

## Explanatory Notes

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

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### Note 1. Petroleum Supply Reporting System

The Petroleum Supply Reporting System (PSRS) represents a family of data collection survey forms, data processing systems, and publication systems that have been consolidated to achieve comparability and consistency throughout. The survey forms that comprise the PSRS are listed below:

<u>Form Number</u>	<u>Name</u>
EIA-800	“Weekly Refinery Report”
EIA-801	“Weekly Bulk Terminal Report”
EIA-802	“Weekly Product Pipeline Report”
EIA-803	“Weekly Crude Oil Stocks Report”
EIA-804	“Weekly Imports Report”
EIA-805	“Weekly Terminal Blenders Report”
EIA-810	“Monthly Refinery Report”
EIA-811	“Monthly Bulk Terminal Report”
EIA-812	“Monthly Product Pipeline Report”
EIA-813	“Monthly Crude Oil Report”
EIA-814	“Monthly Imports Report”
EIA-815	“Monthly Terminal Blenders Report”
EIA-816	“Monthly Natural Gas Liquids Report”
EIA-817	“Monthly Tanker and Barge Movement Report”
EIA-819	“Monthly Oxygenate Report”
EIA-820	“Annual Refinery Report”

Forms EIA-800 through 805 comprise the Weekly Petroleum Supply Reporting System (WPSRS). A sample of all petroleum companies report weekly data to the Energy Information Administration (EIA) on crude oil and petroleum product stocks, refinery inputs and production, and crude oil and petroleum product imports. The sample of companies that report weekly is selected from the universe of companies that report on the comparable monthly surveys. Data collected from the WPSRS are used to develop estimates of the most current monthly quantities in the Summary Statistics section of the *Petroleum Supply Monthly* (PSM) and which appear in the *Weekly Petroleum Status Report* (WPSR).

Forms EIA-810 through 817, and 819 comprise the Monthly Petroleum Supply Reporting System (MPSRS). These surveys are used to collect detailed refinery/blender, natural gas plant, and oxygenate operations data; refinery/blender, bulk terminal, natural gas plant, oxygenate producers and pipeline stocks data; crude oil and petroleum product imports data; and data on movements of petroleum products and crude oil between Petroleum Administration for Defense (PAD) Districts. A description of the MPSRS forms follows in Explanatory Note 2.

Data from these surveys are published in preliminary form in the *PSM*. They are published in final form in the *Petroleum Supply Annual* (PSA).

Summary information on the revision error between preliminary and final data is published once a year in the *PSM* feature article entitled, “Accuracy of Petroleum Supply Data.” The last article was published in the October 2005 issue and evaluated the accuracy of the data for the current year compared with the previous year.

The Form EIA-820, “Annual Refinery Report,” is used to collect data on the consumption of purchased steam, electricity, coal, and natural gas; refinery receipts of crude oil by method of transportation; operable capacity for atmospheric crude oil distillation units and downstream units; and production capacity and storage capacity for crude oil and petroleum products. This survey is the primary source of data in the Refinery Capacity tables.

### Note 2. Monthly Petroleum Supply Reporting System

The Monthly Petroleum Supply Reporting System (MPSRS) was implemented in January 1983 as the result of an extensive effort by the Energy Information Administration (EIA) to integrate the collection and processing of petroleum supply data that had been

collected on other survey forms for many years. The collection of monthly petroleum supply statistics began as early as 1918 when the U.S. Bureau of Mines began collecting data on refinery operations, crude oil stocks and movements. The collection systems were further expanded in 1925 to include natural gas plant liquids production and storage, imports of crude oil and petroleum products and storage and movement of petroleum products in 1959, and tanker and barge movements of crude oil and petroleum products in 1964. Since their inception, each survey has undergone numerous changes, but the MPSRS was the first effort to make them all consistent and comparable. The forms that comprise the MPSRS are:

<u>Form Number</u>	<u>Name</u>
EIA-810	“Monthly Refinery Report”
EIA-811	“Monthly Bulk Terminal Report”
EIA-812	“Monthly Product Pipeline Report”
EIA-813	“Monthly Crude Oil Report”
EIA-814	“Monthly Imports Report”
EIA-815	“Monthly Terminal Blenders Report”
EIA-816	“Monthly Natural Gas Liquids Report”
EIA-817	“Monthly Tanker and Barge Movement Report”
EIA-819	“Monthly Oxygenate Report”

#### **Respondent Frame**

Form EIA-810, “Monthly Refinery Report” - Operators of all operating and idle petroleum refineries located in the 50 States, the District of Columbia, Puerto Rico, the Virgin Islands, Guam and other U.S. possessions. There are approximately 156 respondents on the Form EIA-810.

Form EIA-811, “Monthly Bulk Terminal Report” - Every bulk terminal operating company located in the 50 States, the District of Columbia, Puerto Rico, the Virgin Islands, and other U.S. possessions. A bulk terminal is primarily used for storage and/or marketing of petroleum products and has a total bulk storage capacity of 50,000 barrels or more, and/or receives petroleum products by tanker, barge, or pipeline. Bulk terminal facilities associated with a product pipeline are included. Approximately 228 respondents report on the Form EIA-811.

