

Crude Petroleum and Natural Gas Extraction: 2002

Issued December 2004

EC02-211-211111 (RV)

2002 Economic Census

Mining

Industry Series



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ACKNOWLEDGMENTS

This report was prepared in the Manufacturing and Construction Division under the direction of **Judy M. Dodds**, Assistant Division Chief for Census and Related Programs who was responsible for the overall planning, management, and coordination. **Susan Bucci**, Chief, Construction and Minerals Branch, assisted by **Kaylene Hanks**, Section Chief, and **Raphael Corrado**, **Tom Flood**, **Robert Miller**, and **Robert Rosati**, Special Assistants, performed the planning and implementation. **Richard Hough**, **Lacey Loftin**, **Vicki Mills**, **Kara Moore**, and **Felix Veras** provided primary staff assistance. **Mendel D. Gayle**, Chief, Census and Related Programs Support Branch, assisted by **Kimberly DePhillip**, Section Chief, performed overall coordination of the publication process. **Patrick Duck**, **Michael Flaherty**, **Taylor C. Murph**, **Wanda Sledd**, and **Veronica White** provided primary staff assistance.

Mathematical and statistical techniques, as well as the coverage operations, were provided by **Paul Hsen**, Assistant Division Chief for Research and Methodology Programs, assisted by **Stacey Cole**, Chief, Manufacturing Methodology Branch, and **Robert Struble**, Section Chief. **Jeffrey Dalzell** and **Cathy Gregor** provided primary staff assistance.

Eddie J. Salyers, Assistant Division Chief of Economic Planning and Coordination Division, was responsible for overseeing the editing and tabulation procedures and the interactive analytical software. **Dennis Shoemaker** and **Kim Wortman**, Special Assistants, **John D. Ward**, Chief, Analytical Branch, and **Brandy L. Yarbrough**, Chief, Edit Branch, were responsible for developing the systems and procedures for data collection, editing, review, and correction. **Donna L. Hambric**, Chief of the Economic Planning Staff, was responsible for overseeing the systems and information for dissemination. **Douglas J. Miller**, Chief, Tables and Dissemination Branch, assisted by **Lisa Aispuro**, **Jamie Fleming**, **Keith Fuller**, **Andrew W. Hait**, and **Kathy G. Padgett** were responsible for developing the data dissemination systems and procedures.

The Geography Division staff, **Robert LaMacchia**, Chief, developed geographic coding procedures and associated computer programs.

The Economic Statistical Methods and Programming Division, **Howard R. Hogan**, Chief, developed and coordinated the computer processing systems. **Barry F. Sessamen**, Assistant Division Chief for Post Collection, was responsible for design and implementation of the processing system and computer programs. **Gary T. Sheridan**, Chief, Macro Analytical Branch, assisted by **Apparao V. Katikineni** and **Edward F. Johnson** provided computer programming and implementation.

The Systems Support Division provided the table composition system. **Robert Joseph Brown**, Table Image Processing System (TIPS) Senior Software Engineer, was responsible for the design and development of the TIPS, under the supervision of **Robert J. Bateman**, Assistant Division Chief, Information Systems.

The staff of the National Processing Center performed mailout preparation and receipt operations, clerical and analytical review activities, and data entry.

Margaret A. Smith, **Bernadette J. Beasley**, **Michael T. Browne**, and **Alan R. Plisch** of the Administrative and Customer Services Division, **Walter C. Odom**, Chief, provided publication and printing management, graphics design and composition, and editorial review for print and electronic media. General direction and production management were provided by **James R. Clark**, Assistant Division Chief, and **Susan L. Rappa**, Chief, Publications Services Branch.

Special acknowledgment is also due the many businesses whose cooperation contributed to the publication of these data.

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-- Not applicable for this report.

Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the nation's economy. It provides essential information for government, business, industry, and the general public. Title 13 of the United States Code (Sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in "2" and "7."

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product estimates, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions. Specific uses of economic census data include the following:

- Policymaking agencies of the federal government use the data to monitor economic activity and to assess the effectiveness of policies.
- State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.
- Trade associations study trends in their own and competing industries, which allows them to keep their members informed of market changes.
- Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

INDUSTRY CLASSIFICATIONS

Data from the 2002 Economic Census are published primarily according to the 2002 North American Industry Classification System (NAICS). NAICS was first adopted in the United States, Canada, and Mexico in 1997. The 2002 Economic Census covers the following NAICS sectors:

21	Mining
22	Utilities
23	Construction
31-33	Manufacturing
42	Wholesale Trade
44-45	Retail Trade
48-49	Transportation and Warehousing
51	Information
52	Finance and Insurance
53	Real Estate and Rental and Leasing
54	Professional, Scientific, and Technical Services
55	Management of Companies and Enterprises
56	Administrative and Support and Waste Management and Remediation Services
61	Educational Services
62	Health Care and Social Assistance
71	Arts, Entertainment, and Recreation
72	Accommodation and Food Services
81	Other Services (except Public Administration)

(Not listed above are the Agriculture, Forestry, Fishing, and Hunting sector (NAICS 11), partially covered by the census of agriculture conducted by the U.S. Department of Agriculture, and the Public Administration sector (NAICS 92), largely covered by the census of governments conducted by the Census Bureau.)

The 20 NAICS sectors are subdivided into 100 subsectors (three-digit codes), 317 industry groups (four-digit codes), and, as implemented in the United States, 1,179 industries (six-digit codes).

RELATIONSHIP TO HISTORICAL INDUSTRY CLASSIFICATIONS

Prior to the 1997 Economic Census, data were published according to the Standard Industrial Classification (SIC) system. While many of the individual NAICS industries correspond directly to industries as defined under the SIC system, most of the higher level groupings do not. Particular care should be taken in comparing data for retail trade, wholesale trade, and manufacturing, which are sector titles used in both NAICS and SIC, but cover somewhat different groups of industries. The 1997 Economic Census *Bridge Between NAICS and SIC* demonstrates the relationships between NAICS and SIC industries. Where changes are significant, it may not be possible to construct time series that include data for points both before and after 1997.

Most industry classifications remained unchanged between 1997 and 2002, but NAICS 2002 includes substantial revisions within the construction and wholesale trade sectors, and a number of revisions for the retail trade and information sectors. These changes are noted in industry definitions and will be demonstrated in the *Bridge Between NAICS 2002 and NAICS 1997*.

For 2002, data for enterprise support establishments (those functioning primarily to support the activities of their company's operating establishments, such as a warehouse or a research and development laboratory) are included in the industry that reflects their activities (such as warehousing). For 1997, such establishments were termed auxiliaries and were excluded from industry totals.

BASIS OF REPORTING

The economic census is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each store, factory, shop, or other location. Each establishment is assigned a separate industry classification based on its primary activity and not that of its parent company. (For selected industries, only payroll, employment, and classification are collected for individual establishments, while other data are collected on a consolidated basis.)

GEOGRAPHIC AREA CODING

Accurate and complete information on the physical location of each establishment is required to tabulate the census data for states, metropolitan and micropolitan statistical areas, counties, and corporate municipalities (places) including cities, towns, townships, villages, and boroughs. Respondents were required to report their physical location (street address, municipality, county, and state) if it differed from their mailing address. For establishments not surveyed by mail (and those single-establishment companies that did not provide acceptable information on physical location), location information from administrative sources is used as a basis for coding.

AVAILABILITY OF ADDITIONAL DATA

All results of the 2002 Economic Census are available on the Census Bureau Internet site (www.census.gov) and on digital versatile discs (DVD-ROMs) for sale by the Census Bureau. The American FactFinder system at the Internet site allows selective retrieval and downloading of the data. For more information, including a description of reports being issued, see the Internet site, write to the U.S. Census Bureau, Washington, DC 20233-6100, or call Customer Services at 301-763-4100.

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1954, 1958, and 1963. Prior to that time, individual components of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for the 1840 Decennial Census and subsequent censuses to include mining and some commercial activities. The 1905 Manufactures Census was the first time a census was taken apart

from the regular decennial population census. Censuses covering retail and wholesale trade and construction industries were added in 1930, as were some service trades in 1933. Censuses of construction, manufacturing, and the other business censuses were suspended during World War II.

The 1954 Economic Census was the first census to be fully integrated, providing comparable census data across economic sectors and using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census report forms.

The range of industries covered in the economic census expanded between 1967 and 2002. The census of construction industries began on a regular basis in 1967, and the scope of service industries, introduced in 1933, was broadened in 1967, 1977, and 1987. While a few transportation industries were covered as early as 1963, it was not until 1992 that the census broadened to include all of transportation, communications, and utilities. Also new for 1992 was coverage of financial, insurance, and real estate industries. With these additions, the economic census and the separate census of governments and census of agriculture collectively covered roughly 98 percent of all economic activity. New for 2002 is coverage of four industries classified in the agriculture, forestry, and fishing sector under the SIC system: landscape architectural services, landscaping services, veterinary services, and pet care services.

Printed statistical reports from the 1992 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. Reports for 1997 were published primarily on the Internet and copies of 1992 reports are also available there. CD-ROMs issued from the 1987, 1992, and 1997 Economic Censuses contain databases that include all or nearly all data published in print, plus additional statistics, such as ZIP Code statistics, published only on CD-ROM.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for the 2002 Economic Census and related surveys is published in the *Guide to the 2002 Economic Census* at www.census.gov/econ/census02/guide. More information on the methodology, procedures, and history of the census will be published in the *History of the 2002 Economic Census* at www.census.gov/econ/www/history.html.

