



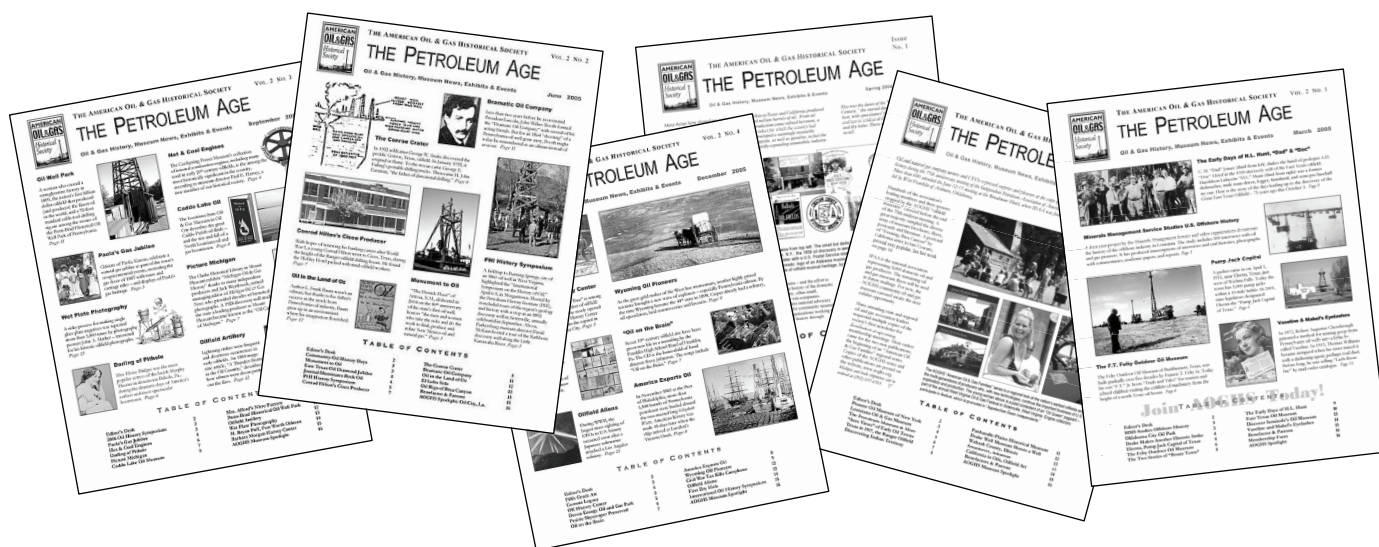
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Bruce Wells, Executive Director,  
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*Image features a roughneck at work in the  
Fort Worth Basin, Texas.*



# **THE OIL & NATURAL GAS PRODUCING INDUSTRY IN YOUR STATE**

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## THE EDITOR'S DESK: INTRODUCTION TO 2004 O&G IN YOUR STATE

### 2004: A Pivotal Year in the Dynamic Oil and Gas Industry

Pete Stark, Ph. D., IHS

#### Global Trends and Issues

During 2004 an unexpected surge in oil demand strained the global supply chain and all but drained OPEC's excess production capacity while heightening anxieties about future energy security. World oil demand exceeded historic trends and grew by a whopping 2.7 million barrels per day (MMb/d). China, which faced hydro-power shortages, needed oil to generate electricity and boosted its oil demand by some 800 thousand barrels per day (Mb/d) - more than 14%. In addition, U.S. oil demand grew by some 700 Mb/d to fuel a booming economy. To exacerbate the problem, OPEC cut its production quotas by 1 MMb/d at the end of the first quarter - before anyone was aware of China's surging oil demand - and played catch up with its production for the balance of the year. Periodic oil supply disruptions in Nigeria and Venezuela, delays in rebuilding Iraq's production capacity and damage to U.S. offshore Gulf of Mexico production by Hurricane Ivan added to the uncertainties about oil supplies. As a result, average annual West Texas Intermediate (WTI) oil price rose by \$10.32 to \$41.37 a barrel, an increase of 33%, with a high in excess of \$55.00 per barrel during October.

Fear of possible oil supply disruptions dominated market psychology throughout the year. During the first half of the year, U.S. crude oil and gasoline inventories were at or below historic 5-year ranges. Low inventories, coupled with state bans on MTBE additives and doubt that refiners would be able to meet new sulfur restrictions boosted fears about possible shortages of gasoline during the summer driving season. These factors added to the pressures on crude and gasoline prices. Later, during the second week of September, Hurricane Ivan swept through the Gulf of Mexico and severely damaged several important offshore production facilities. Some 30% of Gulf of Mexico offshore oil production was offline through October 2004. Overall, Ivan's damage resulted in curtailment of about 471,000 barrels of oil production and 140 billion cubic feet (Bcf) of gas production through the end of the year. Reduced availability of U.S. crude supplies and low levels of distillate inventories stimulated a new round of fears - this time about possible winter heating oil shortages - that helped to push fuel oil prices to more than \$1.60 per gallon in late October - almost double the prior year price. However, mild fall weather and accelerated refinery output combined to boost fuel oil inventories so that seasonal fears and prices, at least, abated during November.

In retrospect, the heightened fears about possible seasonal oil supply shortages signaled more substantial concerns about energy security. China's surging oil demand and OPEC's spare excess producing capacity commanded worldwide attention and ushered in a new era which Daniel Yergin of Cambridge Energy Research Associates identified as the "Age of Energy Supply Anxiety". Key factors that contributed to uncertainties about the global energy future included:

- Elevated oil demand and the outlook for high energy demand growth rates in China and other rapidly developing non-OECD countries.
- Failure to replace oil production by new discoveries for almost 20 years and decreasing volume of recent oil discoveries.
- Desire by producing countries to increase control of their natural resources and their share of oil and gas revenues.
- Restricted access to investment by international oil companies in countries with potential for giant resources.
- Increased competition - highlighted by international expansion by national oil companies to secure future energy resources to fuel their growing economies.

Bottom line: Heightened anxieties about energy supplies triggered a global scramble to secure energy resources. After pursuing policies to attract foreign investments, governments reversed course during 2004 and began to tighten control of their energy resources. Unfortunately, this meant that more of the world's oil and gas supplies were being controlled by governments that also faced political instability and regional security issues. Until several of the foregoing underlying factors change, fears and geopolitical uncertainties could constitute a greater influence on oil markets than basic supply and demand. This might have been evidenced by a decoupling of oil prices from oil inventories during the last half of 2004. For example, the level of U.S. oil inventories, tended to be a barometer for oil prices for the past decade when inventories lower than 30 MMb were associated with higher oil price and inventories greater than 300 MMb were associated with lower oil prices. This relationship was stretched during the first half of 2004 and essentially dissolved during the last half of the year when prices continued to rise regardless of inventory behavior. OPEC spare production capacity then became a barometer for broader oil supply anxieties.

2004 was a pivotal year clarifying substantial changes to the global petroleum industry that had built momentum over the past decade:

- Monthly average oil prices increased from \$11.26 to \$53.28.
- Monthly average U.S. natural gas prices increased from \$1.26 to \$7.37 (with an interim peak of \$9.80 in December 2000).
- U.S. E&P emphasis switched from oil to gas and from conventional to unconventional reservoirs.
- Global E&P emphasis switched from exploration to exploitation and from managing subsurface risks to managing above ground risks.
- Offshore E&P switched emphasis from the shelf to deep water.
- National Oil Companies (NOCs) switched from being resource holders to become competitors in the international E&P arena.
- International Oil Companies (IOCs) switched emphasis from replacing reserves to increasing shareholder value.

These changes are reflected in U.S E&P data that are summarized in the statistics and state summaries in this edition of the *IPAA Oil & Gas Producing Industry in Your State*.

#### Oil

The substantial U.S. appetite for oil was highlighted during 2004 when demand increased by 700 thousand barrels per day (Mb/d), almost 3.5%, to 20,730 Mb/d. This surprising increase accounted for more than 25% of the 2.7 million barrels per day (MMb/d) global increase in demand which severely challenged the capacity of the oil supply chain. In contrast, U.S. oil production decreased by 204 Mb/d to 4,887 Mb/d, continuing a long term slide which recorded an overall decline of about 1,200 Mb/d since 1995. IHS data compilations for this report indicated this oil volume was produced from 394,960 oil wells which averaged 12.7 b/d. Almost 88% of U.S. 2004 producing oil wells were classed as marginal wells - those that produced 15 Bopd or less. Marginal wells, though, accounted for only about 20% of U.S. oil production - some 971 Mb/d.

The Federal Offshore Gulf of Mexico continued to lead U.S. oil production, totaling 449 MMbo plus 86 MMb of condensate. Texas ranked number two with 351 MMbo and 40 MMb condensate and was followed by Alaska with 336 MMbo plus 1 MMb condensate and California with 239 MMbo and 145 Mb condensate.

These four entities also recorded the largest oil production declines from 2003 with offshore Gulf of Mexico dropping 28.6 MMbo, Alaska 26 MMbo, Texas 8.8 MMbo and California 8 MMbo. California's oil production



was distinctive in that almost 96% (228 MMbo) was classed as heavy oil with 20° or less API gravity. The expanding Bakken shale play in the Williston Basin accounted for the most significant U.S. oil production increases with 5.3 MMbo added in Montana and 1.7 MMbo added in North Dakota.

As a result of this divergence in production and demand trends, U.S. oil and petroleum product imports surged to fill the gap. Total 2004 petroleum imports (crude and refined products) increased by 881 Mb/d (+ 7%) to a record 13,145 MMb/d. Crude imports rose by 423 Mb/d to 10.09 MMb/d and refined product imports increased by 458 Mb/d to 3.06 MMb/d. Non-OPEC sources accounted for 57% (7.44 MMb/d) of U.S. imports. Canada, with 2.14 MMb/d, and Mexico, with 1.67 MMb/d, were the largest non-OPEC suppliers. Over the last decade, Canadian imports have grown more than for any other supplier, adding 806 Mb/d or 61% since 1995. OPEC imports were led by Saudi Arabia with 1.56 MMb/d and Venezuela with 1.55 MMb/d. To meet soaring U.S. demand during 2004, OPEC imports returned to prominence - increasing by 539 Mb/d while non-OPEC sources increased by 341 Mb/d. Most of the OPEC increases were supplied by Nigeria, Venezuela and Iraq while Ecuador was the only non-OPEC source to increase its deliveries by more than 100 Mb/d.

According to the U.S. Energy Information Agency (EIA), U.S. oil reserves also decreased over the past decade, from 22.351 Bbo in 1995 to 21.371 Bbo in 2004. More than half - some 520 MMb - of the decrease was recorded during 2004 when new discoveries added only 33 MMbo while 617 MMbo attributed to extensions and revisions were not adequate to offset production.

### Drilling

U.S. drilling activity responded to the volatile shifts in oil and gas prices over the past decade. Well completions recorded by IHS increased from 22,078 wells in 1995 and reached a near-term high of 30,306 wells in 1997; decreased in response to the 1998 - 1999 oil price collapse to a low of 21,277 wells in 1999 and rebounded to 36,180 wells in 2001. After 4th quarter 2001 oil prices dropped below \$20 per barrel only 28,376 new well completions were reported in 2002. Drilling activity then responded to steady increases in oil and gas prices to reach 33,227 completions in 2003 and 36,782 in 2004 - the most since 1985. The strong shift in emphasis to natural gas was exemplified by the number of gas well completions growing more than 2.5 times from 8,825 wells in 1995 to 23,332 wells in 2004. Oil well completions, on the other hand, remained almost flat over this same period, increasing only from 8,610 wells in 1995 to 9,292 wells in 2004. The Baker Hughes average 2004 rig count increased by 160 (+15.5%) to 1,192 rigs, with 1,025 rigs - a new record - directed to gas drilling. Horizontal drilling also recorded a healthy 38% increase to 2,434 well completions. Successful horizontal completions in the Barnett and Bakken shales plus Hartshorne coal helped to boost horizontal drilling activity.

### Natural Gas

Expanding LNG facilities and new regional pipelines facilitated 27% growth of global natural gas consumption from 78.23 trillion cubic feet (Tcf) in 1995 to 99.67 Tcf in 2004. During the past decade LNG technologies matured to enable access to global markets for huge amounts of stranded gas that were estimated to be about 1,600 Tcf in the mid-1990's. As a result, operators with stranded gas in SE Asia, the Middle East, North Africa, Africa's Sub-Sahara Atlantic margin and in gas-rich S. American countries developed projects to capture shares of the three leading gas consuming regions - Asia, Europe and North America. Globalization of the World's natural gas business became a reality.

U.S. gas consumption, though, essentially resembled an undulating plateau, ranging between 22 and 23 Tcf per year from 1995 through 2004. U.S. gas production (as tracked by IHS) also reached an undulating plateau, ranging from 119.96 Tcf in 1995 to a high of 20.84 Tcf in 2001 before dipping to 20.18 Tcf in 2003 and 20.15 Tcf in 2004. Canada was expected to supply most of the gas to fill the gap between U.S. gas production and consumption and these exports grew from 2.82 Tcf in 1995 to a high of 3.6 Tcf in 2004. But Canada's gas production also reached a plateau in 2001 and expanding oil sands production required increasing amounts of

gas to fuel thermal recovery projects. These new realities provided the opportunity for LNG to expand into North America. Only 17.9 billion cubic feet (Bcf) of LNG was imported to the U.S. during 1995. After the four existing U.S. LNG terminals were re-commissioned, LNG imports reached 226.1 Bcf in 2000, more than doubled to 506.5 Bcf in 2003 and increased again to 652.1 Bcf in 2004. Trinidad and Tobago, the closest LNG supplier, was the source for almost 71% (462.1 Bcf) of the 2004 LNG imports.

U.S. gas productivity demonstrated substantial changes over the past decade as emphasis shifted from conventional onshore and offshore Gulf of Mexico gas to onshore unconventional reservoirs. U.S. average peak well production decreased from about 1,150 thousand cubic feet per day (Mcf/d) for wells completed during 1996 to about 590 Mcf/d for wells completed during 2004. Average reserves added per new well also decreased from a high of 1.32 Bcf for wells completed during 1996 to 0.96 Bcf for wells completed during 2004. Also of concern were the aging of the U.S. conventional gas well population and increasing numbers of marginal gas wells - those with 90 Mcfd or less production rates. IHS data showed that 70% (227,402 wells) of the 323,893 gas wells that produced during 2004 were classified as marginal producers. These marginal wells accounted for only 12% or 2.1 Tcf of reported 2004 gas well gas production. Overall U.S. gas wells averaged only 147 Mcf/d during 2004. As a result of these factors, U.S. gas production essentially remained flat over the past decade even though gas well completions increased 2.6 times from 1995 to 2004.

Vintaged gas decline data showed that U.S. base annual decline during 2002 was 2.53 Tcf. This is the amount of decline that would result if no new gas wells were completed. Analyses of 2002 through 2004 well productivity indicated that at least 24,000 annual new gas wells would be required to replace this base decline volume. This represents a substantial challenge to U.S. gas drillers and producers.

The shift from conventional to unconventional gas reservoirs has been dramatic but the overall estimated increase in unconventional gas production from 5.55 Tcf in 1995 to 9.57 Tcf in 2004 was not sufficient to offset the declines in conventional gas production. Over this same period conventional offshore gas production declined by 4.15 Tcf to 9.82 Tcf during 2004 and onshore conventional gas declined by an additional 4.26 Tcf to 34.38 Tcf during 2004. Overall U.S. gas well gas production declined slightly - by 45.5 Bcf to 17,388 Bcf during 2004. The Federal Offshore was the biggest loser, declining almost 360 Bcf, and was followed by declines of 31.3 Bcf in Alabama and 25.2 Bcf in Kansas. Continuing expansion of the Barnett shale play in North Central Texas and tight sand developments in East Texas helped to boost Texas gas well gas production by 110.2 Bcf during 2004. Wyoming, with continuing expansion of Upper Cretaceous Lance and Mesaverde tight sand production at the Pinedale Anticline and Jonah Fields added 98 Bcf during 2004 while Colorado added almost 63 Bcf from Mesaverde tight sands in the Piceance Basin, plus various tight sands in the DJ Basin and coalbed methane (CBM) in the Raton Basin. CBM in the Arkoma and Cherokee Basins plus expanded development of various Anadarko Basin reservoirs helped to boost Oklahoma gas well production by 28.5 Bcf.

Prime tight sand plays included the Cotton Valley and Bossier in East Texas; Strawn and Canyon sands in West Texas; Upper Cretaceous (Mesaverde and equivalent) sands in the Green River, Piceance and Uinta basins; and granite wash along the southwest flank of the Anadarko Basin. Pennsylvanian coals were the primary CBM targets in the eastern U.S. with plays continuing to expand in the Black Warrior, Arkoma, Cherokee and Appalachian Basins. Cretaceous and Tertiary coals were the primary CBM targets in western U.S. with established plays in the San Juan, Powder River, Uinta and Raton Basins plus tests of CBM potential underway in other provinces. Based on success of the Barnett shale in the Ft. Worth Basin, shale plays became the rage. Projects were under way in Barnett and equivalent shales in Oklahoma, Arkansas and West Texas. Operators also were extending production in the rich Woodford - Bakken - Devonian shale source rocks in the mid-continent, Rocky Mountain Region and Appalachian Basin. Unconventional gas plays have become the backbone for future onshore U.S. gas production growth.





## Final Comment

2004 may be viewed as a pivotal year for the petroleum industry. Both oil and gas appear to have established the foundation for a new high price environment. Soaring oil demand stressed the supply chain and heightened anxieties about the petroleum industry's capabilities to meet future demand forecasts. Access to international opportunities tightened as governments increased control of their resources and expanding NOCs increased competition for prospects. There also was growing evidence that North American natural gas supplies were tightening with both Canadian and U.S. gas production establishing plateaus. Operators clearly identified "unconventional" tight sand, CBM and emerging shale reservoirs as the plays of choice. Unfortunately, due to the combination of decreasing gas well performance and lower reserves per well in unconventional reservoirs even record levels of gas drilling failed to yield enough new production to replace consumption. To meet projected future gas demand growth the U.S. must accommodate either substantial increases in gas drilling in virtually all gas producing provinces or substantial increases in LNG imports. Both cases pose significant concerns about the environment and community relations. Solutions increasingly will require open collaboration between policy makers, state and federal regulatory agencies, stakeholders in environmental and community concerns, consumers and producers.

## New Look for Our Publication

The Independent Petroleum Association (IPAA) Statistics Department would like to take this opportunity to recognize our new collaboration with IHS in this issue of the Oil and Gas Producing Industry In Your State. In an effort to enhance the data quality and broaden our sources, IPAA welcomes the wide-ranging and professional input provided by IHS.

IPAA believes that the enhancement of both state and national data will help make this publication more valuable for those in industry, government, academia or other stakeholder groups. IHS has helped expand data in new areas such as unconventional production (i.e. coalbed methane and heavy oil) in addition to offshore and marginal production capacity. In addition, we have updated reserves data and other information that was one year lagged in previous editions. We look forward to continuing this relationship with IHS in bringing you more high-quality data that may not be publicly available. In the future, we hope to add additional categories that further clarify the role played by the independent producer.

We continue to utilize data from the Energy Information Administration (EIA), the Minerals Management Service (MMS) and from the individual states. Please note that some of the traditional data sources have been changed to reflect the use of IHS numbers where possible. For the state pages, we have noted where state data was used rather than IHS or EIA data. In the summary pages, we have used both IHS and EIA data. You will note that all data sources are specified in detail on page 109 (Reference Information).

We appreciate the assistance of IHS in improving both the scope and quality of this upstream publication. Please let us know if you have ideas pertaining to other ways we can improve this publication. You can send your comments to Fred Lawrence at IPAA (flawrence@ipaa.org). Thank you for your continued support of one of the industry's most informative publications.

## Methodology

- IHS uses multiple sources of data such as test files (Texas and Louisiana test information is used to allocate production volumes on a well completion level), injection files and plugging reports that is integrated with basic production volume data that is submitted by individual states. As a result production totals may differ from the Energy Information Administration data previously used.
- The following states submitted data for the 2005-2006 edition: Colorado, Illinois, Indiana, New York and Ohio. In all cases state submitted data, where applicable, was used and footnoted. On state data pages, state submitted data is marked by an asterisk (\*).
- All Federal Offshore statistics include only those wells in Federal waters. All state well statistics include those offshore wells for each state.
- Deepest Well statistics are based on total depth recorded from state completion reports. The only exceptions are minor occurrences where projected depth from permits have been used as a proxy for Deepest Well statistics.
- Well statistics for oil, gas and dry wells are all classes that were drilled with the intent to find hydrocarbons. Historical well counts do not include any miscellaneous wells ie injection, storage, etc.
- Drilled footage is the actual drilled footage as reported. For sidetracks it is the footage from the whipstock or kickoff point to total depth. For wells deepened it is the footage from the original total depth to the new total depth.
- All state drilling costs are calculated using the API Joint Association cost statistics and the IHS well data statistics ie total wells drilled, footage drilled, etc.
- Marginal wells are defined as oil wells producing 15 or less barrels of oil and 90 or less thousand cubic feet of gas per day (previous editions used stripper wells producing less than 10 bbls of oil and 60 Mcf of gas per day).



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**Kentucky Department of Mines and Minerals**  
Oil and Gas Division  
1025 Capital Center Dr.  
Frankfurt, KY 40601  
(502) 573-0147  
<http://dogc.ky.gov/>

**Louisiana Department of Natural Resources**  
P.O. Box 94275/617 North Third Street  
Baton Rouge, LA 70804-9275  
(225) 342-5515  
<http://www.dnr.state.la.us>

**Maryland Geological Survey**  
2300 Saint Paul Street  
Baltimore, MD 21218-5210  
(401) 554-5500  
<http://www.mgs.md.gov/>

**Michigan Geological Survey**  
Department of Natural Resources  
P.O. Box 30028  
Lansing, MI 48909  
(517) 373-2352  
<http://www.michigan.gov/dnr>

**Mississippi State Oil and Gas Board**  
500 Greymont, Suite E  
Jackson, MS 39202-3446  
(601) 354-7142  
(601) 354-6873 Fax  
<http://www.ogb.state.ms.us>

**Missouri Department of Natural Resources**  
P.O. Box 176  
Jefferson City, MO 65102  
(800) 361-4827  
<http://www.dnr.mo.gov/>

**Montana Board of Oil and Gas Conservation**  
2535 St. John's Avenue  
Billings, MT 59102  
(406) 656-0040  
(406) 655-6015  
<http://bogc.dnrc.state.mt.us>

**Nebraska Oil & Gas Conservation Commission**  
P.O. Box 399  
Sidney, NE 69162  
(308) 254-6919  
<http://www.nogcc.ne.gov/>

**Nevada Department of Minerals**  
400 West King Street, Suite 106  
Carson City, NV 89703  
(702) 684-7040  
(702) 684-7052 Fax  
<http://minerals.state.nv.us/>

**New Mexico Energy, Minerals and Natural Resources Department**  
1220 S. St. Francis Drive  
Santa Fe, NM 87505  
(505) 476-3440  
(505) 476-3462 Fax  
<http://www.emnrd.state.nm.us/>

**New York State Department of Environmental Conservation**  
625 Broadway  
Albany, NY 12233-6500  
(518) 402-8076  
(518) 402-8060 Fax  
<http://www.dec.state.ny.us/website/dmn/>

**North Dakota Industrial Commission**  
Oil and Gas Division  
600 East Boulevard Avenue, Dept. 405  
Bismark, ND 58505-0840  
(701) 328-8020  
(701) 328-8022  
<http://www.oilgas.nd.gov>

**Ohio Department of Natural Resources**  
Division of Mineral Resources Management  
1855 Fountain Square Drive, Bldg. H-2  
Columbus, OH 43224-1362  
(614) 265-6633  
(614) 265-7999 Fax  
<http://www.ohiodnr.com/mineral/index.html>

**Oklahoma Corporation Commission**  
Oil and Gas Division  
P.O. Box 52000/2101 N. Lincoln Blvd.  
Oklahoma City, OK 73152-2000  
(405) 521-2211  
<http://www.occ.state.ok.us/>

**Oregon Department of Geology and Mineral Industries**  
800 NE Oregon St., #28, Room 965  
Portland, OR 97232  
(503) 731-4100  
(503) 731-4066 Fax  
<http://www.oregongeology.com/sub/default.htm>

**Pennsylvania Dept. of Environmental Resources**  
Oil and Gas Division  
Rachel Carson St. Office Bldg., Box 8765  
Harrisburg, PA 17105-8765  
(717) 772-2199  
(717) 772-2291 Fax  
<http://www.dep.state.pa.us/dep/deputate/minres/oilgas/oilgas.htm>

**South Dakota Dept. of Environment & Natural Resources**  
523 E. Capitol - Joe Foss Bldg.  
Pierre, SD 57501  
(605) 773-3151  
(605) 773-6035 Fax  
<http://www.state.sd.us/denr/denr.html>

**Tennessee Dept. of Geology & Conservation**  
Oil and Gas Board  
401 Church St., 13th Fl.  
Nashville, TN 37243  
(615) 532-0445  
<http://www.state.tn.us/environment/>

**Texas Railroad Commission**  
Office of Information Services - P.O. Drawer 12967  
Austin, TX 78711-2967  
(512) 463-6887  
<http://www.rrc.state.tx.us/>





## STATE ENERGY CONTACTS

### Utah Department of Natural Resources

1594 West North Temple/P.O. Box 145801  
Salt Lake City, UT 84114-5801  
(801) 538-5277  
(801) 359-3940 Fax  
<http://dogm.nr.state.ut.us/>

### Virginia Division of Energy

Dept. of Mines, Minerals & Energy -PO Drawer 900  
Big Stone Gap, VA 24219  
(276) 523-8146  
<http://www.mme.state.va.us/dgo/default.htm>

### West Virginia Office of Oil & Gas

1356 Hansford St.  
Charleston, WV 25301  
(304) 558-6075  
(304) 558-6047 Fax  
<http://www.wvdep.org/>

### Wyoming Dept. of Environmental Quality

122 West 25th Street - Herscheler Bldg.  
Cheyenne, WY 82002  
(307) 777-7937  
(307) 777-7682 Fax  
<http://deq.state.wy.us/>

### Wyoming Oil and Gas Conservation Commission

Box 2640/777 West First Street  
Casper, WY 82602  
(307) 234-7147  
(307) 234-5306 Fax  
<http://wogcc.state.wy.us/>

### Federal Organizations

#### Energy Information Administration

Forrestal Building - Room 1F-048  
1000 Independence Avenue, S.W.  
Washington, D.C. 20585  
(202) 586-5000  
<http://www.eia.doe.gov>

#### Federal Energy Regulatory Committee

888 First St., NE, Room 2-A  
Washington, D.C. 20426  
(866) 208-3372  
<http://www.ferc.gov>

#### National Petroleum Technology Office

One West Third St., Suite 1400  
Tulsa, OK 74103-3519  
(918) 699-2000  
(918) 699-2005 Fax  
<http://www.npto.doe.gov>

#### U.S. Department of Energy - Fossil Energy Dept.

1000 Independence Avenue, S.W.  
Washington, D.C. 20585  
(202) 586-6503  
<http://www.fe.doe.gov>

#### U.S. Dept. of the Interior - MMS

Mail Stop 3000, P.O. Box 25165  
Denver, CO 80225  
(303) 231-3230  
<http://www.doi.gov/> & <http://www.mms.gov/>

#### U.S. Environmental Protection Agency

Ariel Rios Bldg. 1200 Penn. Ave., N.W., 3213A  
Washington, DC 20460  
(202) 260-2090  
<http://www.epa.gov>

### U.S. Geological Survey

12201 Sunrise Valley Dr.  
Reston, VA 20192  
(703) 648-4000  
<http://www.usgs.gov/>

### Oil and Gas Museums

#### Arkansas Museum of Natural Resources

(870) 863-6113  
<http://www.amnr.org/>

#### Arkansas Museum of Natural Science

(870) 725-2877  
<http://www.msstate.edu/dept/geosciences>

#### Brea Museum and Heritage Center-CA

(714) 256-2283  
<http://www.breamuseum.org/>

#### California Oil Museum

(805) 933-0076  
<http://www.oilmuseum.net/>

#### Kern County Museum - CA

(661) 852-5000  
<http://www.kcmuseum.org/>

#### Olinda Historic Museum and Park - CA

(714) 990-7600  
<http://www.ci.brea.ca.us/>

#### West Kern County Museum - CA

(661) 765-6664  
<http://www.westkern-oilmuseum.org/>

#### Denver Museum of Nature & Science - CO

(303) 322-7009  
<http://www.dmns.org/main/en/>

#### Illinois Oilfield Museum & Resource Center

[http://www.theonlyoblong.com/oil\\_field/oblong\\_oilfield.html](http://www.theonlyoblong.com/oil_field/oblong_oilfield.html)

#### Museum of Science & Industry, Petroleum Planet -IL

(773) 684-1414  
<http://www.msichicago.org/index.html>

#### Kansas Oil Museum and Hall of Fame

(316) 321-9333  
<http://www.kansasoilmuseum.org/>

#### Oil Patch Museum - KS

(785) 483-3637  
<http://www.rchs.russellks.net/>

#### The Kansas Oil & Gas Hall of Fame Museum

(620) 793-5742  
<http://greatbend.com/gbconven/oilgas.htm>

#### Louisiana State Oil and Gas Museum

(318) 995-6845  
<http://www.sos.louisiana.gov/museums/oil/>

#### International Petroleum Museum & Exposition - LA

(985) 384-3744  
<http://www.rigmuseum.com/>

#### Pioneer Oil Museum - NY

(585) 373-6035  
<http://www.pioneer-oil-museum.com/about-us.html>

### Wood County Historical Center & Museum - OH

(419) 352-0967  
<http://www.woodcountyhistory.org>

### Anadarko Basin Museum of Natural History - OK

(580) 243-0437  
<http://www1.itlnet.net/web/route66/page4.html>

### Bartlesville Area History Museum - OK

(918) 337-5336  
<http://www.bartlesvillehistory.com/>

### Healdton Oil Museum-OK

(405) 229-0317  
<http://www.brightok.net/chickasaw/ar-dmore/county/healdoil.html>

### Oklahoma Historical Society

(405) 521-2491  
<http://www.okhistory.org/>

### Greater Seminole Area Oil & Historical Museum

(405) 382-1500  
<http://www.seminoleoklahoma.com/museum/>

### Drake Well Museum - PA

(814) 827-2797  
<http://www.drakewell.org/index.htm>

### The Oil Heritage Region - PA

(800) 483-6264, Ext. 18  
<http://www.oilregion.org/>

### Penn-Brad Oil Museum - PA

(814) 368-5574  
<http://pennbradoilmuseum.com/>

### Petroleum History Institute - PA

<http://www.petroleumhistory.org/>

### East Texas Oil Museum

(903) 983-8295  
<http://www.easttexasoilmuseum.com/index.html>

### Houston Museum of Natural Science

(713) 639-4629  
<http://www.hmns.org/Index.asp>

### Panhandle-Plains Historical Museum

(806) 651-2244  
<http://www.panhandleplains.org/>

### Spindletop - Gladys City Boomtown Museum - TX

(409) 835-0823  
<http://spindletop.org/default.htm>

### Texas Energy Museum

(409) 833-5100  
<http://www.texasenergymuseum.org/front2.htm>

### Ocean Star Offshore Drilling Rig and Museum - TX

(409) 766-STAR  
<http://www.oceanstaroec.com/Default.htm>

### West Virginia Oil & Gas Museum

(304) 485-5446  
<http://www.little-mountain.com/oilandgasmuseum/>



## COOPERATING OIL & GAS ASSOCIATIONS

**American Association of Professional Landmen**  
4100 Fossil Creek Blvd.  
Fort Worth, TX 76137-2791  
(817) 847-7700  
(817) 847-7704 Fax  
<http://www.landman.org>