Form EIA-812, “Monthly Product Pipeline Report” - All product pipeline companies that carry petroleum products (including interstate, intrastate, and intra-company pipelines) in the 50 States and the District of Columbia. Approximately 72 respondents report on the Form EIA-812.

Form EIA-813, “Monthly Crude Oil Report” - All companies which carry or store 1,000 barrels or more of crude oil. Included in this survey are gathering and trunk pipeline companies (including interstate, intrastate, and intra-company pipelines), crude oil producers, terminal operators, storers of crude oil (except refineries), and companies transporting Alaskan crude oil by water

in the 50 States and the District of Columbia. Approximately 141 respondents report on the Form EIA-813.

Form EIA-814, “Monthly Imports Report” - All companies, including subsidiary or affiliated companies, that import crude oil or petroleum products (1) into the 50 States and the District of Columbia, (2) into Puerto Rico, the Virgin Islands and other U.S. possessions (Guam, Midway Islands, Wake Island, American Samoa, and Northern Mariana Islands), and (3) from Puerto Rico, the Virgin Islands and other U.S. possessions into the 50 States and the District of Columbia. Imports into Foreign Trade Zones located in the 50 States and the District of Columbia are considered imports into the 50 States and the District of Columbia and must be reported. A report is required only if there has been an import during the month unless the importer has been selected as part of a sample to report every month regardless of activity. Approximately 257 respondents report on the Form EIA-814.

Form EIA-815, “Monthly Terminal Blenders Report” - All storage terminals which produce finished motor gasoline through the blending of various motor gasoline blending components, natural gas liquids, and oxygenates. Approximately 280 respondents report on the Form EIA-815.

Form EIA-816, “Monthly Natural Gas Liquids Report” - Operators of all facilities that extract liquid hydrocarbons from a natural gas stream (natural gas processing plant) and/or separate a liquid hydrocarbon stream into its component products (fractionator). Approximately 398 respondents report on the Form EIA-816.

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

Form EIA-819, “Monthly Oxygenate Report” - All operators of facilities that produce (manufacture or distill) oxygenates (including MTBE plants), fuel ethanol plants, petrochemical plants, and refineries that produce oxygenates as part of their operations. Approximately 93 respondents report on the Form EIA-819.

#### **Description of Survey Forms**

The Form EIA-810, “Monthly Refinery Report,” is used to collect data on refinery input and capacity, sulfur content and API gravity of crude oil, and data on supply (beginning stocks, receipts, and

production) and disposition (inputs, shipments, fuel use and losses, and ending stocks) of crude oil and refined products.

The Form EIA-811, "Monthly Bulk Terminal Report," is used to collect data on end-of-month stock levels of finished petroleum products by State in the custody of the bulk terminal regardless of ownership. All domestic and foreign ending stocks held at bulk terminals and in-transit thereto, except those in-transit by pipeline are included. Petroleum products in-transit by pipeline are reported by pipeline operators on Form EIA-812, "Monthly Product Pipeline Report."

The Form EIA-812, "Monthly Product Pipeline Report," is used to collect data on end-of-month stock levels and movements of petroleum products transported by pipeline. Intermediate movements for pipeline systems operating in more than two PAD Districts are included.

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

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

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

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

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

The Form EIA-815, "Monthly Terminal Blenders Report," is used to collect data on blending of natural gas liquids, oxygenates, finished motor gasoline and motor gasoline blending components, and production of finished motor gasoline.

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

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

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

### **Collection Methods**

Survey forms for the MPSRS can be submitted by mail, facsimile, or electronic transmission. Completed forms are required to be postmarked by the 20th calendar day following the end of the report month. Receipt of the reports is monitored using an automated respondent mailing list. Telephone follow-up calls are made to nonrespondents prior to the publication deadline.

### **Response Rate**

The response rate is generally 98 to 100 percent. Chronic nonrespondents and late filing respondents are contacted in writing and reminded of their requirement to report. Companies that file late or fail to file are subject to criminal fines, civil penalties, and other sanctions as provided by Section 13(i) of the Federal Energy Administration (FEA) Act.

### **Data Imputation**

Imputation is performed for companies that fail to file Forms EIA-810 through 813, 815, 816, and 819. For such companies, previous monthly values and values reported on the weekly survey forms are used.

Data for nonrespondents on the Forms EIA-814 and 817 are not imputed because these data series, by respondent, are highly variable.

## Confidentiality

The information reported on these forms will be kept confidential and not disclosed to the public to the extent that it satisfies the criteria for exemption under the Freedom of Information Act (FOIA), 5 U.S.C. §552, the DOE regulations, 10 C.F.R. §1004.11, implementing the FOIA, and the Trade Secrets Act, 18 U.S.C. §1905. The Energy Information Administration (EIA) will protect your information in accordance with its confidentiality and security policies and procedures.

