The Oil Daily*, December 20, 1999, p. 4.