**Association of Energy Service Companies**  
10200 Richmond Avenue  
Houston, TX 77042  
(713) 781-0758  
(713) 781-7542 Fax  
<http://www.aesc.net>

**California Independent Petroleum Association**  
1112 I Street, Suite 350  
Sacramento, CA 95814  
(916) 447-1177  
(916) 447-1144 Fax  
<http://www.cipa.org>

**Colorado Oil & Gas Association**  
1776 Lincoln Street, Suite 1008  
Denver, CO 80203  
(303) 861-0362  
(303) 861-0373 Fax  
<http://www.coga.org>

**Domestic Petroleum Council**  
101 Constitution Ave., NW, Suite 800  
Washington, DC 20001-2133  
(202) 742-4300  
<http://www.dpcusa.org>

**East Texas Producers & Royalty Owners Assoc.**  
P.O. Box 1700  
Kilgore, TX 75663  
(903) 984-8671  
(903) 984-1499 Fax

**Eastern Kansas Oil & Gas Association**  
P.O. Box 355  
Chanute, KS 66720  
(620) 431-1020  
(620) 431-9325 Fax

**Florida Independent Petroleum Producers Association**  
P.O. Box 230  
Pensacola, FL 32591  
(904) 434-6830  
(904) 434-6842 Fax

**Illinois Oil & Gas Association**  
P.O. Box 788  
Mount Vernon, IL 62864  
(618) 242-2857  
(618) 242-3418 Fax  
<http://www.ioga.com>

**Independent Oil & Gas Association of New York**  
5743 Walden Drive  
Lakeview, NY 14085  
(716) 627-4250  
(716) 627-4375 Fax  
<http://iogany.org>

**Independent Oil & Gas Assoc. of Pennsylvania**  
Northridge Office Plaza II  
Wexford, PA 15090-7906  
(724) 933-7306  
(717) 933-7310 Fax

**Independent Oil & Gas Assoc. of West Virginia**  
405 Capitol St., Suite 507  
Charleston, WV 25301  
(304) 344-9867  
(304) 344-5836 Fax  
<http://www.iogawv.com/>

**Independent Oil Producers' Agency**  
1228 N Street, Suite 26  
Sacramento, CA 95814  
(916) 442-7095  
(916) 442-5822 Fax

**Independent Oil Producers Assoc. Tri-State**  
2104 Lincoln Avenue  
Evansville, IN 47714  
(812) 479-9451  
(812) 476-2569 Fax

**Independent Petroleum Assoc. of Mountain States**  
518 17th Street, Suite 620  
Denver, CO 80202  
(303) 623-0987  
(303) 893-0709 Fax  
<http://www.ipams.org>

**Independent Petroleum Assoc. of New Mexico**  
529 West San Francisco St./PO Box 576  
Santa Fe, NM 87504  
(505) 984-0128  
(505) 622-8996 Fax  
<http://www.ipanm.org>

**Indiana Oil & Gas Association**  
Route 1, P.O. Box 197  
Bridgeport, IL 62417  
(618) 943-1010  
(618) 943-5301 Fax

**International Association of Geophysical Contractors**  
2550 N. Loop, W, Suite 104  
Houston, TX 77092  
(713) 957-8080  
(713) 957-0008 Fax  
<http://www.iagc.org>

**Kansas Independent Oil & Gas Association**  
105 S. Broadway, Suite 500  
Wichita, KS 67202-4262  
(316) 263-7297  
(316) 263-3021 Fax  
<http://www.kioga.org>

**Kentucky Oil & Gas Association**  
#1-A Physicians Park  
Frankfort, KY 40601  
(502) 226-1955  
(502) 226-3626 Fax  
<http://kyoilgas.org>

**Liaison Committee of Cooperating Oil & Gas Associations**  
P.O. Box 1143  
Graham, TX 76450  
(940) 549-5261  
(940) 549-4241 Fax

**Louisiana Independent Oil & Gas Association**  
P.O. Box 4069  
Baton Rouge, LA 70821-4069  
(800) 443-1433  
(225) 388-9561 Fax  
<http://www.lioga.com>

**Louisiana Landowners Association**  
P.O. Box 44121  
Baton Rouge, LA 70804-4121  
(504) 927-5619  
(504) 928-7339 Fax  
<http://www.louisiana2000.com/LLA/>

**Michigan Oil & Gas Association**  
124 West Allegan St., Suite 1610  
Lansing, MI 48933  
(517) 487-1092  
(517) 487-0961 Fax  
<http://www.michiganoilandgasassociation.org>

**Mississippi Indep. Producers & Royalty Owners**  
P.O. Box 13393  
Jackson, MS 39236  
(601) 362-0502  
(601) 362-5397 Fax  
<http://www.mipro.ms>

**Montana Petroleum Association**  
601 Euclid Ave., P.O. Box 1186  
Helena, MT 59624-1186  
(406) 442-7582  
(406) 443-7291 Fax  
<http://montanapetroleum.org>

**National Association of Royalty Owners**  
P.O. Box 5779  
Norman, OK 73070-5779  
(405) 573-2972  
<http://www.naro-us.org>

**National Stripper Well Association**  
P.O. Box 18336  
Oklahoma City, OK 73154  
(405) 601-8002

**New Mexico Oil & Gas Association**  
P.O. Box 1864, 500 Don Gaspar  
Santa Fe, NM 87504-1864  
(505) 982-2568  
(505) 982-0811 Fax  
<http://www.nmoga.org>

**New York State Oil Producers Association**  
37 Elm St., P.O. Box 364  
Eldred, PA 16731  
(814) 225-4659

**Northern Alliance of Independent Producers**  
P.O. Box 2422  
Bismarck, ND 58502  
(701) 224-5037  
(701) 224-5038

**Ohio Oil & Gas Association**  
P.O. Box 535/1718 Columbus Rd., SW  
Granville, OH 43023-0535  
(740) 587-0444  
(740) 587-0446 Fax  
<http://www.ooga.org>

**Oklahoma Independent Petroleum Association**  
3555 Northwest 58th St., Suite 400  
Oklahoma City, OK 73112  
(405) 942-2334  
(405) 942-4636 Fax  
<http://www.oipa.com>

**Panhandle Producers & Royalty Owners Assoc.**  
3131 Bell #209  
Amarillo, TX 79106  
(806) 352-5637  
(806) 359-1274 Fax  
<http://www.pproa.org>





## COOPERATING OIL & GAS ASSOCIATIONS

### Pennsylvania Oil & Gas Association

106 Locust Grove Rd./P.O. Box 349  
Bainbridge, PA 17405  
(717) 426-0067  
(717) 426-3010 Fax

### Permian Basin Petroleum Association

P.O. Box 132/415 W. Wall, 1st Floor  
Midland, TX 79701  
(432) 684-6345  
(432) 684-7836 Fax  
<http://www.pbpa.info/>

### Petroleum Association of Wyoming

951 Werner Court, Suite 100  
Casper, WY 82601  
(307) 234-5333  
<http://www.pawyo.org>

### Petroleum Equipment Suppliers Association

9225 Katy Freeway, Suite 310  
Houston, TX 77024  
(713) 932-0168  
(713) 932-0497 Fax  
<http://www.pesa.org/>

### Petroleum Technology Transfer Council

16010 Barkers Point Lane, Suite 220  
Houston, Texas 77079  
(888) THE-PTTC/(281) 921-1720  
(281) 921-1723 Fax  
<http://www.pttc.org>

### Society of Indep. Professional Earth Scientists

4925 Greenville Avenue, Suite 1106  
Dallas, TX 75206  
(214) 363-1780  
(214) 363-8195 Fax  
<http://www.sipes.org>

### Tennessee Oil & Gas Association

750 Old Hickory Blvd., #285  
Brentwood, TN 37027  
(615) 263-1291  
(615) 263-1282 Fax  
<http://www.tennoil.com>

### Texas Alliance of Energy Producers

726 Scott Ave., Ste. 500  
Wichita Falls, TX 76301  
(800) 299-2998  
(940) 723-4132 Fax  
<http://www.texasalliance.org>

### Texas Independent Producers & Royalty Owners Association

515 Congress Avenue, Suite 910  
Austin, TX 78701  
(512) 477-4452  
(512) 476-8070 Fax  
<http://www.tipro.org>

### Virginia Oil & Gas Association

1007 East Watauga Ave.  
Johnson City, TN 37601  
(423) 926-2536  
(423) 378-1723 Fax

### Wyoming Independent Producers Association

P.O. Box 2325  
Gillette, WY 82717-2325  
(307) 686-1081  
(307) 686-0560 Fax  
<http://www.energyconnect.com/wipa>

### Contributing Associations

#### Alaska Oil & Gas Association

121 W. Fireweed, Suite 207  
Anchorage, AK 99503  
(907) 272-1481  
(907) 279-8114 Fax  
<http://www.aoga.org>

#### American Association of Petroleum Geologists

1444 S. Boulder Ave./P.O. Box 979  
Tulsa, OK 74101  
(800) 364-2274  
(981) 560-2694  
<http://www.aapg.org>

#### American Petroleum Institute

1220 L St. NW  
Washington, DC 20005-4070  
(202) 682-8000  
(202) 962-4776 Fax  
<http://www.api.org>

#### Canadian Association of Petroleum Producers

Suite 2100, 350 7th Avenue S.W.  
Calgary, Alberta  
Canada T2P 3N9  
(403) 267-1100  
(403) 261-4622 Fax  
<http://www.capp.ca>

#### Illinois Petroleum Resources Board

P.O. Box 491  
Mount Vernon, IL 62864  
(618) 242-2861  
(618) 242-3418 Fax

#### International Association of Drilling Contractors

P.O. Box 4287/10370 Richmond Ave., Ste. 760  
Houston, TX 77210-4287/77042  
(713) 292-1945  
(713) 292-1946  
<http://www.iadc.org>

#### Louisiana Mid-Continent Oil & Gas Association

801 North Blvd.  
Baton Rouge, LA 70802  
(225) 387-3205  
(225) 344-5502 Fax  
<http://www.lmoga.com>

#### Mid-Continent Oil & Gas Association

6701 N. Broadway, Suite 300  
Oklahoma City, OK 73116  
(405) 843-5741  
(405) 843-5746 Fax  
<http://www.okmoga.com>

#### Nebraska Independent Oil & Gas Association

P.O. Box 427  
Kimball, NE 69145  
(308) 235-2906  
(308) 235-2108 Fax

#### North Dakota Petroleum Council

120 N 3rd St., P.O. Box 1395  
Bismarck, ND 58502-1395  
(701) 223-6380  
(701) 222-0006 Fax  
<http://www.ndoil.org>

### Public Lands Advocacy

1410 Grant St., Suite C-307  
Denver, CO 80203  
(303) 860-0212  
(303) 860-0310 Fax  
<http://www.publiclandsadvocacy.org>

### Society of Petroleum Engineers

P.O. Box 833836/222 Palisades Creek Drive  
Richardson, TX 75083  
(800) 456-6863  
(972) 952-9435  
<http://www.spe.org>

### Southeastern Ohio Oil & Gas Association

Rt. 1, Box 55-P  
Marietta, OH 45750  
(740) 374-3203  
(740) 374-2840 Fax  
<http://www.sooga.org>

### Southwest Kansas Royalty Owners Association

209 East 6th, Box 250  
Hugoton, KS 67951  
(620) 544-4333  
(620) 544-2230 Fax  
<http://www.swkroa.com>

### Texas Oil & Gas Association

304 W. 13th St.  
Austin, TX 78701  
(512) 478-6631  
(512) 472-3859 Fax  
<http://www.txoga.org>

### Utah Petroleum Association

533 West 2600 South, Suite 270  
Bountiful, UT 84010  
(801) 295-5399  
(801) 295-5477 Fax  
<http://www.utahpetroleum.org>

### Western States Petroleum Association

1415 L St., Ste. 600  
Sacramento, CA 95814  
(916) 444-9981  
<http://www.wspa.org>

### West Virginia Oil & Natural Gas Association

P.O. Box 3231  
Charleston, WV 25332-3231  
(304) 343-1609  
<http://www.wvonga.com>



## STATE RANKINGS

### *Crude Oil Wells Drilled*

- 1 Texas
- 2 Oklahoma
- 3 California
- 4 Kansas
- 5 New Mexico
- 6 Louisiana
- 7 Ohio
- 8 Wyoming
- 9 Colorado
- 10 Montana
- 11 Federal Offshore
- 12 North Dakota
- 13 Michigan
- 14 Utah
- 15 New York
- 16 Alaska
- 17 Arkansas
- 18 West Virginia
- 19 Mississippi
- 20 Nebraska
- 21 Alabama
- 22 South Dakota
- 23 Nevada
- 24 Florida
- 25 Arizona

### *Natural Gas Wells Drilled*

- 1 Texas
- 2 West Virginia
- 3 Oklahoma
- 4 New Mexico
- 5 Wyoming
- 6 Colorado
- 7 Ohio
- 8 Kansas
- 9 Kentucky
- 10 Louisiana
- 11 Michigan
- 12 New York
- 13 Montana
- 14 Alabama
- 15 Federal Offshore
- 16 Arkansas
- 17 Utah
- 18 California
- 19 Mississippi
- 20 North Dakota
- 21 Nebraska
- 22 South Dakota
- 23 Oregon
- 24 Arizona
- 25 Florida
- 26 Nevada
- 27 Alaska
- 28 Illinois
- 29 Indiana

### *Crude Oil Production*

- 1 Federal Offshore
- 2 Texas
- 3 Alaska
- 4 California
- 5 Louisiana
- 6 New Mexico
- 7 Oklahoma
- 8 Wyoming
- 9 Kansas
- 10 North Dakota
- 11 Montana
- 12 Colorado
- 13 Mississippi
- 14 Utah
- 15 Illinois
- 16 Alabama
- 17 Arkansas
- 18 Michigan
- 19 Ohio
- 20 Florida
- 21 Kentucky
- 22 Pennsylvania
- 23 Nebraska
- 24 Indiana
- 25 South Dakota
- 26 West Virginia
- 27 Nevada
- 28 Tennessee
- 29 New York
- 30 Missouri
- 31 Arizona
- 32 Virginia

### *Natural Gas Production*

- 1 Texas
- 2 Federal Offshore
- 3 Oklahoma
- 4 New Mexico
- 5 Wyoming
- 6 Louisiana
- 7 Colorado
- 8 Alaska
- 9 Kansas
- 10 California
- 11 Alabama
- 12 Utah
- 13 Michigan
- 14 West Virginia
- 14 Pennsylvania
- 16 Arkansas
- 17 Montana
- 18 Kentucky
- 19 Ohio
- 20 Mississippi
- 21 North Dakota
- 22 New York
- 23 Indiana
- 24 Florida
- 25 Tennessee
- 26 Nebraska
- 27 South Dakota
- 28 Oregon
- 29 Arizona
- 30 Illinois
- 31 Maryland
- 32 Nevada





## CRUDE OIL SUMMARY

Year	Production			Imports	Supply		Exports	Demand		Crude Reserves		Price
	Crude Oil*	NGL*	Total	Total*	Other	Total		Domestic	Total	Proved*	New*	Oil
	(thous. b/d)									Reserves	Reserves	Wellhead
										(mill. bbls.)	(mill. bbls.)	(\$/bbl.)
1959	7,054	879	7,933	1,780	86	9,799	211	9,526	9,737	31,719	3,667	2.90
1960	7,035	929	7,964	1,815	147	9,926	202	9,798	10,000	31,613	2,365	2.88
1961	7,183	991	8,174	1,917	179	10,270	174	9,976	10,150	31,759	2,658	2.89
1962	7,332	1,021	8,353	2,082	175	10,610	168	10,400	10,568	31,389	2,181	2.90
1963	7,542	1,098	8,640	2,123	202	10,965	208	10,743	10,951	30,970	2,174	2.89
1964	7,614	1,155	8,769	2,258	217	11,244	202	11,023	11,225	30,991	2,665	2.88
1965	7,804	1,210	9,014	2,468	220	11,702	187	11,513	11,700	31,352	3,048	2.88
1966	8,295	1,284	9,579	2,573	246	12,398	198	12,085	12,283	31,452	2,964	2.88
1967	8,810	1,409	10,219	2,537	293	13,049	307	12,560	12,867	31,377	2,962	2.92
1968	9,096	1,504	10,600	2,840	347	13,787	231	13,393	13,624	30,707	2,455	2.94
1969	9,238	1,590	10,828	3,166	339	14,333	233	14,137	14,370	29,632	2,120	3.09
1970	9,637	1,660	11,297	3,419	355	15,071	259	14,697	14,956	39,001	2,689	3.18
1971	9,463	1,694	11,157	3,925	438	15,520	224	15,213	15,437	38,063	2,318	3.39
1972	9,441	1,744	11,185	4,741	431	16,357	222	16,367	16,589	36,339	1,558	3.39
1973	9,208	1,738	10,946	6,256	472	17,674	231	17,308	17,539	35,300	2,146	3.89
1974	8,774	1,688	10,462	6,112	478	17,052	221	16,652	16,873	34,250	1,994	6.87
1975	8,375	1,632	10,007	6,056	631	16,694	209	16,322	16,531	32,682	1,318	7.67
1976	8,132	1,604	9,736	7,313	577	17,626	223	17,461	17,684	30,942	1,085	8.19
1977	8,245	1,618	9,863	8,808	531	19,202	243	18,431	18,674	31,780	1,140	8.57
1978	8,707	1,567	10,274	8,364	315	18,953	362	18,847	19,209	31,355	2,583	9.00
1979	8,552	1,583	10,135	8,456	503	19,094	471	18,516	18,987	29,810	1,410	12.64
1980	8,597	1,573	10,170	6,909	616	17,695	544	17,056	17,600	29,805	2,970	21.59
1981	8,572	1,609	10,181	5,995	392	16,568	595	16,058	16,653	29,426	2,570	31.77
1982	8,649	1,550	10,199	5,113	478	15,790	815	15,296	16,111	27,858	1,382	28.52
1983	8,688	1,559	10,247	5,051	503	15,801	739	15,231	15,970	27,735	2,897	26.19
1984	8,879	1,630	10,509	5,437	587	16,533	722	15,726	16,448	28,446	3,748	25.88
1985	8,971	1,609	10,580	5,067	640	16,287	781	15,726	16,507	28,416	3,022	24.09
1986	8,680	1,551	10,231	6,223	764	17,218	785	16,281	17,066	26,889	1,446	12.51
1987	8,349	1,595	9,944	6,678	768	17,390	764	16,665	17,429	27,256	3,240	15.40
1988	8,151	1,625	9,776	7,402	840	18,018	815	17,283	18,098	26,825	2,380	12.58
1989	7,626	1,546	9,172	8,060	853	18,085	859	17,325	18,184	26,501	2,262	15.86
1990	7,335	1,559	8,894	8,017	1,025	17,936	857	16,988	17,845	26,254	2,258	20.03
1991	7,417	1,659	9,076	7,626	1,047	17,749	1,001	16,714	17,715	24,682	940	16.54
1992	7,171	1,697	8,868	7,888	1,114	17,870	949	17,033	17,953	23,745	1,509	15.99
1993	6,847	1,736	8,583	8,620	1,152	18,355	1,003	17,237	18,240	22,957	1,551	14.25
1994	6,662	1,727	8,389	8,996	1,291	18,676	942	17,718	18,660	22,457	1,768	13.19
1995	6,560	1,762	8,322	8,835	1,517	18,674	949	17,725	18,674	22,351	2,107	14.62
1996	6,465	1,830	8,295	9,478	1,516	19,290	981	18,309	19,215	22,017	1,839	18.46
1997	6,452	1,817	8,253	10,162	1,193	19,623	1,003	18,620	19,623	22,546	2,667	17.23
1998	6,252	1,759	8,011	10,708	1,143	19,862	945	18,917	19,862	21,034	479	10.87
1999	5,881	1,850	7,731	10,852	1,876	20,459	940	19,519	20,459	21,765	2,683	15.56
2000	5,822	1,911	7,733	11,459	1,549	20,741	1,040	19,701	20,741	22,045	2,160	26.72
2001	5,801	1,868	7,669	11,871	1,080	20,620	971	19,649	20,620	22,446	2,316	21.84
2002	5,746	1,880	7,626	11,530	1,589	20,745	984	19,761	20,745	22,677	2,106	22.51
2003	5,681	1,719	7,400	12,264	1,397	21,061	1,027	20,034	21,061	21,891	1,091	27.56
2004	5,419	1,719	7,288	13,145	1,406	21,779	1,048	20,731	21,061	21,371	1,299	36.77

Sources: Energy Information Administration\* and IHS

Note: Reserves estimated as of December 31 each year. Imports to Strategic Petroleum Reserve are excluded.

# NATURAL GAS SUMMARY

Year	Production		Extraction	Imports	Supply		Exports	Consumption	Gas Reserves		Price
	Marketed	Dry	Loss		Other	Total			Proved Reserves	New Reserves	
				(Bcf)							Gas Wellhead (\$/Mcf)
1958	11,030	10,572	458	136	582	11,329	39	10,303	254,142	19,058	.12
1959	12,046	11,548	498	134	650	12,350	18	11,321	262,597	20,895	.13
1960	12,771	12,228	543	156	701	13,096	11	11,967	263,759	14,253	.14
1961	13,254	12,662	592	219	686	13,578	11	12,489	267,728	17,421	.15
1962	13,877	13,253	624	402	838	14,509	16	13,267	273,766	19,750	.16
1963	14,747	14,077	670	406	899	15,399	17	13,970	276,151	18,418	.16
1964	15,547	14,824	723	443	866	16,153	20	14,814	281,251	20,447	.15
1965	16,040	15,287	753	456	934	16,703	26	15,280	286,469	21,470	.16
1966	17,207	16,468	739	480	1,116	18,089	25	16,452	289,333	20,355	.16
1967	18,171	17,386	785	564	1,052	19,084	82	17,388	292,908	21,956	.16
1968	19,322	18,494	828	652	1,236	20,476	94	18,632	287,350	13,816	.16
1969	20,698	19,831	867	727	1,329	21,938	51	20,056	275,109	8,482	.17
1970	21,921	21,015	906	821	1,388	23,294	70	21,139	290,746	37,598	.17
1971	22,493	21,610	883	935	1,427	24,052	80	21,793	278,806	10,136	.18
1972	22,532	21,624	908	1,019	1,679	24,400	78	22,101	266,085	9,791	.19
1973	22,648	21,731	917	1,033	1,456	24,297	77	22,049	249,950	6,471	.22
1974	21,601	20,713	887	959	1,624	23,373	77	21,223	237,132	8,501	.30
1975	20,109	19,236	872	953	1,687	21,949	73	19,538	228,200	10,786	.45
1976	19,952	19,098	854	964	1,640	21,767	65	19,946	216,026	7,368	.58
1977	20,025	19,163	863	1,011	1,654	21,884	56	19,521	207,413	12,978	.79
1978	19,974	19,122	852	966	1,817	21,958	53	19,627	208,033	19,425	.91
1979	20,471	19,663	808	1,253	1,620	22,592	56	20,241	200,997	12,221	1.18
1980	20,180	19,403	777	985	1,385	21,822	49	19,877	199,021	16,723	1.59
1981	19,956	19,181	775	904	1,499	21,643	59	19,404	201,730	21,446	1.98
1982	18,582	17,820	762	933	1,647	20,452	52	18,001	201,512	17,288	2.46
1983	16,884	16,094	790	918	1,523	18,590	55	16,835	200,247	14,523	2.59
1984	18,304	17,466	838	843	1,894	20,258	55	17,951	197,463	14,409	2.66
1985	17,270	16,454	816	950	2,005	19,464	55	17,281	193,369	11,891	2.51
1986	16,859	16,059	800	750	1,364	18,234	61	16,221	191,586	13,827	1.94
1987	17,433	16,621	812	993	1,484	19,152	54	17,211	187,211	11,739	1.67
1988	17,918	17,103	816	1,294	1,807	20,278	74	18,030	168,024	-2,517	1.69
1989	18,095	17,311	785	1,382	2,917	21,717	107	19,119	167,116	16,075	1.69
1990	18,594	17,810	784	1,532	2,265	21,693	86	19,174	169,346	19,463	1.71
1991	18,532	17,698	835	1,773	2,699	22,299	129	19,562	167,062	14,918	1.64
1992	18,712	17,840	872	2,138	2,805	22,999	216	20,228	165,015	15,376	1.74
1993	18,982	18,095	886	2,350	3,105	23,690	140	20,790	162,415	15,189	2.04
1994	19,710	18,821	889	2,624	2,598	24,205	162	21,247	163,837	19,744	1.85
1995	19,506	18,599	908	2,841	3,333	24,927	154	22,207	165,146	19,275	1.55
1996	19,751	18,854	958	2,937	3,725	25,669	153	22,610	166,474	21,456	2.17
1997	19,866	18,902	964	2,994	3,641	25,694	157	22,737	167,223	19,960	2.32
1998	19,961	19,024	938	3,152	2,975	25,310	159	22,246	164,041	15,538	1.96
1999	19,805	18,832	973	3,585	2,585	25,166	163	22,405	167,406	22,293	2.19
2000	20,198	19,182	1,016	3,782	3,053	26,261	244	23,333	177,427	29,240	3.68
2001	20,570	19,616	954	3,977	2,110	26,076	373	22,239	183,460	25,812	4.00
2002	19,885	18,928	957	4,015	2,734	26,193	516	23,007	186,946	22,839	2.95
2003	19,974	19,099	876	3,996	2,526	26,249	680	22,277	189,044	21,523	4.88
2004	19,517	18,591	926	4,259	2,689	26,393	854	22,389	192,513	22,637	5.46

Sources: Energy Information Administration

Note: Reserves estimated as of December 31 each year. Imports to Strategic Petroleum Reserve are excluded.



## DRILLING SUMMARY

Year	Seismic Crews		Rotary Rigs			Exploratory Wells		Total Well Completions				Footage
	Working	Active	New-Field Wildcats	Total Exploratory	Oil Wells	Gas Wells	Dry Wells	Service Holes	Total Wells	Total Drilled (mill. ft.)		
1958	5,064	1,923	6,950	13,199	24,578	4,803	19,043	1,615	50,039	198.2		
1959	5,097	2,074	7,031	13,191	25,800	5,029	19,265	1,670	51,764	209.2		
1960	4,625	1,750	7,320	11,704	21,186	5,258	17,574	2,733	46,751	190.7		
1961	4,557	1,760	6,909	10,992	21,101	5,664	17,106	3,091	46,962	192.1		
1962	3,915	1,637	6,794	10,797	21,249	5,848	16,682	2,400	46,179	198.6		
1963	3,966	1,500	6,570	10,664	20,288	4,751	16,347	2,267	43,653	184.4		
1964	4,102	1,502	6,623	10,747	20,620	4,855	17,488	2,273	45,236	189.9		
1965	4,247	1,387	6,175	9,466	18,761	4,724	16,025	1,913	41,423	181.5		
1966	3,672	1,273	6,158	10,313	16,447	4,167	15,770	2,152	38,536	165.5		
1967	3,337	1,134	5,260	8,878	15,329	3,659	13,246	1,584	33,818	144.7		
1968	3,268	1,169	5,205	8,879	14,331	3,456	12,812	2,315	32,914	149.3		
1969	3,156	1,194	5,956	9,701	14,368	4,083	13,736	1,866	34,053	161.0		
1970	2,340	1,028	4,829	7,436	13,043	4,031	11,099	1,369	29,542	142.0		
1971	2,655	976	4,636	7,131	11,903	3,983	10,382	1,414	27,682	130.7		
1972	3,016	1,107	5,011	7,551	11,437	5,484	11,013	1,486	29,420	142.5		
1973	2,999	1,195	5,096	7,771	10,251	6,975	10,466	970	28,662	141.9		
1974	3,662	1,471	5,946	8,969	13,644	7,168	12,205	1,398	34,415	153.8		
1975	3,416	1,660	6,234	9,459	16,979	8,169	13,736	1,920	40,804	184.9		
1976	3,140	1,656	5,856	9,317	17,697	9,438	13,805	1,674	42,614	187.3		
1977	3,063	2,001	6,162	10,140	18,700	12,119	15,036	1,453	47,308	215.7		
1978	4,148	2,255	6,731	11,030	19,065	14,405	16,591	1,610	51,671	238.4		
1979	4,400	2,176	6,423	10,735	20,689	15,166	16,035	1,472	53,362	243.7		
1980	4,962	2,910	7,332	12,870	32,120	17,132	20,234	2,076	71,562	311.4		
1981	5,877	3,970	9,151	17,430	42,520	19,742	26,972	2,366	91,600	406.5		
1982	5,676	3,105	7,386	15,882	39,252	18,810	25,827	2,212	86,101	375.4		
1983	4,944	2,229	6,057	13,845	37,396	14,505	23,837	2,047	77,785	316.7		
1984	4,655	2,428	6,528	15,138	44,472	14,962	25,549	2,251	87,234	368.8		
1985	3,494	1,969	5,630	12,208	36,458	12,917	21,431	1,736	75,542	316.8		
1986	2,016	964	3,484	7,156	18,598	8,055	12,362	834	39,849	177.6		
1987	1,561	936	3,515	6,903	16,441	8,114	11,698	890	37,143	163.8		
1988	1,512	936	3,271	6,350	13,508	8,446	10,284	953	33,191	155.2		
1989	1,392	869	2,644	5,251	10,412	9,483	8,468	672	29,035	135.0		
1990	1,493	1,010	2,685	5,074	12,104	10,242	8,359	802	31,417	149.5		
1991	1,251	862	2,195	4,399	11,733	9,020	7,664	1,070	29,487	141.4		
1992	847	721	1,762	3,525	8,821	7,854	6,394	989	24,058	121.3		
1993	952	755	1,683	3,603	9,144	10,285	6,594	716	25,724	138.5		
1994	1,087	775	1,613	3,787	7,704	10,044	5,568	669	23,985	130.6		
1995	1,253	723	1,605	3,402	8,736	8,923	5,425	885	23,969	124.5		
1996	1,307	779	1,676	3,342	9,937	10,118	5,698	791	26,544	138.7		
1997	1,336	943	1,757	3,155	12,028	11,838	6,354	1,017	31,237	165.4		
1998	1,566	827	1,478	2,445	8,389	12,233	5,202	838	26,662	143.6		
1999	1,125	625	1,244	1,842	5,419	12,663	3,930	478	22,490	110.0		
2000	727	918	1,505	2,231	8,860	17,283	4,721	930	31,794	148.9		
2001	717	1,156	1,765	3,018	9,581	21,601	4,667	786	36,635	184.0		
2002	674	830	1,452	2,233	7,222	16,801	3,771	747	28,541	145.0		
2003	481	1,032	1,711	2,484	8,710	20,715	4,011	815	34,251	178.5		
2004	563	1,192	1,951	2,891	9,303	23,377	3,979	1,447	36,777	202.6		

Sources: Seismic crews from EIA & IHS Energy Group & World Oil. Rotary rigs from Baker-Hughes. All other data from American Petroleum Institute.

Notes: Total well completions include exploratory and development wells. API historical data may not match IHS data used for recent decade on state and summary pages.