The Federal Energy Administration Act requires the EIA to provide company-specific data to other Federal agencies when requested for official use. The information reported on these forms may also be made available, upon request, to another component of the Department of Energy (DOE), to any Committee of Congress, the General Accounting Office, or other Federal agencies authorized by law to receive such information. A court of competent jurisdiction may obtain this information in response to an order. The information may be used for any nonstatistical purposes such as administrative, regulatory, law enforcement, or adjudicatory purposes.

Company specific data are also provided to other DOE offices for the purpose of examining specific petroleum operations in the context of emergency response planning and actual emergencies.

Disclosure limitation procedures are not applied to the statistical data published from these surveys information. Thus, there may be some statistics that are based on data from fewer than three respondents, or that are dominated by data from one or two large respondents. In these cases, it may be possible for a knowledgeable person to estimate the information reported by a specific respondent.

## Note 3. Technical Notes for Detailed Statistics Tables

The detailed statistics tables in the *Petroleum Supply Monthly* (PSM) provide complete supply and demand information for the current year. The tables are organized to locate National and Petroleum Administration for Defense (PAD) District summary data at the front followed by tables on crude oil and petroleum product production, import/export data, stocks information, and lastly, data on crude oil and petroleum product movements. To assist in the interpretation of these tables, the following technical notes are provided. Column and row headings are defined in the Glossary.

### Supply

**Field Production** - Field production is the sum of crude oil production, natural gas plant liquids production, and other liquids production.

Crude oil production is an estimate based on data received from State conservation agencies and the Mineral Management Service of the U.S. Department of the Interior. Refer to Explanatory Note 4 for further details.

Field production of natural gas plant liquids is reported on Form EIA-816 and published on a net basis (i.e., production minus inputs) in this column.

Other liquids field production is calculated by forcing the product supplied to be zero; thereby backing into field production.

**Refinery and Blenders Production** - Published production of these products equal refinery and motor gasoline terminal blenders production minus refinery and motor gasoline terminal blenders input. Production of other hydrocarbons, hydrogen and oxygenates, unfinished oils, and motor and aviation gasoline blending components appear on a net basis under "Refinery and Motor Gasoline Terminal Blenders 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.

**Adjustments** - This column provides adjustments for crude oil, motor gasoline blending components, fuel ethanol, finished motor gasoline, and distillate fuel oil. Some of the adjustments balance supply and disposition. Supply at the U.S. level is equal to the sum of field production, refinery production, and imports. Disposition at the U.S. level is equal to the sum of stock change, refinery input, exports, and demand measured as product supplied. Add net receipts as a component of supply at the PAD District level. Applicable components of supply and disposition vary depending on the product or products involved in each adjustment.

- The crude oil adjustment is a balancing item equal to the difference between crude oil supply and disposition. A positive crude oil adjustment indicates crude oil disposition exceeded available supply. Undercounting crude oil imports is one example of a typical cause of crude oil adjustments. The crude oil adjustment was formerly called unaccounted-for crude oil. The change was effective with data for January 2005.
- The motor gasoline blending components adjustment transfers the imbalance between supply and disposition of motor gasoline blending components to product supplied of finished motor gasoline. Product supplied (demand) for motor gasoline blending components is set equal to zero. A negative value for the motor gasoline blending components adjustment indicates understatement of finished gasoline production from gasoline blending (i.e. the volume of motor gasoline blending components blended was less than available supply of motor gasoline blending components). A positive value for the motor gasoline blending components adjustment indicates overstatement of finished gasoline production from gasoline blending (i.e. the volume of motor gasoline

blending components blended exceeded the available supply of motor gasoline blending components).

- Beginning in 2005, this adjustment was reflected by adding the calculated “product supplied” for motor gasoline blending components to the column labeled, “Adjustments.” The motor gasoline blending components adjustment was reported as field production from January 1993-December 2004. Prior to January 1993, there was no adjustment to transfer of motor gasoline blending components to finished gasoline. The volume that would have been adjusted prior to January 1993 was reported as product supplied for motor gasoline blending components.
- The fuel ethanol adjustment transfers the imbalance between supply and disposition of fuel ethanol to product supplied of finished motor gasoline. Product supplied (demand) for fuel ethanol is set equal to zero. A negative value for the fuel ethanol adjustment indicates understatement of finished gasoline production from fuel ethanol blending (i.e. the volume of fuel ethanol blended into finished motor gasoline was less than available supply of fuel ethanol). A positive value for the fuel ethanol adjustment indicates overstatement of finished gasoline production from fuel ethanol blending (i.e. the volume of fuel ethanol blended into finished motor gasoline exceeded available supply of fuel ethanol). There is no line item for the fuel ethanol adjustment. The fuel ethanol adjustment volume is equal to the sum of the finished motor gasoline adjustment and the motor gasoline blending components adjustment. The fuel ethanol adjustment was reported as part of finished gasoline field production from January 1993-December 2004. Refer to Table B1.
- The finished motor gasoline adjustment is equal to the sum of the motor gasoline blending components adjustment and the fuel ethanol adjustment. Beginning with data for January 2005, adjustments are allocated to reformulated or conventional finished motor gasoline based on the types of motor gasoline blending components adjusted. For example, adjustments to Reformulated Blendstock for Oxygenate Blending (RBOB) are allocated to finished reformulated motor gasoline while adjustments to Conventional Blendstock for Oxygenate Blending (CBOB) are allocated to finished conventional motor gasoline. Ethanol adjustments are allocated to reformulated or conventional gasoline based on the types of blending components adjusted and typical fuel ethanol blending percentages by region. During the period January 1993-December 2004, the entire motor gasoline blending components adjustment volume was added to finished conventional motor gasoline and the fuel ethanol adjustment volume was added to finished-oxygenated (conventional) motor gasoline.
- Distillate fuel oil adjustment volumes are reported on EIA surveys by operators of bulk terminals and pipelines. The distillate fuel oil adjustment transfers ultra-low sulfur distillate fuel oil (15 ppm sulfur and under) to low-sulfur distillate fuel oil (greater than 15 ppm sulfur to 500 ppm sulfur) in cases where ultra-low sulfur distillate fuel oil is downgraded to low-sulfur distillate fuel oil. Ultra-low

