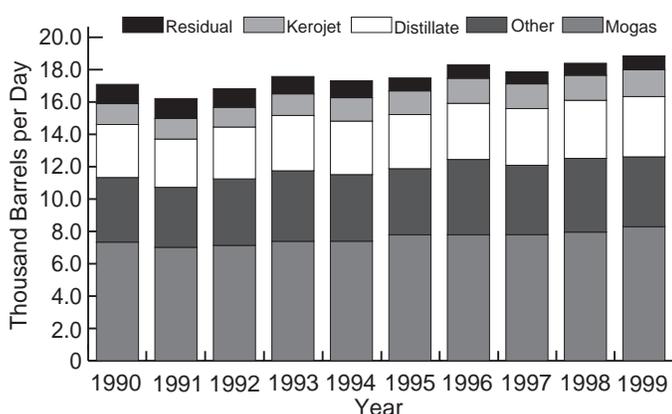


Highlights

March 24th marked the 10-year anniversary of the Exxon Valdez running aground on Bligh Reef causing the nation's worst oil spill; an estimated **11 million gallons of crude oil leaked into Prince William Sound**. Ten years later, Exxon remains in court appealing the 1994 federal court judgement of \$5.2 billion in punitive damages and the Exxon Valdez (now the SeaRiver Mediterranean) remains banned from the Sound.¹

Economic conditions remained bright in the U.S., driving demand for petroleum to high levels. Estimates from the Census Bureau regarding monthly retail sales reflect year-to-year increases for both March and for the first quarter.² Total demand for refined petroleum products, measured as product supplied, reached the highest level for the month since 1979. The total demand for refined petroleum products in March 1999³ averaged 18.9 million barrels per day (Table & Figure H1). Over the last three months, total demand for refined petroleum products has also been at a very high level, averaging 19.0 million barrels per day. On average, temperatures across the U.S. were nearly 5 percent cooler than normal and 6 percent cooler than this time last year according to data collected by the National Oceanic and Atmospheric Administration (NOAA).⁴

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



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

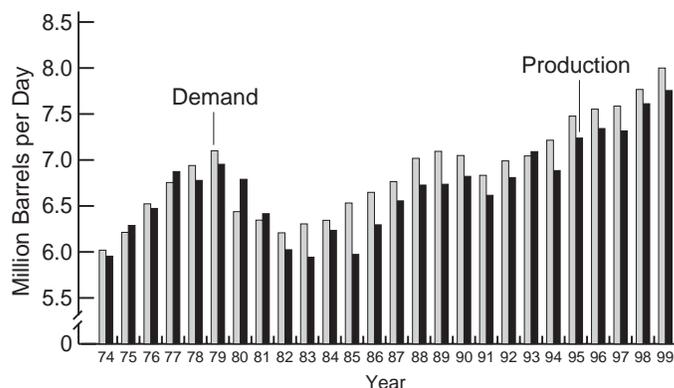
March 1999 and first quarter highlights include:

- **Demand** for finished motor gasoline set a **record high average not only for the month but for the first three months as well**, averaging 8.3 million barrels per day and 8.0 million barrels per day, respectively. **Production** of finished motor gasoline set both a March record high at 7.7 million barrels per day and first quarter record high at 7.8 million barrels per day. **Stocks** ended the month totaling 166.6 million barrels, the highest level to end the month since 1995.
- Distillate fuel oil **demand** reached the **highest average for this time of year since the record was set in 1978**. For the

first quarter, distillate fuel oil demand has been at its highest average since 1979 at 3.7 million barrels per day. Distillate fuel oil **production** was down for both the first three months and March compared to last year. **Stocks** of 124.1 million barrels were slightly below the end of March last year.