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Mining

SCOPE

The Mining sector (sector 21) comprises establishments that extract naturally occurring mineral solids, such as coal and ores; liquid minerals, such as crude petroleum; and gases, such as natural gas. The term mining is used in the broad sense to include quarrying, well operations, beneficiating (e.g., crushing, screening, washing, and flotation), and other preparation customarily performed at the mine site, or as a part of mining activity.

The mining sector distinguishes two basic activities: mine operation and mining support activities. Mine operation includes establishments operating mines, quarries, or oil and gas wells on their own account or for others on a contract or fee basis. Mining support activities include establishments that perform exploration (except geophysical surveying) and/or other mining services on a contract or fee basis (except mine site preparation and construction of oil/gas pipelines).

Establishments in the mining sector are grouped and classified according to the natural resource mined or to be mined. Industries include establishments that develop the mine site, extract the natural resources, and/or those that beneficiate (i.e., prepare) the mineral mined. Beneficiation is the process whereby the extracted material is reduced to particles that can be separated into mineral and waste, the former suitable for further processing or direct use. The operations that take place in beneficiation are primarily mechanical, such as grinding, washing, magnetic separation, and centrifugal separation. In contrast, manufacturing operations primarily use chemical and electrochemical processes, such as electrolysis and distillation. However, some treatments, such as heat treatments, take place in both the beneficiation and the manufacturing (i.e., smelting/refining) stages. The range of preparation activities varies by mineral and the purity of any given ore deposit. While some minerals, such as petroleum and natural gas, require little or no preparation, others are washed and screened, while yet others, such as gold and silver, can be transformed into bullion before leaving the mine site.

Mining, beneficiating, and manufacturing activities often occur in a single location. Separate receipts will be collected for these activities whenever possible. When receipts cannot be broken out between mining and manufacturing, establishments that mine or quarry nonmetallic minerals, beneficiate the nonmetallic minerals into more finished manufactured products are classified based on the primary activity of the establishment. A mine that manufactures a small amount of finished products will be classified in Sector 21, Mining. An establishment that mines whose primary output is a more finished manufactured product will be classified in Sector 31-33, Manufacturing.

Exclusions. Hauling and other transportation beyond the mine property and contract hauling (except out of open pits in conjunction with mining).

The tabulations for this sector do not include central administrative offices, warehouses, or other establishments that serve mining establishments within the same organization. Data for such establishments are classified according to the nature of the service they provide. For example, separate headquarters establishments are reported in NAICS Sector 55, Management of Companies and Enterprises.

The reports described below exclude establishments of firms with no paid employees. These “nonemployers,” typically self-employed individuals or partnerships operating businesses that they have not chosen to incorporate, are reported separately in *Nonemployer Statistics*. The contribution of nonemployers, relatively moderate for this sector, may be examined at www.census.gov/nonemployerimpact.

The reports described below cover all mining establishments with one or more paid employees.

Definitions. Industry categories are defined in Appendix B, NAICS Codes, Titles, and Descriptions. Other terms are defined in Appendix A, Explanation of Terms.

REPORTS

The following reports provide statistics on this sector.

Industry Series. There are 29 reports, each covering a single NAICS industry (six-digit code). These reports include such statistics as number of establishments, employment, payroll, value added by mining, cost of supplies, value of shipments and receipts for services, capital expenditures, etc. The industry reports also include data for states with 100 employees or more in the industry. The data in industry reports are preliminary and subject to change in the following reports.

Geographic Area Series. There are 52 separate reports, one for each state, the District of Columbia, and offshore areas. Each state report presents similar statistics at the “all mining” level for each state. The state reports also include six-digit NAICS level data for industries with 100 employees or more in the state.

Subject Series:

- **Industry-Product Analysis Summary.** This report presents company, establishments, value of shipments and receipts for services, value of product shipments or receipts for services, percentage of product shipments of the total value of shipments and receipts for services, and percentage of distribution of value of product shipments or receipts for services on the NAICS six-digit industry level and by the six- and seven-digit product code levels. It also includes miscellaneous receipts at the six- and seven-digit product code levels by NAICS six-digit industry levels.
- **General Summary.** This report contains industry and geographic area statistics summarized in one report. It includes higher levels of aggregation than the industry and state reports, as well as revisions to the data made after the release of the industry and state reports.
- **Product Summary.** This report summarizes the products data published in the industry reports.
- **Materials Summary.** This report summarizes the materials and fuels data published in the industry reports.
- **Location of Mines Summary.** This report contains statistics on the number of establishments for the three- and six-digit NAICS industry by state and offshore area by employment-size of the establishment.

Other reports. Data for this sector are also included in reports with multisector coverage, including *Nonemployer Statistics*, *Comparative Statistics*, *Bridge Between 2002 NAICS and 1997 NAICS*, *Business Expenses*, and the Survey of Business Owners reports.

GEOGRAPHIC AREAS COVERED

1. The United States as a whole.
2. States and the District of Columbia.
3. Offshore Areas. Data for offshore areas that are part of Alaska, California, Louisiana, and Texas are included in their respective state area reports and represent offshore operations on these state offshore leases and all federal offshore leases defined by their state plane coordinate systems. State offshore includes the areas extending from the coastline up to 3 geographical miles distance, except for Texas and Florida, which extend 3 marine leagues from the coastline in the Gulf of Mexico. Data for offshore areas not associated with a state are in an Offshore Areas geographic report that includes the following areas:

-
- a. Atlantic Offshore: Atlantic Federal Area, New Hampshire state offshore, Maine state offshore, Massachusetts state offshore, Connecticut state offshore, New York state offshore, New Jersey state offshore, Delaware state offshore, Maryland state offshore, Virginia state offshore, North Carolina state offshore, South Carolina state offshore, Georgia state offshore, and Florida state Atlantic offshore.
 - b. Northern Gulf of Mexico Offshore: Northern Gulf of Mexico Federal Areas defined by the Universal Transverse Mercator Coordinate System (including areas generally south of the state plane coordinate systems of Louisiana and Texas), Mississippi state offshore, Alabama state offshore, and Florida state Gulf offshore.
 - c. Pacific Offshore: Pacific Federal areas defined by Universal Transverse Mercator Coordinate System, Oregon state offshore, and Washington state offshore.

DOLLAR VALUES

All dollar values presented are expressed in current dollars; i.e., 2002 data are expressed in 2002 dollars, and 1997 data, in 1997 dollars. Consequently, when making comparisons with prior years, users of the data should consider the changes in prices that have occurred.

All dollar values are shown in thousands of dollars.

COMPARABILITY OF THE 1997 AND 2002 ECONOMIC CENSUSES

Both the 2002 Economic Census and the 1997 Economic Census present data based on the North American Industry Classification System (NAICS). There were several revisions to selected industries in the mining sector, for 2002. These changes were due to industries that are now being classified in the construction sector. These changes are:

- 213112 – Construction of field gathering lines on a contract basis
- 213112 – Site preparation and related construction activities on a contract basis
- 213113 – Site preparation and related construction activities on a contract basis
- 213114 – Site preparation and related construction activities on a contract basis
- 213115 – Site preparation and related construction activities on a contract basis

More detailed information of NAICS changes from 1997 to 2002, may be examined at <http://www.census.gov/epcd/naics02/n02ton97.htm>.

In addition, there have been several additional data tables added, which did not exist in 1997. These tables for 2002 include industry-product analysis, e-commerce value of shipments and receipts for services, and leased and nonleased detail employment statistics by subsectors.

RELIABILITY OF DATA

All data compiled for this sector are subject to nonsampling errors. Nonsampling errors can be attributed to many sources: inability to identify all cases in the actual universe; definition and classification difficulties; differences in the interpretation of questions; errors in recording or coding the data obtained; and other errors of collection, response, coverage, processing, and estimation for missing or misreported data.

No direct measurement of these effects has been obtained except for estimation for missing or misreported data, as by the percentages shown in the tables. Precautionary steps were taken in all phases of the collection, processing, and tabulation of the data in an effort to minimize the effects of nonsampling errors. More information on the reliability of the data is included in Appendix C, Methodology.

DISCLOSURE

In accordance with federal law governing census reports (Title 13 of the United States Code), no data are published that would disclose the operations of an individual establishment or company. However, the number of establishments in a specific industry or geographic area is not considered a disclosure; therefore, this information may be released even though other information is withheld. Techniques employed to limit disclosure are discussed at www.census.gov/epcd/ec02/disclosure.htm.

The disclosure analysis for "industry statistics" files is based on the total value of shipments and receipts. When the total value of shipments and receipts cannot be shown without disclosing information for individual companies, the complete line is suppressed except for capital expenditures. If capital expenditures alone is a disclosure, only capital expenditures and cost of supplies statistics are suppressed. Nonetheless, the suppressed data are included in higher-level totals.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

The County Business Patterns program offers annual statistics on the number of establishments, employment, and payroll classified by industry within each county, and Statistics of U.S. Businesses provides annual statistics classified by the employment size of the enterprise, further classified by industry for the United States, and by broader categories for states and metropolitan areas.