sulfur distillate fuel oil is downgraded when it encounters sulfur in the petroleum storage and transportation system such that the sulfur content of the fuel increases to a level greater than 15 ppm. Note that some circumstances may result in downgrading ultra-low sulfur distillate fuel oil even when the sulfur content remained at or below 15 ppm. For example, a batch of ultra-low sulfur distillate fuel oil might be downgraded if it failed to meet a pipeline specification that was below 15 ppm sulfur for transportation and handling of ultra-low sulfur distillate fuel oil.

- The adjustment to finished petroleum products is equal to the finished motor gasoline adjustment.
- Primary components of “other” hydrocarbons and oxygenates include hydrogen and oxygenates especially fuel ethanol and methyl tertiary butyl ether (MTBE). The adjustment is equal to the difference between disposition and supply and accounts for production from oxygenate plants, hydrogen plants, and other facilities that produce materials in this product category (see definitions).
- The adjustment for “Other” Liquids is equal to the sum of adjustments for “other” hydrocarbons and oxygenates and motor gasoline blending components.

## Disposition

**Stock Change** - This column is calculated as the difference between the Ending Stocks column of this table and the Ending Stocks column of this table in the prior month’s publication. A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.

**Crude Losses** - The volume of crude oil reported by petroleum refineries as being lost in their operations. These losses are due to spills, contamination, fires, etc., as opposed to refining processing losses or gains.

**Refinery Inputs** - Refinery inputs of crude oil and intermediate materials (unfinished oils, gasoline blending components, other hydrocarbons and oxygenates, liquefied petroleum gases, and pentanes plus) that are processed at refineries to produce finished petroleum products.

Crude oil input represents total crude oil (domestic and foreign) input to atmospheric crude oil distillation units and other refinery processing units (i.e., catalytic cracking units, cokers).

Inputs of natural gas liquids are refinery input of natural gas liquids received from natural gas plants for blending and processing. Published inputs of natural gas liquids are reported on a gross basis.

Inputs of unfinished oils, motor and aviation gasoline blending components, and other hydrocarbons and oxygenates are published on a net basis (i.e., refinery input minus refinery production).

Inputs of finished petroleum products are published on a net basis (i.e., refinery production minus refinery inputs) and displayed under the refinery production column.

**Exports** - Exports include crude oil shipments from the 50 States to Puerto Rico, and the Virgin Islands.

**Products Supplied** - Products supplied is equal to field production, plus refinery production, plus imports, (plus net receipts on a PAD District basis), plus adjustments, minus stock change, minus refinery input, minus exports.

A product supplied value indicates those quantities of petroleum products supplied for domestic consumption. Occasionally, the result for a product is negative because total disposition of the product exceeds total supply. Negative 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; and (4) products such as gasoline blending components and unfinished oils have entered the primary supply channels with their production not having been reported, e.g., streams returned to refineries from petrochemical plants.

Product supplied for crude oil is the sum of crude oil burned on leases and by pipelines as fuel. Prior to January 1983, crude oil burned on leases and by pipelines as fuel was reported as either distillate or residual fuel oil and was included in product supplied for these products.

## Yields

The refinery yield of finished motor gasoline is calculated by subtracting the inputs of pentanes plus, liquefied petroleum gases, other hydrocarbons/oxygenates and motor gasoline blending components from the production of finished motor gasoline before dividing by the sum of crude oil input and unfinished oils input (net).

The refinery yield of finished aviation gasoline is calculated by subtracting the inputs of aviation gasoline blending components from the production of finished aviation gasoline before dividing by the sum of crude oil input and unfinished oils input (net).

Refinery yields for all products (except finished motor gasoline and finished aviation gasoline) are calculated by dividing the production for each product by the sum of crude oil input and unfinished oils input (net) reported in the U.S. total.