- Residual fuel oil **demand** reached the highest average for the month since 1994 at 855 thousand barrels per day. End-of-month residual fuel oil **stocks** came to 37.9 million barrels, the lowest level for March since 1996.
- **Demand** for kerosene-type jet fuel set a **record high** during March average at 1.7 million barrels per day. Year-to-date, demand for kerosene-type jet fuel is at a record pace. **Production** of kerosene-type jet fuel averaged 1.5 million barrels per day for March and 1.6 million barrels per day since the beginning of the year, **both records** for comparable periods.
- U.S. propane inventories ended the month at 36.2 million barrels, **6.3 million barrels higher than last year and the highest total for March since 1987**.
- Domestic crude oil **production** averaged 5.9 million barrels per day for the month, **the lowest level for March since 1950**. Production of Alaskan crude oil has dropped to the lowest level for March in 22 years. Year-to-date crude oil production is also down for both domestic and Alaskan crude. Crude oil **imports** set a **new March record** at 8.6 million barrels, significantly above the prior high for the month. Year-to-date imports of crude oil are up 5.6 percent from the prior record high, and net imports are up 6.6 percent. **Stocks** of crude oil, excluding the Strategic Petroleum Reserve (SPR), ended the month at 343.1 million barrels.

Figure H2. Finished Motor Gasoline, Year-to-Date March 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"10 Years Later, Case Is Hardly Closed, Exxon's PR mess still isn't cleaned up", *USA TODAY*, March 4, 1999, section 1B & 2B.

²"Advance Monthly Retail Sales March 1999", *Department of Commerce*, April 13, 1999, accessible via the Internet at <http://www.census.gov/svsd/www/retail.html>.

³March 1999 data are monthly-from-weekly estimates based on the Energy Information Administration's Weekly Petroleum Supply Reporting System.

⁴"Heating Degree Day Data Monthly Summary, Monthly Data for March 1999", *National Oceanic and Atmospheric Administration*, accessible via the Internet at <http://nic.fb4.noaa.gov>.

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

Category	1999			1998	January - March	
	Estimated March	February	Difference ^a	March	1999	1998
Products Supplied	18.9	19.2	-0.4	18.4	19.0	18.3
Finished Motor Gasoline.....	8.3	8.1	0.2	8.0	8.0	7.8
Distillate Fuel Oil.....	3.7	3.6	0.1	3.6	3.7	3.6
Residual Fuel Oil	0.9	1.0	-0.1	0.7	0.9	0.8
Jet Fuel.....	1.7	1.7	-0.1	1.5	1.7	1.6
Other Petroleum Products ^b	4.3	4.8	-0.5	4.6	4.7	4.6
Crude Oil Inputs	14.4	14.4	(s)	14.6	14.4	14.3
Operating Utilization Rate (%)	92.0	92.3	-0.3	95.5	92.3	94.1
Imports	10.4	10.3	(s)	9.7	10.3	9.7
Crude Oil	8.6	8.4	0.2	8.0	8.4	8.0
Strategic Petroleum Reserve	0.0	0.0	0.0	0.0	0.0	0.0
Other.....	8.6	8.4	0.2	8.0	8.4	8.0
Products	1.8	1.9	-0.2	1.7	1.9	1.7
Finished Motor Gasoline.....	0.3	0.3	(s)	0.3	0.3	0.3
Distillate Fuel Oil.....	0.3	0.3	(s)	0.2	0.3	0.2
Residual Fuel Oil	0.2	0.2	(s)	0.2	0.2	0.2
Jet Fuel.....	0.1	0.2	-0.1	0.1	0.1	0.1
Other Petroleum Products ^c	0.9	1.0	-0.1	0.9	0.9	1.0
Exports	1.0	0.8	0.2	0.9	0.9	1.0
Crude Oil	0.1	0.1	(s)	0.1	0.1	0.2
Products	0.8	0.6	0.2	0.8	0.8	0.8
Total Net Imports	9.4	9.6	-0.1	8.8	9.4	8.7
Stock Change^d	-0.3	-0.5	0.2	0.5	-0.4	0.3
Crude Oil	0.3	(s)	0.3	0.5	0.1	0.4
Products	-0.7	-0.5	-0.1	0.1	-0.5	-0.1
Total Stocks	1,608	1,625	-17	1,588	—	—
(million barrels)						
Crude Oil	915	897	18	900	—	—
Strategic Petroleum Reserve ^e	572	572	(s)	563	—	—
Other.....	343	325	18	336	—	—
Products	693	728	-35	689	—	—
Finished Motor Gasoline.....	167	178	-12	166	—	—
Distillate Fuel Oil.....	124	142	-18	124	—	—
Residual Fuel Oil	38	42	-4	41	—	—
Jet Fuel.....	42	45	-3	43	—	—
Other Petroleum Products ^c	322	320	2	314	—	—