# UNITED STATES



□ States with oil and/or gas production

## Background Information

### States

Number of states	50
With oil and/or gas production	33

### First year of production

Crude oil (Pennsylvania)	1859
Natural gas (Pennsylvania)	1881

### Year and amount of peak production

Crude oil — 3,517,450 thous. bbls.	1970
Natural gas — 22,647,549 MMcf	1973

### Deepest producing well (ft.)

Crude oil (GOM)	23,257
Natural gas (Texas)	26,536

### Year and depth of deepest well drilled (ft.)

2003 (GOM)	31,824
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### Cumulative number of total wells drilled

as of 12/31/04 (excluding service wells)

Oil wells	1,897,648	54%
Gas wells	584,405	17%
Dry holes	1,035,253	29%
Total	3,517,306	100%

### Cumulative crude oil wellhead value

as of 12/31/04 (thous. \$) \$1,799,045,472

### Cumulative production & new reserves

as of 12/31/04

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	206,637	47,194	253,831	1,206,597
Production	185,518	36,369	221,887	1,028,917

## Value of Oil and Gas

### Average wellhead price

(2004)

Crude oil (\$/bbl.)	\$36.77
Natural gas (\$/Mcf)	\$5.46

### Wellhead value of production

(2004, in thous. \$)

Crude oil	\$ 65,667,175
Natural gas	\$ 94,941,068
Total	\$160,608,243

### Average natural gas price

(2004, \$/Mcf)

Residential consumers	\$10.75
Commercial consumers	\$ 9.43
Industrial consumers	\$ 6.53
Electric utilities	\$ 6.11
City Gate	\$ 6.65

### Severance taxes paid

(2004, in thous. \$) \$6,216,369

## 2004 Industry Statistics

### Number of wells drilled

	Exploratory	Development	Total
Oil	451	8,859	9,310
Gas	1,511	21,934	23,445
Dry	1,371	2,654	4,025
Total	3,333	33,447	36,780

### Total footage drilled

(thous. ft.)

	Exploratory	Development	Total
Oil	3,338.8	39,184.3	42,523.1
Gas	8,962.5	127,542.3	136,504.8
Dry	9,569.4	14,011.8	23,581.2
Total	21,870.7	180,738.4	202,609.1

(Note: Totals may not add due to rounding.)

### New-field wildcats drilled

	1,903
Footage (thous. ft.)	12,099.4

### Average rotary rigs active

1,192

### World-wide rank

	Crude Oil	Natural Gas
Wells drilled	1st	1st
Production	3rd	2nd
Reserves (2004)	11th	6th

### Number of producing wells

(12/31/04)

Crude oil	389,348
Natural gas	323,747
Total	713,095

### Average production

Crude oil (thous. b/d)	4,887
Natural gas	48,231
Total	53,118

### Natural gas marketed production

(MMcf)

19,911,802

### Average output per producing well

Crude oil (bbls.)	4,582
Natural gas (Mcf)	54,377

### Average number of employees

Oil and natural gas extraction	320,782
Refining	83,720
Transportation	227,059
Wholesale	198,805
Retail	873,964
Total petroleum industry	1,704,330

## 2004 Latest Available Data

### Petroleum reserves

as of 12/31/04 (mill. bbls.)

	Crude Oil	NGL	Total
New reserves	1,299	1,296	2,595
Production	1,819	827	2,646
Net annual change	-520	469	-51
Proved reserves	21,371	7,928	29,299

### Natural gas reserves

as of 12/31/04 (Bcf)

	Associated Dissolved	Non- Associated	Dry Gas
New reserves	1,839	22,233	22,637
Production	2,742	17,275	19,168
Net annual change	-903	4,958	3,469
Proved reserves	27,649	173,551	192,513

### Cost of drilling and equipping wells

	Cost/ft. (\$)	Cost/ well (\$)	Total Cost (thous. \$)
Oil	284	1,296,705	12,072,320
Gas	277	1,615,094	37,865,875
Dry	360	2,109,620	8,491,222

### Marginal oil wells

Producing marginal wells	346,876
Crude oil production in bbls. (thous.)	352,166
Crude oil production b/d (thous.)	960

### Marginal natural gas wells

as of 12/31/04

Producing marginal wells	226,561
Natural gas production (MMcf)	2,093,201

### Federal Onshore Mineral Lease Royalties

Oil	\$ 1,778,524,187
Gas	\$4,769,695,881
Total Royalties	\$ 7,136,139,984

### For more information please contact:

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UNITED STATES



# FEDERAL OFFSHORE



## Background Information

### Planning Areas

Number of areas	25
With oil and/or gas production	3

### First year of production

Crude oil	1946
Natural gas	1946

### Year and amount of peak production

Crude oil — 591,589 thous. bbls.	2001
Natural gas — 5,248,041 MMcf	1997

### Deepest producing well (ft.)

Water Depth	7,570
Natural gas	24,709

### Year and depth of deepest well drilled (ft.)

Water depth (2001)	10,011
Well depth (2005)	30,505

### Cumulative number of total wells drilled as of 12/31/04 (excluding service wells)

Oil wells	9,692	29%
Gas wells	9,020	27%
Dry holes	14,801	44%
Total	33,513	100%

### Cumulative crude oil wellhead value

as of 12/31/04 (thous. \$)	\$234,090,781
----------------------------	---------------

### Cumulative production & new reserves

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	21,042	4,520	25,562	102,771
Production	14,360	2,580	16,940	60,452

## Value of Oil and Gas

### Average wellhead price (2004)

Crude oil (\$/bbl.)	\$36.83
Natural gas (\$/Mcf)	\$5.18

### Wellhead value of production (2004, in thous. \$)

Crude oil	\$20,713,229
Natural gas	\$21,006,661
Total	\$41,719,890

### Federal Reserves (2004, in thous. \$)

Bonuses	\$865.26
Rents	\$224.01
Royalties	\$6,514.66
Total	\$7,606.77



## 2004 Industry Statistics

### Number of wells drilled

	Exploratory	Development	Total
Oil	2	164	166
Gas	27	338	365
Dry	142	113	255
Total	171	615	786

### Total footage drilled

(thous. ft.)

	Exploratory	Development	Total
Oil	18.5	1,840.0	1,858.5
Gas	261.2	3,410.3	3,671.5
Dry	1,838.1	1,212.2	3,050.3
Total	2,117.8	6,462.5	8,580.3

(Note: Totals may not add due to rounding.)

New-field wildcats drilled	81
Footage (thous. ft.)	1124.75

Average rotary rigs active	97
----------------------------	----

### State-wide rank

	Crude Oil	Natural Gas
Wells drilled	13th	14th
Production	1st	2nd
Reserves (2004)	1st	3rd

### Number of producing wells

(12/31/04)

Crude oil	3,840
Natural gas	4,136
Total	7,976

### Average production

Crude oil (thous. b/d)	1,303
NGL (est.)	234
Natural gas (MMcf/day)	9,169

### Natural gas marketed production

(MMcf) 3,969,450

### Average output per producing well

Crude oil (bbls.)	124,165
Natural gas (Mcf)	811,352

### Producing Well Depth

	Oil Wells	Gas Wells
Shelf (wd <1,000ft)	3,455	3,982
Deep (wd 1,000-4,999ft)	364	133
Ultra Deep (wd >5,000ft)	21	21
Total	3,840	4,136

### Number of operators

Producing Oil	120
Producing Natural Gas	126

## 2004 Latest Available Data

### Petroleum reserves

as of 12/31/04 (mill. bbls.)

	Crude Oil	NGL	Total
New reserves	66	151	217
Production	495	155	650
Net annual change	-429	-4	-433
Proved reserves	4,691	721	5,412

### Natural gas reserves

as of 12/31/04 (Bcf)

	Associated Dissolved	Non- Associated	Dry Gas
New reserves	-175	903	622
Production	881	3,133	3,921
Net annual change	-1,056	-2,230	-3,299
Proved reserves	6,361	13,386	19,271

### Cost of drilling and equipping wells

	Cost/ft. (\$)	Cost/ well (\$)	Total Cost (thous. \$)
Oil	1,342	15,029,000	2,494,843
Gas	1,387	13,952,000	5,092,485
Dry	1,331	15,923,000	4,060,462

## 2004 Lease Statistics

### Prelease activities

G&G permits	960
-------------	-----

### Postlease activities

Platform installations	107
Platform removals	180
Platform in place	3,940

### Lease Characteristics

Existing leases	
<200 meters of water	3,054
200-400 meters of water	96
400-900 meters of water	79
>900 meters of water	88

### Oil & natural gas fields

Producing	848
Non-producing	327

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# ALABAMA



□ Counties with oil and/or gas production

## Background Information

### Counties

Number of counties	67
With oil and/or gas production	23

### First year of production

Crude oil	1944
Natural gas	1904

### Year and amount of peak production

Crude oil — 22,153 thous. bbls.	1980
Natural gas — 378,877 MMcf	1996

### Deepest producing well (ft.)

Crude oil	18,750
Natural gas	21,805

### Year and depth of deepest well drilled (ft.)

1995	24,256
------	--------

### Cumulative number of total wells drilled

as of 12/31/04 (excluding service wells)

Oil wells	1,365	10%
Gas wells	7,545	57%
Dry holes	4,388	33%
Total	13,298	100%

### Cumulative crude oil wellhead value

as of 12/31/04 (thous. \$) \$10,236,698

### Cumulative production & new reserves

as of 12/31/04

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	508	390	898	8,134
Production	474	384	858	6,289

## Value of Oil and Gas

### Average wellhead price

(2004)

Crude oil (\$/bbl.)	\$ 38.79
Natural gas (\$/Mcf)	\$ 6.66

### Wellhead value of production

(2004, in thous. \$)

Crude oil	\$ 180,839
Natural gas	\$ 2,160,750
Total	\$ 2,341,589

### Average natural gas price

(2004, \$/Mcf)

Residential consumers	\$13.34
Commercial consumers	\$ 10.91
Industrial consumers	\$ 7.35
Electric utilities	\$ 6.24
City Gate	\$ 6.65

### Severance taxes paid

(2004, in thous. \$)

\$101,184

## 2004 Industry Statistics

### Number of wells drilled

	Exploratory	Development	Total
Oil	8	8	16
Gas	3	388	391
Dry	25	10	35
Total	36	406	442

### Total footage drilled

(thous. ft.)

	Exploratory	Development	Total
Oil	77.4	104.4	181.8
Gas	13.0	847.9	860.9
Dry	162.4	17.8	180.2
Total	252.8	970.1	1,222.9

(Note: Totals may not add due to rounding.)

New-field wildcats drilled	22
Footage (thous. ft.)	170.1

Average rotary rigs active	3
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### State-wide rank

	Crude Oil	Natural Gas
Wells drilled	21st	12th
Production	16th	11th
Reserves (2004)	18th	10th

### Number of producing wells

(12/31/04)

Crude oil	502
Natural gas	4,784
Total	5,286

### Average production

Crude oil (thous. b/d)	13
NGL (thous. b/d)	7.6
Natural gas (MMcf/d)	886

### Natural gas marketed production

(MMcf)	316,021
--------	---------

### Average output per producing well

Crude oil (bbls.)	9,286
Natural gas (Mcf)	67,817

### Coalbed Methane (YTD MMcf)

Oil Wells	0	Gas Wells	4,336
Daily Average (MMcf) / Well			76.8

Heavy Oil (YTD BBls, in thous.)	NA
Wells	NA
Av. Bbls per day	NA
Av. Bbls per well/d	NA

### Average number of employees

Oil and natural gas extraction	1,500
Refining	1,000
Transportation	3,481
Wholesale	3,712
Retail	19,370
Total petroleum industry	29,063

## 2004 Latest Available Data

### Petroleum reserves

as of 12/31/04 (mill. bbls.)

	Crude Oil	NGL	Total
New reserves	14	-6	8
Production	5	4	9
Net annual change	1	-10	-9
Proved reserves	53	50	103

### Natural gas reserves

as of 12/31/04 (Bcf)

	Associated Dissolved	Non- Associated	Dry Gas
New reserves	5	139	146
Production	5	325	327
Net annual change	0	-186	-181
Proved reserves	32	4,127	4,120

### Cost of drilling and equipping wells

	Cost/ft. (\$)	Cost/ well (\$)	Total Cost (thous. \$)
Oil	354	4,019,210	64,307
Gas	220	496,432	194,105
Dry	161	830,743	29,076

### Marginal oil wells

Producing marginal wells	320
Crude oil production in bbls. (thous.)	740
Crude oil production b/d (thous.)	2

### Marginal natural gas wells

as of 12/31/04

Producing marginal wells	3,187
Natural gas production (MMcf)	47,877

### Federal Onshore Mineral Lease Royalties

Oil	\$784,437
Gas	\$462,892
Total Royalties	\$1,308,927

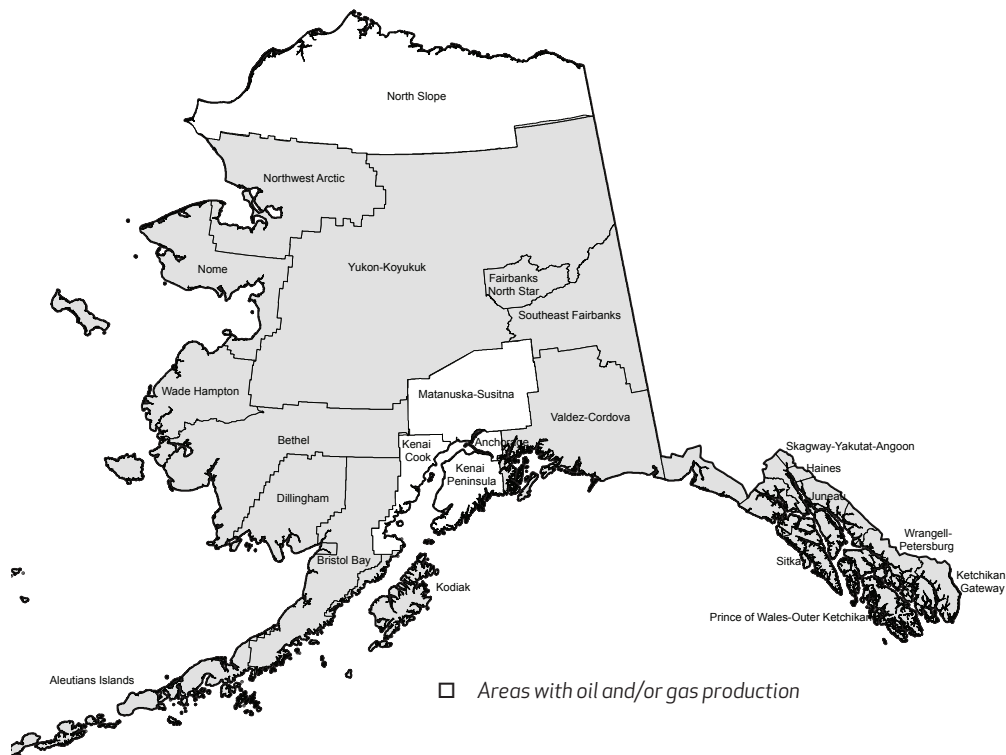
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# ALASKA



## Background Information

### Areas

Number of areas	15
With oil and/or gas production	5

### First year of production

Crude oil	1905
Natural gas	1945

### Year and amount of peak production

Crude oil — 738,143 thous. bbls.	1988
Natural gas — 555,402 MMcf	1994

### Deepest producing well (ft.)

Crude oil	21,980
Natural gas	17,318

### Year and depth of deepest well drilled (ft.)

1998	23,885
------	--------

### Cumulative number of total wells drilled

as of 12/31/04 (excluding service wells)

Oil wells	4,506	78%
Gas wells	293	5%
Dry holes	949	17%
Total	5,748	100%

### Cumulative crude oil wellhead value

as of 12/31/04 (thous. \$) \$211,452,250

### Cumulative production & new reserves

as of 12/31/04

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	19,836	510	20,346	20,115
Production	15,102	329	15,431	10,850

## Value of Oil and Gas

### Average wellhead price

(2004)

Crude oil (\$/bbl.)	\$ 33.17
Natural gas (\$/Mcf)	\$ 3.42

### Wellhead value of production

(2004, in thous. \$)

Crude oil	\$ 11,136,496
Natural gas	\$ 1,613,895
Total	\$12,750,391

### Average natural gas price

(2004, \$/Mcf)

Residential consumers	\$4.88
Commercial consumers	\$ 4.14
Industrial consumers	\$ 1.94
Electric utilities	\$2.79
City Gate	\$3.05

### Severance taxes paid

(2004, in thous. \$)

\$750,425

## 2004 Industry Statistics

### Number of wells drilled

	Exploratory	Development	Total
Oil	--	162	162
Gas	7	20	27
Dry	6	11	17
Total	13	193	206

### Total footage drilled

(thous. ft.)

	Exploratory	Development	Total
Oil	--	896.8	896.8
Gas	73.7	186.7	260.4
Dry	43.3	53.8	97.1
Total	117.0	1,137.3	1,254.3

(Note: Totals may not add due to rounding.)

### New-field wildcats drilled

Footage (thous. ft.)	9
----------------------	---

### Average rotary rigs active

10

### State-wide rank

	Crude Oil	Natural Gas
Wells drilled	12th	24th
Production	3rd	8th
Reserves (2004)	3rd	8th

### Number of producing wells

(12/31/04)

Crude oil	2,384
Natural gas	189
Total	2,574

### Average production

Crude oil (thous. b/d)	917
NGL (thous. b/d)	208
Natural gas (MMcf/day)	610

### Natural gas marketed production

(MMcf)	471,899
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### Average output per producing well

Crude oil (bbls.)	140,773
Natural gas (Mcf)	1,181,929

### Coalbed Methane (YTD MMcf)

Oil Wells	NA	Gas Wells	NA
Daily Average (MMcf) / Well			NA

### Heavy Oil (YTD Bbls, in thous.)

Wells	NA
Av. Bbls per day	NA
Av. Bbls per well/d	NA

### Average number of employees

Oil and natural gas extraction	8,280
Refining	375
Transportation	459
Wholesale	1,426
Retail	1,762
Total petroleum industry	12,302

## 2004 Latest Available Data

### Petroleum reserves

as of 12/31/04 (mill. bbls.)

	Crude Oil	NGL	Total
New reserves	215	0	215
Production	58	18	76
Net annual change	-119	-18	-137
Proved reserves	4,327	369	4,696

### Natural gas reserves

as of 12/31/04 (Bcf)

	Associated Dissolved	Non- Associated	Dry Gas
New reserves	477	129	600
Production	275	206	478
Net annual change	202	-77	122
Proved reserves	6,469	2,004	8,407

### Cost of drilling and equipping wells

	Cost/ft. (\$)	Cost/ well (\$)	Total Cost (thous. \$)
Oil	1,421	8,033,774	1,405,910
Gas	1,480	14,195,138	383,269
Dry	1,618	9,317,622	158,400

### Marginal oil wells

as of 12/31/04

Producing marginal wells	140
Crude oil production in bbls. (thous.)	264
Crude oil production b/d (thous.)	1

### Marginal natural gas wells

as of 12/31/04

Producing marginal wells	--
Natural gas production (MMcf)	--

### Federal Onshore Mineral Lease Royalties

Oil	\$ 1,977,724
Gas	\$10,446,500
Total Royalties	\$ 17,497,301

### Horizontal Wells Data

Horizontal Wells Drilled	116
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ALASKA

# ARIZONA



□ Counties with oil and/or gas production

## Background Information

### Counties

Number of counties	15
With oil and/or gas production	1

### First year of production

Crude oil	1958
Natural gas	1955

### Year and amount of peak production

Crude oil — 3,370 thous. bbls.	1968
Natural gas — 3,161 MMcf	1966

### Deepest producing well (ft.)

Crude oil	6,793
Natural gas	5,992

### Year and depth of deepest well drilled (ft.)

1980	18,013
------	--------

### Cumulative number of total wells drilled

as of 12/31/04 (excluding service wells)

Oil wells	70	6%
Gas wells	52	5%
Dry holes	947	89%
Total	1,069	100%

### Cumulative crude oil wellhead value

as of 12/31/04 (thous. \$) \$70,799,200

### Cumulative production & new reserves

as of 12/31/04

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	NA	NA	NA	NA
Production	NA	NA	NA	NA

## Value of Oil and Gas

### Average wellhead price

(2004)

Crude oil (\$/bbl.)	\$ 36.86
Natural gas (\$/Mcf)	\$ 5.12

### Wellhead value of production

(2004, in thous. \$)

Crude oil	\$ 1,843
Natural gas	\$ 1,116
Total	\$ 2,959

### Average natural gas price

(2004, \$/Mcf)

Residential consumers	\$ 12.16
Commercial consumers	\$ 8.60
Industrial consumers	\$ 6.91
Electric utilities	\$ 5.84
City Gate	\$ 5.63

### Severance taxes paid

(2003/2004, in thous. \$)

\$9,899



## 2004 Industry Statistics

### Number of wells drilled

	Exploratory	Development	Total
Oil	NA	NA	NA
Gas	NA	NA	NA
Dry	1	NA	1
Total	1	NA	1

### Total footage drilled

(thous. ft.)

	Exploratory	Development	Total
Oil	NA	NA	NA
Gas	NA	NA	NA
Dry	4.3	NA	4.3
Total	4.3	NA	4.3

(Note: Totals may not add due to rounding.)

### New-field wildcats drilled

Footage (thous. ft.)	1
	4.3

### Average rotary rigs active

0

### State-wide rank

	Crude Oil	Natural Gas
Wells drilled	NA	NA
Production	31st	29th
Reserves (2004)	NA	NA

### Number of producing wells

(12/31/04)

Crude oil	21
Natural gas	7
Total	28

### Average production

Crude oil (thous. b/d)	0
NGL (thous. b/d)	0
Natural gas (MMcf/day)	1

### Natural gas marketed production

(MMcf)	218
--------	-----

### Average output per producing well

Crude oil (bbls.)	2,391
Natural gas (Mcf)	31,181

### Coalbed Methane (YTD MMcf)

Oil Wells	NA	Gas Wells	NA
Daily Average (MMcf) / Well	NA		

### Heavy Oil (YTD Bbls, in thous.)

Wells	NA
Av. Bbls per day	NA
Av. Bbls per well/d	NA

### Average number of employees

Oil and natural gas extraction	244
Refining	228
Transportation	1,120
Wholesale	1,904
Retail	16,273
Total petroleum industry	19,769

## 2004 Latest Available Data

### Petroleum reserves

as of 12/31/04 (mill. bbls.)

	Crude Oil	NGL	Total
New reserves	NA	NA	NA
Production	NA	NA	NA
Net annual change	NA	NA	NA
Proved reserves	NA	NA	NA

### Natural gas reserves

as of 12/31/04 (Bcf)

	Associated Dissolved	Non- Associated	Dry Gas
New reserves	NA	NA	NA
Production	NA	NA	NA
Net annual change	NA	NA	NA
Proved reserves	NA	NA	NA

### Cost of drilling and equipping wells

	Cost/ft. (\$)	Cost/ well (\$)	Total Cost (thous. \$)
Oil	NA	NA	NA
Gas	NA	NA	NA
Dry	116	502,686	502,686

### Marginal oil wells

Producing marginal wells	19
Crude oil production in bbls. (thous.)	24
Crude oil production b/d (thous.)	--

### Marginal natural gas wells

as of 12/31/04

Producing marginal wells	2
Natural gas production (MMcf)	28

### Federal Onshore Mineral Lease Royalties

Oil	\$ 319,692
Gas	\$ 88,521
Total Royalties	\$ 75,468,922

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# ARKANSAS



□ Counties with oil and/or gas production

## Background Information

### Counties

Number of counties	75
With oil and/or gas production	24

### First year of production

Crude oil	1921
Natural gas	1889

### Year and amount of peak production

Crude oil — 77,398 thous. bbls.	1925
Natural gas — 224,446 MMcf	1996

### Deepest producing well (ft.)

Crude oil	11,804
Natural gas	11,804

### Year and depth of deepest well drilled (ft.)

1992	20,661
------	--------

### Cumulative number of total wells drilled

as of 12/31/04 (excluding service wells)

Oil wells	14,236	40%
Gas wells	6,682	19%
Dry holes	14,243	41%
Total	35,161	100%

### Cumulative crude oil wellhead value

as of 12/31/04 (thous. \$) \$10,404,213

### Cumulative production & new reserves

as of 12/31/04

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	1,817	93	1,910	9,511
Production	1,744	89	1,833	7,413

## Value of Oil and Gas

### Average wellhead price

(2004)

Crude oil (\$/bbl.)	\$36.67
Natural gas (\$/Mcf)	\$ 5.68

### Wellhead value of production

(2004, in thous. \$)

Crude oil	\$ 214,336
Natural gas	\$ 966,861
Total	\$ 1,181,197

### Average natural gas price

(2004, \$/Mcf)

Residential consumers	\$11.73
Commercial consumers	\$ 8.86
Industrial consumers	\$ 8.03
Electric utilities	\$ 6.19
City Gate	\$ 7.12

### Severance taxes paid

(2004, in thous. \$)

\$9,802

## 2004 Industry Statistics

### Number of wells drilled

	Exploratory	Development	Total
Oil	1	14	15
Gas	12	226	238
Dry	13	38	51
Total	26	278	304

### Total footage drilled

(thous. ft.)

	Exploratory	Development	Total
Oil	7.6	80.1	87.7
Gas	49.6	1,329.4	1,379.0
Dry	67.7	212.1	279.8
Total	124.9	1,621.6	1,746.5

(Note: Totals may not add due to rounding.)

New-field wildcats drilled	20
Footage (thous. ft.)	64.7

Average rotary rigs active	6
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### State-wide rank

	Crude Oil	Natural Gas
Wells drilled	22nd	17th
Production	17th	16th
Reserves (2004)	19th	17th

### Number of producing wells

(12/31/04)

Crude oil	2,111
Natural gas	3,954
Total	6,065

### Average production

Crude oil (thous. b/d)	16
NGL (thous. b/d)	0
Natural gas (MMcf/day)	465

### Natural gas marketed production

(MMcf) 170,222

### Average output per producing well

Crude oil (bbls.)	2,732
Natural gas (Mcf)	43,049

Coalbed Methane (YTD MMcf)	1,714
Oil Wells 0 Gas Wells	39
Daily Average (MMcf) / Well	120.1

Heavy Oil (YTD Bbls, in thous.)	NA
Wells	NA
Av. Bbls per day	NA
Av. Bbls per well/d	NA

### Average number of employees

Oil and natural gas extraction	1,988
Refining	675
Transportation	2,279
Wholesale	2,290
Retail	13,093
Total petroleum industry	20,326

## 2004 Latest Available Data

### Petroleum reserves

as of 12/31/04 (mill. bbls.)

	Crude Oil	NGL	Total
New reserves	7	0	7
Production	6	0	6
Net annual change	1	0	1
Proved reserves	51	3	54

### Natural gas reserves

as of 12/31/04 (Bcf)

	Associated Dissolved	Non- Associated	Dry Gas
New reserves	7	334	342
Production	4	166	170
Net annual change	3	168	172
Proved reserves	40	1,797	1,835

### Cost of drilling and equipping wells

	Cost/ft. (\$)	Cost/ well (\$)	Total Cost (thous. \$)
Oil	122	711,344	10,670
Gas	101	584,811	139,185
Dry	76	415,329	21,182

### Marginal oil wells

Producing marginal wells	1,910
Crude oil production in bbls. (thous.)	3,042
Crude oil production b/d (thous.)	8

### Marginal natural gas wells

as of 12/31/04

Producing marginal wells	2,526
Natural gas production (MMcf)	33,641

### Federal Onshore Mineral Lease Royalties

Oil	(\$ 12,509)
Gas	\$3,660,876
Total Royalties	\$ 5,092,228

### Horizontal Wells Data

Horizontal Wells Drilled	3
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# CALIFORNIA



□ Counties with oil and/or gas production

## Background Information

### Counties

Number of counties	58
With oil and/or gas production	29

### First year of production

Crude oil	1861
Natural gas	1889

### Year and amount of peak production

Crude oil —423,877 thous. bbls.	1985
Natural gas —714,893 MMcf	1968

### Deepest producing well (ft.)

Crude oil	14,570
Natural gas	12,576

### Year and depth of deepest well drilled (ft.)

1987	24,426
------	--------

### Cumulative number of total wells drilled

as of 12/31/04 (excluding service wells)

Oil wells	143,604	79%
Gas wells	5,690	3%
Dry holes	33,026	18%
Total	182,320	100%

### Cumulative crude oil wellhead value

as of 12/31/04 (thous. \$) \$187,546,101

### Cumulative production & new reserves

as of 12/31/04

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	30,564	938	31,502	45,538
Production	24,156	1,374	25,530	36,043

## Value of Oil and Gas

### Average wellhead price

(2004)

Crude oil (\$/bbl.)	\$ 34.33
Natural gas (\$/Mcf)	\$ 5.65

### Wellhead value of production

(2004, in thous. \$)

Crude oil	\$ 8,221,520
Natural gas	\$ 425,795
Total	\$8,647,315

### Average natural gas price

(2004, \$/Mcf)

Residential consumers	\$9.86
Commercial consumers	\$8.63
Industrial consumers	\$7.89
Electric utilities	\$6.05
City Gate	\$6.04

### Severance taxes paid

(2004, in thous. \$) \$188,753





## 2004 Industry Statistics

### Number of wells drilled

	Exploratory	Development	Total
Oil	2	2,030	2,032
Gas	17	72	89
Dry	41	60	101
Total	60	2,162	2,222

### Total footage drilled

(thous. ft.)

	Exploratory	Development	Total
Oil	11.2	4,793.2	4,804.4
Gas	96.2	433.9	530.1
Dry	286.1	221.6	507.7
Total	393.5	5,448.7	5,842.2

(Note: Totals may not add due to rounding.)

### New-field wildcats drilled

29

### Footage (thous. ft.)

213.9

### Average rotary rigs active

24

### State-wide rank

	Crude Oil	Natural Gas
Wells drilled	2nd	20th
Production	4th	10th
Reserves (2004)	4th	14th

### Number of producing wells

(12/31/04)

Crude oil	47,666
Natural gas	1,497
Total	49,163

### Average production

Crude oil (thous. b/d)	654
NGL (thous. b/d)	0.4
Natural gas (MMcf/day)	206

### Natural gas marketed production

(MMcf)

319,9191

### Average output per producing well

Crude oil (bbls.)	5,024
Natural gas (Mcf)	50,257

### Coalbed Methane (YTD MMcf)

Oil Wells	NA	Gas Wells	NA
Daily Average (MMcf) / Well			NA

### Heavy Oil (YTD Bbls, in thous.)

228,977

Wells	43,098
Av. Bbls per day	625,621
Av. Bbls per well/d	14.52

### Average number of employees

Oil and natural gas extraction	15,273
Refining	13,607
Transportation	39,327
Wholesale	4,889
Retail	55,956
Total petroleum industry	129,052

## 2004 Latest Available Data

### Petroleum reserves

as of 12/31/04 (mill. bbls.)