CONTACTS FOR DATA USERS

Questions about these data may be directed to the U.S. Census Bureau, Manufacturing & Construction Division, Information Services Center, 301-763-4673 or ask.census.gov.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used with these data:

A	Standard error of 100 percent or more
D	Withheld to avoid disclosing data of individual companies; data are included in higher level totals
F	Exceeds 100 percent because data include establishments with payroll exceeding revenue
N	Not available or not comparable
S	Withheld because estimates did not meet publication standards
X	Not applicable
Z	Less than half the unit shown
a	0 to 19 employees
b	20 to 99 employees
c	100 to 249 employees
e	250 to 499 employees
f	500 to 999 employees
g	1,000 to 2,499 employees
h	2,500 to 4,999 employees
i	5,000 to 9,999 employees
j	10,000 to 24,999 employees
k	25,000 to 49,999 employees
l	50,000 to 99,999 employees
m	100,000 employees or more
p	10 to 19 percent estimated
q	20 to 29 percent estimated
r	Revised
s	Sampling error exceeds 40 percent
nsk	Not specified by kind
-	Represents zero (page image/print only)
(CC)	Consolidated city
(IC)	Independent city

Table 1. Historical Statistics for the Industry: 2002 and 1997

[Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

Industry and year	Companies ¹	All establishments ²	All employees		Production, development, and exploration workers			Value added (\$1,000)	Total cost of supplies (\$1,000)	Total value of shipments and receipts for services (\$1,000)	Capital expenditures (\$1,000)
			For pay period including March 12	Annual payroll (\$1,000)	For pay period including March 12	Annual hours (1,000)	Annual wages (\$1,000)				
211111, Crude petroleum and natural gas extraction 2002.. 1997..	6 296 6 806	7 178 7 784	94 886 100 333	5 036 621 4 968 972	58 628 58 328	109 144 116 793	2 966 426 2 716 562	90 806 008 77 202 492	19 048 015 21 908 937	85 906 216 78 005 625	23 947 807 21 105 804

¹For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

²Includes establishments with payroll at any time during the year.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 2. Industry Statistics for Selected States and Offshore Areas: 2002

[Offshore areas refer to those areas not associated with a state. States that are disclosures or with less than 100 employees are not shown. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographical definitions, see note at end of table. For information on geographic areas followed by *, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

Industry and geographic area	E ¹	All establishments ²		All employees		Production, development, and exploration workers			Value added (\$1,000)	Total cost of supplies (\$1,000)	Total value of shipments and receipts for services (\$1,000)	Capital expenditures (\$1,000)
		Total	With 20 employees or more	For pay period including March 12	Annual payroll (\$1,000)	For pay period including March 12	Annual hours (1,000)	Annual wages (\$1,000)				
211111, Crude petroleum and natural gas extraction												
United States	2	7 178	793	94 886	5 036 621	58 628	109 144	2 966 426	90 806 008	19 048 015	85 906 216	23 947 807
Alabama	1	37	13	1 042	64 411	564	1 287	39 242	1 453 205	131 815	1 308 510	276 510
California	1	215	40	3 666	224 144	2 640	5 392	156 025	3 407 511	1 172 249	4 009 949	569 811
Colorado	2	344	41	4 057	254 900	2 305	4 241	128 796	3 187 910	685 180	2 858 215	1 014 875
Illinois	4	175	11	899	32 210	664	1 005	20 239	188 318	64 589	222 983	29 924
Kansas	3	375	24	2 325	104 281	1 630	2 763	69 346	1 756 333	480 550	2 044 952	191 931
Louisiana	2	425	89	11 270	634 319	7 796	14 783	436 327	18 696 109	4 610 555	15 715 311	7 591 353
Michigan	4	88	16	926	41 363	586	970	24 431	339 076	89 904	361 918	67 062
New Mexico	1	167	20	2 097	118 118	1 265	2 456	73 550	5 642 496	725 647	5 804 810	563 333
Oklahoma	2	1 039	89	9 382	438 850	5 634	9 402	235 685	4 997 767	1 199 248	4 821 981	1 375 034
Pennsylvania	6	145	22	1 629	81 514	1 000	1 884	44 379	551 679	123 623	539 352	135 950
Texas	2	2 794	285	40 408	2 172 312	23 840	44 683	1 158 551	34 579 935	6 968 429	31 907 938	9 640 426
Utah	5	55	14	1 860	56 946	818	2 554	35 585	1 618 799	346 810	1 547 983	417 626
West Virginia	1	210	20	1 720	71 397	1 077	1 537	37 956	925 276	179 014	963 052	141 238
Wyoming	3	180	32	2 553	127 296	1 831	3 407	92 774	2 843 828	767 420	2 762 224	849 024
Offshore Areas not Associated with a State	-	5	4	501	36 626	281	649	23 263	624 379	150 149	631 302	143 226

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data account for 10 percent or more of the figures shown: 1-10 to 19 percent; 2-20 to 29 percent; 3-30 to 39 percent; 4-40 to 49 percent; 5-50 to 59 percent; 6-60 to 69 percent; 7-70 to 79 percent; 8-80 to 89 percent; 9-90 percent or more.

²Includes establishments with payroll at any time during the year.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C. For geographical definitions, see Appendix D.

Table 3. Detailed Statistics by Industry: 2002

[Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Item	Value
211111, Crude petroleum and natural gas extraction	
Companies ¹	number.. 6 296
All establishments ²	number.. 7 178
Establishments with 0 to 19 employees	number.. 6 385
Establishments with 20 to 99 employees	number.. 636
Establishments with 100 employees or more	number.. 157
All employees for pay period including March 12	number.. 94 886
Total compensation	\$1,000.. 6 227 995
Annual payroll	\$1,000.. 5 036 621
Annual fringe benefits not included in payroll	\$1,000.. 1 191 374
Production, development, and exploration workers for pay period including March 12	number.. 58 628
Production, development, and exploration worker annual hours	1,000.. 109 144
Production, development, and exploration worker annual wages	\$1,000.. 2 966 426
Total cost of supplies	\$1,000.. 19 048 015
Supplies used, minerals received, and purchased machinery installed	\$1,000.. 8 324 724
Resales	\$1,000.. 2 098 645
Purchased fuels consumed	\$1,000.. 810 959
Purchased electricity	\$1,000.. 1 339 504
Contract work	\$1,000.. 6 474 183
Quantity of electricity purchased	1,000 kWh.. 26 926 558
Quantity of electricity generated less sold	1,000 kWh.. 254 098
Total other expenses	\$1,000.. 1 692 887
Response coverage ratio ³	percent.. 47
Communications services	\$1,000.. 104 109
Legal services	\$1,000.. 76 449
Accounting, auditing, and bookkeeping services	\$1,000.. 72 587
Advertising and promotional services	\$1,000.. 12 114
All other expenses (not included above)	\$1,000.. 1 427 628
Total value of shipments and receipts for services	\$1,000.. 85 906 216
Primary products value of shipments	\$1,000.. 82 571 843
Secondary products value of shipments and receipts for services	\$1,000.. 1 114 686
Value of resales	\$1,000.. 2 219 687
Value of primary products shipments or services produced in all industries	\$1,000.. 82 799 026
Value of primary products shipments or services produced in this industry	\$1,000.. 82 571 843
Value of primary products shipments or services produced in other industries	\$1,000.. 227 183
Value added	\$1,000.. 90 806 008
Total inventories, end of 2001	\$1,000.. 921 466
Mineral products, crude petroleum, and natural gas liquids inventories	\$1,000.. 399 405
Supplies, parts, fuels, etc., inventories	\$1,000.. 522 061
Total inventories, end of 2002	\$1,000.. 1 042 620
Mineral products, crude petroleum, and natural gas liquids inventories	\$1,000.. 486 981
Supplies, parts, fuels, etc., inventories	\$1,000.. 555 639
Gross book value of depreciable/depletable assets at beginning of year	\$1,000.. -
Capital expenditures (except land and mineral rights)	\$1,000.. 23 947 807
Capital expenditures for buildings, structures, machinery, and equipment (new and used)	\$1,000.. 5 724 488
Capital expenditures for mineral exploration and development	\$1,000.. 18 223 319
Capital expenditures for mineral land and rights	\$1,000.. -
Deductions from depreciable/depletable assets during year	\$1,000.. -
Gross book value of depreciable/depletable assets at end of year	\$1,000.. -
Total depreciation/depletion charges during year	\$1,000.. -
Total rental payments during year	\$1,000.. 1 628 876
Buildings and other structures	\$1,000.. 431 100
Machinery and equipment	\$1,000.. 1 197 776
Lease rents	\$1,000.. -
Expensed mineral exploration, development, land, and rights	\$1,000.. 8 365 264

¹For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

²Includes establishments with payroll at any time during the year.

³A response coverage ratio is derived for this item by calculating the ratio of the employment for those establishments that reported this item to the total employment for all establishments classified in this industry.

Note 1: The amounts shown for other expenses reflect only those services that establishments purchase from other companies.