^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 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), 1997, *Petroleum Supply Annual*, Volume II; 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 October 1998, *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	14,655	14,340	14,851	15,170	15,305	15,651	15,704	15,806	15,041	14,241	15,089	15,168
Operating Refinery Capacity ²	15,538	15,555	15,547	15,587	15,617	15,687	15,695	15,689	15,703	15,346	15,481	15,797
Idle Capacity ³	167	158	184	144	144	135	135	143	129	537	449	154
Idle Three Months or Less	41	20	46	0	0	0	0	14	0	420	369	37
Idle More than Three Months	127	138	138	144	144	135	135	129	129	117	80	117
Operable Refinery Capacity	15,705	15,713	15,732	15,732	15,761	15,822	15,830	15,832	15,832	15,883	15,930	15,951
Utilization Rate (percent)												
Operating Capacity	94.3	92.2	95.5	97.3	98.0	99.8	100.1	100.7	95.8	92.8	97.5	96.0
Operable Capacity	93.3	91.3	94.4	96.4	97.1	98.9	99.2	99.8	95.0	89.7	94.7	95.1
1999												
Gross Refinery Inputs	14,762	14,719										
Operating Refinery Capacity ²	15,953	15,955										
Idle Capacity ³	200	227										
Idle Three Months or Less	71	98										
Idle More than Three Months	129	129										
Operable Refinery Capacity	16,153	16,181										
Utilization Rate (percent)												
Operating Capacity	92.5	92.3										
Operable Capacity	91.4	91.0										

¹Capacities are on a calendar day basis.

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

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

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

Sources: Energy Information Administration (EIA), 1997, *Petroleum Supply Annual*, Volume 2, Table 16; EIA, *Petroleum Supply Monthly*, 1998 data issue, Table 28.

Motor Gasoline

Demand for gasoline continues to grow as drivers in the U.S. opt for less fuel efficient vehicles such as the popular sport utility vehicles (SUV's). The increasing popularity of SUV's and other less fuel efficient vehicles has caused a decline in the U.S.'s new car and light truck fleets' fuel efficiency which is not even expected to get back to the 1996 level until the year 2005.⁵ Demand for finished motor gasoline set a March record high at an average of 8.3 million barrels per day. For the year, demand for finished motor gasoline has averaged 8.0 million barrels per day, a first quarter record (Figure H2). The retail price for conventional motor gasoline averaged \$0.99 a gallon (including taxes), about six cents per gallon cheaper than this time last year (Figure H3). While retail prices for conventional motor gasoline remain below those of the last few years, prices in California have risen dramatically. California gasoline prices have increased due to several factors: OPEC's decision to rein in output, refinery

problems at plants operated by Arco, Chevron, Exxon, and Tosco which supply the state with cleaner burning reformulated gasoline, and lower reformulated gasoline stocks than this time last year.⁶ Production of finished motor gasoline has set record highs for both the month and the first quarter at averages of 7.7 million barrels per day and 7.8 million barrels per day, respectively. Finished motor gasoline imports were robust in March, at 326 thousand barrels per day. Due to the favorable price differences between the U.S. and abroad, cargoes of gasoline have been making their way to the U.S.⁷ Imports of finished motor gasoline since January have averaged 320 thousand barrels per day, the highest average for this time of year since 1997.

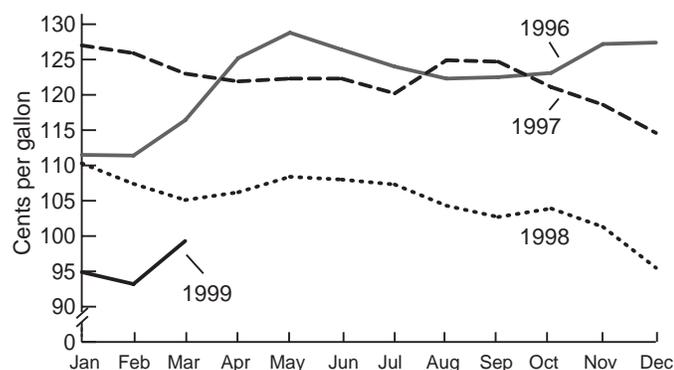
Total stocks of finished motor gasoline ended the month at their highest level for this time of year since 1995 totaling 166.6 million barrels. Of that total, reformulated motor gasoline stocks in PAD District 5 ended the month at 9.6 million barrels. While the RFG total in PAD District 5 was down 12 percent from last year, stocks did end the month higher than March 1997.