	Crude Oil	NGL	Total
New reserves	163	31	194
Production	239	10	249
Net annual change	-76	21	-55
Proved reserves	3,376	122	3,498

### Natural gas reserves

as of 12/31/04 (Bcf)

	Associated Dissolved	Non- Associated	Dry Gas
New reserves	378	85	431
Production	182	77	247
Net annual change	196	8	184
Proved reserves	2,006	767	2,634

### Cost of drilling and equipping wells

	Cost/ft. (\$)	Cost/ well (\$)	Total Cost (thous. \$)
Oil	252	601,233	1,219,902
Gas	135	815,983	66,910
Dry	165	834,398	77,599

### Marginal oil wells

Producing marginal wells	33,010
Crude oil production in bbls. (thous.)	64,825
Crude oil production b/d (thous.)	177

### Marginal natural gas wells

as of 12/31/04

Producing marginal wells	706
Natural gas production (MMcf)	8,986

### Federal Onshore Mineral Lease Royalties

Oil	\$ 22,024,612
Gas	\$ 4,410,937
Total Royalties	\$ 49,703,129

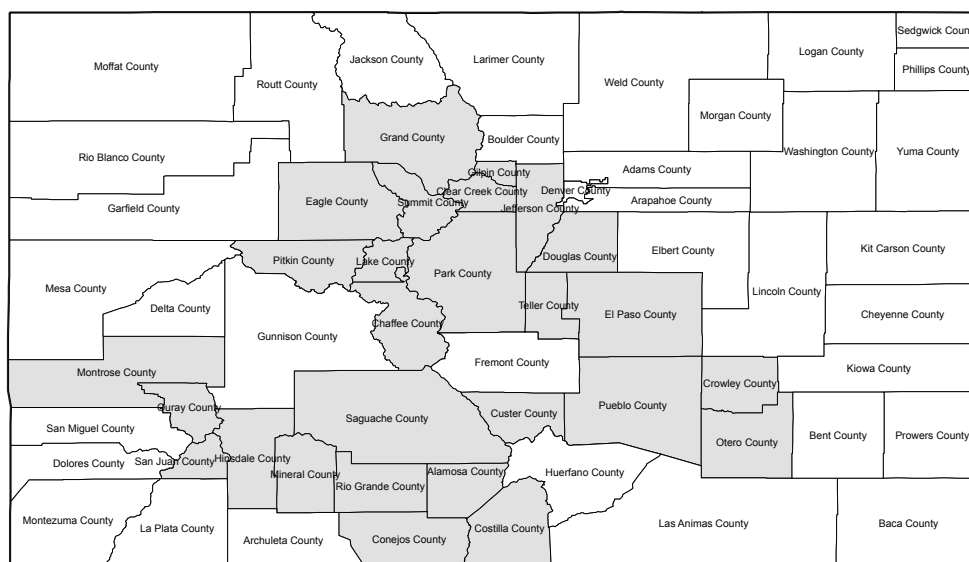
### Horizontal Wells Data

Horizontal Wells Drilled	135
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# COLORADO



□ Counties with oil and/or gas production

## Background Information

### Counties

Number of counties	63
With oil and/or gas production	36

### First year of production

Crude oil	1887
Natural gas	1893

### Year and amount of peak production

Crude oil — 58,516 thous. bbls.	1956
Natural gas — 1,091,923 MMcf*	2004

### Deepest producing well (ft.)

Crude oil	12,704
Natural gas	17,654

### Year and depth of deepest well drilled (ft.)

1987	22,092
------	--------

### Cumulative number of total wells drilled

as of 12/31/04 (excluding service wells)

Oil wells	13,493	19%
Gas wells	33,505	46%
Dry holes	25,041	35%
Total	72,039	100%

### Cumulative crude oil wellhead value

as of 12/31/04 (thous. \$) \$20,024,697

### Cumulative production & new reserves

as of 12/31/04

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	2,114	92	2,206	29,720
Production	1,917	20,521	22,438	14,245

## Value of Oil and Gas

### Average wellhead price

(2004)

Crude oil (\$/bbl.)	\$40.38
Natural gas (\$/Mcf)	\$ 5.21

### Wellhead value of production

(2004, in thous. \$)

Crude oil	\$ 485,125
Natural gas	\$ 5,535,083
Total	\$ 6,020,208

### Average natural gas price

(2004, \$/Mcf)

Residential consumers	\$8.47
Commercial consumers	\$7.48
Industrial consumers	\$6.54
Electric utilities	\$5.65
City Gate	\$5.02

### Severance taxes paid

(2004, in thous. \$) \$107,145

## 2004 Industry Statistics

### Number of wells drilled

	Exploratory	Development	Total
Oil	2	37	39
Gas	67	1,798	1,865
Dry	31	57	88
Total	100	1,892	1,992

### Total footage drilled

(thous. ft.)

	Exploratory	Development	Total
Oil	10.9	180.3	191.2
Gas	417.1	10,482.7	10,899.8
Dry	141.9	270.8	412.7
Total	569.9	10,933.8	11,503.7

(Note: Totals may not add due to rounding.)

New-field wildcats drilled	64
Footage (thous. ft.)	361.2

Average rotary rigs active	54
----------------------------	----

### State-wide rank

	Crude Oil	Natural Gas
Wells drilled	20th	5th
Production	12th	7th
Reserves (2004)	12th	6th

### Number of producing wells\*

(12/31/04)

Crude oil	6,861
Natural gas	17,275
Total	24,136

### Average production

Crude oil (thous. b/d)	33
NGL (thous. b/d)	28.7
Natural gas (MMcf/day)	2,896

### Natural gas marketed production

(MMcf) 1,079,235

### Average output per producing well

Crude oil (bbls.)	2,338
Natural gas (Mcf)	46,809

### Coalbed Methane (YTD MMcf)\*

Oil Wells	6	Gas Wells	3,275
Daily Average (MMcf) / Well			473.6

### Heavy Oil (YTD BBls, in thous.)\*

Wells	24
Av. Bbls per day	66
Av. Bbls per well/d	2.77

### Average number of employees

Oil and natural gas extraction	9,956
Refining	597
Transportation	4,144
Wholesale	2,124
Retail	13,179
Total petroleum industry	30,000

## 2004 Latest Available Data

### Petroleum reserves

as of 12/31/04 (mill. bbls.)

	Crude Oil	NGL	Total
New reserves	26	102	128
Production	18	32	50
Net annual change	8	70	78
Proved reserves	225	465	690

### Natural gas reserves

as of 12/31/04 (Bcf)

	Associated Dissolved	Non- Associated	Dry Gas
New reserves	198	244	357
Production	91	995	1,050
Net annual change	107	-751	-693
Proved reserves	1,293	13,956	14,743

### Cost of drilling and equipping wells

	Cost/ft. (\$)	Cost/ well (\$)	Total Cost (thous. \$)
Oil	236	1,156,085	45,087
Gas	218	1,275,224	2,377,016
Dry	167	788,229	67,788

### Marginal oil wells\*

Producing marginal wells	6,029
Crude oil production in bbls. (thous.)	8,009
Crude oil production b/d (thous.)	11

### Marginal natural gas wells

as of 12/31/04

Producing marginal wells	10,043
Natural gas production (MMcf)	137,478

### Federal Onshore Mineral Lease Royalties

Oil	\$ 20,385,066
Gas	\$ 198,469,006
Total Royalties	\$ 293,769,834

### Horizontal Wells Data

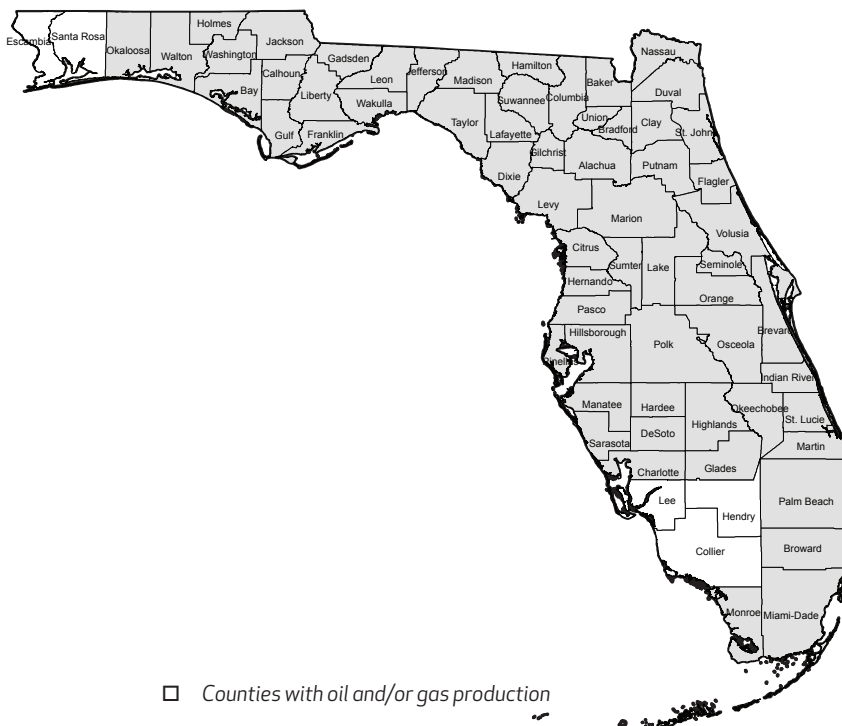
Horizontal Wells Drilled	1
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# FLORIDA



□ Counties with oil and/or gas production

## Background Information

### Counties

Number of counties	67
With oil and/or gas production	5

### First year of production

Crude oil	1943
Natural gas	1943

### Year and amount of peak production

Crude oil — 47,536 thous. bbls.	1978
Natural gas — 51,595 MMcf	1978

### Deepest producing well (ft.)

Crude oil	16,656
Natural gas	17,452

### Year and depth of deepest well drilled (ft.)

2002	18,806
------	--------

### Cumulative number of total wells drilled

as of 12/31/04 (excluding service wells)

Oil wells	319	27%
Gas wells	3	0%
Dry holes	845	73%
Total	1,167	100%

### Cumulative crude oil wellhead value

as of 12/31/04 (thous. \$) \$9,352,458

### Cumulative production & new reserves

as of 12/31/04

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	739	92	831	681
Production	673	NA	NA	592

## Value of Oil and Gas

### Average wellhead price

(2004)

Crude oil (\$/bbl.)	NA
Natural gas (\$/Mcf)	NA

### Wellhead value of production

(2004, in thous. \$)

Crude oil	NA
Natural gas	NA
Total	NA

### Average natural gas price

(2004, \$/Mcf)

Residential consumers	\$17.75
Commercial consumers	\$11.43
Industrial consumers	\$ 8.22
Electric utilities	\$ 6.49
City Gate	\$ 6.60

### Severance taxes paid

(2004, in thous. \$) \$6,084



## 2004 Industry Statistics

### Number of wells drilled

	Exploratory	Development	Total
Oil	NA	NA	NA
Gas	NA	NA	NA
Dry	NA	NA	NA
Total	NA	NA	NA

### Total footage drilled

(thous. ft.)

	Exploratory	Development	Total
Oil	NA	NA	NA
Gas	NA	NA	NA
Dry	NA	NA	NA
Total	NA	NA	NA

(Note: Totals may not add due to rounding.)

### New-field wildcats drilled

Footage (thous. ft.)	NA
----------------------	----

### Average rotary rigs active

1

### State-wide rank

	Crude Oil	Natural Gas
Wells drilled	NA	NA
Production	20th	24th
Reserves (2004)	16th	24th

### Number of producing wells

(12/31/04)

Crude oil	67
Natural gas	--
Total	67

### Average production

Crude oil (thous. b/d)	8
NGL (thous. b/d)	--
Natural gas (MMcf/day)	NA

### Natural gas marketed production

(MMcf)	3,123
--------	-------

### Average output per producing well

Crude oil (bbls.)	--
Natural gas (Mcf)	--

### Coalbed Methane (YTD MMcf)

Oil Wells	NA	Gas Wells	NA
Daily Average (MMcf) / Well	NA		

### Heavy Oil (YTD BBls, in thous.)

Wells	NA
Av. Bbls per day	NA
Av. Bbls per well/d	NA

### Average number of employees

Oil and natural gas extraction	1,466
Refining	418
Transportation	2,544
Wholesale	6,670
Retail	39,228
Total petroleum industry	50,326

## 2004 Latest Available Data

### Petroleum reserves

as of 12/31/04 (mill. bbls.)

	Crude Oil	NGL	Total
New reserves	0	-5	-5
Production	3	0	3
Net annual change	-3	-5	-8
Proved reserves	65	12	77

### Natural gas reserves

as of 12/31/04 (Bcf)

	Associated Dissolved	Non- Associated	Dry Gas
New reserves	-1	0	-1
Production	3	0	3
Net annual change	-4	0	-1
Proved reserves	88	0	78

### Cost of drilling and equipping wells

	Cost/ft. (\$)	Cost/ well (\$)	Total Cost (thous. \$)
Oil	NA	NA	NA
Gas	NA	NA	NA
Dry	NA	NA	NA

### Marginal oil wells

Producing marginal wells	11
Crude oil production in bbls. (thous.)	27
Crude oil production b/d (thous.)	0

### Marginal natural gas wells

as of 12/31/04

Producing marginal wells	NA
Natural gas production (MMcf)	NA

### Federal Onshore Mineral Lease Royalties

Oil	\$ 1,936
Gas	--
Total Royalties	\$38,157

### For more information please contact:

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FLORIDA



# ILLINOIS



□ Counties with oil and/or gas production

## Background Information

### Counties

Number of counties	102
With oil and/or gas production	45

### First year of production

Crude oil	1889
Natural gas	1882

### Year and amount of peak production

Crude oil — 147,647 thous. bbls.	1940
Natural gas — 18,137 MMcf	1944

### Deepest producing well (ft.)

Crude oil	5,405
Natural gas	4,832

### Year and depth of deepest well drilled (ft.)

1976	14,942
------	--------

### Cumulative number of total wells drilled

as of 12/31/04 (excluding service wells)

Oil wells	64,330	55%
Gas wells	1,135	0%
Dry holes	50,966	45%
Total	116,431	100%

### Cumulative crude oil wellhead value

as of 12/31/04 (thous. \$) \$20,278,881

### Cumulative production & new reserves

as of 12/31/04

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	3,578	NA	3,578	NA
Production	3,527	NA	3,527	NA

## Value of Oil and Gas

### Average wellhead price

(2004)

Crude oil (\$/bbl.)	\$38.74
Natural gas (\$/Mcf)	NA

### Wellhead value of production

(2004, in thous. \$)

Crude oil	\$414,479
Natural gas	NA
Total	\$414,479

### Average natural gas price

(2004, \$/Mcf)

Residential consumers	\$ 9.41
Commercial consumers	\$ 9.10
Industrial consumers	\$ 8.07
Electric utilities	\$ 6.59
City Gate	\$ 6.38

### Severance taxes paid

(2004, in thous. \$)

--

## 2004 Industry Statistics

### Number of wells drilled

	Exploratory	Development	Total
Oil	8	178	186
Gas	--	29	29
Dry	39	70	109
Total	47	277	324

### Total footage drilled

(thous. ft.)

	Exploratory	Development	Total
Oil	18.9	448.2	467.1
Gas	NA	21.8	21.8
Dry	95.9	169.8	265.7
Total	114.8	639.8	754.6

(Note: Totals may not add due to rounding.)

### New-field wildcats drilled

	30
Footage (thous. ft.)	74.5

### Average rotary rigs active

0

### State-wide rank

	Crude Oil	Natural Gas
Wells drilled	11th	23rd
Production	15th	30th
Reserves (2004)	15th	NA

### Number of producing wells\*

(12/31/04)

Crude oil	27,923
Natural gas	NA
Total	27,923

### Average production

Crude oil (thous. b/d)	29
NGL (thous. b/d)	NA
Natural gas (MMcf/day)	NA

### Natural gas marketed production

(MMcf)	170
--------	-----

### Average output per producing well

Crude oil (bbls.)	NA
Natural gas (Mcf)	NA

### Coalbed Methane (YTD MMcf)

Oil Wells	NA	Gas Wells*	90
Daily Average (MMcf) / Well			NA

### Heavy Oil (YTD BBls, in thous.)

Wells	NA
Av. Bbls per day	NA
Av. Bbls per well/d	NA

### Average number of employees

Oil and natural gas extraction	2,257
Refining	4,643
Transportation	7,350
Wholesale	5,693
Retail	26,889
Total petroleum industry	46,832

## 2004 Latest Available Data

### Petroleum reserves

as of 12/31/04 (mill. bbls.)

	Crude Oil	NGL	Total
New reserves	-23	NA	-23
Production	10	NA	10
Net annual change	-33	NA	-33
Proved reserves	92	NA	92

### Natural gas reserves

as of 12/31/04 (Bcf)

	Associated Dissolved	Non- Associated	Dry Gas
New reserves	NA	NA	NA
Production	NA	NA	NA
Net annual change	NA	NA	NA
Proved reserves	NA	NA	NA

### Cost of drilling and equipping wells

	Cost/ft. (\$)	Cost/ well (\$)	Total Cost (thous. \$)
Oil	184	458,530	86,203
Gas	414	309,617	8,669
Dry	198	484,517	50,874

### Marginal oil wells

Producing marginal wells	5,148
Crude oil production in bbls. (thous.)	5,104
Crude oil production b/d (thous.)	14

### Marginal natural gas wells

as of 12/31/04

Producing marginal wells	NA
Natural gas production (MMcf)	NA

### Federal Onshore Mineral Lease Royalties

Oil	\$ 157,100
Gas	--
Total Royalties	\$156,778

### Horizontal Wells Data

Horizontal Wells Drilled	5
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### For more information please contact:

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ILLINOIS



# INDIANA

□ Counties with oil and/or gas production



## Background Information

### Counties

Number of counties	92
With oil and/or gas production	48

### First year of production

Crude oil	1889
Natural gas	1885

### Year and amount of peak production

Crude oil — 12,833 thous. bbls.	1953
Natural gas — 2,241 MMcf	1936

### Deepest producing well (ft.)

Crude oil	8,429
Natural gas	3,355

### Year and depth of deepest well drilled (ft.)

1998	8,429
------	-------

### Cumulative number of total wells drilled

as of 12/31/04 (excluding service wells)

Oil wells	6,265	36%
Gas wells	1,110	6%
Dry holes	10,161	58%
Total	17,536	100%

### Cumulative crude oil wellhead value

as of 12/31/04 (thous. \$) \$3,358,948

### Cumulative production & new reserves

as of 12/31/04

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	548	NA	548	NA
Production	543	NA	543	NA

## Value of Oil and Gas

### Average wellhead price

(2004)

Crude oil (\$/bbl.)	\$38.18
Natural gas (\$/Mcf)	\$ 6.30

### Wellhead value of production

(2004, in thous. \$)

Crude oil	\$ 66,013
Natural gas	\$ 21,426
Total	\$87,439

### Average natural gas price

(2004, \$/Mcf)

Residential consumers	\$9.98
Commercial consumers	\$8.56
Industrial consumers	\$7.99
Electric utilities	\$6.26
City Gate	\$6.78

### Severance taxes paid

(2004, in thous. \$)

\$845



## 2004 Industry Statistics

### Number of wells drilled

	Exploratory	Development	Total
Oil	1	49	50
Gas	16	42	58
Dry	7	34	41
Total	24	125	149

### Total footage drilled

(thous. ft.)

	Exploratory	Development	Total
Oil	2.9	86.9	89.8
Gas	24.4	45.7	70.1
Dry	11.6	68.0	79.6
Total	38.9	200.6	239.5

(Note: Totals may not add due to rounding.)

### New-field wildcats drilled

Footage (thous. ft.)	19
	32.4

### Average rotary rigs active

0

### State-wide rank

	Crude Oil	Natural Gas
Wells drilled	18th	22nd
Production	24th	23rd
Reserves (2004)	24th	NA

### Number of producing wells\*

(12/31/04)

Crude oil	5,382
Natural gas	545
Total	NA

### Average production

Crude oil (thous. b/d)	5
NGL (thous. b/d)	NA
Natural gas (MMcf/day)	NA

### Natural gas marketed production

(MMcf)	3,401
--------	-------

### Average output per producing well

Crude oil (bbls.)	0.89
Natural gas (Mcf)	17

### Coalbed Methane (YTD MMcf)

Oil Wells	NA	Gas Wells	NA
Daily Average (MMcf) / Well			NA

### Heavy Oil (YTD BBls, in thous.)

Wells	NA
Av. Bbls per day	NA
Av. Bbls per well/d	NA

### Average number of employees

Oil and natural gas extraction	283
Refining	407
Transportation	3,282
Wholesale	3,711
Retail	25,004
Total petroleum industry	32,687

## 2004 Latest Available Data

### Petroleum reserves

as of 12/31/04 (mill. bbls.)

	Crude Oil	NGL	Total
New reserves	-6	NA	-6
Production	2	NA	2
Net annual change	-8	NA	-8
Proved reserves	11	NA	11

### Natural gas reserves

as of 12/31/04 (Bcf)

	Associated Dissolved	Non- Associated	Dry Gas
New reserves	NA	NA	NA
Production	NA	NA	NA
Net annual change	NA	NA	NA
Proved reserves	NA	NA	NA

### Cost of drilling and equipping wells

	Cost/ft. (\$)	Cost/ well (\$)	Total Cost (thous. \$)
Oil	221	397,014	19,850
Gas	322	390,207	21,851
Dry	196	387,725	15,897

### Marginal oil wells

Producing marginal wells	1,051
Crude oil production in bbls. (thous.)	1,020
Crude oil production b/d (thous.)	3

### Marginal natural gas wells

as of 12/31/04

Producing marginal wells	NA
Natural gas production (MMcf)	NA

### Federal Onshore Mineral Lease Royalties

Oil	0
Gas	--
Total Royalties	\$479

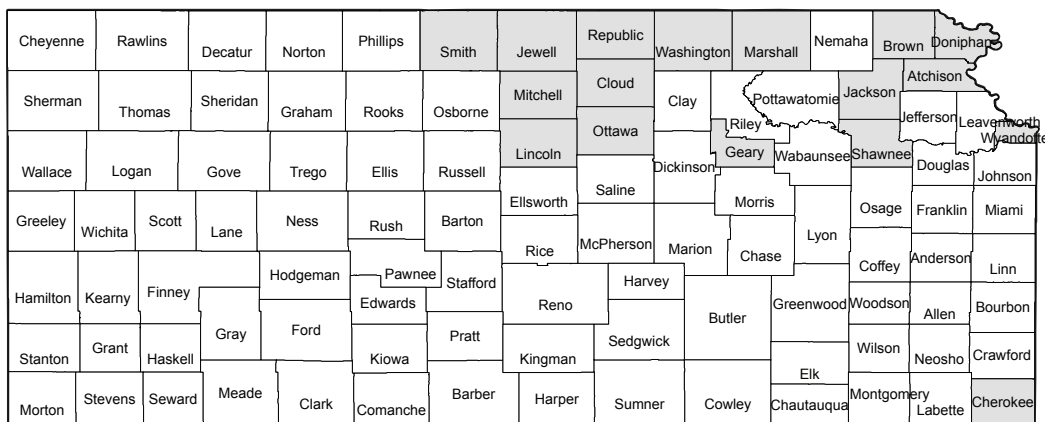
### Horizontal Wells Data

Horizontal Wells Drilled	3
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Information Services Department  
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Washington, D.C. 20005  
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# KANSAS



□ Counties with oil and/or gas production

## Background Information

### Counties

Number of counties	105
With oil and/or gas production	89

### First year of production

Crude oil	1889
Natural gas	1882

### Year and amount of peak production

Crude oil — 124,204 thous. bbls.	1956
Natural gas — 899,955 MMcf	1970

### Deepest producing well (ft.)

Crude oil	7,400
Natural gas	6,774

### Year and depth of deepest well drilled (ft.)

1984	11,300
------	--------

### Cumulative number of total wells drilled

as of 12/31/04 (excluding service wells)

Oil wells	96,753	44%
Gas wells	29,262	13%
Dry holes	97,398	43%
Total	223,413	100%

### Cumulative crude oil wellhead value

as of 12/31/04 (thous. \$) \$44,792,276

### Cumulative production & new reserves

as of 12/31/04

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	6,332	1,475	7,807	44,540
Production	6,114	NA	6,114	39,680

## Value of Oil and Gas

### Average wellhead price

(2004)

Crude oil (\$/bbl.)	\$ 39.18
Natural gas (\$/Mcf)	\$ 4.94

### Wellhead value of production

(2004, in thous. \$)

Crude oil	\$ 1,324,362
Natural gas	\$ 2,003,634
Total	\$ 3,327,996

### Average natural gas price

(2004, \$/Mcf)

Residential consumers	\$10.73
Commercial consumers	\$ 10.10
Industrial consumers	\$ 6.41
Electric utilities	\$ 5.50
City Gate	\$ 6.68

### Severance taxes paid

(2004, in thous. \$)

\$116,677

## 2004 Industry Statistics

### Number of wells drilled

	Exploratory	Development	Total
Oil	95	529	624
Gas	53	728	781
Dry	197	285	482
Total	345	1,542	1,887

### Total footage drilled

(thous. ft.)

	Exploratory	Development	Total
Oil	392.1	1,611.1	2,003.2
Gas	200.5	1,529.5	1,730.0
Dry	836.0	964.7	1,800.7
Total	1,428.6	4,105.3	5,533.9

(Note: Totals may not add due to rounding.)

### New-field wildcats drilled

	179
Footage (thous. ft.)	731.6

### Average rotary rigs active

7

### State-wide rank

	Crude Oil	Natural Gas
Wells drilled	3rd	9th
Production	9th	9th
Reserves (2004)	11th	9th

### Number of producing wells

(12/31/04)

Crude oil	39,952
Natural gas	17,704
Total	57,056

### Average production

Crude oil (thous. b/d)	92
NGL (thous. b/d)	--
Natural gas (MMcf/day)	1,109

### Natural gas marketed production

(MMcf)	397,121
--------	---------

### Average output per producing well

Crude oil (bbls.)	846
Natural gas (Mcf)	22,930

### Coalbed Methane (YTD MMcf)

Oil Wells	1	Gas Wells	826
Daily Average (MMcf) / Well	34.4		

### Heavy Oil (YTD BBls, in thous.)

Wells	NA
Av. Bbls per day	NA
Av. Bbls per well/d	NA

### Average number of employees

Oil and natural gas extraction	6,117
Refining	1,440
Transportation	3,680
Wholesale	2,034
Retail	10,905
Total petroleum industry	24,176

## 2004 Latest Available Data

### Petroleum reserves

as of 12/31/04 (mill. bbls.)

	Crude Oil	NGL	Total
New reserves	35	45	80
Production	33	22	55
Net annual change	2	23	25
Proved reserves	245	271	516

### Natural gas reserves

as of 12/31/04 (Bcf)

	Associated Dissolved	Non- Associated	Dry Gas
New reserves	3	261	209
Production	8	396	376
Net annual change	-5	-135	-167
Proved reserves	80	4,923	4,652

### Cost of drilling and equipping wells

	Cost/ft. (\$)	Cost/ well (\$)	Total Cost (thous. \$)
Oil	64	207,182	129,696
Gas	85	188,451	144,353
Dry	39	145,416	68,636

### Marginal oil wells

Producing marginal wells	39,386
Crude oil production in bbls. (thous.)	24,607
Crude oil production b/d (thous.)	67

### Marginal natural gas wells

as of 12/31/04

Producing marginal wells	13,417
Natural gas production (MMcf)	201,987

### Federal Onshore Mineral Lease Royalties

Oil	\$ 450,491
Gas	\$5,803,573
Total Royalties	\$ 6,269,103

### Horizontal Wells Data

Horizontal Wells Drilled	3
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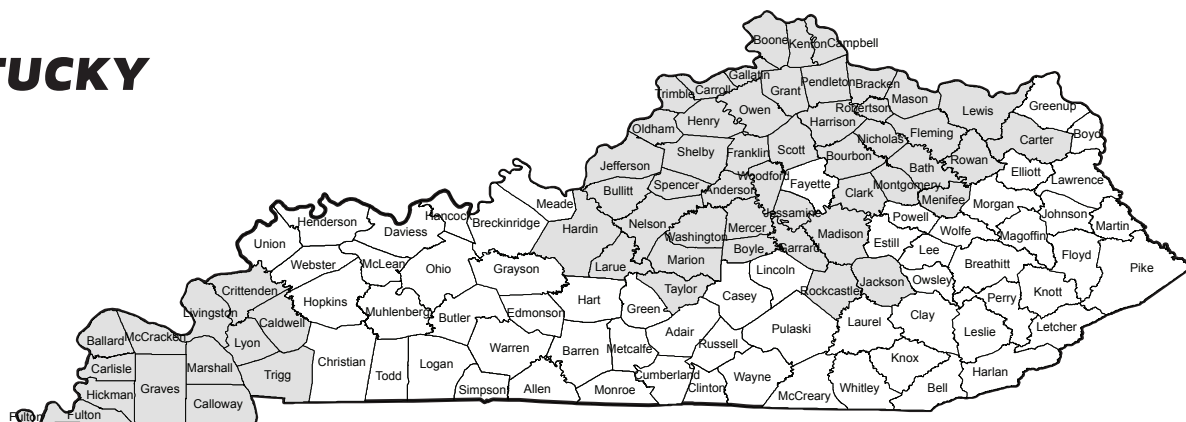
### For more information please contact:

Information Services Department  
Independent Petroleum Association of America  
1201 15th St., N.W., Suite 300  
Washington, D.C. 20005  
T: 202-857-4722 • FAX: 202-857-4799

**KANSAS**



# KENTUCKY



□ Counties with oil and/or gas production

## Background Information

### Counties

Number of counties	120
With oil and/or gas production	53

### First year of production

Crude oil	1860
Natural gas	1888

### Year and amount of peak production

Crude oil — 27,272 thous. bbls.	1959
Natural gas — 96,459 MMcf	1947

### Deepest producing well (ft.)

Crude oil	8,546
Natural gas	10,934

### Year and depth of deepest well drilled (ft.)

1983	22,500
------	--------

### Cumulative number of total wells drilled

as of 12/31/04 (excluding service wells)

Oil wells	17,931	30%
Gas wells	14,562	24%
Dry holes	27,940	46%
Total	60,433	100%

### Cumulative crude oil wellhead value

as of 12/31/04 (thous. \$) \$17,293,485

### Cumulative production & new reserves

as of 12/31/04

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	798	233	1,031	6,831
Production	753	NA	753	5,137

## Value of Oil and Gas

### Average wellhead price

(2004)

Crude oil (\$/bbl.)	\$36.82
Natural gas (\$/Mcf)	\$ 5.26

### Wellhead value of production

(2004, in thous. \$)

Crude oil	\$ 44,552
Natural gas	\$ 450,614
Total	\$ 495,166

### Average natural gas price

(2004, \$/Mcf)

Residential consumers	\$10.97
Commercial consumers	\$ 10.18
Industrial consumers	\$ 7.38
Electric utilities	NA
City Gate	\$ 7.28

### Severance taxes paid

(2004, in thous. \$) \$22,170

## 2004 Industry Statistics

### Number of wells drilled

	Exploratory	Development	Total
Oil	5	47	52
Gas	223	424	647
Dry	41	103	144
Total	269	574	843

### Total footage drilled

(thous. ft.)

	Exploratory	Development	Total
Oil	11	85.0	96.0
Gas	682.6	1,447.2	2,129.8
Dry	58.4	145.3	203.7
Total	752.0	1,677.5	2,429.5

(Note: Totals may not add due to rounding.)