Note 2: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 4. Industry Statistics by Employment Size: 2002

[Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

Employment size class	E ¹	All establishments ²	All employees		Production, development, and exploration workers			Value added (\$1,000)	Total cost of supplies (\$1,000)	Total value of shipments and receipts for services (\$1,000)	Capital expenditures (\$1,000)
			For pay period including March 12	Annual payroll (\$1,000)	For pay period including March 12	Annual hours (1,000)	Annual wages (\$1,000)				
211111, Crude petroleum and natural gas extraction											
All establishments	2	7 178	94 886	5 036 621	58 628	109 144	2 966 426	90 806 008	19 048 015	85 906 216	23 947 807
Establishments with—											
0 to 4 employees	5	4 900	7 625	304 374	5 474	8 160	178 102	3 733 335	710 900	3 718 217	726 018
5 to 9 employees	1	805	5 440	245 268	3 245	5 112	146 873	4 235 945	1 073 422	4 321 270	988 097
10 to 19 employees	1	680	9 144	421 841	5 519	8 978	244 645	6 566 706	1 439 908	6 162 725	1 843 889
20 to 49 employees	1	445	13 347	693 998	7 992	14 239	365 767	12 800 792	2 692 090	12 207 442	3 285 440
50 to 99 employees	1	191	13 213	743 746	8 418	16 207	436 161	15 373 405	2 852 118	14 686 976	3 538 547
100 to 249 employees	1	102	15 450	949 370	9 664	19 132	550 191	17 367 277	3 936 996	15 673 602	5 630 671
250 to 499 employees	1	37	12 150	717 555	7 570	16 517	447 022	13 393 610	2 884 218	13 133 449	3 144 379
500 to 999 employees	6	12	8 534	399 677	5 272	10 755	265 676	9 576 676	2 883 497	8 157 210	4 302 963
1,000 to 2,499 employees	1	5	i	D	D	D	D	D	D	D	D
2,500 employees or more	1	1	h	D	D	D	D	D	D	D	D
Administrative records ³	9	4 177	6 325	247 083	4 677	6 975	143 410	1 640 421	320 087	1 714 036	246 472

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Includes establishments with payroll at any time during the year.

³Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. Data are also included in respective size classes shown.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 5. Industry Statistics by Type of Operation: 2002

[Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

Industry and type of operation	All establishments ¹		All employees		Production, development, and exploration workers			Value added (\$1,000)	Total value of shipments and receipts for services (\$1,000)
	Total	With 20 employees or more	For pay period including March 12	Annual payroll (\$1,000)	For pay period including March 12	Annual hours (1,000)	Annual wages (\$1,000)		
211111, Crude petroleum and natural gas extraction									
All establishments	7 178	793	94 886	5 036 621	58 628	109 144	2 966 426	90 806 008	85 906 216
Producing establishments	7 159	790	94 631	5 023 938	58 469	108 802	2 958 984	90 840 232	85 906 216
Mines or wells only	7 159	790	94 631	5 023 938	58 469	108 802	2 958 984	90 840 232	85 906 216
Underground mines	-	-	-	-	-	-	-	-	-
Open-pit mines	-	-	-	-	-	-	-	-	-
Combination mines, well operations, or other types of mines	7 159	790	94 631	5 023 938	58 469	108 802	2 958 984	90 840 232	85 906 216
Mines with preparation plants	-	-	-	-	-	-	-	-	-
Underground mines	-	-	-	-	-	-	-	-	-
Open-pit mines	-	-	-	-	-	-	-	-	-
Combination mines or other types of mines	-	-	-	-	-	-	-	-	-
Separately operated preparation plants	-	-	-	-	-	-	-	-	-
Undistributed ²	-	-	-	-	-	-	-	-	-
Nonproducing establishments	19	3	255	12 683	159	342	7 442	-34 224	-

¹Includes establishments with payroll at any time during the year.

²Includes data for establishments that were not possible to classify based on information available.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 6a. Products or Services Statistics: 2002 and 1997

[Includes quantity and value of products or receipts for services of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Product or service code	Product or service	Quantity of production for all purposes	Product shipments or receipts for services	
			Quantity	Value (\$1,000)
211111	Crude petroleum and natural gas extraction	2002.. X 1997.. X	X X	82 799 026 77 300 748
2111111	Crude petroleum, including lease condensate (volumes corrected to 60 degrees F) shipped	2002.. X 1997.. X	X X	30 713 805 34 998 081
21111111	Crude petroleum, including lease condensate (volumes corrected to 60 degrees F) shipped	2002.. X 1997.. X	X X	30 713 805 34 998 081
211111111	Crude petroleum, including lease condensate (volumes corrected to 60 degrees F) shipped	mil bbl. 2002.. X 1997.. X	1 319.3 1 990.7	30 713 805 34 998 081
2111111121	Crude petroleum shipped from stripper well leases	mil bbl. 2002.. X 1997.. X	230.7 108.1	X X
2111111131	Lease condensate produced (volumes corrected to 60 degrees F)	mil bbl. 2002.. X 1997.. X	119.1 147.4	X X
2111113	Natural gas	2002.. X 1997.. X	X X	39 413 752 34 514 366
21111131	Natural gas (volumes adjusted to pressure base of 14.73 lb absolute at 60 degrees F) shipped to consumers	2002.. X 1997.. X	X X	39 413 752 34 514 366
2111113100	Natural gas (volumes adjusted to pressure base of 14.73 lb absolute at 60 degrees F) shipped to consumers	bil cu ft. 2002.. X 1997.. X	P13 420.4 14 606.2	39 413 752 34 514 366
211111W	Crude petroleum and natural gas extraction, nsk	2002.. X 1997.. X	X X	12 671 469 7 788 301
211111WY	Crude petroleum and natural gas extraction, nsk	2002.. X 1997.. X	X X	12 671 469 7 788 301
211111WYWT	Crude petroleum and natural gas extraction, nsk	2002.. X 1997.. X	X X	12 671 469 7 788 301

Note 1: For some establishments, data have been estimated from central unit values that are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: p-10 to 19 percent estimated; q-20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by S.

Note 2: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 6b. **Product Class Shipments or Receipts for Services for Selected States and Offshore Areas: 2002 and 1997**

[Product classes covered are those that are economically significant and whose production is geographically dispersed, provided dispersion is not approximated by data in Table 2. Also, product classes are not shown if they are miscellaneous or "not specified by kind" classes. Statistics for some states are withheld because they are either less than \$2 million in product class shipments or they disclose data for individual companies in 2002. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographic definitions, see note at end of table. For information on geographic areas followed by *, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

Product or service class code	Product or service class and geographic area	Value of product shipments or receipts for services (\$1,000)	
2111111	Crude petroleum, including lease condensate (volumes corrected to 60 degrees F) shipped		
	United States.....	2002.. 30 713 805 1997.. 34 998 081	
	Alabama.....	2002.. 160 285 1997.. N	
	Arkansas.....	2002.. 68 382 1997.. N	
	California.....	2002.. 3 069 716 1997.. 5 890 923	
	Colorado.....	2002.. 474 328 1997.. 484 024	
	Illinois.....	2002.. 121 989 1997.. N	
	Indiana.....	2002.. 38 961 1997.. N	
	Kansas.....	2002.. 254 674 1997.. 438 882	
	Kentucky.....	2002.. 5 824 1997.. N	
	Louisiana.....	2002.. 5 860 818 1997.. 5 791 859	
	Michigan.....	2002.. 53 557 1997.. 151 523	
	Mississippi.....	2002.. 210 693 1997.. 151 970	
	Montana.....	2002.. 159 956 1997.. 147 581	
	New Mexico.....	2002.. 800 810 1997.. 994 166	
	North Dakota.....	2002.. 307 354 1997.. 367 638	
	Ohio.....	2002.. 269 087 1997.. 96 450	
	Oklahoma.....	2002.. 988 604 1997.. 1 020 258	
	Pennsylvania.....	2002.. 24 972 1997.. N	
	Texas.....	2002.. 8 230 104 1997.. 7 955 373	
	Utah.....	2002.. 1 219 477 1997.. 323 203	
	Wyoming.....	2002.. 903 659 1997.. 932 778	
	North Gulf of Mexico Offshore Area.....	2002.. 227 772 1997.. N	
	2111113	Natural gas	
		United States.....	2002.. 39 413 752 1997.. 34 514 366
		Alabama.....	2002.. 1 019 166 1997.. N
		Arkansas.....	2002.. 258 331 1997.. N
		California.....	2002.. 208 395 1997.. 842 641
		Colorado.....	2002.. 1 506 344 1997.. 836 993
		Illinois.....	2002.. 2 677 1997.. N
		Kansas.....	2002.. 1 152 228 1997.. 1 195 788
		Kentucky.....	2002.. 152 101 1997.. N
		Louisiana.....	2002.. 8 043 806 1997.. 9 402 251
Michigan.....		2002.. 103 466 1997.. 355 622	
Mississippi.....		2002.. 175 527 1997.. 91 725	
Montana.....		2002.. 81 293 1997.. 61 683	
New Mexico.....		2002.. 4 692 963 1997.. 2 264 113	
New York.....		2002.. 3 843 1997.. N	
Ohio.....		2002.. 342 035 1997.. 322 598	
Oklahoma.....		2002.. 2 718 006 1997.. 2 225 956	
Pennsylvania.....		2002.. 209 129 1997.. N	
Texas.....		2002.. 16 033 958 1997.. 11 362 711	

See footnotes at end of table.