⁵“Clean-Car Threat To Gasoline Stirs Oil Firms”, *Petroleum Intelligence Weekly*, April 5, 1999, p. 1 & 2.

⁶“Drivers' Patience Hits Empty as Gas Prices Soar”, *Los Angeles Times*, April 3, 1999, accessible via the Internet at <http://www.latimes.com>.

⁷“US West Coast attracts 'at least 11' gasoline cargoes over next 30 days; many from Asia”, *Platt's Oilgram Price Report*, March 16, 1999, p. 1.

Figure H3. Prices for Conventional Motor Gasoline 1996-current

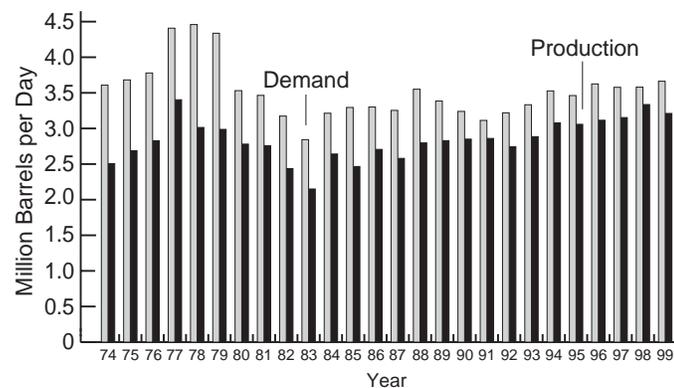


Source: Energy Information Administration, *Weekly Petroleum Status Report*, DOE/EIA-0208 (various issues).

Distillate Fuel Oil

Distillate fuel oil **demand** reached near record March levels at an average of 3.7 million barrels per day, the highest level for the month since the record was set in 1978. Over the last three months, demand for distillate has averaged a robust 3.7 million barrels per day, the highest average for a first quarter since 1979 (Figure H4). **Production** of distillates during the month declined to 3.2 million barrels per day, the lowest level for this time of year since 1996. Compared to the first quarter of 1998, distillate production is down slightly to an average of 3.2 million barrels per day. **Imports** of distillate fuel oil reached the highest level for the month in three years at 252 thousand barrels per day. So far this year, imports are averaging 268 thousand barrels per day, the highest level since 1990. End-of-month **stocks** totaled 124.1 million barrels which were only slightly below March of last year.

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

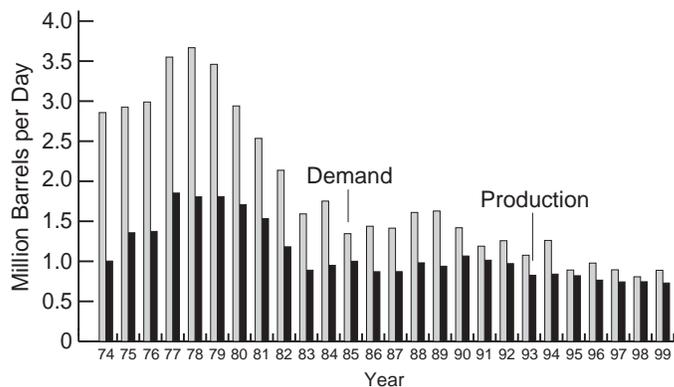


Source: Energy Information Administration, *Petroleum Supply Annual*, DOE/EIA-0340 (various issues), and *Petroleum Supply Monthly*, DOE/EIA-0109 (various issues).

Residual Fuel Oil

Residual fuel oil's recent turnaround continued in March. Weak petroleum prices compared to natural gas have given electric utilities incentive to burn the heavy fuel along with the deregulation of these utilities which has allowed them to operate differently thereby increasing demand.⁸ **Demand** for residual fuel oil during the month averaged 855 thousand barrels per day, the highest average for the month since 1994. This year, demand for residual fuel oil is up 81 thousand barrels per day compared to last year's first quarter (Figure H5). **Production** of residual fuel oil averaged 664 thousand barrels per day during the month, a decline from last year's level. For the first three months of the year, residual fuel oil production averaged 728 thousand barrels per day. Residual fuel oil **imports** averaged 224 thousand barrels per day for the month and 213 thousand barrels per day year-to-date, both increases over this time last year. **Stocks** ended the month totaling 37.9 million barrels, the lowest March month end total since 1996.