New-field wildcats drilled	144
Footage (thous. ft.)	407.2

Average rotary rigs active	5
----------------------------	---

### State-wide rank

	Crude Oil	Natural Gas
Wells drilled	19th	10th
Production	21st	18th
Reserves (2004)	21st	16th

### Number of producing wells\*

(12/31/04)

Crude oil	28,400
Natural gas	12,298
Total	40,698

### Average production

Crude oil (thous. b/d)	3
NGL (thous. b/d)	NA
Natural gas (MMcf/day)	234

### Natural gas marketed production

(MMcf)	94,259
--------	--------

### Average output per producing well

Crude oil (bbls.)	NA
Natural gas (Mcf)	6,966

### Coalbed Methane (YTD MMcf)

Oil Wells	NA	Gas Wells	NA
Daily Average (MMcf) / Well			NA

### Heavy Oil (YTD BBls, in thous.)

Wells	NA
Av. Bbls per day	NA
Av. Bbls per well/d	NA

### Average number of employees

Oil and natural gas extraction	1,846
Refining	425
Transportation	2,403
Wholesale	3,309
Retail	20,572
Total petroleum industry	28,555

## 2004 Latest Available Data

### Petroleum reserves

as of 12/31/04 (mill. bbls.)

	Crude Oil	NGL	Total
New reserves	4	9	13
Production	2	3	5
Net annual change	2	6	8
Proved reserves	27	72	99

### Natural gas reserves

as of 12/31/04 (Bcf)

	Associated Dissolved	Non- Associated	Dry Gas
New reserves	-6	104	74
Production	0	87	83
Net annual change	-6	17	-9
Proved reserves	19	1,963	1,880

### Cost of drilling and equipping wells

	Cost/ft. (\$)	Cost/ well (\$)	Total Cost (thous. \$)
Oil	130	238,496	11,686
Gas	94	313,696	189,472
Dry	151	219,623	28,331

### Marginal oil wells

Producing marginal wells	965
Crude oil production in bbls. (thous.)	701
Crude oil production b/d (thous.)	2

### Marginal natural gas wells

as of 12/31/04

Producing marginal wells	12,129
Natural gas production (MMcf)	78,805

### Federal Onshore Mineral Lease Royalties

Oil	\$ 5,998
Gas	\$ 94,144
Total Royalties	\$156,453

### Horizontal Wells Data

Horizontal Wells Drilled	1
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### For more information please contact:

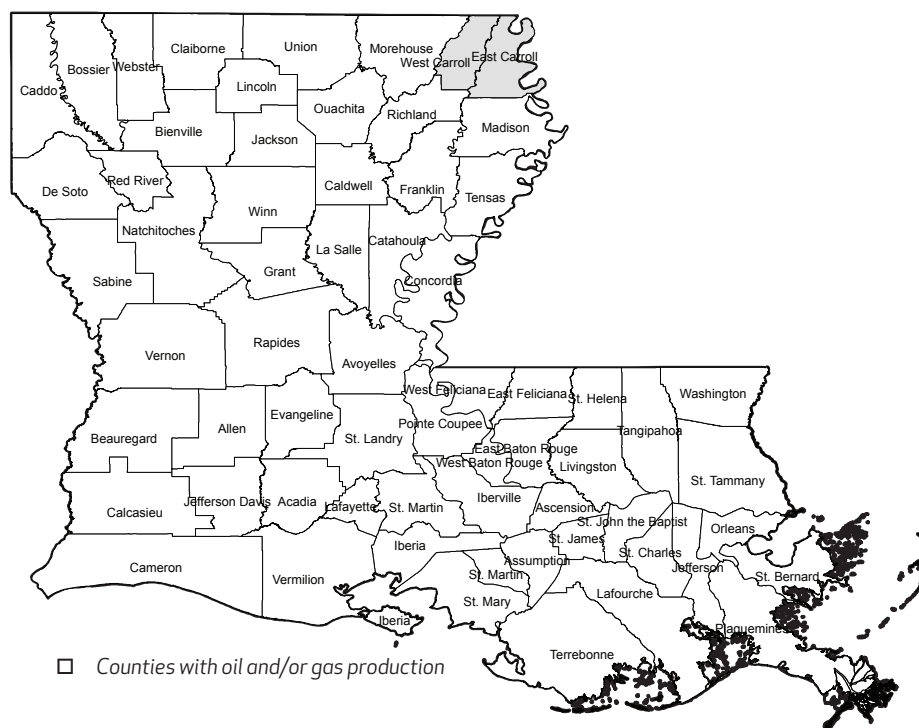
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KENTUCKY





# LOUISIANA



## Background Information

### Counties

Number of counties	64
With oil and/or gas production	62

### First year of production

Crude oil	1902
Natural gas	1905

### Year and amount of peak production

Crude oil — 935,243 thous. bbls.	1971
Natural gas — 8,242,423 MMcf	1973

### Deepest producing well (ft.)

Crude oil	22,856
Natural gas	21,862

### Year and depth of deepest well drilled (ft.)

1981	25,703
------	--------

### Cumulative number of total wells drilled

as of 12/31/04 (excluding service wells)

Oil wells	99,252	40%
Gas wells	65,370	26%
Dry holes	84,218	34%
Total	248,840	100%

### Cumulative crude oil wellhead value

as of 12/31/04 (thous. \$) \$251,570,901

### Cumulative production & new reserves

as of 12/31/04

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	27,641	4,888	32,529	263,900
Production	18,572	3,394	21,966	143,869

## Value of Oil and Gas

### Average wellhead price

(2004)

Crude oil (\$/bbl.)	\$40.08
Natural gas (\$/Mcf)	\$ 5.96

### Wellhead value of production

(2004, in thous. \$)

Crude oil	\$ 2,283,879
Natural gas	\$ 7,547,088
Total	\$ 9,830,967

### Average natural gas price

(2004, \$/Mcf)

Residential consumers	\$11.20
Commercial consumers	\$9.56
Industrial consumers	\$6.58
Electric utilities	\$6.50
City Gate	\$6.56

### Severance taxes paid

(2004, in thous. \$) \$677,320

## 2004 Industry Statistics

### Number of wells drilled

	Exploratory	Development	Total
Oil	5	165	170
Gas	16	823	839
Dry	52	200	252
Total	73	1,188	1,261

### Total footage drilled

(thous. ft.)

	Exploratory	Development	Total
Oil	33.2	1,028.5	1,061.7
Gas	121.7	8,335.7	8,457.4
Dry	462.5	1,625.7	2,088.2
Total	617.4	10,989.9	11,607.3

(Note: Totals may not add due to rounding.)

New-field wildcats drilled	140
Footage (thous. ft.)	1,283.7

Average rotary rigs active	167
----------------------------	-----

### State-wide rank

	Crude Oil	Natural Gas
Wells drilled	9th	8th
Production	5th	6th
Reserves (2004)	8th	7th

### Number of producing wells

(12/31/04)

Crude oil	17,576
Natural gas	8,731
Total	26,307

### Average production

Crude oil (thous. b/d)	156
NGL (thous. b/d)	70.0
Natural gas (MMcf/day)	3,460

### Natural gas marketed production

(MMcf)	1,353,249
--------	-----------

### Average output per producing well

Crude oil (bbls.)	3,242
Natural gas (Mcf)	145,034

### Coalbed Methane (YTD MMcf)

Oil Wells	NA	Gas Wells	NA
Daily Average (MMcf) / Well			NA

Heavy Oil (YTD Bbls, in thous.)	33,207
Wells	13,331
Av. Bbls per day	90,730
Av. Bbls per well/d	6.81

### Average number of employees

Oil and natural gas extraction	40,646
Refining	9,838
Transportation	16,748
Wholesale	4,087
Retail	19,080
Total petroleum industry	90,399

## 2004 Latest Available Data

### Petroleum reserves

as of 12/31/04 (mill. bbls.)

	Crude Oil	NGL	Total
New reserves	32	24	56
Production	57	56	113
Net annual change	-25	-32	-57
Proved reserves	427	263	690

### Natural gas reserves

as of 12/31/04 (Bcf)

	Associated Dissolved	Non- Associated	Dry Gas
New reserves	46	1,566	1,585
Production	75	1,283	1,322
Net annual change	-29	283	263
Proved reserves	557	9,235	9,588

### Cost of drilling and equipping wells

	Cost/ft. (\$)	Cost/ well (\$)	Total Cost (thous. \$)
Oil	802	5,697,585	1,464,279
Gas	589	5,936,648	6,637,172
Dry	777	6,438,604	2,491,739

### Marginal oil wells

Producing marginal wells	15,129
Crude oil production in bbls. (thous.)	9,547
Crude oil production b/d (thous.)	26

### Marginal natural gas wells

as of 12/31/04

Producing marginal wells	4,327
Natural gas production (MMcf)	40,083

### Federal Onshore Mineral Lease Royalties

Oil	\$ 2,121,252
Gas	\$8,978,443
Total Royalties	\$11,007,323

### Horizontal Wells Data

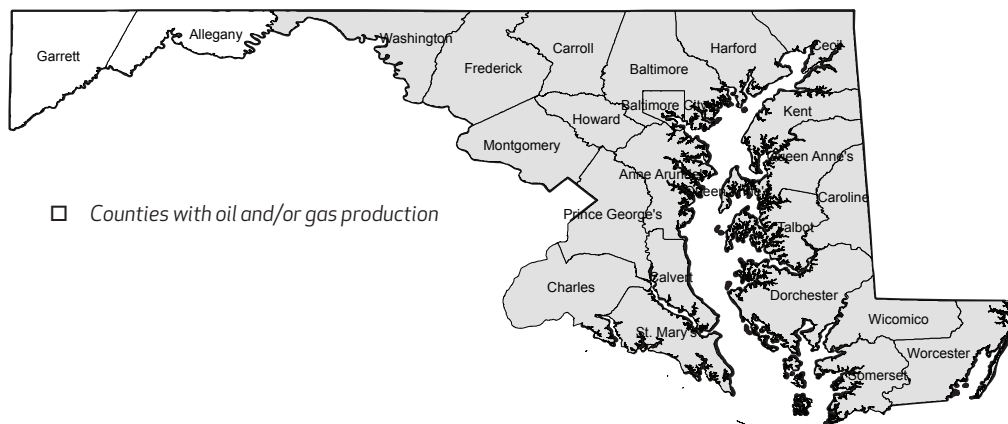
Horizontal Wells Drilled	23
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### For more information please contact:

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Washington, D.C. 20005  
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# MARYLAND



## Background Information

### Counties

Number of counties	23
With oil and/or gas production	2

### First year of production

Crude oil	--
Natural gas	1950

### Year and amount of peak production

Crude oil —	--
Natural gas —4,543 MMcf	1959

### Deepest producing well (ft.)

Crude oil	10,376
Natural gas	8,658

### Year and depth of deepest well drilled (ft.)

1973	11,617
------	--------

### Cumulative number of total wells drilled

as of 12/31/04 (excluding service wells)

Oil wells	NA	NA
Gas wells	71	49%
Dry holes	75	51%
Total	146	100%

### Cumulative crude oil wellhead value

as of 12/31/04 (thous. \$) NA

### Cumulative production & new reserves

as of 12/31/04

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	0	NA	NA	NA
Production	0	NA	NA	NA

## Value of Oil and Gas

### Average wellhead price

(2004)

Crude oil (\$/bbl.)	NA
Natural gas (\$/Mcf)	\$6.25

### Wellhead value of production

(2004, in thous. \$)

Crude oil	NA
Natural gas	\$213
Total	\$213

### Average natural gas price

(2004, \$/Mcf)

Residential consumers	\$12.39
Commercial consumers	\$ 9.33
Industrial consumers	\$10.62
Electric utilities	\$ 5.79
City Gate	\$ 7.77

### Severance taxes paid

(2004, in thous. \$) \$1

## 2004 Industry Statistics

### Number of wells drilled

	Exploratory	Development	Total
Oil	NA	NA	NA
Gas	NA	NA	NA
Dry	NA	NA	NA
Total	NA	NA	NA

### Total footage drilled

(thous. ft.)

	Exploratory	Development	Total
Oil	NA	NA	NA
Gas	NA	NA	NA
Dry	NA	NA	NA
Total	NA	NA	NA

(Note: Totals may not add due to rounding.)

### New-field wildcats drilled

Footage (thous. ft.)	NA
----------------------	----

### Average rotary rigs active

0

### State-wide rank

	Crude Oil	Natural Gas
Wells drilled	NA	NA
Production	NA	31st
Reserves (2004)	NA	NA

### Number of producing wells\*

(12/31/04)

Crude oil	NA
Natural gas	6
Total	6

### Average production

Crude oil (thous. b/d)	NA
NGL (thous. b/d)	NA
Natural gas (MMcf/day)	NA

### Natural gas marketed production

(MMcf)

34

### Average output per producing well

Crude oil (bbls.)	0
Natural gas (Mcf)	5,667

### Coalbed Methane (YTD MMcf)

Oil Wells	NA	Gas Wells	NA
Daily Average (MMcf) / Well			NA

### Heavy Oil (YTD BBls, in thous.)

NA

Wells	NA
Av. Bbls per day	NA
Av. Bbls per well/d	NA

### Average number of employees

Oil and natural gas extraction	174
Refining	50
Transportation	1,432
Wholesale	3,462
Retail	11,313
Total petroleum industry	16,431

## 2004 Latest Available Data

### Petroleum reserves

as of 12/31/04 (mill. bbls.)

	Crude Oil	NGL	Total
New reserves	NA	NA	NA
Production	NA	NA	NA
Net annual change	NA	NA	NA
Proved reserves	NA	NA	NA

### Natural gas reserves

as of 12/31/04 (Bcf)

	Associated Dissolved	Non- Associated	Dry Gas
New reserves	NA	NA	NA
Production	NA	NA	NA
Net annual change	NA	NA	NA
Proved reserves	NA	NA	NA

### Cost of drilling and equipping wells

	Cost/ft. (\$)	Cost/ well (\$)	Total Cost (thous. \$)
Oil	NA	NA	NA
Gas	NA	NA	NA
Dry	NA	NA	NA

### Marginal oil wells

Producing marginal wells	NA
Crude oil production in bbls. (thous.)	NA
Crude oil production b/d (thous.)	NA

### Marginal natural gas wells

as of 12/31/04

Producing marginal wells	NA
Natural gas production (MMcf)	NA

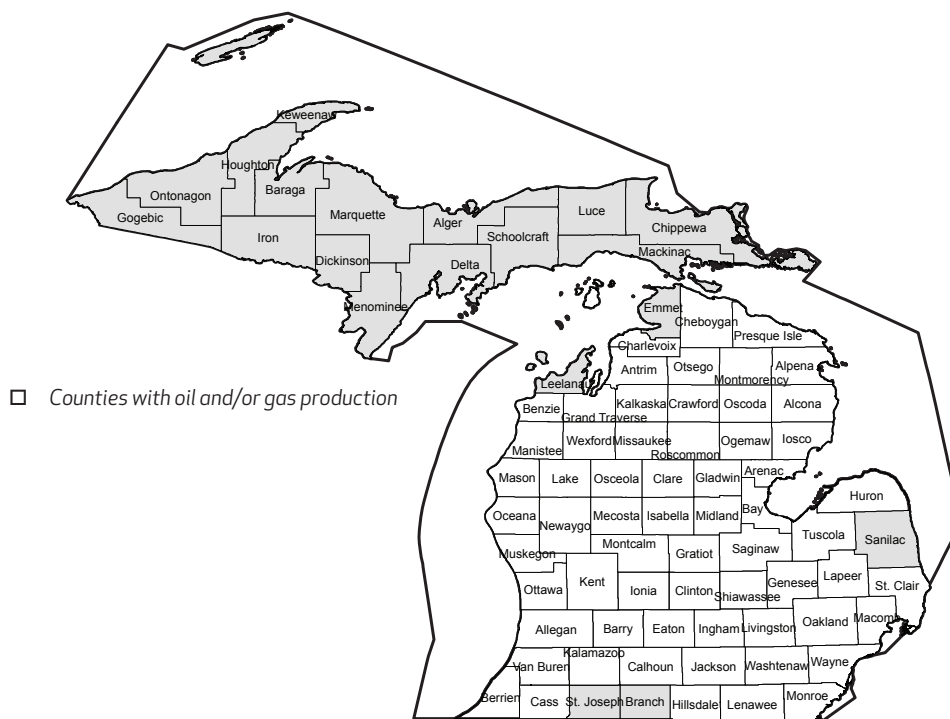
### Federal Onshore Mineral Lease Royalties

Oil	0
Gas	0
Total Royalties	\$10,045

### For more information please contact:

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# MICHIGAN



## Background Information

### Counties

Number of counties	83
With oil and/or gas production	63

### First year of production

Crude oil	1900
Natural gas	1909

### Year and amount of peak production

Crude oil — 34,862 thous. bbls.	1979
Natural gas — 311,616 MMcf	1997

### Deepest producing well (ft.)

Crude oil	10,515
Natural gas	13,513

### Year and depth of deepest well drilled (ft.)

1975	17,466
------	--------

### Cumulative number of total wells drilled

as of 12/31/04 (excluding service wells)

Oil wells	15,214	28%
Gas wells	13,373	24%
Dry holes	26,292	48%
Total	54,879	100%

### Cumulative crude oil wellhead value

as of 12/31/04 (thous. \$) \$14,191,057

### Cumulative production & new reserves

as of 12/31/04

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	1,269	292	1,561	9,030
Production	1,229	239	1,468	5,205

## Value of Oil and Gas

### Average wellhead price

(2004)

Crude oil (\$/bbl.)	\$ 39.14
Natural gas (\$/Mcf)	\$ 3.85

### Wellhead value of production

(2004, in thous. \$)

Crude oil	\$ 225,564
Natural gas	\$ 654,589
Total	\$ 880,153

### Average natural gas price

(2004, \$/Mcf)

Residential consumers	\$ 8.52
Commercial consumers	\$ 7.98
Industrial consumers	\$ 6.88
Electric utilities	\$ 4.42
City Gate	\$ 6.34

### Severance taxes paid

(2004, in thous. \$) \$56,186



## 2004 Industry Statistics

### Number of wells drilled

	Exploratory	Development	Total
Oil	3	9	12
Gas	4	365	369
Dry	20	29	49
Total	27	403	430

### Total footage drilled

(thous. ft.)

	Exploratory	Development	Total
Oil	21.5	41.9	63.4
Gas	12.3	577.8	590.1
Dry	55.3	76.9	132.2
Total	89.1	696.6	785.7

(Note: Totals may not add due to rounding.)

### New-field wildcats drilled

	23
Footage (thous. ft.)	64.3

### Average rotary rigs active

3

### State-wide rank

	Crude Oil	Natural Gas
Wells drilled	23rd	13th
Production	18th	13th
Reserves (2004)	17th	13th

### Number of producing wells

(12/31/04)

Crude oil	3,689
Natural gas	8,552
Total	12,241

### Average production

Crude oil (thous. b/d)	16
NGL (thous. b/d)	2.0
Natural gas (MMcf/day)	465

### Natural gas marketed production

(MMcf)	259,681
--------	---------

### Average output per producing well

Crude oil (bbls.)	1,555
Natural gas (Mcf)	19,890

### Coalbed Methane (YTD MMcf)

Oil Wells	NA	Gas Wells	NA
Daily Average (MMcf) / Well			NA

### Heavy Oil (YTD BBls, in thous.)

Wells	NA
Av. Bbls per day	NA
Av. Bbls per well/d	NA

### Average number of employees

Oil and natural gas extraction	2,363
Refining	898
Transportation	5,442
Wholesale	5,282
Retail	25,781
Total petroleum industry	39,766

## 2004 Latest Available Data

### Petroleum reserves

as of 12/31/04 (mill. bbls.)

	Crude Oil	NGL	Total
New reserves	-17	4	-13
Production	5	4	9
Net annual change	-22	0	-22
Proved reserves	53	48	101

### Natural gas reserves

as of 12/31/04 (Bcf)

	Associated Dissolved	Non- Associated	Dry Gas
New reserves	-58	-64	-130
Production	18	194	207
Net annual change	-76	-258	-337
Proved reserves	193	2,961	3,091

### Cost of drilling and equipping wells

	Cost/ft. (\$)	Cost/ well (\$)	Total Cost (thous. \$)
Oil	328	1,731,435	20,777
Gas	293	469,292	173,169
Dry	238	641,666	31,442

### Marginal oil wells

Producing marginal wells	3,508
Crude oil production in bbls. (thous.)	3,427
Crude oil production b/d (thous.)	9

### Marginal natural gas wells

as of 12/31/04

Producing marginal wells	956
Natural gas production (MMcf)	13,559

### Federal Onshore Mineral Lease Royalties

Oil	\$ 108,948
Gas	\$ 1,618,199
Total Royalties	\$1,757,714

### Horizontal Wells Data

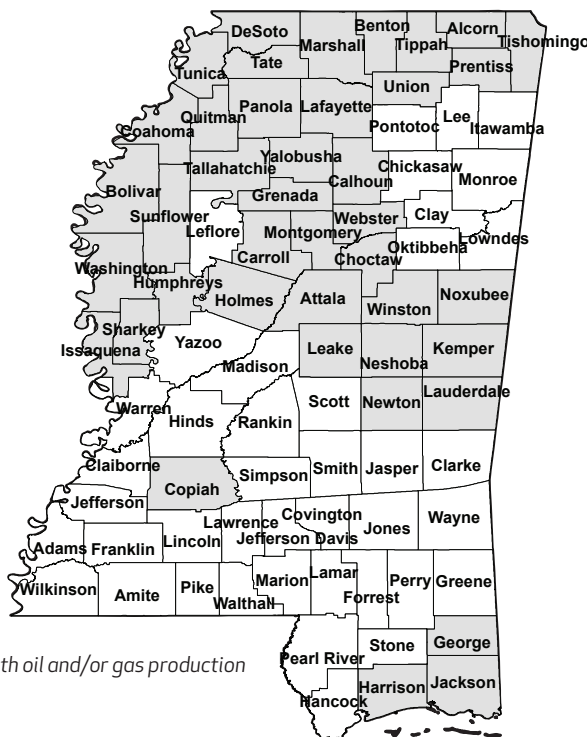
Horizontal Wells Drilled	41
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### For more information please contact:

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MICHIGAN

# MISSISSIPPI



□ Counties with oil and/or gas production

## Background Information

### Counties

Number of counties	82
With oil and/or gas production	41

### First year of production

Crude oil	1889
Natural gas	1923

### Year and amount of peak production

Crude oil — 65,119 thous. bbls.	1970
Natural gas — 181,238 MMcf	1981

### Deepest producing well (ft.)

Crude oil	21,533
Natural gas	21,727

### Year and depth of deepest well drilled (ft.)

1986	25,500
------	--------

### Cumulative number of total wells drilled

as of 12/31/04 (excluding service wells)

Oil wells	10,553	33%
Gas wells	3,868	12%
Dry holes	17,585	55%
Total	32,006	100%

### Cumulative crude oil wellhead value

as of 12/31/04 (thous. \$) \$19,035,979

### Cumulative production & new reserves

as of 12/31/04

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	2,660	126	2,786	9,420
Production	2,507	161	2,668	8,764

## Value of Oil and Gas

### Average wellhead price

(2004)

Crude oil (\$/bbl.)	\$37.03
Natural gas (\$/Mcf)	\$ 5.83

### Wellhead value of production

(2004, in thous. \$)

Crude oil	\$ 578,964
Natural gas	\$ 992,015
Total	\$1,570,979

### Average natural gas price

(2004, \$/Mcf)

Residential consumers	\$10.56
Commercial consumers	\$ 8.84
Industrial consumers	\$ 6.67
Electric utilities	\$ 6.14
City Gate	\$ 6.44

### Severance taxes paid

(2004, in thous. \$)

\$62,631

## 2004 Industry Statistics

### Number of wells drilled

	Exploratory	Development	Total
Oil	3	43	46
Gas	4	165	169
Dry	26	29	55
Total	33	237	270

### Total footage drilled

(thous. ft.)

	Exploratory	Development	Total
Oil	38.2	307.0	345.2
Gas	26.5	1,173.9	1,200.4
Dry	211.2	231.5	442.7
Total	275.9	1,712.4	1,988.3

(Note: Totals may not add due to rounding.)

New-field wildcats drilled	29
Footage (thous. ft.)	244.5

Average rotary rigs active	10
----------------------------	----

### State-wide rank

	Crude Oil	Natural Gas
Wells drilled	19th	19th
Production	13th	20th
Reserves (2004)	14th	21st

### Number of producing wells

(12/31/04)

Crude oil	1,669
Natural gas	1,288
Total	2,957

### Average production

Crude oil (thous. b/d)	43
NGL (thous. b/d)	4.2
Natural gas (MMcf/day)	465

### Natural gas marketed production

(MMcf)	63,353
--------	--------

### Average output per producing well

Crude oil (bbls.)	9,404
Natural gas (Mcf)	132,272

### Coalbed Methane (YTD MMcf)

Oil Wells	NA	Gas Wells	NA
Daily Average (MMcf) / Well			NA

### Heavy Oil (YTD Bbls, in thous.)

Wells	257
Av. Bbls per day	6,048
Av. Bbls per well/d	23.53

### Average number of employees

Oil and natural gas extraction	3,865
Refining	1,698
Transportation	2,175
Wholesale	2,487
Retail	15,821
Total petroleum industry	26,046

## 2004 Latest Available Data

### Petroleum reserves

as of 12/31/04 (mill. bbls.)

	Crude Oil	NGL	Total
New reserves	26	0	26
Production	17	1	18
Net annual change	9	-1	8
Proved reserves	178	6	184

### Natural gas reserves

as of 12/31/04 (Bcf)

	Associated Dissolved	Non- Associated	Dry Gas
New reserves	-4	41	38
Production	3	90	93
Net annual change	-7	-49	-55
Proved reserves	20	672	691

### Cost of drilling and equipping wells

	Cost/ft. (\$)	Cost/ well (\$)	Total Cost (thous. \$)
Oil	290	2,176,234	100,107
Gas	158	1,120,882	189,429
Dry	191	1,533,767	84,357

### Marginal oil wells

Producing marginal wells	850
Crude oil production in bbls. (thous.)	2,010
Crude oil production b/d (thous.)	5

### Marginal natural gas wells

as of 12/31/04

Producing marginal wells	806
Natural gas production (MMcf)	12,783

### Federal Onshore Mineral Lease Royalties

Oil	\$ 1,541,437
Gas	\$ 328,228
Total Royalties	\$ 2,380,459

### Horizontal Wells Data

Horizontal Wells Drilled	1
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### For more information please contact:

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# MISSOURI



□ Counties with oil and/or gas production

## Background Information

### Counties

Number of counties	114
With oil and/or gas production	5

### First year of production

Crude oil	1889
Natural gas	1887

### Year and amount of peak production

Crude oil —285 thous. bbls.	1984
Natural gas —1,368 MMcf	1938

### Deepest producing well (ft.)

Crude oil	3,680
Natural gas	765

### Year and depth of deepest well drilled (ft.)

1988	10,089
------	--------

### Cumulative number of total wells drilled

as of 12/31/04 (excluding service wells)

Oil wells	675	32%
Gas wells	78	4%
Dry holes	1,330	64%
Total	2,083	100%

### Cumulative crude oil wellhead value

as of 12/31/04 (thous. \$) \$95,818

### Cumulative production & new reserves

as of 12/31/04

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	NA	NA	NA	NA
Production	NA	NA	NA	15

## Value of Oil and Gas

### Average wellhead price

(2004)

Crude oil (\$/bbl.)	\$37.15
Natural gas (\$/Mcf)	NA

### Wellhead value of production

(2004, in thous. \$)

Crude oil	\$3,269
Natural gas	0
Total	\$3,269

### Average natural gas price

(2004, \$/Mcf)

Residential consumers	\$ 11.02
Commercial consumers	\$10.00
Industrial consumers	\$ 8.80
Electric utilities	NA
City Gate	\$ 6.99

### Severance taxes paid

(2004, in thous. \$)

	--
--	----

## 2004 Industry Statistics

### Number of wells drilled

	Exploratory	Development	Total
Oil	NA	NA	NA
Gas	NA	NA	NA
Dry	NA	NA	NA
Total	NA	NA	NA

### Total footage drilled

(thous. ft.)

	Exploratory	Development	Total
Oil	NA	NA	NA
Gas	NA	NA	NA
Dry	NA	NA	NA
Total	NA	NA	NA

(Note: Totals may not add due to rounding.)

### New-field wildcats drilled

Footage (thous. ft.)	NA
----------------------	----

### Average rotary rigs active

0

### State-wide rank

	Crude Oil	Natural Gas
Wells drilled	NA	NA
Production	30th	NA
Reserves (2004)	NA	NA

### Number of producing wells

(12/31/04)

Crude oil	NA
Natural gas	NA
Total	NA

### Average production

Crude oil (thous. b/d)	NA
NGL (thous. b/d)	NA
Natural gas (MMcf/day)	NA

### Natural gas marketed production

(MMcf)

NA

### Average output per producing well

Crude oil (bbls.)	NA
Natural gas (Mcf)	NA

### Coalbed Methane (YTD MMcf)

Oil Wells	NA	Gas Wells	NA
Daily Average (MMcf) / Well			NA

### Heavy Oil (YTD BBls, in thous.)

NA

Wells	NA
Av. Bbls per day	NA
Av. Bbls per well/d	NA

### Average number of employees

Oil and natural gas extraction	89
Refining	443
Transportation	3,915
Wholesale	3,909
Retail	25,247
Total petroleum industry	33,603

## 2004 Latest Available Data

### Petroleum reserves

as of 12/31/04 (mill. bbls.)

	Crude Oil	NGL	Total
New reserves	NA	NA	NA
Production	NA	NA	NA
Net annual change	NA	NA	NA
Proved reserves	NA	NA	NA

### Natural gas reserves

as of 12/31/04 (Bcf)

	Associated Dissolved	Non- Associated	Dry Gas
New reserves	NA	NA	NA
Production	NA	NA	NA
Net annual change	NA	NA	NA
Proved reserves	NA	NA	NA

### Cost of drilling and equipping wells

	Cost/ft. (\$)	Cost/ well (\$)	Total Cost (thous. \$)
Oil	NA	NA	NA
Gas	NA	NA	NA
Dry	NA	NA	NA

### Marginal oil wells

Producing marginal wells	NA
Crude oil production in bbls. (thous.)	NA
Crude oil production b/d (thous.)	NA

### Marginal natural gas wells

as of 12/31/04

Producing marginal wells	NA
Natural gas production (MMcf)	NA

### Federal Onshore Mineral Lease Royalties

Oil	0
Gas	0
Total Royalties	\$4,599,387

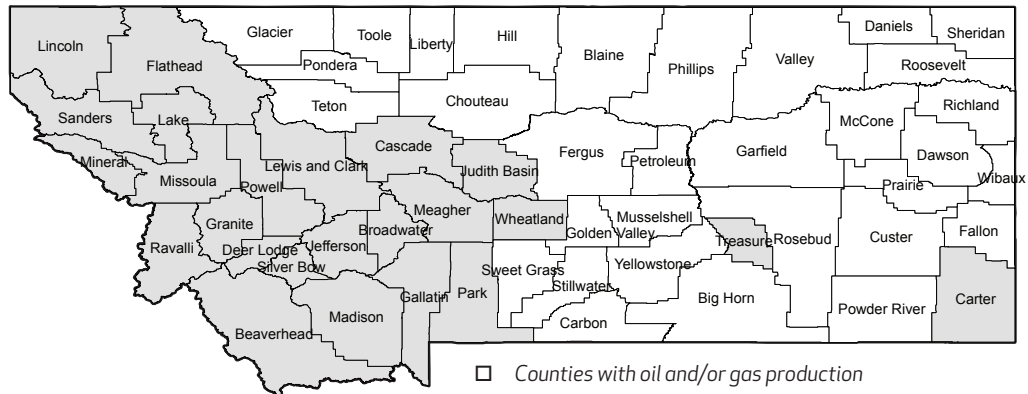
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# MONTANA



## Background Information

### Counties

Number of counties	56
With oil and/or gas production	32

### First year of production

Crude oil	1916
Natural gas	1915

### Year and amount of peak production

Crude oil — 48,460 thous. bbls.	1968
Natural gas — 87,045 MMcf	2004

### Deepest producing well (ft.)

Crude oil	18,016
Natural gas	5,500

### Year and depth of deepest well drilled (ft.)

1999	18,016
------	--------

### Cumulative number of total wells drilled

as of 12/31/04 (excluding service wells)

Oil wells	14,383	35%
Gas wells	9,385	23%
Dry holes	17,065	42%
Total	40,833	100%

### Cumulative crude oil wellhead value

as of 12/31/04 (thous. \$) \$15,913,868

### Cumulative production & new reserves

as of 12/31/04

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	1,899	48	1,947	4,184
Production	1,555	43	1,598	3,127

## Value of Oil and Gas

### Average wellhead price

(2004)

Crude oil (\$/bbl.)	\$ 38.53
Natural gas (\$/Mcf)	\$ 4.51

### Wellhead value of production

(2004, in thous. \$)

Crude oil	\$ 950,689
Natural gas	\$ 392,577
Total	\$ 1,343,266

### Average natural gas price

(2004, \$/Mcf)

Residential consumers	\$ 9.19
Commercial consumers	\$ 9.15
Industrial consumers	\$ 6.34
Electric utilities	NA
City Gate	\$ 6.47

### Severance taxes paid

(2004, in thous. \$) \$114,218

## 2004 Industry Statistics

### Number of wells drilled

	Exploratory	Development	Total
Oil	107	178	285
Gas	96	305	401
Dry	45	21	66
Total	248	504	752

### Total footage drilled

(thous. ft.)