Table 6b. **Product Class Shipments or Receipts for Services for Selected States and Offshore Areas: 2002 and 1997—Con.**

[Product classes covered are those that are economically significant and whose production is geographically dispersed, provided dispersion is not approximated by data in Table 2. Also, product classes are not shown if they are miscellaneous or "not specified by kind" classes. Statistics for some states are withheld because they are either less than \$2 million in product class shipments or they disclose data for individual companies in 2002. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographic definitions, see note at end of table. For information on geographic areas followed by *, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

Product or service class code	Product or service class and geographic area	Value of product shipments or receipts for services (\$1,000)
2111113	Natural gas—Con.	
	United States—Con.	
	Utah	2002.. 220 014 1997.. 274 110
	Virginia	2002.. 14 639 1997.. N
	West Virginia	2002.. 597 984 1997.. N
	Wyoming	2002.. 1 122 157 1997.. 1 677 611
	North Gulf of Mexico Offshore Area	2002.. 215 668 1997.. N

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C. For geographical definitions, see Appendix D.

Table 7. Selected Supplies, Minerals Received for Preparation, Purchased Machinery, and Fuels Consumed by Type: 2002 and 1997

[Includes quantity and cost of supplies and fuels consumed or put into production by establishments classified only in this industry. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Supply or fuel code	Supply or fuel consumed	Quantity	Delivered cost (\$1,000)
211111	Crude petroleum and natural gas extraction		
	Supplies consumed by type		
33300007	Purchased machinery installed, including mobile loading, transportation, and other equipment installed at the operation	2002.. X 1997.. X	2 980 498 3 829 117
33300009	Parts and attachments for mining, mineral preparation, construction, and conveying machinery and equipment	2002.. X 1997.. X	472 582 689 404
32500075	Industrial chemicals (including acidizing materials), excluding drilling fluids	2002.. X 1997.. X	557 531 1 121 428
32599803	Drilling fluids (drilling mud and drilling mud materials; mud thinners, thickeners, and purifiers)	2002.. X 1997.. X	783 735 664 132
32419100	Lubricating oils and greases (including hydraulic oils)	2002.. X 1997.. X	58 954 88 022
32731001	Cement	2002.. X 1997.. X	358 189 371 819
33120059	Steel shapes and forms (excluding castings and forgings)	2002.. X 1997.. X	1 306 075 1 369 649
33290013	Valves and pipe fittings	2002.. X 1997.. X	127 855 301 906
33300005	Drill bits and reamers	2002.. X 1997.. X	147 121 195 644
00999828	Water (purchased)	2002.. X 1997.. X	79 736 71 595
00970098	All other supplies	2002.. X 1997.. X	565 299 615 125
00973000	Undistributed minerals, purchased machinery, parts, attachments, and supplies used	2002.. X 1997.. X	897 114 1 660 701
	Fuels consumed by type		
32411017	Distillate (light) grade numbers 1, 2, 4, and light diesel fuel used as a fuel	1,000 bbl . 2002.. 3 716.4 1997.. 2 017.8	109 965 61 219
32411019	Residual (heavy) grade numbers 5 and 6 and heavy diesel fuel used as a fuel	1,000 bbl . 2002.. S 1997.. 648.6	20 436 20 549
21111015	Gas (natural, manufactured, and mixed) used as a fuel	bil cu ft . 2002.. P102.4 1997.. 169.7	341 552 459 812
32411015	Gasoline used as a fuel	mil gal . 2002.. S 1997.. 98.3	15 575 105 255
21111101	Crude petroleum produced and used in the same plant as a fuel	mil bbl . 2002.. D 1997.. .6	X X
21111003	Natural gas produced and used in the same plant as a fuel	bil cu ft . 2002.. 255.3 1997.. 715.9	X X
00960018	Other fuels (liquefied petroleum gas, coke, wood, etc.)	2002.. X 1997.. X	46 407 38 537
00974000	Undistributed fuels	2002.. X 1997.. X	268 957 217 570

Note 1: For some establishments, data have been estimated from central unit values that are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: p-10 to 19 percent estimated; q-20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by S.

Note 2: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Appendix A.

Explanation of Terms

PAYROLL

This item includes the gross earnings of all employees on the payrolls of operating mining establishments paid in the calendar year. Respondents were told they could follow the definition of payrolls used for calculating the federal withholding tax. It includes all forms of compensation, such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick-leave pay, and compensation in kind, prior to such deductions as employees' social security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of corporations; it excludes payments to proprietors or partners of unincorporated concerns. Also excluded are payments to members of Armed Forces and pensioners carried on the active payrolls of mining establishments.

The census definition of payrolls is identical to that recommended to all federal statistical agencies by the Office of Management and Budget. It should be noted that this definition does not include employers' social security contributions or other nonpayroll labor costs, such as employees' pension plans, group insurance premiums, and workers' compensation.

Also collected, but not included in payroll, are employers' total supplemental labor costs (those required by federal and state laws and those incurred voluntarily or as part of collective bargaining agreements).

BEGINNING- AND END-OF-YEAR INVENTORIES

Respondents were asked to report their beginning-of-year and end-of-year inventories at cost or market. Effective with the 1982 Economic Census, this change to a uniform instruction for reporting inventories was introduced for all sector reports. Prior to 1982, respondents were permitted to value inventories using any generally accepted accounting method (FIFO, LIFO, market, to name a few). Beginning in 1982, LIFO users were asked to first report inventory values prior to the LIFO adjustment and, then, to report the LIFO reserve and the LIFO value after adjustment for the reserve.

Inventory data by type

Total inventories and two detailed components (1) mined or quarried products, crude petroleum, and natural gas liquids and (2) supplies, parts, fuels, etc., were collected.

CAPITAL EXPENDITURES

This item includes permanent additions and major alterations as well as new and used machinery and equipment used for replacement and additions to plant capacity for which depreciation, depletion, or Office of Minerals Exploration accounts are ordinarily maintained. Reported capital expenditures include work done on contract, as well as by the mine forces. Totals for expenditures include the costs of assets leased from other concerns through capital leases. In addition, these data include expenditures made during the year for development and exploration of mineral properties. Excluded are expenditures for land and cost of maintenance and repairs charged as current operating expenses and capital expenditures for mineral land and rights. For any equipment or structure transferred for the use of the reporting establishment by the parent company or one of its subsidiaries, the value at which it was transferred to the establishment was to be reported. If an establishment changed ownership during the year, the cost of the fixed assets (building and equipment) was to be reported.

Capital expenditures for mineral land and rights

This item includes all capital expenditures for acquiring either undeveloped or developed acreage. Included are all capitalized lease bonuses and any other outlays necessary to acquire leases, mineral rights, fee lands incident to mineral exploration, development, or production.

PURCHASED SERVICES

Included in the cost of purchased services for communication is the actual expense incurred or payable during the year for any type of communication. Such types of communication include telephone, data transmission, telegraph, Internet, connectivity, FAX, telex, photo transmission, paging, cellular telephone, online access and related services, etc.

Included in the cost of selected purchased services for legal services are payments made to other companies for these services that were paid directly by the establishment. Excluded are the salaries paid to employees of the establishment for these services.

Included in the cost of selected accounting, auditing, and bookkeeping services are payments made to other companies for these services that were paid directly by the establishment. Excluded are the salaries paid to employees of this establishment for these services.

Included in the cost of selected advertising and promotional services are payments made to other companies for these services that were paid directly by the establishment. These include payments for printing, media coverage, and other advertising services and materials. Excluded are the salaries paid to employees of this establishment for these services.

Included in the all other expenses are payments made to other companies for services not included in communication, legal, accounting, auditing, bookkeeping, and advertising and promotional services previously mentioned that were paid directly by the establishment. Excluded are the salaries paid to employees of this establishment for these services.

Response coverage ratio

A response coverage ratio is a measure of the extent to which respondents report for an item. The estimate is derived by calculating the ratio of the employment for those establishments that reported this item to the total employment for all establishments classified in this industry.

COST OF SUPPLIES

This term refers to direct charges actually paid or payable for items consumed or put into production during the year, including freight charges and other direct charges incurred by the establishment in acquiring these items. It includes the cost of these items whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year. Included are items charged to both current and capital accounts.

Included in this item are:

1. Costs of supplies used, minerals received for preparation, and purchased machinery installed. Includes all major supplies that were important parts of the cost of production, exploration, and development of a particular industry. Also included are all new and used machinery, equipment, and parts installed whether purchased or received from other establishments of the same company.
2. Cost of products bought and sold in the same condition.
3. Cost of purchased fuels consumed for heat, power, or the generation of electricity. Includes the cost of fuels consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.

-
4. Cost of purchased electricity. The cost of purchased electric energy represents the amount actually used during the year for heat and power. In addition, information was collected on the quantity of electric energy purchased and also the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other establishments of the same company.
 5. Cost of contract work. This term applies to the cost of all work done for an establishment by others. It includes payments for supplies and equipment furnished by the contractor incidental to the contract work, and cost of services performed by others in the operation or development of the establishment. The term "Contract Work" refers to the fee a company pays to another company to perform a service. It excludes payments to miners paid on a per ton, car, yard, or footage basis. Also excluded are payments to suppliers who mined for their own account on property owned or leased by them and who paid royalties either directly or indirectly on the minerals mined.