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



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

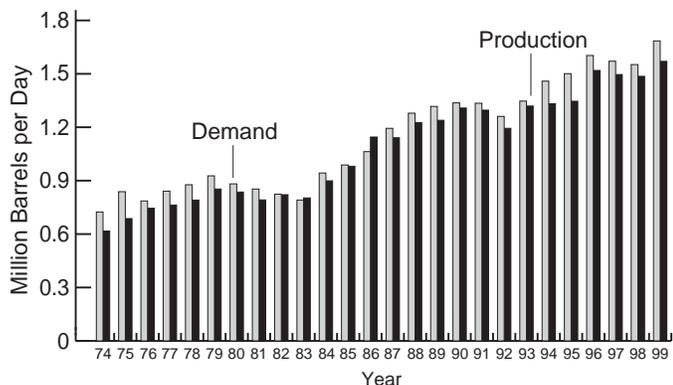
Kerosene-Type Jet Fuel

Kerosene-type jet fuel **demand** set a **March record high** at an average of 1.7 million barrels per day. For the first quarter, demand for kerosene-type jet fuel is up 8.5 percent compared to the record for this time last year (Figure H6). Data from the Air Transport Association on domestic available seat miles (one seat flown one mile) reflect growth of nearly 2 percent for the first quarter and an increase of 3.6 percent for the month, suggesting increased fuel usage this year.⁹ **Production** of kerosene-type jet fuel **set record high averages for March, as well as for the first quarter** at 1.5 million barrels per day and 1.6 million barrels per day, respectively. **Imports** of jet fuel, both kerosene and naphtha-type, were normal for this time of year at an average of 92 thousand barrels per day. Since the beginning of the year, total jet fuel imports have averaged 117 thousand barrels per day. **Stocks** of kerosene-type jet fuel ended the month totaling 42.1 million barrels, down slightly from last year's record high for the month.

⁸“Residual fuel oil: The fuel of the future”, *Platt's Oilgram Price Report*, March 12, 1999, p. 10.

⁹“Preliminary Scheduled Passenger Traffic Statistics*”, *Air Transport Association*, accessible via the Internet at <http://www.air-transport.org/>.

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



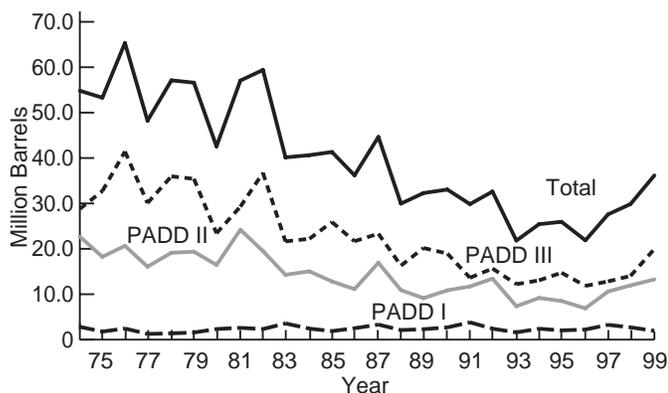
Source: Energy Information Administration, *Petroleum Supply Annual*, DOE/EIA-0340 (various issues), and *Petroleum Supply Monthly*, DOE/EIA-0109 (various issues).

Propane

U.S. propane inventories ended the month totaling 36.2 million barrels per day, the highest level to end the month since 1987 (Figure H7). U.S. inventories of propane ended the month well above normal for this time of year in all regions except the East Coast which ended the month slightly below normal. The Gulf Coast ended the month totaling 19.7 million barrels, a draw of 2.6 million barrels during the month. Midwest inventories declined 3.1 million barrels to end the month at 13.3 million barrels. Propane inventories along the East Coast declined 1.1 million barrels to end the month totaling 1.9 million barrels.

The record decline in March inventories can be partly attributed to the weather which was nearly 5 percent cooler than normal, particularly along the East Coast and in the Midwest regions.