	Exploratory	Development	Total
Oil	1,242.0	1,376.4	2,618.4
Gas	208.6	529.0	737.6
Dry	226.5	45.5	272.0
Total	1,677.1	1,950.9	3,628.0

(Note: Totals may not add due to rounding.)

### New-field wildcats drilled

	159
Footage (thous. ft.)	986.6

### Average rotary rigs active

20

### State-wide rank

	Crude Oil	Natural Gas
Wells drilled	8th	11th
Production	11th	17th
Reserves (2004)	10th	19th

### Number of producing wells

(12/31/04)

Crude oil	3,947
Natural gas	5,299
Total	9,246

### Average production

Crude oil (thous. b/d)	67
NGL (thous. b/d)	0.3
Natural gas (MMcf/day)	238

### Natural gas marketed production

(MMcf)	96,762
--------	--------

### Average output per producing well

Crude oil (bbls.)	6,255
Natural gas (Mcf)	15,427

### Coalbed Methane (YTD MMcf)

	12,261
Oil Wells	1
Gas Wells	438
Daily Average (MMcf) / Well	12,260

### Heavy Oil (YTD BBls, in thous.)

	191
Wells	78
Av. Bbls per day	522
Av. Bbls per well/d	6.7

### Average number of employees

Oil and natural gas extraction	1,948
Refining	893
Transportation	1,031
Wholesale	1,014
Retail	5,091
Total petroleum industry	9,977

## 2004 Latest Available Data

### Petroleum reserves

as of 12/31/04 (mill. bbls.)

	Crude Oil	NGL	Total
New reserves	71	-1	70
Production	17	1	18
Net annual change	9	-2	7
Proved reserves	178	6	184

### Natural gas reserves

as of 12/31/04 (Bcf)

	Associated Dissolved	Non- Associated	Dry Gas
New reserves	27	2	31
Production	9	86	95
Net annual change	18	-84	-64
Proved reserves	130	872	995

### Cost of drilling and equipping wells

	Cost/ft. (\$)	Cost/ well (\$)	Total Cost (thous. \$)
Oil	519	4,772,204	1,360,078
Gas	245	449,682	180,332
Dry	410	1,706,150	110,900

### Marginal oil wells

Producing marginal wells	2,817
Crude oil production in bbls. (thous.)	3,355
Crude oil production b/d (thous.)	9

### Marginal natural gas wells

as of 12/31/04

Producing marginal wells	4,536
Natural gas production (MMcf)	37,963

### Federal Onshore Mineral Lease Royalties

Oil	\$ 15,560,645
Gas	\$ 12,884,411
Total Royalties	\$ 69,735,602

### Horizontal Wells Data

Horizontal Wells Drilled	283
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MONTANA



## 2004 Industry Statistics

### Number of wells drilled

	Exploratory	Development	Total
Oil	1	6	7
Gas	0	7	7
Dry	17	19	36
Total	18	32	50

### Total footage drilled

(thous. ft.)

	Exploratory	Development	Total
Oil	5.2	30.6	35.8
Gas	0	25.1	25.1
Dry	87.3	92.5	179.8
Total	92.5	148.2	240.7

(Note: Totals may not add due to rounding.)

New-field wildcats drilled	16
Footage (thous. ft.)	83.8

Average rotary rigs active	1
----------------------------	---

### State-wide rank

	Crude Oil	Natural Gas
Wells drilled	26th	26th
Production	23rd	26th
Reserves (2004)	22nd	NA

### Number of producing wells

(12/31/04)

Crude oil	1,224
Natural gas	112
Total	1,336

### Average production

Crude oil (thous. b/d)	7
NGL (thous. b/d)	0
Natural gas (MMcf/day)	3

### Natural gas marketed production

(MMcf)	1,476
--------	-------

### Average output per producing well

Crude oil (bbls.)	2,059
Natural gas (Mcf)	10,862

### Coalbed Methane (YTD MMcf)

Oil Wells	NA	Gas Wells	NA
Daily Average (MMcf) / Well			NA

### Heavy Oil (YTD BBls, in thous.)

Wells	NA
Av. Bbls per day	NA
Av. Bbls per well/d	NA

### Average number of employees

Oil and natural gas extraction	245
Refining	9
Transportation	2,112
Wholesale	1,219
Retail	9,156
Total petroleum industry	12,741

## 2004 Latest Available Data

### Petroleum reserves

as of 12/31/04 (mill. bbls.)

	Crude Oil	NGL	Total
New reserves	2	NA	2
Production	3	NA	3
Net annual change	-1	NA	-1
Proved reserves	15	NA	15

### Natural gas reserves

as of 12/31/04 (Bcf)

	Associated Dissolved	Non- Associated	Dry Gas
New reserves	NA	NA	NA
Production	NA	NA	NA
Net annual change	NA	NA	NA
Proved reserves	NA	NA	NA

### Cost of drilling and equipping wells

	Cost/ft. (\$)	Cost/ well (\$)	Total Cost (thous. \$)
Oil	135	693,151	4,852
Gas	118	422,701	2,959
Dry	94	470,922	16,953

### Marginal oil wells

Producing marginal wells	1,177
Crude oil production in bbls. (thous.)	1,842
Crude oil production b/d (thous.)	5

### Marginal natural gas wells

as of 12/31/04

Producing marginal wells	98
Natural gas production (MMcf)	784

### Federal Onshore Mineral Lease Royalties

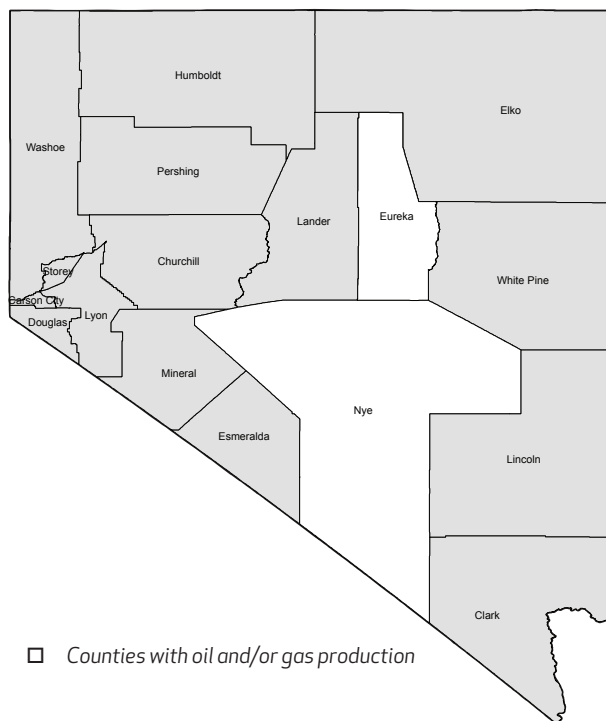
Oil	\$143,645
Gas	0
Total Royalties	\$ 208,182

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# NEVADA



□ Counties with oil and/or gas production

## Background Information

### Counties

Number of counties	17
With oil and/or gas production	2

### First year of production

Crude oil	1954
Natural gas	NA

### Year and amount of peak production

Crude oil — 3,230 thous. bbls.	1988
Natural gas —	NA

### Deepest producing well (ft.)

Crude oil	8,694
Natural gas	NA

### Year and depth of deepest well drilled (ft.)

1980	19,562
------	--------

### Cumulative number of total wells drilled

as of 12/31/04 (excluding service wells)

Oil wells	122	14%
Gas wells	2	0%
Dry holes	752	86%
Total	876	100%

### Cumulative crude oil wellhead value

as of 12/31/04 (thous. \$) \$803,435

### Cumulative production & new reserves

as of 12/31/04

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	NA	NA	NA	NA
Production	NA	NA	NA	NA

## Value of Oil and Gas

### Average wellhead price

(2004)

Crude oil (\$/bbl.)	\$31.98
Natural gas (\$/Mcf)	NA

### Wellhead value of production

(2004, in thous. \$)

Crude oil	\$14,807
Natural gas	NA
Total	\$14,807

### Average natural gas price

(2004, \$/Mcf)

Residential consumers	\$10.05
Commercial consumers	\$ 8.35
Industrial consumers	\$ 8.57
Electric utilities	\$ 5.76
City Gate	\$ 6.77

### Severance taxes paid

(2004, in thous. \$) \$45



## 2004 Industry Statistics

### Number of wells drilled

	Exploratory	Development	Total
Oil	0	0	0
Gas	0	0	0
Dry	4	0	4
Total	4	0	4

### Total footage drilled

(thous. ft.)

	Exploratory	Development	Total
Oil	0	0	0
Gas	0	0	0
Dry	20.0	0	20.0
Total	20.0	0	20.0

(Note: Totals may not add due to rounding.)

### New-field wildcats drilled

	3
--	---

Footage (thous. ft.)

12.1

### Average rotary rigs active

2

### State-wide rank

	Crude Oil	Natural Gas
Wells drilled	--	--
Production	27th	32nd
Reserves (2004)	NA	NA

### Number of producing wells

(12/31/04)

Crude oil	68
Natural gas	NA
Total	68

### Average production

Crude oil (thous. b/d)	1
NGL (thous. b/d)	NA
Natural gas (MMcf/day)	NA

### Natural gas marketed production

(MMcf)

5

### Average output per producing well

Crude oil (bbls.)	6,810
Natural gas (Mcf)	NA

### Coalbed Methane (YTD MMcf)

Oil Wells	NA	Gas Wells	NA
Daily Average (MMcf) / Well			NA

### Heavy Oil (YTD BBls, in thous.)

NA

Wells	NA
Av. Bbls per day	NA
Av. Bbls per well/d	NA

### Average number of employees

Oil and natural gas extraction	88
Refining	177
Transportation	914
Wholesale	774
Retail	8,420
Total petroleum industry	10,373

## 2004 Latest Available Data

### Petroleum reserves

as of 12/31/04 (mill. bbls.)

	Crude Oil	NGL	Total
New reserves	NA	NA	NA
Production	NA	NA	NA
Net annual change	NA	NA	NA
Proved reserves	NA	NA	NA

### Natural gas reserves

as of 12/31/04 (Bcf)

	Associated Dissolved	Non- Associated	Dry Gas
New reserves	NA	NA	NA
Production	NA	NA	NA
Net annual change	NA	NA	NA
Proved reserves	NA	NA	NA

### Cost of drilling and equipping wells

	Cost/ft. (\$)	Cost/ well (\$)	Total Cost (thous. \$)
Oil	NA	NA	NA
Gas	NA	NA	NA
Dry	125	506,748	1,520

### Marginal oil wells

Producing marginal wells	40
Crude oil production in bbls. (thous.)	91
Crude oil production b/d (thous.)	0

### Marginal natural gas wells

as of 12/31/04

Producing marginal wells	98
Natural gas production (MMcf)	784

### Federal Onshore Mineral Lease Royalties

Oil	\$1,467,545
Gas	0
Total Royalties	\$5,946,319

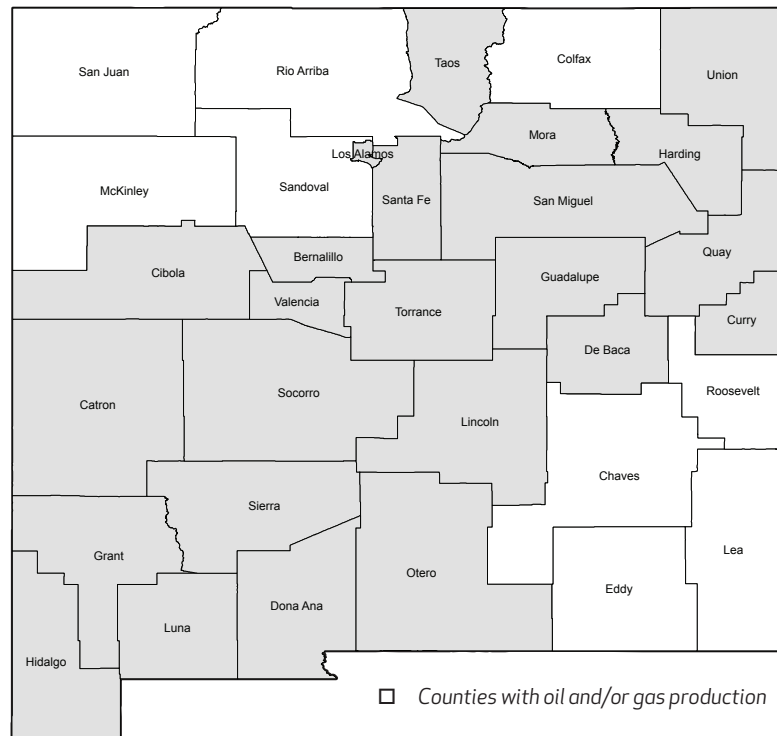
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NEVADA



# NEW MEXICO



## Background Information

### Counties

Number of counties	33
With oil and/or gas production	9

### First year of production

Crude oil	1911
Natural gas	1924

### Year and amount of peak production

Crude oil — 129,227 thous. bbls.	1969
Natural gas — 1,689,125 MMcf	2001

### Deepest producing well (ft.)

Crude oil	17,652
Natural gas	17,515

### Year and depth of deepest well drilled (ft.)

1969	22,926
------	--------

### Cumulative number of total wells drilled

as of 12/31/04 (excluding service wells)

Oil wells	49,053	47%
Gas wells	37,727	36%
Dry holes	17,493	17%
Total	104,278	100%

### Cumulative crude oil wellhead value

as of 12/31/04 (thous. \$) \$50,784,143

### Cumulative production & new reserves

as of 12/31/04

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	6,973	3,116	10,089	79,483
Production	6,377	2,224	8,601	61,074

## Value of Oil and Gas

### Average wellhead price

(2004)

Crude oil (\$/bbl.)	\$ 39.25
Natural gas (\$/Mcf)	\$ 4.97

### Wellhead value of production

(2004, in thous. \$)

Crude oil	\$ 2,226,378
Natural gas	\$ 6,821,723
Total	\$ 9,048,101

### Average natural gas price

(2004, \$/Mcf)

Residential consumers	\$ 9.57
Commercial consumers	\$ 7.99
Industrial consumers	\$ 6.66
Electric utilities	NA
City Gate	\$ 5.40

### Severance taxes paid

(2004, in thous. \$) \$737,200

## 2004 Industry Statistics

### Number of wells drilled

	Exploratory	Development	Total
Oil	24	496	520
Gas	59	1,137	1,196
Dry	20	53	73
Total	103	1,686	1,789

### Total footage drilled

(thous. ft.)

	Exploratory	Development	Total
Oil	124.1	2,837.9	2,962
Gas	427	6,186.4	6,613.4
Dry	139.5	358.6	498.1
Total	690.7	9,382.8	10,073.5

(Note: Totals may not add due to rounding.)

New-field wildcats drilled	77
Footage (thous. ft.)	527.1

Average rotary rigs active	67
----------------------------	----

### State-wide rank

	Crude Oil	Natural Gas
Wells drilled	5th	6th
Production	6th	4th
Reserves (2004)	5th	4th

### Number of producing wells

(12/31/04)

Crude oil	20,014
Natural gas	28,148
Total	48,162

### Average production

Crude oil (thous. b/d)	155
NGL (thous. b/d)	21.6
Natural gas (MMcf/day)	3,750

### Natural gas marketed production

(MMcf)	1,632,539
--------	-----------

### Average output per producing well

Crude oil (bbls.)	2,831
Natural gas (Mcf)	48,760

Coalbed Methane (YTD MMcf)	491,669
Oil Wells 1 Gas Wells	3,863
Daily Average (MMcf) / Well	348

Heavy Oil (YTD BBls, in thous.)	23
Wells	32
Av. Bbls per day	2.3
Av. Bbls per well/d	1.92

### Average number of employees

Oil and natural gas extraction	11,339
Refining	701
Transportation	3,159
Wholesale	1,866
Retail	7,765
Total petroleum industry	24,830

## 2004 Latest Available Data

### Petroleum reserves

as of 12/31/04 (mill. bbls.)

	Crude Oil	NGL	Total
New reserves	52	68	120
Production	60	79	139
Net annual change	-8	-11	-19
Proved reserves	669	864	1,533

### Natural gas reserves

as of 12/31/04 (Bcf)

	Associated Dissolved	Non- Associated	Dry Gas
New reserves	268	2,825	3,019
Production	235	1,397	1,527
Net annual change	33	1,428	1,492
Proved reserves	1,578	18,109	18,512

### Cost of drilling and equipping wells

	Cost/ft. (\$)	Cost/ well (\$)	Total Cost (thous. \$)
Oil	173	988,148	512,849
Gas	193	1,067,800	1,277,089
Dry	238	1,621,404	118,363

### Marginal oil wells

Producing marginal wells	16,602
Crude oil production in bbls. (thous.)	21,045
Crude oil production b/d (thous.)	58

### Marginal natural gas wells

as of 12/31/04

Producing marginal wells	17,650
Natural gas production in MMcf (thous.)	229,209

### Federal Onshore Mineral Lease Royalties

Oil	\$ 177,014,697
Gas	\$532,089,288
Total Royalties	\$ 821,891,259

### Horizontal Wells Data

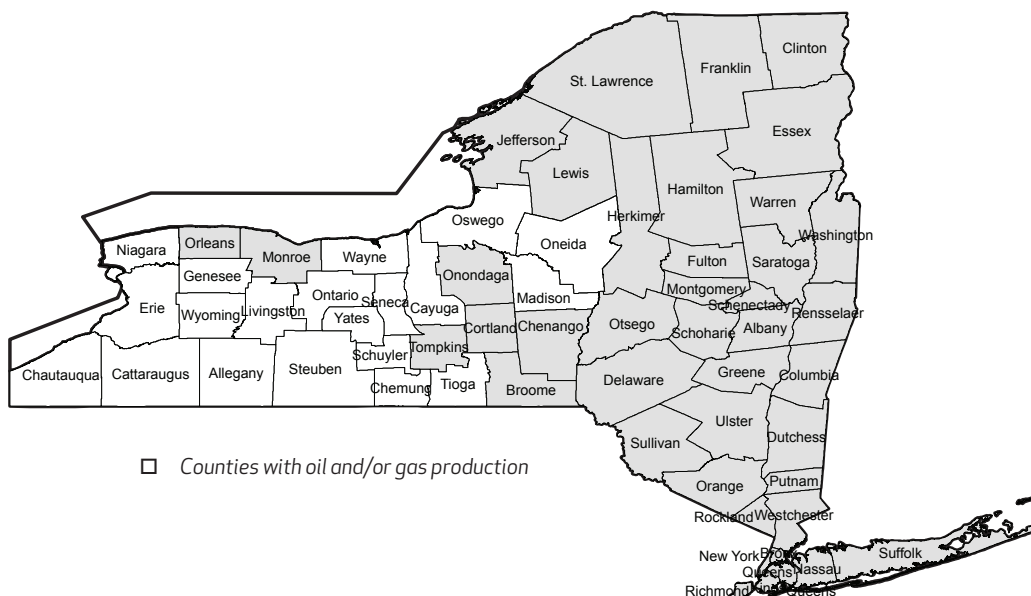
Horizontal Wells Drilled	44
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# NEW YORK



□ Counties with oil and/or gas production

## Background Information

### Counties

Number of counties	62
With oil and/or gas production	19

### First year of production

Crude oil	1865
Natural gas	1821

### Year and amount of peak production

Crude oil — 6,685 thous. bbls.	1882
Natural gas — 39,402 MMcf	1938

### Deepest producing well (ft.)

Crude oil	4,906
Natural gas	10,485

### Year and depth of deepest well drilled (ft.)

2002	15,000
------	--------

### Cumulative number of total wells drilled

as of 12/31/04 (excluding service wells)

Oil wells	2,463	19%
Gas wells	7,759	62%
Dry holes	2,401	19%
Total	12,623	100%

### Cumulative crude oil wellhead value

as of 12/31/04 (thous. \$) \$1,119,426

### Cumulative production & new reserves

as of 12/31/04

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	NA	NA	NA	1,415
Production	NA	NA	NA	1,107

## Value of Oil and Gas

### Average wellhead price

(2004)

Crude oil (\$/bbl.)	\$39.40
Natural gas (\$/Mcf)	\$ 6.98

### Wellhead value of production

(2004, in thous. \$)

Crude oil	\$ 4,334
Natural gas	\$ 319,579
Total	\$ 323,913

### Average natural gas price

(2004, \$/Mcf)

Residential consumers	\$12.50
Commercial consumers	\$ 10.11
Industrial consumers	\$ 8.05
Electric utilities	\$ 6.65
City Gate	\$ 6.36

### Severance taxes paid

(2004, in thous. \$)

--

## 2004 Industry Statistics

### Number of wells drilled

	Exploratory	Development	Total
Oil	2	37	39
Gas	36	38	74
Dry	21	2	23
Total	59	77	136

### Total footage drilled

(thous. ft.)

	Exploratory	Development	Total
Oil	3.2	45.2	48.4
Gas	288.1	117.6	405.7
Dry	152.4	21.8	174.2
Total	443.7	184.6	628.3

(Note: Totals may not add due to rounding.)

### New-field wildcats drilled

	47
Footage (thous. ft.)	364.7

### Average rotary rigs active

5

### State-wide rank

	Crude Oil	Natural Gas
Wells drilled	21st	21st
Production	29th	22nd
Reserves (2004)	NA	23rd

### Number of producing wells\*

(12/31/04)

Crude oil	3,153
Natural gas	6,596
Total	9,749

### Average production

Crude oil (thous. b/d)	NA
NGL (thous. b/d)	NA
Natural gas (MMcf/day)	NA

### Natural gas marketed production

(MMcf) 46,050

### Average output per producing well\*

Crude oil (bbls.)	0.16
Natural gas (Mcf)	19.0

### Coalbed Methane (YTD MMcf)

Oil Wells	NA	Gas Wells	NA
Daily Average (MMcf) / Well			NA

### Heavy Oil (YTD BBls, in thous.)

Wells	NA
Av. Bbls per day	NA
Av. Bbls per well/d	NA

### Average number of employees

Oil and natural gas extraction	804
Refining	488
Transportation	5,707
Wholesale	15,794
Retail	29,397
Total petroleum industry	52,190

## 2004 Latest Available Data

### Petroleum reserves

as of 12/31/04 (mill. bbls.)

	Crude Oil	NGL	Total
New reserves	NA	NA	NA
Production	NA	NA	NA
Net annual change	NA	NA	NA
Proved reserves	NA	NA	NA

### Natural gas reserves

as of 12/31/04 (Bcf)

	Associated Dissolved	Non- Associated	Dry Gas
New reserves	0	3	3
Production	0	44	44
Net annual change	0	-41	-41
Proved reserves	0	324	324

### Cost of drilling and equipping wells

	Cost/ft. (\$)	Cost/ well (\$)	Total Cost (thous. \$)
Oil	144	178,698	6,969
Gas	245	1,365,322	98,303
Dry	284	2,156,110	45,278

### Marginal oil wells\*

Producing marginal wells	3,153
Crude oil production in bbls. (thous.)	184
Crude oil production b/d (thous.)	0.16

### Marginal natural gas wells\*

as of 12/31/04

Producing marginal wells	6,392
Natural gas production (MMcf)	10,850

### Federal Onshore Mineral Lease Royalties

Oil	0
Gas	\$22,688
Total Royalties	\$22,688

### Horizontal Wells Data

Horizontal Wells Drilled	3
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NEW YORK



# NORTH DAKOTA



□ Counties with oil and/or gas production

## Background Information

### Counties

Number of counties	53
With oil and/or gas production	17

### First year of production

Crude oil	1951
Natural gas	1907

### Year and amount of peak production

Crude oil — 52,654 thous. bbls.	1984
Natural gas — 72,633 MMcf	1985

### Deepest producing well (ft.)

Crude oil (18,262 MD horizontal)	14,352
Natural gas (16,510 MD horizontal)	14,792

### Year and depth of deepest well drilled (ft.)

NA (18,262 MD horizontal-2000)	19,800
--------------------------------	--------

### Cumulative number of total wells drilled

as of 12/31/04 (excluding service wells)

Oil wells	9,283	58%
Gas wells	343	2%
Dry holes	6,511	40%
Total	16,137	100%

### Cumulative crude oil wellhead value

as of 12/31/04 (thous. \$) \$23,308,418

### Cumulative production & new reserves

as of 12/31/04

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	1,841	228	2,069	2,604
Production	1,461	161	1,622	2,207

## Value of Oil and Gas

### Average wellhead price

(2004)

Crude oil (\$/bbl.)	\$39.30
Natural gas (\$/Mcf)	\$ 5.73

### Wellhead value of production

(2004, in thous. \$)

Crude oil	\$ 1,184,581
Natural gas	\$ 76,375
Total	\$1,260,956

### Average natural gas price

(2004, \$/Mcf)

Residential consumers	\$9.03
Commercial consumers	\$ 8.21
Industrial consumers	\$ 5.70
Electric utilities	\$8.05
City Gate	\$6.93

### Severance taxes paid

(2004, in thous. \$)

\$73,914



## 2004 Industry Statistics

### Number of wells drilled

	Exploratory	Development	Total
Oil	34	131	165
Gas	NA	24	24
Dry	19	13	32
Total	53	168	221

### Total footage drilled

(thous. ft.)

	Exploratory	Development	Total
Oil	357.5	1,127.4	1,484.9
Gas	NA	74.8	74.8
Dry	149.5	80.6	230.1
Total	507.0	1282.8	1,789.8

(Note: Totals may not add due to rounding.)

New-field wildcats drilled	24
Footage (thous. ft.)	237.2

Average rotary rigs active	15
----------------------------	----

### State-wide rank

	Crude Oil	Natural Gas
Wells drilled	14th	25th
Production	10th	21st
Reserves (2004)	9th	22nd

### Number of producing wells

(12/31/04)

Crude oil	3,778
Natural gas	133
Total	3,911

### Average production

Crude oil (thous. b/d)	82
NGL (thous. b/d)	0.9
Natural gas (MMcf/day)	36

### Natural gas marketed production

(MMcf) 55,009

### Average output per producing well

Crude oil (bbls.)	7,979
Natural gas (Mcf)	100,147

### Coalbed Methane (YTD MMcf)

Oil Wells	NA	Gas Wells	NA
Daily Average (MMcf) / Well			NA

### Heavy Oil (YTD BBls, in thous.)

Wells	NA
Av. Bbls per day	NA
Av. Bbls per well/d	NA

### Average number of employees

Oil and natural gas extraction	1,632
Refining	NA
Transportation	301
Wholesale	1,744
Retail	3,974
Total petroleum industry	7,651

## 2004 Latest Available Data

### Petroleum reserves

as of 12/31/04 (mill. bbls.)

	Crude Oil	NGL	Total
New reserves	68	3	71
Production	32	5	37
Net annual change	36	-2	34
Proved reserves	389	43	432

### Natural gas reserves

as of 12/31/04 (Bcf)

	Associated Dissolved	Non- Associated	Dry Gas
New reserves	46	-21	20
Production	42	15	51
Net annual change	4	-36	-31
Proved reserves	320	145	417

### Cost of drilling and equipping wells

	Cost/ft. (\$)	Cost/ well (\$)	Total Cost (thous. \$)
Oil	478	4,302,129	709,851
Gas	200	623,259	14,958
Dry	479	3,539,727	109,732

### Marginal oil wells

Producing marginal wells	2,412
Crude oil production in bbls. (thous.)	4,531
Crude oil production b/d (thous.)	12

### Marginal natural gas wells

as of 12/31/04

Producing marginal wells	82
Natural gas production (MMcf)	731

### Federal Onshore Mineral Lease Royalties

Oil	\$20,992,289
Gas	\$ 3,376,636
Total Royalties	\$ 27,751,341

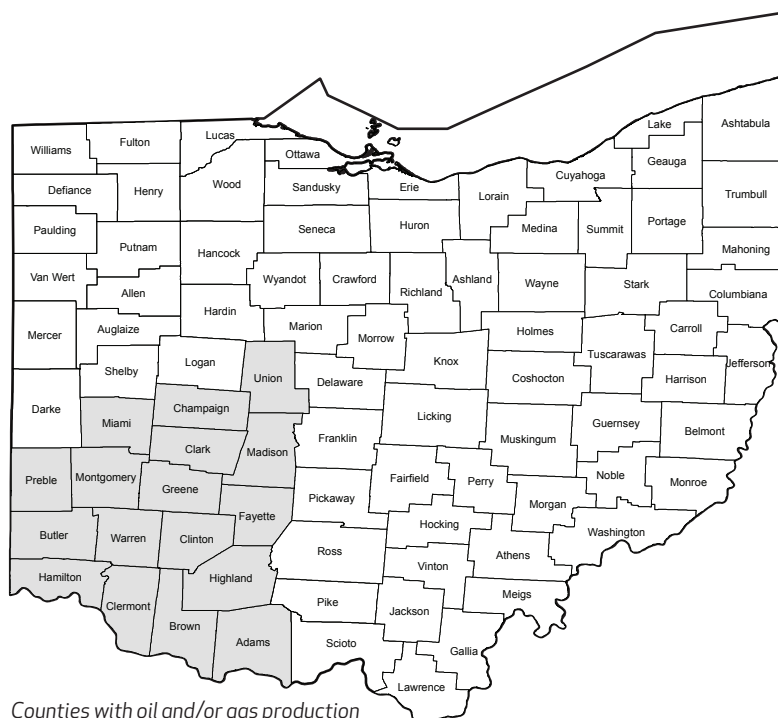
### Horizontal Wells Data

Horizontal Wells Drilled	142
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# OHIO



## Background Information

### Counties

Number of counties	88
With oil and/or gas production	71

### First year of production

Crude oil	1860
Natural gas	1884

### Year and amount of peak production

Crude oil — 23,941 thous. bbls.	1896
Natural gas — 186,480 MMcf	1984

### Deepest producing well (ft.)

Crude oil	7,805
Natural gas	8,953

### Year and depth of deepest well drilled (ft.)

1967	11,442
------	--------

### Cumulative number of total wells drilled

as of 12/31/04 (excluding service wells)

Oil wells	46,644	59%
Gas wells	22,016	28%
Dry holes	10,531	13%
Total	79,191	100%

### Cumulative crude oil wellhead value

as of 12/31/04 (thous. \$) \$8,048,904

### Cumulative production & new reserves

as of 12/31/04

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	1,120	NA	1,120	9,474
Production	1,083	NA	1,083	8,745

## Value of Oil and Gas

### Average wellhead price

(2004)

Crude oil (\$/bbl.)	\$38.27
Natural gas (\$/Mcf)	\$ 6.65

### Wellhead value of production

(2004, in thous. \$)

Crude oil	\$ 163,183
Natural gas	\$ 442,637
Total	\$ 605,820

### Average natural gas price

(2004, \$/Mcf)

Residential consumers	\$10.46
Commercial consumers	\$ 9.20
Industrial consumers	\$ 8.84
Electric utilities	\$ 6.70
City Gate	\$ 7.49

### Severance taxes paid

(2004, in thous. \$) \$2,691

## 2004 Industry Statistics

### Number of wells drilled

	Exploratory	Development	Total
Oil	8	313	321
Gas	9	178	187
Dry	7	34	41
Total	24	525	549

### Total footage drilled

(thous. ft.)