Specific supplies used, minerals received for preparation, and purchased machinery installed

In addition to the total cost of supplies, purchased machinery installed, etc., which every establishment was required to report, information also was collected on the consumption of the major supplies used in mining. The inquiries were restricted to those supplies which were important parts of the cost of production, exploration, and development in a particular industry and for which cost information was available from the establishment's records. Except for the crude petroleum and natural gas and the support activities for mining industries, figures were also obtained on crude minerals mined at the establishment, received from other establishments of the company or purchased from others, and received for preparation on a custom or toll basis. If less than \$25,000 of a listed supply was consumed by an establishment, the cost data could be reported in the "All other supplies," census supply code 00970098. Also, the cost of supplies for small establishments for which administrative records or short forms were used was imputed into the "Undistributed – minerals, purchased machinery, parts.....," census supply code 00973000.

Specific fuels consumed

For most industries, separate quantity and cost figures are shown for purchased coal, distillate fuel oil, residual fuel oil, gas, gasoline, and a cost figure for other fuels. Data also were obtained on the quantity of crude petroleum, natural gas, and coal produced and consumed at the same establishment for heat and power. The cost of fuels for small establishments for which administrative records or short forms were used was imputed into the "Undistributed fuels", census fuel code 00974000.

EXPENSED MINERAL EXPLORATION, DEVELOPMENT, LAND AND RIGHTS

This item includes all expenses for mineral properties, exploration, and development charged to current accounts. Included are all supplies, machinery, equipment, parts, fuels, power, etc., used for development or exploration and charged to current operating expenses. Also included are royalty payments, acquisition costs for mineral land and rights that were not associated with exploration or development activity, and the cost of maintenance and repairs associated with exploration or development activity and charged to current accounts.

DEPRECIATION AND/OR DEPLETION CHARGES

This item includes depreciation, depletion, and amortization charged during the year against assets. Depreciation charged against assets acquired since the beginning of the year and against assets sold or retired during the year are components of this category. Respondents were requested to make certain that they did not report accumulated depreciation or depletion.

NUMBER OF EMPLOYEES

These individuals comprise of all full-time and part-time employees on the payrolls of establishments during any part of the pay period that were the 12th of March. Included are all persons on paid sick leave, paid holidays, and paid vacations during this pay period. A distribution of those

employees who work in units that serve manufacturing, distribution, or construction operations also carried on at the mining establishment in addition to the minerals operation is also included. Officers of corporations are included as employees; not included are proprietors and partners of unincorporated firms.

The (all employees) number is the number of production, development, and exploration workers plus the number of all other employees on the payrolls of establishments during any part of the pay period that were the 12th of March.

The (production, development, and exploration workers) number includes workers (up through the working-supervisor level) engaged in manual work (using tools, operating machines, hauling materials, loading and hauling products out of the mine, and caring for mines, plants, mills, shops, or yards). Included are exploration work, mine development, storage, shipping, maintenance, repair, janitorial and guard services, auxiliary production for use at establishments (e.g., power plant), recordkeeping, and other services closely associated with these production operations at the establishment covered by the report. Gang and straw bosses and supervisors who performed manual labor are included, as are employees paid on either a time- or piece-rate basis. Also included are miners paid on a per ton, car, or yard basis and persons engaged by them and paid out of the total amount received by these miners. Employees above the working-supervisor level and those of contractors are excluded from this item.

The (other employees) number covers nonproduction employees of the mining establishment including those engaged in the following activities: supervision above the working-supervisor level, sales, highway trucking or other transportation (by employees not entering mines or pits), advertising, credit, collection, clerical and routine office functions, executive, purchasing, financing, legal, personnel (including cafeteria, medical, etc.), and professional (engineers, geologists, etc.) and technical work. Also included are employees on the payroll of the mining establishment engaged in the construction of major additions or alterations utilized as a separate work force. Workers engaged in regular maintenance and repair operations are not included here but are classified as production, development, and exploration workers. Employees of contractors are excluded from this item.

TOTAL FRINGE BENEFITS

This item is the employer's costs for social security tax, unemployment tax, workmen's compensation insurance, state disability insurance pension plans, stock purchase plans, union-negotiated benefits, life insurance premiums, and insurance premiums on hospital and medical plans for employees.

Fringe benefits include both legally required expenditures and payments for voluntary programs. The legally required portion consists primarily of federal old age and survivors' insurance, unemployment compensation, and workers' compensation. Payments for voluntary programs include all programs not specifically required by legislation, whether they were employer initiated or the result of collective bargaining. They include the employer portion of such plans as insurance premiums, premiums for supplemental accident and sickness insurance, pension plans, supplemental unemployment compensation, welfare plans, stock purchase plans on which the employer payment is not subject to withholding tax, and deferred profit-sharing plans, and payments made directly to retired employees or their survivors that do not pass through a fund. They exclude such items as losses on company-operated cafeterias and snack bars, cost of in-plant medical services, cost of free parking lots, discounts on employee purchases, cost of uniforms and other work clothing supplied to employees and similar expenditures, and wages and salaries reported in payroll (holidays, vacations, sick pay, bonuses, jury pay, costs for training, and partially subsidized housing and safety).

GROSS BOOK VALUE OF DEPRECIABLE AND/OR DEPLETABLE ASSETS AT BEGINNING OF YEAR (BOY) AND END OF YEAR (EOY)

Total value of depreciable and/or depletable assets is collected on all census forms except for the crude petroleum and natural gas form.

It shows the value of depreciable and/or depletable assets for the beginning of year (BOY) and end of year (EOY). The data encompass all depreciable and/or depletable assets on the books of establishments. The values shown (book value) represent the actual cost of assets at the time they were acquired, including all costs incurred in making the assets usable (such as transportation and installation). Included are all buildings, structures, machinery, equipment (production, office, and transportation equipment), capitalized mineral exploration and development, and mineral land and rights for which depreciation, amortization, or depletion reserves are maintained.

The definition of depreciable and/or depletable assets is consistent with the definition of capital expenditures. For example, expenditures include actual capital outlays during the year rather than the final value of equipment put in place and buildings completed during the year.

Accordingly, the value of assets at the end of the year includes the value of construction in progress.

In addition, respondents were requested to make certain that assets at the beginning of the year plus capital expenditures, less retirements, equaled assets at the end of the year.

LEASE RENTS

This item represents the lease rents paid by the establishment for mineral properties. It was not collected on the short form or for the crude petroleum and natural gas, natural gas liquids, and the support activities for mining industries.

ESTABLISHMENT

An establishment is a single physical location where business is conducted or where services or industrial operations are performed. Data in this sector includes those establishments where mineral operations are performed. A separate report was required for each mining establishment of firms with one employee or more that were in operation at any time during the year.

An establishment not in operation for any portion of the year was requested to return the report form with the proper notation in the "Operational Status" section of the form. In addition, the establishment was requested to report data on any employees, capital expenditures, inventories, or shipments from inventories during the year.

For the crude petroleum and support activities for mining industries, the basis for reporting is different from the establishments basis used for other types of mining. Firms operating oil and gas wells, drilling wells, or exploring for oil and gas for their own account were required to submit a separate report for each state or offshore area adjacent to a state in which it conducted such activities. Firms that performed contract services for oil and gas field operation or for mining establishments were required to submit one report covering all such activities in the United States and to include information on receipts for services and production-worker wages and hours by state. These consolidated reports were then allocated to state establishments based on the data reported at the state level.

Company

A company or ("enterprise") is comprised of all the establishments that operate under the ownership or control of a single organization. A company may be a business, service, or membership organization; consist of one or several establishments; and operate at one or several locations. It includes all subsidiary organizations, all establishments that are majority-owned by the company or any subsidiary, and all the establishments that can be directed or managed by the company or any subsidiary.

A company may have one or many establishments. Examples include product and service sales offices (retail and wholesale), industrial production plants, processing or assembly operations, mines or well sites, and support operations (such as an administrative office, warehouse, customer service center, or regional headquarters). Each establishment should receive, complete, and return a separate census form.

If the company operated at different physical locations, even if the individual locations were producing the same mineral product, a separate report was requested for each location. If the company operated in two or more distinct lines of mining at the same location, a separate report was requested for each activity.

PRODUCT CODES AND CLASSES OF PRODUCTS

NAICS United States industries are identified by a six-digit code. The longer code accommodates the large number of sectors and allows more flexibility in designing subsectors. Each product or service is assigned a ten-digit code. The product coding structure represents an extension by the Census Bureau of the six-digit industry classifications of the manufacturing and mining sectors. The classification system operates so that the industrial coverage is progressively narrower with the successive addition of digits.

As in previous censuses, data were collected for most industries on the quantity and value of individual products shipped. Since the 1997 census programs, information is collected on the output of almost 10,000 individual product items.

In the mining sector for 2002, there are 3 subsectors (three-digit NAICS), 5 industry groups (four-digit NAICS), 10 NAICS industries (five-digit NAICS) that are comparable with Canadian and Mexican classification, and 29 U.S. industries (six-digit NAICS). Product classes and products of the mining industries have been assigned codes based on the industry from which they originate. There are 63 product classes (seven-digit codes) and 136 ten-digit product codes. The ten-digit products are considered the primary products of the industry with the same first six digits.