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



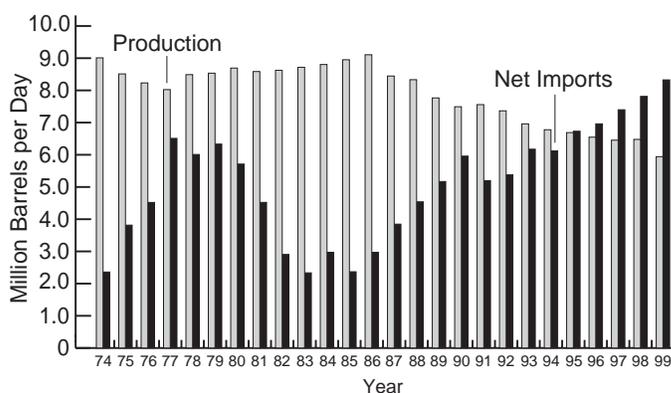
Source: Energy Information Administration, *Petroleum Supply Annual*, DOE/EIA-0340 (various issues), and *Petroleum Supply Monthly*, DOE/EIA-0109 (various issues).

Crude Oil

Domestic crude oil production remained below 6 million barrels per day for the fourth month in a row. Domestic crude oil **production** averaged 5.9 million barrels per day, the **lowest average for the month in 49 years**. Depressed crude oil prices have been too much to bear for some of the U.S.'s crude oil producers as filings for bankruptcies are up and crude oil wells are shut-in.¹⁰ For the year, domestic crude oil production is down 7.9 percent compared to the first quarter last year (Figure H8). Field production in Alaska is down, dropping to an average of 1.1 million barrels per day for both March and the first quarter. **Imports** of crude oil set a record high for this time of year at an average of 8.6 million barrels per day, **an increase of 7.7 percent from the prior March high**. Year-to-date imports of crude oil set a record for the first quarter at an average of 8.4 million barrels per day, up 5.6 percent from the prior record. This year, the basket price of OPEC's seven crude oils has dropped below that of the fourth quarter in 1998, making imports very appealing.¹¹ One measure of reliance on foreign crude oil, net imports, set a record for the month at an average of 8.5 million barrels per day. Since the beginning of the year, net imports of crude oil have averaged 8.3 million barrels per day or an **increase of 6.6 percent from the prior first quarter record**.

Stocks of crude oil excluding the SPR ended the month totaling 343.1 million barrels, 6.7 million barrels higher than this time last year. Total crude oil stocks, including non-U.S. stocks held under foreign or commercial storage agreements, totaled 915.1 million barrels by month's end.

Figure H8. Crude Oil, Year-to-Date March 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).

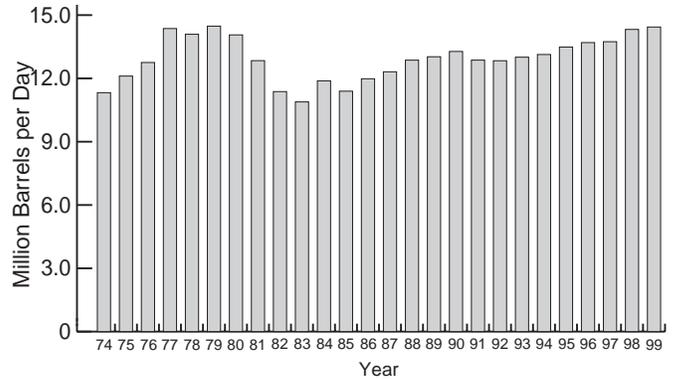
¹⁰“US Producers Go Broke On Marginal Wells”, *Petroleum Intelligence Weekly*, March 15, 1999, p. 3 & 4.

¹¹“OPEC weekly basket rises 90 cts/bbl”, *Platt's Oilgram Price Report*, March 31, 1999, p. 9.

Refinery Operations

Crude oil **inputs** averaged 14.4 million barrels per day, about 200 thousand barrels per day below the record high for the month. Over the first three months of the year crude oil inputs have been at a near record pace averaging 14.4 million barrels per day (Figure H9). The estimated refinery **operable utilization rate** (gross input divided by operable capacity) averaged 91.2 percent versus 94.4 percent last year.

Figure H9. Year-to-Date March 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).