## Stocks

Primary stocks of petroleum products do not include either secondary stocks held by dealers and jobbers or tertiary stocks held by consumers.

## Movements

Movements of crude oil by pipeline between PAD Districts include trunk pipeline companies (interstate, intrastate, and intra-company pipelines). Intermediate movements for crude oil pipeline systems operating in more than two PAD Districts are not included.

Movements of petroleum products by pipeline between PAD Districts include trunk pipeline companies (interstate, intrastate and intra-company pipelines). Intermediate movements for product pipeline systems operating in more than two PAD Districts are included. For example, a shipment originating in PAD District 3, passing through PAD District 2 to PAD District 1, is reported as a movement from PAD District 3 to PAD District 2 and also from PAD District 2 to PAD District 1.

Waterborne movements of crude oil and petroleum products between PAD Districts include all shipments of crude oil or petroleum products for which the transporter has custody at the time of shipment. Custody is defined as physical possession of crude oil or petroleum products on a company-owned tanker and barge.

## Other Adjustments

Adjusted data are included in published aggregate petroleum supply statistics to correct for incomplete survey frames and reporting errors as described below.

- **Trans-Alaska Pipeline System (TAPS) Adjustment for Natural Gas Plant Liquids** – This adjustment corrects for overstatement of crude oil input at refineries due to injection of natural gas plant liquids into Alaskan crude oil transported in TAPS. This adjustment is necessary because refiners have been unable to segregate input of natural gas plant liquids from input of Alaskan crude oil.

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

To offset this reporting error, an adjustment is made to refinery input in all PAD Districts receiving Alaskan crude oil. The adjustment reduces the crude oil inputs and increases the NGL inputs by an equal amount. Each PAD District adjustment is a portion of the known Alaskan-NGL production that is proportional to the PAD District's share of Alaskan crude oil received at all refineries in the United States. The greatest impact occurs in PAD District 5 for butane and pentanes plus. The reporting problem, which began in 1987, grew as injections of NGL's into the TAPS increased. Data for 1988 was revised in the *Petroleum Supply Annual* (PSA) to account for the adjustment.

- **Lease Stocks of Crude Oil** – This adjustment corrects for incomplete survey coverage of companies that store crude oil on leases.

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

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

- **Northeast Heating Oil Reserve** – This adjustment subtracts the volume of heating oil stored by the U.S. Department of Energy in the Northeast Heating Oil Reserve from commercial inventory of heating oil.
- **Other Aggregate Adjustments** – Other adjustments are made to aggregate data from time to time. For example, unusual industry conditions, including fuel transitions, business practice shifts, or hurricane dislocations, may generate reporting anomalies and require adjustments. Measurement error and frame deficiencies may occasionally result in inconsistencies when individual respondent data are aggregated to publication levels and require adjustment. Monthly supply data are reviewed throughout the year and some estimates may be replaced with newly available or resubmitted respondent data in the *Petroleum Supply Annual* (PSA).

## Note 4. Domestic Crude Oil Production

The Energy Information Administration (EIA) collects monthly crude oil production data on an ongoing basis. Data on crude oil production for States are reported to the EIA by State government agencies. The Minerals Management Service of the U.S. Department of the Interior and the California Department of Conservation reports data on crude oil production for Federal offshore areas to the EIA.

All States except Michigan, New York, Ohio, and Pennsylvania report production on a monthly basis. These four States report crude oil production on an annual basis. Estimates of monthly crude oil production for these four States are made by the EIA using data reported on Form EIA-182, "Domestic Crude Oil First Purchase Report." After the end of each calendar year, the monthly crude oil production estimates are updated using annual reports from various State agencies, the Minerals Management Service, and the California Department of Conservation.

Table 25, "Production of Crude Oil by PAD District and State" provides estimates of crude oil production in the latest month for which most State production data are available. There is a time lag of approximately 4 months between the end of the production month and the time when most monthly State crude oil production data become available.

In order to present timelier crude oil production estimates, the EIA prepares a weekly crude oil production estimate, which is used in the *Weekly Petroleum Status Report* (WPSR). At the end of the production month, weekly crude oil production estimates are aggregated into an **original estimate** of monthly crude oil production. The original monthly estimate is used until replaced a month later by the **interim estimate**. The interim estimates are based on: (a) data reported by the States (e.g., production data for Alaska are typically reported to the EIA before the interim estimate is made); (b) first purchase data reported on Form EIA-182, "Domestic Crude Oil First Purchase Report;" (c) exponential or hyperbolic curve fitted projections based on recent State data; or (d) constant level projections based on the average production rate during a recent time period.

The interim estimate is used in the *PSM* Tables 1 through 24, until replaced by the final estimate. The final estimate is published in the *Petroleum Supply Annual* (PSA). Updates received after April are published in Appendix C in the following year's *PSA*.