For the 2002 Economic Census — Mining, all establishments were classified in particular industries based on the products they produced. If an establishment made products of more than one industry, it was classified in the industry with the largest product value.

Establishments frequently make products classified both in their industry (primary products) and other industries (secondary products). Industry statistics (employment, payroll, value added by mining, value of shipments and receipts for services, etc.) reflect the activities of the establishments that may make both primary and secondary products. Product statistics, however, represent the output of all establishments without regard for the classification of the producing establishment. For this reason, when relating the industry statistics, especially the value of shipments and receipts for services, to the product statistics, the composition of the industry's output should be considered.

The list of products for which separate information was collected was prepared after consultation with industry and government representatives. Comparability with previous figures was given considerable weight in the selection of product categories, so that comparable 1997 information is presented for most products.

Typically, both quantity and value of shipments and receipts for services information were collected. However, if quantity was not significant or could not be reported by mining establishments, only value of shipments and receipts for services was collected.

Shipments include both commercial shipments and transfers of products to other plants of the same company.

PRODUCTION, DEVELOPMENT, AND EXPLORATION WORKER HOURS

This item covers all hours worked or paid for at the establishment, including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacations, holidays, or sick leave when the employee was not at the establishment. Excluded are hours worked by employees of contractors and hours of proprietors or partners.

QUANTITY OF ELECTRICITY PURCHASED FOR HEAT AND POWER

Data on the quantity and cost of purchased electric energy were collected on all census forms, except for the short forms. In addition, information is collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.

RENTAL PAYMENTS

Total rental payments are collected on all census forms. This item includes rental payments for the use of all items for which depreciation reserves would be maintained, if they were owned by the establishment, e.g., structures and buildings, and production, office, and transportation equipment. Excluded are royalties and other payments for the use of intangibles and depletable assets.

When an establishment of a multiestablishment company was charged rent by another part of the same company for the use of assets owned by the company, it was instructed to exclude that cost from rental payments.

However, the book value (original cost) of these company-owned assets was to be reported as assets of the establishment at the end of the year.

If there were assets at an establishment rented from another company and the rents were paid centrally by the head office of the establishment, the company was instructed to report these rental payments as if they were paid directly by the establishment.

RETIREMENTS OF DEPRECIABLE AND/OR DEPLETABLE ASSETS

Included in this item is the gross value of assets sold, retired, scrapped, destroyed, abandoned, etc., during the calendar year at their acquisition cost. It also includes the value of assets transferred to other establishments from a company at their acquisition cost, rather than current market value. Excluded are the charges to depreciation or amortization reserves. When a complete operation or establishment changed ownership, the respondent was instructed to report the value of the assets sold at the original cost as recorded in the books of the seller. The respondent also was requested to report retirements of equipment or structures owned by a parent company that the establishment was using as if it were a tenant.

VALUE ADDED

This measure of mining activity is derived by subtracting the cost of supplies, minerals received for preparation, purchased machinery installed, purchased fuel, purchased electricity, and contract work from the sum of the value of shipments and receipts for services (mining products plus receipts for services rendered) and capital expenditures. The result of this calculation is adjusted by the addition of value added by merchandising operations (i.e., the difference between the sales value and the cost of products sold without further processing).

“Value added” avoids the duplication in the figure for value of shipments and receipts for services that results from the use of products of some establishments as supplies, energy sources, or materials by others. Moreover, it provides a measure of value added not only in mineral production but also in the development of mineral properties. Value added is considered to be the best value measure available for comparing the relative economic importance of mining among industries and geographic areas.

VALUE OF SHIPMENTS AND RECEIPTS FOR SERVICES

This item covers the net selling values, f.o.b. mine or plant after discounts and allowances (exclusive of freight and excise taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts, such as installation and repair, sales of scrap, and sales of products bought and sold without further processing. Included are all products physically shipped by the establishments, whether sold, transferred to other plants of the same company, or shipped on consignment. For products transferred to other establishments of the same company, or prepared on a custom or toll basis, companies were requested to report the estimated value, not merely the cost of producing the product.

In the case of multiunit companies, the mineral operation was requested to report the value of products transferred to other establishments of the same company at full economic or commercial value, including not only the direct cost of production but also a reasonable proportion of “all other costs” (including company overhead) and profit.

In addition to the value for NAICS defined products, aggregates of the following categories of miscellaneous receipts are reported as part of a total establishment's value of shipments and receipts for services:

1. Receipts for services — receipts for work or services that an establishment performed for others.
2. Value of resales — sales of products brought and sold without further processing.
3. Other miscellaneous receipts — such as repair work, installation, sales of scrap, etc.

Industry primary product value of shipments and receipts for services represents one of the three components of value of shipments and receipts for services. These components are:

1. Primary products value of shipments and receipts for services.
2. Secondary products value of shipments and receipts for services.
3. Value of resales.

The term "Value of primary products shipments or services produced in this industry" is used in this publication and refers to the same data.

An establishment is classified in a particular NAICS industry, if its shipments of primary products of that industry exceed in value its shipments of the products of any other single industry.

An establishment's value of shipments and receipts for services include those products assigned to an industry (primary products), those considered primary to other industries (secondary products), receipts for services and miscellaneous activities, and the value of resales.

Value of product shipments represents the total value of all products shipped that are classified as primary to an industry and includes those that were shipped by all mining and manufacturing establishments regardless of their industry classification.

Duplication in cost of supplies, etc., and value of shipments and receipts for services

The aggregate of the cost of supplies, etc., and value of shipments and receipts for services figures for industry groups and all mining industries includes some duplication since the products of some industries are used as supplies by others. Some duplication exists because of the inclusion of minerals transferred from one establishment to another for mineral preparation or resale. Duplication may also exist within the products of some individual industries where minerals shipped for preparation are also reported as the prepared product by another establishment.

Appendix B.

NAICS Codes, Titles, and Descriptions

211111 CRUDE PETROLEUM AND NATURAL GAS EXTRACTION

This U.S. industry group comprises establishments primarily engaged in the following:

1. the exploration, development, and/or the production of petroleum or natural gas from wells in which the hydrocarbons will initially flow or can be produced using normal pumping techniques or
2. the production of crude petroleum from surface shales or tar sands or from reservoirs in which the hydrocarbons are semisolids.

Establishments in this industry operate oil and gas wells on their own account or for others on a contract or fee basis.

Appendix C.

Methodology

SOURCES OF THE DATA

The mining sector includes approximately 25,000 establishments. This number includes those industries in the North American Industry Classification System (NAICS) definition of mining. The amount of information requested from mining establishments was dependent upon a number of factors. The more important consideration was the size of the company.

Establishments in the 2002 Economic Census are divided into those sent report forms and those not sent report forms. The coverage of and the method of obtaining census information from each are described below:

1. Establishments sent a report form:
 - a. Large and medium size establishments. Approximately 48 percent of all mining establishments were included in this group. A variable cutoff, based on administrative-record payroll data and determined on an industry-by-industry basis, was used to select those establishments that were to receive 1 of the 15 economic census — mining regular forms. The first seven pages, requesting establishment data for items, such as employment and payroll, costs, assets, and capital expenditures, were fairly standard although some variation occurred depending on the industries collected on the form. The remaining pages of the form contained product, supply, fuel, and special inquiries. The diversity of the mining activities necessitated the use of several forms to canvass the 29 mining industries.
 - b. Small single-establishment companies. This group included approximately 12 percent of all mining establishments. For those industries where application of the variable cutoff for administrative-record cases resulted in a large number of small establishments being included in the mail canvass, an abbreviated or short form was used. Establishments in the crushed stone, sand and gravel, and crude petroleum and natural gas industries with 5 to 19 employees received 1 of 2 versions of the short form. The form requested summary product and material data and totals, but no details on payrolls, cost of supplies and fuels, assets, and capital expenditures.

Use of the short form has no adverse effect on published totals for the industry statistics, because the same data were collected on the short form as on the long form. However, detailed information on products, supplies, and fuels was not collected on the short form; thus, its use would increase the value of the “not specified by kind” (nsk) categories.

2. Establishments not sent a report form:
 - a. Small single-establishment companies not sent a report form. Approximately 40 percent of the mining establishments were small single-establishment companies that were excused from filing a census report. Selection of these establishments was based on two factors: annual payroll and the Census Bureau’s ability to assign the correct six-digit NAICS industry classification to the establishment. For each six-digit NAICS industry code, an annual payroll cutoff was determined. These cutoffs were derived so that the establishments with payroll less than the cutoff were expected to account for no more than 3 percent of the value of shipments and receipts for the industry. Generally, all single-establishment companies with less than 5 employees were excused, while all establishments with more than 20 employees were mailed forms. Establishments below the cutoff that could not be directly assigned a six-digit NAICS code were mailed a classification report that requested information for assigning NAICS industry codes. Establishments below the cutoff that could be

directly assigned a six-digit NAICS code were excused from filing any report. For below cut-off establishments, information on the physical location, payroll, and receipts was obtained from the administrative records of other federal agencies under special arrangements that safeguarded their confidentiality.