	Exploratory	Development	Total
Oil	42.2	1,324.8	1,367
Gas	50.9	674.8	725.7
Dry	32.9	152	184.9
Total	126	2,151.6	2,277.6

(Note: Totals may not add due to rounding.)

New-field wildcats drilled	2
Footage (thous. ft.)	9.9

Average rotary rigs active	7
----------------------------	---

### State-wide rank

	Crude Oil	Natural Gas
Wells drilled	7th	18th
Production	19th	19th
Reserves (2004)	20th	20th

### Number of producing wells\*

(12/31/04)

Crude oil	29,024
Natural gas	33,828
Total	62,852

### Average production

Crude oil (thous. b/d)	12
NGL (thous. b/d)	0.9
Natural gas (MMcf/day)	182

### Natural gas marketed production

(MMcf)	90,476
--------	--------

### Average output per producing well

Crude oil (bbls.)	249
Natural gas (Mcf)	2,997

### Coalbed Methane (YTD MMcf)

Oil Wells	NA	Gas Wells	17
Daily Average (MMcf) / Well	NA		

### Heavy Oil (YTD Bbls, in thous.)

Wells	NA
Av. Bbls per day	NA
Av. Bbls per well/d	NA

### Average number of employees

Oil and natural gas extraction	4,583
Refining	2,126
Transportation	6,298
Wholesale	5,873
Retail	35,860
Total petroleum industry	54,740

## 2004 Latest Available Data

### Petroleum reserves

as of 12/31/04 (mill. bbls.)

	Crude Oil	NGL	Total
New reserves	-12	NA	NA
Production	5	NA	NA
Net annual change	-17	NA	NA
Proved reserves	49	NA	NA

### Natural gas reserves

as of 12/31/04 (Bcf)

	Associated Dissolved	Non- Associated	Dry Gas
New reserves	-77	7	-70
Production	19	63	82
Net annual change	-96	-56	-152
Proved reserves	208	767	974

### Cost of drilling and equipping wells

	Cost/ft. (\$)	Cost/ well (\$)	Total Cost (thous. \$)
Oil	82	351,258	112,754
Gas	100	389,387	72,815
Dry	165	763,918	30,557

### Marginal oil wells\*

Producing marginal wells	15,309
Crude oil production in bbls. (thous.)	4,917
Crude oil production b/d (thous.)	10

### Marginal natural gas wells\*

as of 12/31/04

Producing marginal wells	33,404
Natural gas production (MMcf)	72,536

### Federal Onshore Mineral Lease Royalties

Oil	\$ 77,819
Gas	\$424,610
Total Royalties	\$547,128

### Horizontal Wells Data

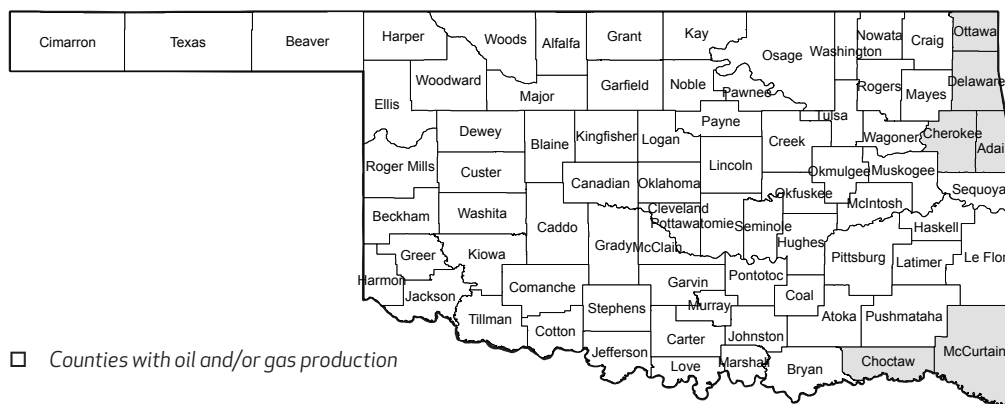
Horizontal Wells Drilled	2
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OHIO

# OKLAHOMA



□ Counties with oil and/or gas production

## Background Information

### Counties

Number of counties	77
With oil and/or gas production	71

### First year of production

Crude oil	1891
Natural gas	1902

### Year and amount of peak production

Crude oil — 277,775 thous. bbls.	1927
Natural gas — 2,153,852 MMcf	1991

### Deepest producing well (ft.)

Crude oil	22,850
Natural gas	25,152

### Year and depth of deepest well drilled (ft.)

1974	31,441
------	--------

### Cumulative number of total wells drilled

as of 12/31/04 (excluding service wells)

Oil wells	239,543	53%
Gas wells	79,567	18%
Dry holes	133,374	29%
Total	452,484	100%

### Cumulative crude oil wellhead value

as of 12/31/04 (thous. \$) \$100,075,782

### Cumulative production & new reserves

as of 12/31/04

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	14,785	5,111	19,896	110,785
Production	14,374	4,191	18,565	107,594

## Value of Oil and Gas

### Average wellhead price

(2004)

Crude oil (\$/bbl.)	\$39.95
Natural gas (\$/Mcf)	\$ 5.52

### Wellhead value of production

(2004, in thous. \$)

Crude oil	\$ 2,193,215
Natural gas	\$ 7,986,767
Total	\$10,179,982

### Average natural gas price

(2004, \$/Mcf)

Residential consumers	\$10.22
Commercial consumers	\$ 9.63
Industrial consumers	\$ 8.59
Electric utilities	\$ 6.14
City Gate	\$ 6.56

### Severance taxes paid

(2004, in thous. \$)

\$701,156

## 2004 Industry Statistics

### Number of wells drilled

	Exploratory	Development	Total
Oil	37	542	579
Gas	139	2,023	2,162
Dry	75	319	394
Total	251	2,884	3,135

### Total footage drilled

(thous. ft.)

	Exploratory	Development	Total
Oil	274.1	2,783.6	3,057.7
Gas	1,330.0	13,963.6	15,293.6
Dry	487.2	1,815.1	2,302.3
Total	2,091.3	18,562.3	20,653.6

(Note: Totals may not add due to rounding.)

New-field wildcats drilled	103
Footage (thous. ft.)	790.0

Average rotary rigs active	159
----------------------------	-----

### State-wide rank

	Crude Oil	Natural Gas
Wells drilled	4th	3rd
Production	7th	3rd
Reserves (2004)	7th	5th

### Number of producing wells

(12/31/04)

Crude oil	49,655
Natural gas	32,049
Total	81,704

### Average production

Crude oil (thous. b/d)	147
NGL (thous. b/d)	21.8
Natural gas (MMcf/day)	3,938

### Natural gas marketed production

(MMcf)	1,655,769
--------	-----------

### Average output per producing well

Crude oil (bbls.)	1,801
Natural gas (Mcf)	44,974

Coalbed Methane (YTD MMcf)	60,619
Oil Wells	4
Gas Wells	2,857
Daily Average (MMcf) / Well	58

### Heavy Oil (YTD BBl, in thous.)

Wells	NA
Av. Bbls per day	NA
Av. Bbls per well/d	NA

### Average number of employees

Oil and natural gas extraction	29,277
Refining	1,725
Transportation	7,140
Wholesale	3,560
Retail	12,869
Total petroleum industry	54,571

## 2004 Latest Available Data

### Petroleum reserves

as of 12/31/04 (mill. bbls.)

	Crude Oil	NGL	Total
New reserves	33	179	212
Production	51	75	126
Net annual change	-18	104	86
Proved reserves	570	790	1,360

### Natural gas reserves

as of 12/31/04 (Bcf)

	Associated Dissolved	Non- Associated	Dry Gas
New reserves	-20	2,645	2,400
Production	136	1,520	1,563
Net annual change	-156	1,125	837
Proved reserves	899	16,301	16,238

### Cost of drilling and equipping wells

	Cost/ft. (\$)	Cost/ well (\$)	Total Cost (thous. \$)
Oil	142	760,974	426,906
Gas	172	1,226,846	2,620,543
Dry	96	565,433	218,822

### Marginal oil wells

Producing marginal wells	48,542
Crude oil production in bbls. (thous.)	36,618
Crude oil production b/d (thous.)	100

### Marginal natural gas wells

as of 12/31/04

Producing marginal wells	21,455
Natural gas production (MMcf)	269,245

### Federal Onshore Mineral Lease Royalties

Oil	\$ 6,553,801
Gas	\$ 24,542,478
Total Royalties	\$35,054,999

### Horizontal Wells Data

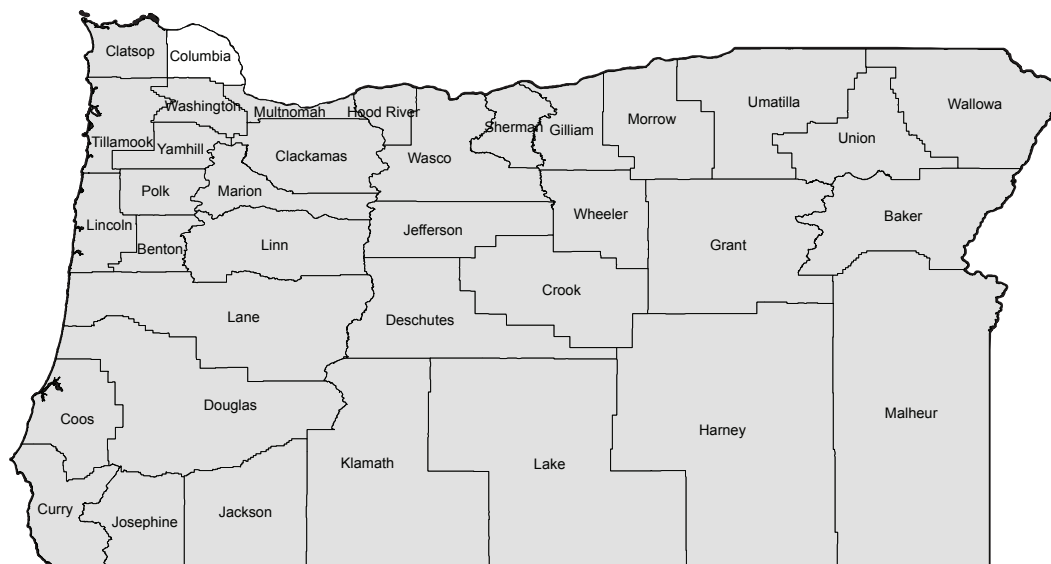
Horizontal Wells Drilled	364
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# OREGON



□ Counties with oil and/or gas production

## Background Information

### Counties

Number of counties	36
With oil and/or gas production	1

### First year of production

Crude oil	NA
Natural gas	1979

### Year and amount of peak production

Crude oil —	NA
Natural gas — 5,000 MMcf	1980/81

### Deepest producing well (ft.)

Crude oil	NA
Natural gas	13,177

### Year and depth of deepest well drilled (ft.)

1979	13,177
------	--------

### Cumulative number of total wells drilled

as of 12/31/04 (excluding service wells)

Oil wells	NA	NA
Gas wells	67	16%
Dry holes	352	84%
Total	419	100%

### Cumulative crude oil wellhead value

as of 12/31/04 (thous. \$) NA

### Cumulative production & new reserves

as of 12/31/04

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	NA	NA	NA	NA
Production	NA	NA	NA	71

## Value of Oil and Gas

### Average wellhead price

(2004)

Crude oil (\$/bbl.)	NA
Natural gas (\$/Mcf)	\$3.89

### Wellhead value of production

(2004, in thous. \$)

Crude oil	NA
Natural gas	\$1,821
Total	\$1,821

### Average natural gas price

(2004, \$/Mcf)

Residential consumers	\$ 11.11
Commercial consumers	\$9.37
Industrial consumers	\$6.30
Electric utilities	\$ 5.15
City Gate	\$5.86

### Severance taxes paid

(2004, in thous. \$) \$72



## 2004 Industry Statistics

### Number of wells drilled

	Exploratory	Development	Total
Oil	NA	NA	NA
Gas	NA	NA	NA
Dry	NA	NA	NA
Total	NA	NA	NA

### Total footage drilled

(thous. ft.)

	Exploratory	Development	Total
Oil	NA	NA	NA
Gas	NA	NA	NA
Dry	NA	NA	NA
Total	NA	NA	NA

(Note: Totals may not add due to rounding.)

### New-field wildcats drilled

Footage (thous. ft.)	NA
----------------------	----

### Average rotary rigs active

0

### State-wide rank

	Crude Oil	Natural Gas
Wells drilled	NA	NA
Production	NA	28th
Reserves (2004)	NA	NA

### Number of producing wells

(12/31/04)

Crude oil	0
Natural gas	16
Total	16

### Average production

Crude oil (thous. b/d)	0
NGL (thous. b/d)	NA
Natural gas (MMcf/day)	467,513

### Natural gas marketed production

(MMcf)

1

### Average output per producing well

Crude oil (bbls.)	NA
Natural gas (Mcf)	29,220

### Coalbed Methane (YTD MMcf)

Oil Wells	NA	Gas Wells	NA
Daily Average (MMcf) / Well			NA

### Heavy Oil (YTD BBl, in thous.)

NA

Wells	NA
Av. Bbls per day	NA
Av. Bbls per well/d	NA

### Average number of employees

Oil and natural gas extraction	23
Refining	420
Transportation	395
Wholesale	1,900
Retail	11,366
Total petroleum industry	14,104

## 2004 Latest Available Data

### Petroleum reserves

as of 12/31/04 (mill. bbls.)

	Crude Oil	NGL	Total
New reserves	NA	NA	NA
Production	NA	NA	NA
Net annual change	NA	NA	NA
Proved reserves	NA	NA	NA

### Natural gas reserves

as of 12/31/04 (Bcf)

	Associated Dissolved	Non- Associated	Dry Gas
New reserves	NA	NA	NA
Production	NA	NA	NA
Net annual change	NA	NA	NA
Proved reserves	NA	NA	NA

### Cost of drilling and equipping wells

	Cost/ft. (\$)	Cost/ well (\$)	Total Cost (thous. \$)
Oil	NA	NA	NA
Gas	NA	NA	NA
Dry	NA	NA	NA

### Marginal oil wells

Producing marginal wells	NA
Crude oil production in bbls. (thous.)	NA
Crude oil production b/d (thous.)	NA

### Marginal natural gas wells

as of 12/31/04

Producing marginal wells	11
Natural gas production (MMcf)	117

### Federal Onshore Mineral Lease Royalties

Oil	0
Gas	0
Total Royalties	\$62,768

### For more information please contact:

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OREGON



# PENNSYLVANIA



□ Counties with oil and/or gas production

## Background Information

### Counties

Number of counties	67
With oil and/or gas production	31

### First year of production

Crude oil	1859
Natural gas	1881

### Year and amount of peak production

Crude oil — 31,424 thous. bbls.	1891
Natural gas — 200,907 MMcf	2000

### Deepest producing well (ft.)

Crude oil	8,484
Natural gas	13,186

### Year and depth of deepest well drilled (ft.)

1974	21,432
------	--------

### Cumulative number of total wells drilled

as of 12/31/04 (excluding service wells)

Oil wells	21,427	32%
Gas wells	42,691	63%
Dry holes	3,517	5%
Total	67,635	100%

### Cumulative crude oil wellhead value

as of 12/31/04 (thous. \$) \$4,830,186

### Cumulative production & new reserves

as of 12/31/04

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	1,356	NA	1,356	14,903
Production	1,354	NA	1,354	12,774

## Value of Oil and Gas

### Average wellhead price

(2004)

Crude oil (\$/bbl.)	\$39.48
Natural gas (\$/Mcf)	NA

### Wellhead value of production

(2004, in thous. \$)

Crude oil	\$100,200
Natural gas	NA
Total	\$100,200

### Average natural gas price

(2004, \$/Mcf)

Residential consumers	\$12.27
Commercial consumers	\$10.60
Industrial consumers	\$ 8.97
Electric utilities	\$ 7.49
City Gate	\$ 7.56

### Severance taxes paid

(2004, in thous. \$)

--

## 2004 Industry Statistics

### Number of wells drilled

	Exploratory	Development	Total
Oil	6	437	443
Gas	198	1,839	2,037
Dry	2	14	16
Total	206	2,290	2,496

### Total footage drilled

(thous. ft.)

	Exploratory	Development	Total
Oil	16.1	803.2	819.3
Gas	858.5	7,043.9	7,902.4
Dry	1.8	47.4	49.2
Total	876.4	7,894.5	8,770.9

(Note: Totals may not add due to rounding.)

New-field wildcats drilled	67
Footage (thous. ft.)	274.7

Average rotary rigs active	9
----------------------------	---

### State-wide rank

	Crude Oil	Natural Gas
Wells drilled	6th	4th
Production	22nd	15th
Reserves (2004)	23rd	15th

### Number of producing wells

(12/31/04)

Crude oil	NA
Natural gas	NA
Total	NA

### Average production

Crude oil (thous. b/d)	NA
NGL (thous. b/d)	NA
Natural gas (MMcf/day)	NA

### Natural gas marketed production

(MMcf) 197,217

### Average output per producing well

Crude oil (bbls.)	2,304
Natural gas (Mcf)	68,035

### Coalbed Methane (YTD MMcf)

Oil Wells	NA	Gas Wells	NA
Daily Average (MMcf) / Well			NA

### Heavy Oil (YTD BBls, in thous.)

Wells	NA
Av. Bbls per day	NA
Av. Bbls per well/d	NA

### Average number of employees

Oil and natural gas extraction	4,099
Refining	4,687
Transportation	7,638
Wholesale	12,436
Retail	35,711
Total petroleum industry	64,571

## 2004 Latest Available Data

### Petroleum reserves

as of 12/31/04 (mill. bbls.)

	Crude Oil	NGL	Total
New reserves	1	NA	1
Production	2	NA	2
Net annual change	-1	NA	-1
Proved reserves	12	NA	12

### Natural gas reserves

as of 12/31/04 (Bcf)

	Associated Dissolved	Non- Associated	Dry Gas
New reserves	-30	60	29
Production	9	147	155
Net annual change	-39	-87	-126
Proved reserves	125	2,246	2,361

### Cost of drilling and equipping wells

	Cost/ft. (\$)	Cost/ well (\$)	Total Cost (thous. \$)
Oil	122	228,913	95,456
Gas	93	361,568	732,897
Dry	89	273,166	4,370

### Marginal oil wells

Producing marginal wells	NA
Crude oil production in bbls. (thous.)	NA
Crude oil production b/d (thous.)	NA

### Marginal natural gas wells

as of 12/31/04

Producing marginal wells	NA
Natural gas production (MMcf)	NA

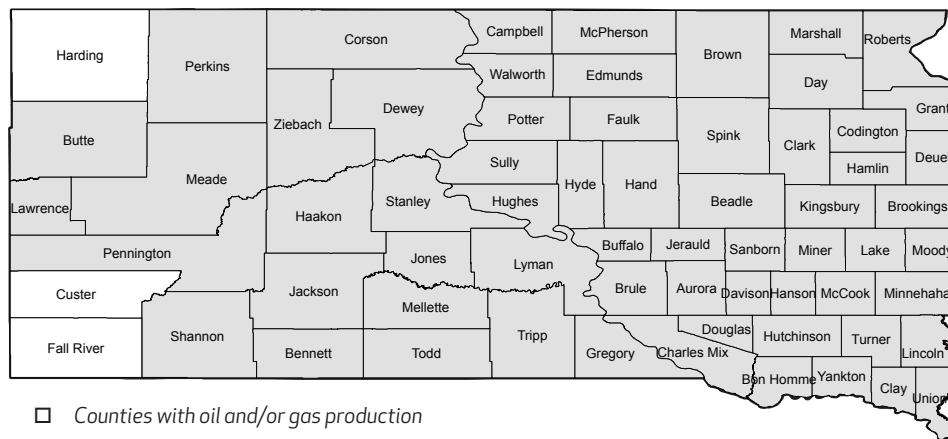
### Federal Onshore Mineral Lease Royalties

Oil	\$ 460
Gas	\$ 32,310
Total Royalties	\$53,666

### For more information please contact:

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1201 15th St., N.W., Suite 300  
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# SOUTH DAKOTA



## Background Information

### Counties

Number of counties	66
With oil and/or gas production	3

### First year of production

Crude oil	1954
Natural gas	1979

### Year and amount of peak production

Crude oil — 1,668 thous. bbls.	1988
Natural gas — 4,369 MMcf	1989

### Deepest producing well (ft.)

Crude oil	14,877
Natural gas	3,550

### Year and depth of deepest well drilled (ft.)

2003	14,877
------	--------

### Cumulative number of total wells drilled

as of 12/31/04 (excluding service wells)

Oil wells	337	31%
Gas wells	112	7%
Dry holes	1,156	72%
Total	1,605	100%

### Cumulative crude oil wellhead value

as of 12/31/04 (thous. \$) \$806,737

### Cumulative production & new reserves

as of 12/31/04

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	NA	NA	NA	NA
Production	NA	NA	NA	1

## Value of Oil and Gas

### Average wellhead price

(2004)

Crude oil (\$/bbl.)	\$38.40
Natural gas (\$/Mcf)	\$ 5.49

### Wellhead value of production

(2004, in thous. \$)

Crude oil	\$ 52,070
Natural gas	\$ 2,794
Total	\$54,864

### Average natural gas price

(2004, \$/Mcf)

Residential consumers	\$ 9.52
Commercial consumers	\$ 8.09
Industrial consumers	\$ 6.26
Electric utilities	NA
City Gate	\$ 6.59

### Severance taxes paid

(2004, in thous. \$)

\$1,658

## 2004 Industry Statistics

### Number of wells drilled

	Exploratory	Development	Total
Oil	3	5	8
Gas	NA	2	2
Dry	1	1	2
Total	4	8	12

### Total footage drilled

(thous. ft.)

	Exploratory	Development	Total
Oil	28.7	57.1	85.8
Gas	NA	2.4	2.4
Dry	4	9.2	13.2
Total	32.7	68.7	101.4

(Note: Totals may not add due to rounding.)

New-field wildcats drilled	1
Footage (thous. ft.)	2.2

Average rotary rigs active	1
----------------------------	---

### State-wide rank

	Crude Oil	Natural Gas
Wells drilled	25th	27th
Production	25th	27th
Reserves (2004)	NA	NA

### Number of producing wells

(12/31/04)

Crude oil	145
Natural gas	60
Total	205

### Average production

Crude oil (thous. b/d)	4
NGL (thous. b/d)	NA
Natural gas (MMcf/day)	1

### Natural gas marketed production

(MMcf)	1,093
--------	-------

### Average output per producing well

Crude oil (bbls.)	9,355
Natural gas (Mcf)	8,477

### Coalbed Methane (YTD MMcf)

Oil Wells	NA	Gas Wells	NA
Daily Average (MMcf) / Well			NA

### Heavy Oil (YTD BBls, in thous.)

Wells	NA
Av. Bbls per day	NA
Av. Bbls per well/d	NA

### Average number of employees

Oil and natural gas extraction	24
Refining	NA
Transportation	367
Wholesale	1,311
Retail	5,860
Total petroleum industry	7,562

## 2004 Latest Available Data

### Petroleum reserves

as of 12/31/04 (mill. bbls.)

	Crude Oil	NGL	Total
New reserves	NA	NA	NA
Production	NA	NA	NA
Net annual change	NA	NA	NA
Proved reserves	NA	NA	NA

### Natural gas reserves

as of 12/31/04 (Bcf)

	Associated Dissolved	Non- Associated	Dry Gas
New reserves	NA	NA	NA
Production	NA	NA	NA
Net annual change	NA	NA	NA
Proved reserves	NA	NA	NA

### Cost of drilling and equipping wells

	Cost/ft. (\$)	Cost/ well (\$)	Total Cost (thous. \$)
Oil	455	4,874,265	38,994
Gas	312	373,884	748
Dry	368	2,429,720	4,859

### Marginal oil wells

Producing marginal wells	64
Crude oil production in bbls. (thous.)	217
Crude oil production b/d (thous.)	1

### Marginal natural gas wells

as of 12/31/04

Producing marginal wells	59
Natural gas production (MMcf)	466

### Federal Onshore Mineral Lease Royalties

Oil	\$ 656,595
Gas	\$ 115,697
Total Royalties	\$ 907,462

### Horizontal Wells Data

Horizontal Wells Drilled	8
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# TENNESSEE



□ Counties with oil and/or gas production

## Background Information

### Counties

Number of counties	95
With oil and/or gas production	12

### First year of production

Crude oil	1860
Natural gas	1889

### Year and amount of peak production

Crude oil — 1,132 thous. bbls.	1982
Natural gas — 5,022 MMcf	1984

### Deepest producing well (ft.)

Crude oil	3,297
Natural gas	4,624

### Year and depth of deepest well drilled (ft.)

1982	11,540
------	--------

### Cumulative number of total wells drilled

as of 12/31/04 (excluding service wells)

Oil wells	2,734	24%
Gas wells	3,057	26%
Dry holes	5,790	50%
Total	11,581	100%

### Cumulative crude oil wellhead value

as of 12/31/04 (thous. \$) \$397,705

### Cumulative production & new reserves

as of 12/31/04

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	NA	NA	NA	NA
Production	NA	NA	NA	107

## Value of Oil and Gas

### Average wellhead price

(2004)

Crude oil (\$/bbl.)	\$36.46
Natural gas (\$/Mcf)	\$ 6.90

### Wellhead value of production

(2004, in thous. \$)

Crude oil	\$ 13,162
Natural gas	\$ 12,441
Total	\$25,603

### Average natural gas price

(2004, \$/Mcf)

Residential consumers	\$10.60
Commercial consumers	\$ 9.51
Industrial consumers	\$ 7.44
Electric utilities	NA
City Gate	\$ 6.68

### Severance taxes paid

(2004, in thous. \$) \$592



## 2004 Industry Statistics

### Number of wells drilled

	Exploratory	Development	Total
Oil	7	48	55
Gas	33	16	49
Dry	16	82	98
Total	56	146	202

### Total footage drilled

(thous. ft.)

	Exploratory	Development	Total
Oil	17.4	77	94.4
Gas	108.8	37.1	145.9
Dry	36.5	140.8	177.3
Total	162.7	254.9	417.6

(Note: Totals may not add due to rounding.)

New-field wildcats drilled	25
Footage (thous. ft.)	88.3

Average rotary rigs active	0
----------------------------	---

### State-wide rank

	Crude Oil	Natural Gas
Wells drilled	17th	23rd
Production	28th	25th
Reserves (2004)	NA	NA

### Number of producing wells

(12/31/04)

Crude oil	NA
Natural gas	NA
Total	NA

### Average production

Crude oil (thous. b/d)	NA
NGL (thous. b/d)	NA
Natural gas (MMcf/day)	NA

Natural gas marketed production	2,100
(MMcf)	

### Average output per producing well

Crude oil (bbls.)	NA
Natural gas (Mcf)	NA

### Coalbed Methane (YTD MMcf)

Oil Wells	NA	Gas Wells	NA
Daily Average (MMcf) / Well			NA

### Heavy Oil (YTD BBls, in thous.)

Wells	NA
Av. Bbls per day	NA
Av. Bbls per well/d	NA

### Average number of employees

Oil and natural gas extraction	535
Refining	1,096
Transportation	3,066
Wholesale	4,163
Retail	24,423
Total petroleum industry	33,283

## 2004 Latest Available Data

### Petroleum reserves

as of 12/31/04 (mill. bbls.)

	Crude Oil	NGL	Total
New reserves	NA	NA	NA
Production	NA	NA	NA
Net annual change	NA	NA	NA
Proved reserves	NA	NA	NA

### Natural gas reserves

as of 12/31/04 (Bcf)

	Associated Dissolved	Non- Associated	Dry Gas
New reserves	NA	NA	NA
Production	NA	NA	NA
Net annual change	NA	NA	NA
Proved reserves	NA	NA	NA

### Cost of drilling and equipping wells

	Cost/ft. (\$)	Cost/ well (\$)	Total Cost (thous. \$)
Oil	137	235,488	12,952
Gas	94	280,340	13,737
Dry	137	248,284	24,332

### Marginal oil wells

Producing marginal wells	NA
Crude oil production in bbls. (thous.)	NA
Crude oil production b/d (thous.)	NA

### Marginal natural gas wells

as of 12/31/04

Producing marginal wells	NA
Natural gas production (MMcf)	NA

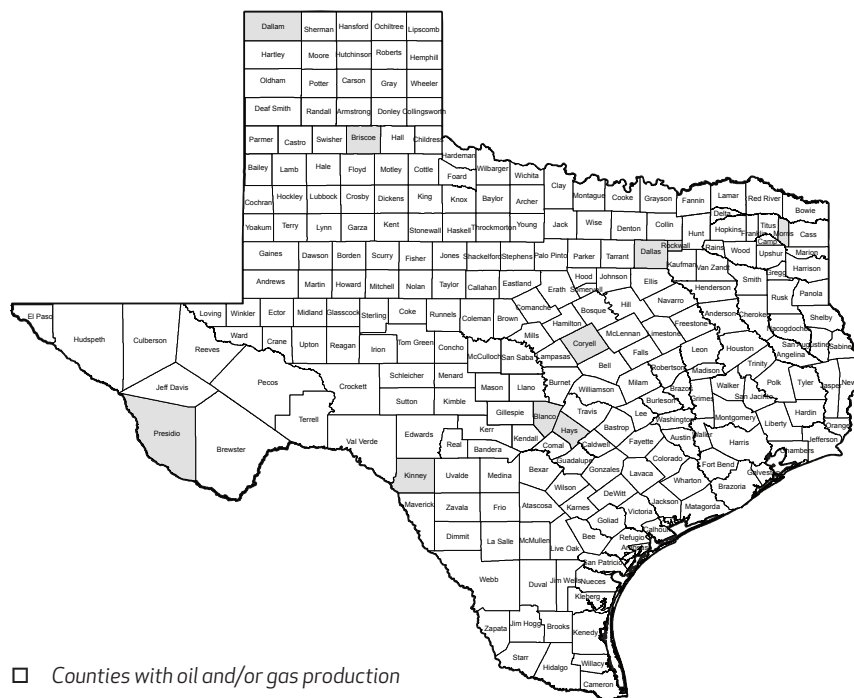
### Federal Onshore Mineral Lease Royalties

Oil	0
Gas	0
Total Royalties	0

### For more information please contact:

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1201 15th St., N.W., Suite 300  
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# TEXAS



## Background Information

### Counties

Number of counties	254
With oil and/or gas production	244

### First year of production

Crude oil	1889
Natural gas	1889

### Year and amount of peak production

Crude oil — 1,301,685 thous. bbls.	1972
Natural gas — 8,657,840 MMcf	1972

### Deepest producing well (ft.)

Crude oil	18,008
Natural gas	26,536

### Year and depth of deepest well drilled (ft.)

1983	29,670
------	--------

### Cumulative number of total wells drilled

as of 12/31/04 (excluding service wells)

Oil wells	552,517	53%
Gas wells	180,559	17%
Dry holes	318,430	30%
Total	1,051,706	100%

### Cumulative crude oil wellhead value

as of 12/31/04 (thous. \$) \$537,127,875

### Cumulative production & new reserves

as of 12/31/04

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	71,677	19,467	91,144	408,463
Production	67,918	16,268	84,186	408,548

## Value of Oil and Gas

### Average wellhead price

(2004)

Crude oil (\$/bbl.)	\$38.79
Natural gas (\$/Mcf)	\$ 5.83

### Wellhead value of production

(2004, in thous. \$)

Crude oil	\$ 13,633,095
Natural gas	\$29,573,835
Total	\$43,206,930

### Average natural gas price

(2004, \$/Mcf)

Residential consumers	\$10.37
Commercial consumers	\$ 8.36
Industrial consumers	\$ 5.91
Electric utilities	\$ 5.90
City Gate	\$ 6.03

### Severance taxes paid

(2004, in thous. \$)

\$1,887,879

## 2004 Industry Statistics

### Number of wells drilled

	Exploratory	Development	Total
Oil	72	2,899	2,971
Gas	240	5,649	5,889
Dry	451	973	1,424
Total	763	9,521	10,284

### Total footage drilled

(thous. ft.)