## Note 5. Export Data

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

Census export statistics used in the *Petroleum Supply Monthly* (PSM) reflect both government and non-governmental exports of domestic and foreign merchandise from the United States (the 50 States and the District of Columbia) to foreign countries and U.S. possessions, without regard to whether or not the exportation involves a commercial transaction. The following types of transactions are excluded from the statistics:

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

(2) Bunker fuels and other supplies and equipment for use on departing vessels, planes, or other carriers engaged in foreign trade.

### Source of Export Information

The U.S. Bureau of the Census compiles the official U.S. export statistics. Exporters are required to file a “Shipper’s Export Declaration Document” with the U.S. Census Bureau.

### 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 6. Quality Control and Data Revision

### Quality Control

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

Survey forms are periodically reviewed for completeness, meaningfulness, and clarity. Modifications are made, when needed, to maintain efficient measure of the intended data items and to track product movement accurately throughout the industry. The latest modification to the survey forms was done in January 2004. Through this process, the EIA can maintain consistency among forms, minimize respondent burden, and eliminate ambiguity.

### Sampling and Non-sampling Errors

There are two types of errors usually associated with data produced from a survey: non-sampling errors and sampling errors. Because the estimates for all monthly surveys are based on a complete census of the frame, there is no sampling error in the data presented. The data, however, are subject to non-sampling errors. Non-sampling errors, sometimes referred to as biases, are those which can arise from a number of sources: (1) the inability to obtain data from all companies in the frame or sample (nonresponse and the method used to account for nonresponse), (2) definitional difficulties and/or improperly worded questions

which lead to different interpretations, (3) mistakes in recording or coding the data obtained from respondents, and (4) other errors of collection, response, coverage, and estimation.

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

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

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

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

Sampling errors are those errors that occur when survey estimates are based on a sample rather than being derived from a complete census of the frame. Although monthly data are still subject to error, they have been thoroughly reviewed and edited, and are considered to be the most accurate data available.



## Data Revision

With respect to the weekly PSRS data, EIA will disseminate revised data only if the revision is expected to substantively affect understanding of the U.S. petroleum supply. Whether to disseminate a revision to weekly data will be based on EIA's judgment of the revision's expected effect. If a revision is necessary, it will be disseminated in the next regularly scheduled release of the weekly products.

The monthly PSRS data reflect EIA's official data on petroleum supply and are considered to be more accurate than the weekly data because they are generally based upon company accounting records instead of company estimates and EIA has more time to edit and correct anomalous data. With respect to the monthly PSRS data, EIA will disseminate revised data during the year only if the revision is expected to substantively affect understanding of the U.S. petroleum supply. Whether to disseminate a revision during the year will be based on EIA's judgment of the revision's expected effect. At the end of year, the monthly data are revised to reflect all resubmitted data received during the year. These official final monthly petroleum supply data are included in the *PSA*.

The *PSA* reflects EIA's final data on petroleum supply and will be revised only if, in EIA's judgment, a revision is expected to substantively affect understanding of the U.S. petroleum supply.

When EIA disseminates any revised PSRS data, it will alert users to the affected data value(s) that are revised.

## Late Response

Respondents who fail to respond within the prescribed time limit (25th day following the end of the report month) become nonrespondents for that particular report period and are contacted by phone to obtain the current month's data. Respondents who are chronically late (i.e., 3 consecutive months) are notified by EIA by certified letter.

## Nonresponse

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

## Note 7. Frames Maintenance

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

known petroleum supply organizations falling within the definition of "Who Must Submit" participate in the survey.

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

Annual frames maintenance focuses on re-evaluating the "required and non-required" companies filing the Form EIA-814.

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

## Note 8. 2004 Changes in the Petroleum Supply Monthly

Effective with January 2004 data, several changes were made to the petroleum supply monthly data series collected by the EIA. The changes primarily affect data reported for motor gasoline blending components, finished motor gasoline, distillate fuel oil, and oxygenates. Motor gasoline blending components now include five splits to provide coverage of the various types of reformulated and conventional blending components.

"Oxygenated" and "Other" finished motor gasoline were combined into a new category entitled "Conventional" finished motor gasoline.

An ultra-low distillate fuel oil category was also established.

- Table H1, "Petroleum Supply Summary"— This table was eliminated from the PSM. There is a link in the web table of contents to Table H1 that is currently published in the Weekly Petroleum Status Report. The primary purpose of Table H1 is to provide timely release of summary Monthly-From-Weekly data.
- Old Table 1 "U.S. Petroleum Balance"— This table was eliminated. All the data elements found on this table can

be found directly or can be generated using other Detail Summary tables.

- New Table 1 “U.S. Supply, Disposition, and Ending Stocks of Crude Oil and Petroleum Products” (Old Table 2) – The “Unaccounted for Crude Oil” header has been renamed “Adjustments.” The motor gasoline blending component adjustment and fuel ethanol adjustment has been moved from the “Field Production” column to the new “Adjustments” column. A line item for “Commercial” and “Strategic Petroleum Reserve” (SPR) has been added to the “Crude Oil” breakout. There is a breakout under SPR for “Imports by SPR” and “Imports into SPR by Others.”
- Refinery Net Input and Net Production Tables - Refinery and motor gasoline blending activity continues to be presented on a combined basis. In addition, blenders activity are presented on a separate basis.
- Import and Export Tables by Country - Import and export tables that show country detail have been expanded to show all products on an individual basis. This change will eliminate the “Other Products” category, which will provide more data for users, but will increase the number of pages for each table.