Estimates of data for these small establishments were developed using industry averages in conjunction with the administrative information. The value of shipments and receipts, cost of supplies, etc., and cost of fuels were not distributed among specific products, supplies, and fuels for these establishments but were included in the product, supplies, and fuels “not specified by kind” (nsk) categories.

The industry classification codes included in the administrative-record files were assigned on the basis of brief descriptions of the general activity of the establishment. As a result, an indeterminate number of establishments were erroneously coded to a six-digit NAICS industry. This was especially true whenever there was a relatively fine line of demarcation between industries or between mining and nonmining activity.

Sometimes the administrative-record cases had only two- or three-digit NAICS group classification codes available in the files. For mining, these establishments were sent a separate classification form, which requested information on the products and services of the establishment. This form was used to code many of these establishments to the appropriate six-digit NAICS level. Establishments that did not return the classification form were coded later to those six-digit NAICS industries identified as “All other,” a default within the given subsector.

As a result of these situations, a number of small establishments may have been misclassified by industry. However, such possible misclassification has no significant effect on the statistics other than on the number of companies and establishments.

The total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are far more reliable than the count of total number of establishments.

- b. All nonemployers, i.e., all firms subject to federal income tax, with no paid employees, during 2002 are excluded as in previous censuses. Data for nonemployers are not included in this report, but are released in the annual *Nonemployer Statistics* series.

The report forms used to collect information for establishments in this sector are available at help.econ.census.gov/econhelp/resources/.

A more detailed examination of census methodology is presented in the *History of the Economic Census* at www.census.gov/econ/www/history.html.

INDUSTRY CLASSIFICATION OF ESTABLISHMENTS

The classifications for all establishments covered in the 2002 Economic Census — Mining are classified in 1 of 29 industries in accordance with the industry definitions in the *North American Industry Classification System, (NAICS), United States, 2002* manual. Changes between 1997 and 2002 affecting this sector are discussed in the text at the beginning of this report. Tables at www.census.gov/epcd/naics02/ identify those industries that changed between the 1997 North American Industry Classification System (NAICS) and 2002 NAICS. When applicable, Appendix F of this report shows the product class and product comparability between the two systems for data in this report.

In the NAICS system, an industry is generally defined as a group of establishments that have similar processes used to produce the mineral products. To the extent practical, the system uses supply-based or production-oriented concepts in defining industries. The resulting group of establishments must be significant in terms of its number, value added by mining, value of shipments and receipts, number of employees, and payroll.

The coding system works in such a way that the definitions progressively become narrower with successive additions of numerical digits. In the mining sector for 2002, there are 3 subsectors (three-digit NAICS), 5 industry groups (four-digit NAICS), 10 NAICS industries (five-digit NAICS) that are comparable with Canadian and Mexican classification, and 29 U.S. industries (six-digit NAICS). Product classes and products of the mining industries have been assigned codes based on the industry from which they originate. There are 63 product classes (seven-digit codes) and 136 ten-digit product codes. The ten-digit products are considered the primary products of the industry with the same first six digits.

For the 2002 Economic Census — Mining, all establishments were classified in particular industries based on the products they produced. If an establishment made products of more than one industry, it was classified in the industry with the largest product value.

Establishments frequently make products classified both in their industry (primary products) and other industries (secondary products). Industry statistics (employment, payroll, value added by mining, value of shipments and receipts, etc.) reflect the activities of the establishments that may make both primary and secondary products. Product statistics, however, represent the output of all establishments without regard for the classification of the producing establishment. For this reason, when relating the industry statistics, especially the value of shipments and receipts, to the product statistics, the composition of the industry's output should be considered.

ESTABLISHMENT BASIS OF REPORTING

The 2002 Economic Census — Mining covers each mining establishment of firms with one or more paid employees operating in the United States. A company operating at more than one establishment is required to file a separate report for each location. A mining establishment is defined as a single physical location where mineral operations are conducted. However, a company engaged in distinctly different lines of activity at one location is required to submit a separate report for each activity, if the plant records permit such a separation and, if the activities are substantial in size.

For oil and gas field operations and for contract services, the basis for reporting is different from the “establishment” basis used for other types of mining. Firms operating oil and gas wells, drilling wells, or exploring for oil and gas for their own account were required to submit a separate report for each state or offshore area adjacent to a state in which it conducted such activities. Firms that performed contract services for oil and gas field operations or for mining establishments were required to submit one report covering all such activities in the United States and to include information on receipts for services, production-worker wages, and hours, by state. These consolidated reports were then allocated to state establishments based on the data reported at the state level. The 2002 figures for establishments include the summation of operations for each state allocated from these nationwide reports.

In 2002, as in prior censuses since 1967, data for single-unit firms without paid employees were excluded. This exclusion had only a slight effect on industry aggregates for most industries. Data for firms without employees were included in the 1963, 1958, and 1954 censuses, if they reported more than \$500 in (1) value of shipments and receipts, (2) cost of supplies and purchased machinery, or (3) capital expenditures.

The 2002 Economic Census — Mining excludes data for central administrative offices (CAOs). These would include separately operated administrative offices, warehouses, garages, and other auxiliary units that service mining establishments of the same company. These data are published in a separate report series.

RELIABILITY OF DATA

All data compiled in the economic census are subject to nonsampling errors. Nonsampling errors can be attributed to many sources during the development or execution of the census:

- inability to identify all cases in the actual universe;
- definition and classification difficulties;

-
- differences in the interpretation of questions;
 - errors in recording or coding the data obtained; and
 - other errors of collection, response, coverage, processing, and estimation for missing or misreported data.

The Census Bureau obtains limited information extracted from administrative records of other federal agencies, such as gross receipts from federal income tax records and employment and payroll from payroll tax records. This information is used in conjunction with other information available to the Census Bureau to develop estimates for nonemployers, small employers, and other establishments for which responses were not received in time for publication.

DUPLICATION IN COST OF MATERIALS AND VALUE OF SHIPMENTS

Data for cost of materials and value of shipments include varying amounts of duplication, especially at higher levels of aggregation. This is because the products of one establishment may be the materials of another. The value added statistics avoid this duplication and are, for most purposes, the best measure for comparing the relative economic importance of industries and geographic areas.

VALUE OF INDUSTRY SHIPMENTS COMPARED WITH VALUE OF PRODUCT SHIPMENTS

The 2002 Economic Census — Mining shows value of shipments and receipts data for industries and products. In the industry statistics tables and files, these data represent the total value of shipments of all establishments classified in a particular industry. The data include the shipments of the products classified in the industry (primary to the industry), products classified in other industries (secondary to the industry), and miscellaneous receipts (repair work, sale of scrap, research and development, installation receipts, and resales). Value of product shipments shown in the products statistics tables and files represent the total value of all products shipped that are classified as primary to an industry regardless of the classification of the producing establishment. The value of products shipped also may include some products shipped from manufacturing establishments with mining operations.

DISCLOSURE

In accordance with federal law governing census reports (Title 13 of the United States Code), no data are published that would disclose the operations of an individual establishment or company. However, the number of establishments in a specific industry or geographic area is not considered a disclosure; therefore, this information may be released even though other information is withheld. Techniques employed to limit disclosure are discussed at www.census.gov/epcd/ec02/disclosure.htm.

The disclosure analysis for the industry statistics files is based on the total value of shipments and receipts. When the total value of shipments and receipts cannot be shown without disclosing information for individual companies, the complete line is suppressed except for capital expenditures. If capital expenditures alone is a disclosure, only capital expenditures and cost of supplies statistics are suppressed. Nonetheless, the suppressed data are included in higher-level totals.

Appendix D. Geographic Notes

Not applicable for this report.

Appendix E. Metropolitan Areas and Micropolitan Statistical Areas

Not applicable for this report.

Appendix F.

Comparability of Product Classes and Product Codes: 2002 to 1997

2002 published	2002 collected	1997 published	2002 published	2002 collected	1997 published	2002 published	2002 collected	1997 published
2111111.....	2111111.....	2111111	2111121.....	2111121.....	2111121	2111123.....	2111123.....	2111123
211111111.....	211111111.....	211111111	211112111.....	211112111.....	211112111	2111123100.....	2111123100.....	2111123100
2111111121.....	2111111121.....	2111111121	2111121221.....	2111121221.....	2111121221	2111124.....	325188G pt.....	325188G pt
2111111131.....	2111111131.....	2111111131	2111121331.....	2111121331.....	2111121331	2111124100.....	325188G110.....	325188G000 pt
2111111YWV.....	2111111YWV.....	2111111YWV	2111121441.....	2111121441.....	2111121441	211112W pt.....	211112W.....	211112W
2111113.....	2111113.....	2111113	2111121451.....	2111121451.....	2111121451	211112W pt.....	325188W pt.....	325188W pt
2111113100.....	2111113100.....	2111113100	2111121461.....	2111121461.....	2111121461	211112WYWT pt ...	211112WYWT.....	211112WYWT
211111W.....	211111W.....	211111W	2111121491.....	2111121491.....	2111121491	211112WYWT pt ...	325188WYWW pt ..	325188WYWW pt
211111WYWT.....	211111WYWT.....	211111WYWT	2111121YWV.....	2111121YWV.....	2111121YWV	211112WYWT pt ...	325188WYWY pt...	325188WYWY pt