## **Note 9. Form EIA-820: Annual Refinery Report**

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

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

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

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

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

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

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

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

In 2004, the survey form was amended to reflect the increasing emphasis on the removal of sulfur from transportation fuels.

### **Respondent Frame**

The respondent frame consists of all operating and idle petroleum refineries (including new refineries under construction), located in the 50 States, the District of Columbia, Puerto Rico, the Virgin Islands, Guam and other U.S. possessions. As of January 1, 2008, there were 152 refineries.

The respondent frame is maintained by monitoring the monthly Form EIA-810, “Monthly Refinery Report,” and industry

publications for changes and developments in the petroleum industry such as refinery sales, mergers and new operations.

### **Description of Survey Form**

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

### **Collection Methods**

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

### **Response Rate**

The response rate for the Form EIA-820 is normally 100%. Data are estimated and non-compliance procedures are implemented for those companies still not reporting data by close-out for the report year.

### **Data Imputation**

Imputation is performed for companies that fail to file prior to the publication deadline. For the January 1, 2008 survey, there were no nonrespondents. When nonresponse occurs, values for these companies are imputed from data reported on the most recent year's Form EIA-820 and/or from data reported on Form EIA-810, "Monthly Refinery Report," for that company. For most surveyed items, the value imputed for nonrespondents is the value that company reported on the Form EIA-820 for the most recent year. For three categories of information however, the imputed value is also based on their data from the Form EIA-810 as follows:

#### **Part 4: Refinery Receipts of Crude Oil by Method of Transportation**

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

#### **Part 5: Atmospheric Crude Oil Distillation Capacity**

Operable atmospheric crude oil distillation capacity in barrels per calendar day is collected on the monthly Form EIA-810 as of the

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

#### **Parts 6, 7 & 8: Downstream Charge Capacity, Production Capacity and Working and Shell Storage Capacities**

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

### **Confidentiality**

The Office of Legal Counsel of the Department of Justice concluded on March 20, 1991, that the Federal Energy Administration Act requires the Energy Information Administration to provide company-specific data to the Department of Justice, or to any other Federal agency when requested for official use, which may include enforcement of Federal law. The information contained on this form may also be made available, upon request, to another component of the Department of Energy (DOE), to any Committee of Congress, the General Accounting Office, or other Congressional agencies authorized by law to receive such information. A court of competent jurisdiction may obtain this information in response to an order.

Information on operable atmospheric crude oil distillation capacity, downstream charge capacity, and production capacity (Parts 5, 6 and 7) on Form EIA-820 are not considered as confidential, and historically have not been treated as such. Company identifiable data are published in the Refinery Capacity Report, Tables 3, 4 and 5.

Other data (Parts 3, 4 and 8 and respondent information) on the Form EIA-820 are kept confidential and not disclosed to the public to the extent that it satisfies the criteria for exemption under the Freedom of Information Act (FOIA), 5 U.S.C.552, Department of Energy (DOE) regulations, 10 C.F.R.1004.11, implementing the FOIA, and the Trade Secrets Act, 18 U.S.C.1905.

Upon receipt of a request for this information under the FOIA, the DOE shall make a final determination whether the information is exempt from disclosure in accordance with the procedures and criteria provided in the regulations. To assist us in this determination, respondents should demonstrate to the DOE that, for example, their information contains trade secrets or commercial or financial information whose release would be likely to cause substantial harm to their company's competitive position. A letter accompanying the submission that explains (on an element-by-element basis) the reasons why the information

would be likely to cause the respondent substantial competitive harm if released to the public would aid in this determination. A new justification does not need to be provided each time information is submitted on the form, if the company has previously submitted a justification for that information and the justification has not changed.

The data collected on Form EIA-820, "Annual Refinery Report," is used to report aggregate statistics on and conduct analyses of the operation of U.S. petroleum refineries. Beginning with data for 2006, the data are published as a stand alone product in the EIA publication *Refinery Capacity Report*. Historical data appear in the *Petroleum Supply Annual (PSA) Volume 1* (through 2005); data also appear in the *Annual Energy Review*. Company specific data are also provided to other DOE offices for the purpose of examining specific refinery operations in the context of emergency response planning and actual emergencies.

The tables pertaining to refinery receipts of crude oil by method of transportation and fuels consumed at the refinery are not subject to statistical nondisclosure procedures. Thus, there may be some table cells which are based on data from only one or two respondents, or which are dominated by data from one or two large respondents. In these cases, it may be possible for a knowledgeable user of the data to make inferences about the data reported by a specific respondent.

## Quality Control

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

## Resubmissions

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

**Table B1. Finished Motor Gasoline Product Supplied Adjustment, 1996 - Present**  
(Thousand Barrels per Day)

Item/Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg
<b>1996</b>													
Fuel Ethanol Adj.	58	53	49	37	27	14	9	20	23	36	44	38	34
Motor Gas Blending	61	75	(s)	-8	43	48	103	52	21	80	60	43	48
Products Supplied	7,721	7,599	7,792	7,873	8,071	8,088	8,165	8,343	7,662	8,093	7,915	7,794	7,891
<b>1997</b>													
Fuel Ethanol Adj.	39	50	51	46	48	38	59	37	47	69	50	61	50
Motor Gas Blending	-20	61	-27	87	73	113	89	95	115	107	165	80	78
Products Supplied	7,301	7,668	7,796	8,064	8,139	8,288	8,496	8,233	8,023	8,141	7,965	8,065	8,017
<b>1998</b>													
Fuel Ethanol Adj.	66	55	61	55	42	50	49	58	62	71	55	75	58
Motor Gas Blending	84	39	117	140	142	246	111	88	171	89	145	205	132
Products Supplied	7,618	7,711	8,004	8,312	8,279	8,520	8,680	8,568	8,310	8,378	8,167	8,451	8,253
<b>1999</b>													
Fuel Ethanol Adj.	57	52	52	53	50	59	43	54	55	64	66	72	56
Motor Gas Blending	81	-13	20	134	46	214	192	128	102	212	156	165	120
Products Supplied	7,701	8,031	8,128	8,506	8,420	8,886	8,942	8,579	8,305	8,542	8,240	8,859	8,431
<b>2000</b>													
Fuel Ethanol Adj.	60	47	62	62	76	52	68	73	66	74	73	76	66
Motor Gas Blending	255	208	178	158	198	125	80	158	155	107	83	319	169
Products Supplied	7,653	8,291	8,305	8,375	8,661	8,824	8,642	8,921	8,518	8,417	8,384	8,670	8,472
<b>2001</b>													
Fuel Ethanol Adj.	80	65	61	59	64	40	96	52	71	93	63	58	67
Motor Gas Blending	264	121	289	303	196	210	213	245	196	193	175	252	222
Products Supplied	8,099	8,234	8,532	8,575	8,706	8,690	9,023	8,953	8,557	8,655	8,677	8,585	8,610
<b>2002</b>													
Fuel Ethanol Adj.	60	68	40	75	78	66	66	48	56	58	80	62	63
Motor Gas Blending	184	214	174	233	339	287	269	252	177	172	208	235	229
Products Supplied	8,227	8,607	8,655	8,766	9,078	9,140	9,143	9,313	8,687	8,814	8,829	8,893	8,848
<b>2003</b>													
Fuel Ethanol Adj.	13	49	8	45	38	31	29	44	31	35	41	22	32
Motor Gas Blending	109	174	209	265	354	399	314	375	298	324	281	194	275
Products Supplied	8,414	8,525	8,602	8,838	9,042	9,170	9,192	9,411	8,926	9,108	8,946	9,011	8,935
<b>2004</b>													
Fuel Ethanol Adj.	17	21	7	36	36	53	25	32	37	29	25	27	29
Motor Gas Blending	217	393	469	574	464	609	466	493	489	372	347	265	429
Products Supplied	8,705	8,838	9,024	9,126	9,179	9,322	9,357	9,327	9,015	9,097	9,055	9,206	9,105
<b>2005</b>													
Fuel Ethanol Adj.	37	31	24	32	39	54	47	55	40	45	50	47	42
Motor Gas Blending	357	251	200	222	337	310	460	455	382	360	239	436	335
Products Supplied	8,775	8,798	8,996	9,130	9,257	9,380	9,451	9,454	8,897	9,013	9,079	9,246	9,125
<b>2006</b>													
Fuel Ethanol Adj.	33	37	48	36	23	40	27	44	51	32	52	37	38
Motor Gas Blending	278	226	406	486	714	207	663	432	649	539	645	689	497
Products Supplied	8,727	8,836	9,129	9,140	9,312	9,440	9,583	9,585	9,222	9,286	9,160	9,335	9,233
<b>2007</b>													
Fuel Ethanol Adj.	68	51	58	62	67	73	84	95	51	93	100	113	76
Motor Gas Blending	512	462	607	674	608	473	627	553	544	534	689	535	569
Products Supplied	8,891	9,025	9,169	9,232	9,429	9,510	9,622	9,592	9,244	9,250	9,249	9,249	9,290
<b>2008</b>													
Fuel Ethanol Adj.	117	118	118	163	134	117	99	107	156	93	76	108	117
Motor Gas Blending	223	259	246	138	402	371	331	448	376	171	417	77	288
Products Supplied	8,814	8,842	9,069	9,117	9,216	9,071	9,072	9,090	8,469	8,986	8,889	8,921	8,964

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

Source: 1995 - 2005, Energy Information Administration (EIA), *Petroleum Supply Annual*, Volumes 1 and 2 (Table 3); 2006 - 2007, *Petroleum Supply Monthly* (Table 2).