	Exploratory	Development	Total
Oil	478.1	15,396.3	15,874.4
Gas	1,937.5	50,915.7	52,853.2
Dry	3,530.7	5,633.4	9,164.1
Total	5,946.3	71,945.4	77,891.7

(Note: Totals may not add due to rounding.)

New-field wildcats drilled	487
Footage (thous. ft.)	3,652.0

Average rotary rigs active	506
----------------------------	-----

### State-wide rank

	Crude Oil	Natural Gas
Wells drilled	1st	1st
Production	2nd	1st
Reserves (2004)	2nd	1st

### Number of producing wells

(12/31/04)

Crude oil	152,693
Natural gas	74,554
Total	227,247

### Average production

Crude oil (thous. b/d)	960
NGL (thous. b/d)	109.8
Natural gas (MMcf/day)	13,859

### Natural gas marketed production

(MMcf) 5,067,315

### Average output per producing well

Crude oil (bbls.)	2,304
Natural gas (Mcf)	68,035

Coalbed Methane (YTD MMcf)	210
Oil Wells	0
Gas Wells	15
Daily Average (MMcf) / Well	38.3

### Heavy Oil (YTD BBLs, in thous.)

Wells	NA
Av. Bbls per day	NA
Av. Bbls per well/d	NA

### Average number of employees

Oil and natural gas extraction	145,390
Refining	21,655
Transportation	34,648
Wholesale	16,053
Retail	68,832
Total petroleum industry	286,578

## 2004 Latest Available Data

### Petroleum reserves

as of 12/31/04 (mill. bbls.)

	Crude Oil	NGL	Total
New reserves	390	580	970
Production	360	296	656
Net annual change	30	284	314
Proved reserves	4,613	2,801	7,414

### Natural gas reserves

as of 12/31/04 (Bcf)

	Associated Dissolved	Non- Associated	Dry Gas
New reserves	780	9,440	9,543
Production	670	4,992	5,318
Net annual change	110	4,448	4,225
Proved reserves	6,547	46,728	49,955

### Cost of drilling and equipping wells

	Cost/ft. (\$)	Cost/ well (\$)	Total Cost (thous. \$)
Oil	166	888,774	2,616,551
Gas	244	2,190,326	12,997,391
Dry	203	1,317,616	1,877,602

### Marginal oil wells

Producing marginal wells	138,498
Crude oil production in bbls. (thous.)	142,581
Crude oil production b/d (thous.)	390

### Marginal natural gas wells

as of 12/31/04

Producing marginal wells	44,657
Natural gas production (MMcf)	509,051

### Federal Onshore Mineral Lease Royalties

Oil	\$ 3,252,502
Gas	\$ 15,958,324
Total Royalties	\$19,599,344

### Horizontal Wells Data

Horizontal Wells Drilled	1,227
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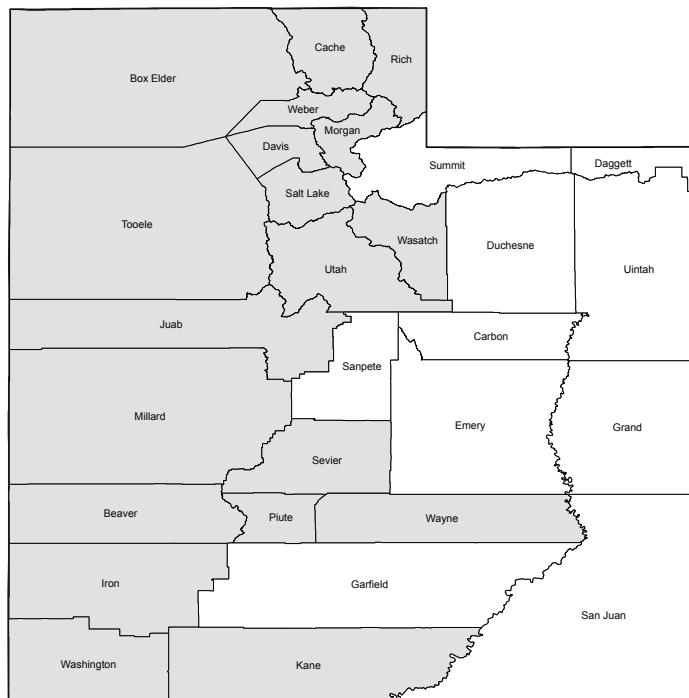
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TEXAS



# UTAH



□ Counties with oil and/or gas production

## Background Information

### Counties

Number of counties	29
With oil and/or gas production	9

### First year of production

Crude oil	1907
Natural gas	1886

### Year and amount of peak production

Crude oil — 42,301 thous. bbls.	1975
Natural gas — 348,140 MMcf	1994

### Deepest producing well (ft.)

Crude oil	17,910
Natural gas	20,600

### Year and depth of deepest well drilled (ft.)

1982	21,874
------	--------

### Cumulative number of total wells drilled

as of 12/31/04 (excluding service wells)

Oil wells	6,657	39%
Gas wells	5,693	33%
Dry holes	4,721	28%
Total	17,071	100%

### Cumulative crude oil wellhead value

as of 12/31/04 (thous. \$) \$16,470,101

### Cumulative production & new reserves

as of 12/31/04

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	1,329	1,399	2,728	9,545
Production	1,163	210	1,373	5,615

## Value of Oil and Gas

### Average wellhead price

(2004)

Crude oil (\$/bbl.)	\$39.35
Natural gas (\$/Mcf)	\$ 5.24

### Wellhead value of production

(2004, in thous. \$)

Crude oil	\$ 539,803
Natural gas	\$1,387,494
Total	\$ 1,927,297

### Average natural gas price

(2004, \$/Mcf)

Residential consumers	\$ 8.12
Commercial consumers	\$ 6.75
Industrial consumers	\$ 5.90
Electric utilities	NA
City Gate	\$ 5.68

### Severance taxes paid

(2004, in thous. \$)

\$39,356

## 2004 Industry Statistics

### Number of wells drilled

	Exploratory	Development	Total
Oil	7	224	231
Gas	32	314	346
Dry	8	16	24
Total	47	554	601

### Total footage drilled

(thous. ft.)

	Exploratory	Development	Total
Oil	53.2	1,325.1	1,378.3
Gas	309.6	2,670.4	2,980
Dry	56.3	68.6	124.9
Total	419.1	4,064.1	4,483.2

(Note: Totals may not add due to rounding.)

### New-field wildcats drilled

22

### Footage (thous. ft.)

196.9

### Average rotary rigs active

22

### State-wide rank

	Crude Oil	Natural Gas
Wells drilled	10th	16th
Production	14th	12th
Reserves (2004)	13th	11th

### Number of producing wells

(12/31/04)

Crude oil	2,432
Natural gas	3,714
Total	6,146

### Average production

Crude oil (thous. b/d)	37
NGL (thous. b/d)	2.9
Natural gas (MMcf/day)	723

### Natural gas marketed production

(MMcf)

277,969

### Average output per producing well

Crude oil (bbls.)	5,640
Natural gas (Mcf)	71,261

### Coalbed Methane (YTD MMcf)

90,244

Oil Wells	0	Gas Wells	793
Daily Average (MMcf) / Well			4,823

### Heavy Oil (YTD BBls, in thous.)

640

Wells	124
Av. Bbls per day	1,749
Av. Bbls per well/d	14.1

### Average number of employees

Oil and natural gas extraction	1,687
Refining	763
Transportation	1,576
Wholesale	894
Retail	9,696
Total petroleum industry	14,616

## 2004 Latest Available Data

### Petroleum reserves

as of 12/31/04 (mill. bbls.)

	Crude Oil	NGL	Total
New reserves	7	91	98
Production	13	62	75
Net annual change	-6	29	23
Proved reserves	215	927	1,142

### Natural gas reserves

as of 12/31/04 (Bcf)

	Associated Dissolved	Non- Associated	Dry Gas
New reserves	12	611	632
Production	21	268	282
Net annual change	-9	343	350
Proved reserves	290	3,661	3,866

### Cost of drilling and equipping wells

	Cost/ft. (\$)	Cost/ well (\$)	Total Cost (thous. \$)
Oil	136	812,801	187,757
Gas	523	4,506,204	1,559,146
Dry	427	2,254,078	56,352

### Marginal oil wells

Producing marginal wells	1,582
Crude oil production in bbls. (thous.)	3,391
Crude oil production b/d (thous.)	9

### Marginal natural gas wells

as of 12/31/04

Producing marginal wells	1,804
Natural gas production (MMcf)	27,683

### Federal Onshore Mineral Lease Royalties

Oil	\$ 46,812,229
Gas	\$ 86,007,218
Total Royalties	\$172,624,421

### Horizontal Wells Data

Horizontal Wells Drilled	7
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UTAH



# VIRGINIA



□ Counties with oil and/or gas production

## Background Information

### Counties

Number of counties	96
With oil and/or gas production	7

### First year of production

Crude oil	1943
Natural gas	1931

### Year and amount of peak production

Crude oil — 65 thous. bbls.	1983
Natural gas — 81,086 MMcf	2003

### Deepest producing well (ft.)

Crude oil	7,238
Natural gas	7,238

### Year and depth of deepest well drilled (ft.)

1977	17,003
------	--------

### Cumulative number of total wells drilled

as of 12/31/04 (excluding service wells)

Oil wells	54	1%
Gas wells	4,207	92%
Dry holes	332	7%
Total	4,593	100%

### Cumulative crude oil wellhead value

as of 12/31/04 (thous. \$) \$11,097

### Cumulative production & new reserves

as of 12/31/04

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	NA	NA	NA	2,452
Production	NA	NA	NA	946

## Value of Oil and Gas

### Average wellhead price

(2004)

Crude oil (\$/bbl.)	NA
Natural gas (\$/Mcf)	NA

### Wellhead value of production

(2004, in thous. \$)

Crude oil	NA
Natural gas	NA
Total	NA

### Average natural gas price

(2004, \$/Mcf)

Residential consumers	\$13.04
Commercial consumers	\$ 10.13
Industrial consumers	\$ 7.91
Electric utilities	\$ 6.83
City Gate	\$13.04

### Severance taxes paid

(2004, in thous. \$)

--



## 2004 Industry Statistics

### Number of wells drilled

	Exploratory	Development	Total
Oil	NA	NA	NA
Gas	2	361	363
Dry	NA	NA	NA
Total	2	361	363

### Total footage drilled

(thous. ft.)

	Exploratory	Development	Total
Oil	NA	NA	NA
Gas	10.9	1,077.0	1,087.9
Dry	NA	NA	NA
Total	10.9	1,077.0	1,087.9

(Note: Totals may not add due to rounding.)

### New-field wildcats drilled

Footage (thous. ft.)	NA
----------------------	----

### Average rotary rigs active

1

### State-wide rank

	Crude Oil	Natural Gas
Wells drilled	NA	15th
Production	32nd	NA
Reserves (2004)	NA	18th

### Number of producing wells \*

(12/31/04)

Crude oil	NA
Natural gas	3,820
Total	3,820

### Average production

Crude oil (thous. b/d)	NA
NGL (thous. b/d)	NA
Natural gas (MMcf/day)	NA

### Natural gas marketed production

(MMcf)	NA
--------	----

### Average output per producing well

Crude oil (bbls.)	NA
Natural gas (Mcf)	NA

### Coalbed Methane (YTD MMcf)

Oil Wells	NA	Gas Wells	NA
Daily Average (MMcf) / Well			NA

### Heavy Oil (YTD BBl, in thous.)

NA

Wells	NA
Av. Bbls per day	NA
Av. Bbls per well/d	NA

### Average number of employees

Oil and natural gas extraction	830
Refining	737
Transportation	3,659
Wholesale	5,377
Retail	33,902
Total petroleum industry	44,505

## 2004 Latest Available Data

### Petroleum reserves

as of 12/31/04 (mill. bbls.)

	Crude Oil	NGL	Total
New reserves	NA	NA	NA
Production	NA	NA	NA
Net annual change	NA	NA	NA
Proved reserves	NA	NA	NA

### Natural gas reserves

as of 12/31/04 (Bcf)

	Associated Dissolved	Non- Associated	Dry Gas
New reserves	0	97	97
Production	0	72	72
Net annual change	0	25	25
Proved reserves	0	1,742	1,742

### Cost of drilling and equipping wells

	Cost/ft. (\$)	Cost/ well (\$)	Total Cost (thous. \$)
Oil	NA	NA	NA
Gas	104	313,440	110,017
Dry	NA	NA	NA

### Marginal oil wells

Producing marginal wells	NA
Crude oil production in bbls. (thous.)	NA
Crude oil production b/d (thous.)	NA

### Marginal natural gas wells

as of 12/31/04

Producing marginal wells	NA
Natural gas production (MMcf)	NA

### Federal Onshore Mineral Lease Royalties

Oil	0
Gas	\$35,539
Total Royalties	\$121,572

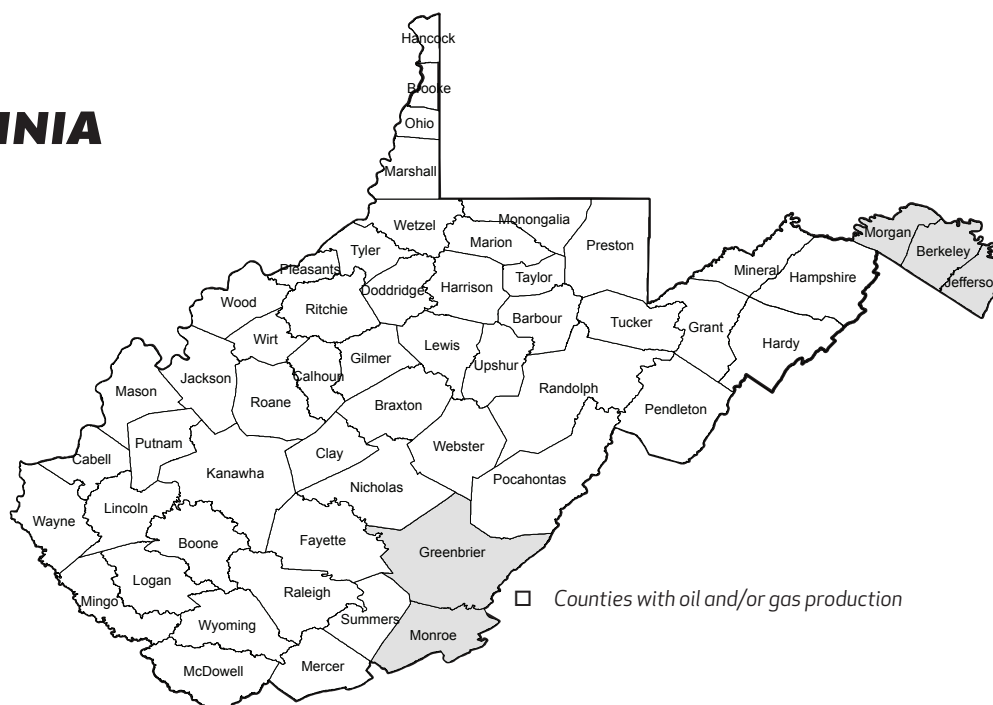
### For more information please contact:

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VIRGINIA



# WEST VIRGINIA



## Background Information

### Counties

Number of counties	55
With oil and/or gas production	50

### First year of production

Crude oil	1860
Natural gas	1885

### Year and amount of peak production

Crude oil — 16,196 thous. bbls.	1900
Natural gas — 264,139 MMcf	2000

### Deepest producing well (ft.)

Crude oil	6,785
Natural gas	14,300

### Year and depth of deepest well drilled (ft.)

1974	20,222
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### Cumulative number of total wells drilled

as of 12/31/04 (excluding service wells)

Oil wells	4,780	10%
Gas wells	41,189	82%
Dry holes	3,987	8%
Total	49,956	100%

### Cumulative crude oil wellhead value

as of 12/31/04 (thous. \$) \$2,609,847

### Cumulative production & new reserves

as of 12/31/04

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	592	458	1,050	22,917
Production	611	408	1,019	19,701

## Value of Oil and Gas

### Average wellhead price

(2004)

Crude oil (\$/bbl.)	\$38.38
Natural gas (\$/Mcf)	\$ 4.71

### Wellhead value of production

(2004, in thous. \$)

Crude oil	\$ 22,491
Natural gas	\$918,846
Total	\$ 941,337

### Average natural gas price

(2004, \$/Mcf)

Residential consumers	\$10.91
Commercial consumers	\$10.13
Industrial consumers	\$ 7.59
Electric utilities	\$ 7.36
City Gate	\$ 7.04

### Severance taxes paid

(2004, in thous. \$) \$41,544

## 2004 Industry Statistics

### Number of wells drilled

	Exploratory	Development	Total
Oil	NA	11	11
Gas	138	1,055	1,193
Dry	6	16	22
Total	144	1,082	1,226

### Total footage drilled

(thous. ft.)

	Exploratory	Development	Total
Oil	NA	39.7	39.7
Gas	561.0	4,220.5	4,781.5
Dry	17.5	39.2	56.7
Total	578.5	4,299.4	4,877.9

(Note: Totals may not add due to rounding.)

New-field wildcats drilled	27
Footage (thous. ft.)	107.7

Average rotary rigs active	15
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### State-wide rank

	Crude Oil	Natural Gas
Wells drilled	24th	7th
Production	26th	14th
Reserves (2004)	25th	12th

### Number of producing wells

(12/31/04)

Crude oil	2,099
Natural gas	41,309
Total	43,408

### Average production

Crude oil (thous. b/d)	2
NGL (thous. b/d)	2.5
Natural gas (MMcf/day)	533

### Natural gas marketed production

(MMcf)	197,217
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### Average output per producing well

Crude oil (bbls.)	279
Natural gas (Mcf)	4,723

### Coalbed Methane (YTD MMcf)

Oil Wells	0	Gas Wells	129
Daily Average (MMcf) / Well			48.2

### Heavy Oil (YTD BBl, in thous.)

Wells	NA
Av. Bbls per day	NA
Av. Bbls per well/d	NA

### Average number of employees

Oil and natural gas extraction	3,638
Refining	940
Transportation	3,263
Wholesale	1,110
Retail	9,237
Total petroleum industry	18,188

## 2004 Latest Available Data

### Petroleum reserves

as of 12/31/04 (mill. bbls.)

	Crude Oil	NGL	Total
New reserves	-1	21	20
Production	1	4	5
Net annual change	-2	17	15
Proved reserves	11	85	96

### Natural gas reserves

as of 12/31/04 (Bcf)

	Associated Dissolved	Non- Associated	Dry Gas
New reserves	-2	287	261
Production	1	174	170
Net annual change	-3	113	91
Proved reserves	20	3,489	3,397

### Cost of drilling and equipping wells

	Cost/ft. (\$)	Cost/ well (\$)	Total Cost (thous. \$)
Oil	90	323,028	3,553
Gas	87	349,472	407,833
Dry	114	307,153	6,450

### Marginal oil wells

Producing marginal wells	1,722
Crude oil production in bbls. (thous.)	384
Crude oil production b/d (thous.)	1

### Marginal natural gas wells

as of 12/31/04

Producing marginal wells	40,452
Natural gas production (MMcf)	161,214

### Federal Onshore Mineral Lease Royalties

Oil	\$ 855
Gas	\$472,304
Total Royalties	\$790,543

### Horizontal Wells Data

Horizontal Wells Drilled	5
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# WYOMING



□ Counties with oil and/or gas production

## Background Information

### Counties

Number of counties	23
With oil and/or gas production	21

### First year of production

Crude oil	1894
Natural gas	1889

### Year and amount of peak production

Crude oil — 160,345 thous. bbls.	1970
Natural gas — 1,539,318 MMcf	2003

### Deepest producing well (ft.)

Crude oil	19,612
Natural gas	24,938

### Year and depth of deepest well drilled (ft.)

2001	25,830
------	--------

### Cumulative number of total wells drilled

as of 12/31/04 (excluding service wells)

Oil wells	33,158	33%
Gas wells	36,986	37%
Dry holes	29,397	30%
Total	99,541	100%

### Cumulative crude oil wellhead value

as of 12/31/04 (thous. \$) \$64,912,175

### Cumulative production & new reserves

as of 12/31/04

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	7,131	1,872	9,003	48,792
Production	6,636	1,172	7,808	28,364

## Value of Oil and Gas

### Average wellhead price

(2004)

Crude oil (\$/bbl.)	\$35.10
Natural gas (\$/Mcf)	\$ 4.96

### Wellhead value of production

(2004, in thous. \$)

Crude oil	\$ 1,463,284
Natural gas	\$8,607,634
Total	\$10,070,918

### Average natural gas price

(2004, \$/Mcf)

Residential consumers	\$8.65
Commercial consumers	\$7.24
Industrial consumers	\$6.77
Electric utilities	\$3.62
City Gate	\$ 6.21

### Severance taxes paid

(2004, in thous. \$)

\$504,731

## 2004 Industry Statistics

### Number of wells drilled

	Exploratory	Development	Total
Oil	8	97	105
Gas	80	3,569	3,649
Dry	38	51	89
Total	126	3,717	3,843

### Total footage drilled

(thous. ft.)

	Exploratory	Development	Total
Oil	54	457.5	511.5
Gas	892.7	10,181.7	11,074.4
Dry	352.5	229.1	581.6
Total	1,299.2	10,868.3	12,167.5

(Note: Totals may not add due to rounding.)

New-field wildcats drilled	86
Footage (thous. ft.)	895.0

Average rotary rigs active	74
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### State-wide rank

	Crude Oil	Natural gas
Wells drilled	15th	2nd
Production	8th	5th
Reserves (2004)	6th	2nd

### Number of producing wells\*

(12/31/04)

Crude oil	10,288
Natural gas	21,376
Total	31,664

### Average production

Crude oil (thous. b/d)	114
NGL (thous. b/d)	26
Natural gas (MMcf/day)	4,740

### Natural gas marketed production

(MMcf) 1,592,203

### Average output per producing well

Crude oil (bbls.)	3,549
Natural gas (Mcf)	73,068

### Coalbed Methane (YTD MMcf)

Oil Wells	0	Gas Wells	15,557
Daily Average (MMcf) / Well			334.392

### Heavy Oil (YTD Bbls, in thous.)

Wells	1,924
Av. Bbls per day	29
Av. Bbls per well/d	15

### Average number of employees

Oil and natural gas extraction	12,314
Refining	1,764
Transportation	2,640
Wholesale	676
Retail	4,235
Total petroleum industry	21,629

## 2004 Latest Available Data

### Petroleum reserves

as of 12/31/04 (mill. bbls.)

	Crude Oil	NGL	Total
New reserves	154	91	245
Production	43	62	105
Net annual change	111	29	140
Proved reserves	111	927	1,038

### Natural gas reserves

as of 12/31/04 (Bcf)

	Associated Dissolved	Non- Associated	Dry Gas
New reserves	-34	2,549	2,412
Production	54	1,537	1,524
Net annual change	-88	1,012	888
Proved reserves	362	23,278	22,632

### Cost of drilling and equipping wells

	Cost/ft. (\$)	Cost/ well (\$)	Total Cost (thous. \$)
Oil	413	2,023,392	210,433
Gas	602	1,830,236	6,665,730
Dry	639	4,199,496	375,473

### Marginal oil wells

Producing marginal wells	9,473
Crude oil production in bbls. (thous.)	13,289
Crude oil production b/d (thous.)	36

### Marginal natural gas wells

as of 12/31/04

Producing marginal wells	13,474
Natural gas production (MMcf)	158,345

### Federal Onshore Mineral Lease Royalties

Oil	\$ 118,354,376
Gas	\$ 557,683,685
Total Royalties	\$1,148,025,234

### Horizontal Wells Data

Horizontal Wells Drilled	17
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## ROTARY RIGS OPERATING

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Alabama	8	5	4	6	6	4	5	3	3	3
Alaska	11	10	11	12	5	8	13	11	10	10
Arizona	0	0	0	0	0	0	0	0	0	0
Arkansas	11	9	10	6	3	4	2	1	2	6
California	28	27	32	28	19	24	36	23	22	24
Colorado	15	14	16	13	13	18	32	28	39	54
Florida	1	1	0	0	0	0	0	0	1	1
Illinois	0	0	0	0	0	0	0	0	0	0
Indiana	0	0	0	0	0	0	0	0	0	0
Kansas	29	24	19	13	7	22	23	8	9	7
Kentucky	2	3	5	3	6	5	6	5	4	5
Louisiana	141	156	194	187	141	194	214	163	157	167
Michigan	7	4	6	5	2	3	1	1	3	3
Mississippi	7	9	13	14	7	11	14	8	8	10
Montana	7	8	11	9	4	7	10	8	14	20
Nebraska	0	0	1	1	0	1	0	0	0	1
Nevada	1	1	0	0	0	0	0	0	1	2
New Mexico	37	35	53	45	36	68	68	42	65	67
New York	1	2	1	2	3	3	5	4	3	5
North Dakota	12	19	18	11	6	13	14	10	14	15
Ohio	10	8	9	10	11	9	10	9	8	7
Oklahoma	96	106	104	85	62	99	130	91	129	159
Oregon	1	0	0	0	0	0	0	0	0	0
Pennsylvania	8	11	10	11	8	9	11	11	10	9
South Dakota	1	1	1	0	1	0	1	0	0	1
Texas	251	283	358	303	227	343	462	338	449	506
Utah	8	9	14	12	9	16	21	13	14	22
Virginia	1	1	2	2	5	2	2	2	1	1
West Virginia	10	12	15	14	14	14	18	13	16	15
Wyoming	24	24	39	38	32	41	55	40	54	74
Other	0	0	1	1	0	0	2	1	1	0
<b>TOTAL U.S.</b>	<b>723</b>	<b>779</b>	<b>943</b>	<b>827</b>	<b>625</b>	<b>918</b>	<b>1,156</b>	<b>830</b>	<b>1,032</b>	<b>1,192</b>
<b>ONSHORE</b>	<b>622</b>	<b>669</b>	<b>820</b>	<b>703</b>	<b>517</b>	<b>779</b>	<b>1,002</b>	<b>716</b>	<b>923</b>	<b>1,095</b>
<b>OFFSHORE</b>	<b>101</b>	<b>110</b>	<b>123</b>	<b>124</b>	<b>107</b>	<b>139</b>	<b>154</b>	<b>114</b>	<b>109</b>	<b>97</b>

Source: Baker-Hughes



# NEW-FIELD WILDCAT WELLS DRILLED

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Alabama	38	35	28	18	19	17	19	16	17	22
Alaska	7	10	11	12	5	8	10	10	9	8
Arizona	4	0	3	7	0	0	0	10	9	8
Arkansas	27	14	22	15	13	13	18	10	10	20
California	14	38	35	22	32	42	42	29	26	31
Colorado	99	72	77	60	49	42	71	40	49	64
Florida	0	0	0	0	0	0	0	0	0	0
Georgia	0	0	0	1	0	0	1	0	0	0
Illinois	31	29	57	23	13	20	36	17	33	31
Indiana	14	34	28	9	7	5	19	10	17	20
Iowa	0	0	0	0	0	0	1	0	0	0
Kansas	154	181	188	120	82	147	215	155	160	180
Kentucky	53	39	34	18	16	26	87	84	123	151
Louisiana	60	86	95	80	76	83	63	74	61	59
Maryland	2	0	0	0	0	0	0	0	0	0
Michigan	38	42	57	40	22	20	19	24	19	23
Mississippi	35	32	31	29	29	25	28	38	33	29
Missouri	0	1	1	1	3	1	3	2	0	0
Montana	51	56	69	67	45	56	90	95	121	159
Nebraska	21	15	23	14	9	15	12	14	15	16
Nevada	16	18	10	6	1	3	3	2	3	3
New Mexico	36	48	48	40	38	44	58	32	61	77
New York	1	3	1	9	16	22	39	35	25	47
North Carolina	0	0	0	2	0	0	0	0	0	0
North Dakota	44	71	49	28	16	19	19	9	4	25
Ohio	30	26	9	21	1	0	5	6	4	2
Oklahoma	67	78	100	63	57	65	102	69	97	102
Oregon	0	0	0	1	0	0	0	0	0	0
Pennsylvania	5	0	2	2	5	4	23	15	37	67
South Dakota	2	5	8	5	1	1	1	6	5	1
Tennessee	5	9	4	4	8	9	11	23	42	25
Texas	456	428	538	581	453	517	432	345	434	476
Utah	21	32	15	23	15	6	20	30	12	22
Virginia	0	0	1	0	1	7	4	8	7	1
Washington	0	1	1	1	1	1	1	0	0	0
West Virginia	2	0	1	3	5	10	32	29	18	28
Wyoming	89	82	155	107	89	77	78	74	85	86
Federal Offshore	24	48	61	54	66	106	106	70	83	81
<b>TOTAL U.S.</b>	<b>1,446</b>	<b>1,533</b>	<b>1,762</b>	<b>1,487</b>	<b>1,193</b>	<b>1,411</b>	<b>1,668</b>	<b>1,372</b>	<b>1,610</b>	<b>1,857</b>

Source: IHS

Note: Data include oil wells, gas wells, and dry holes and may not total due to Federal Offshore data duplication.

NEW-FIELD WILDCAT WELLS DRILLED

## EXPLORATORY WELLS DRILLED

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Alabama	49	46	30	19	20	17	22	17	23	36
Alaska	10	11	12	13	5	8	14	17	11	13
Arizona	6	0	3	7	0	1	0	1	0	1
Arkansas	32	17	24	15	13	14	23	10	12	26
California	49	65	71	66	67	80	90	64	50	60
Colorado	171	115	115	135	104	88	137	57	82	100
Florida	0	0	0	0	0	0	0	0	0	0
Georgia	0	0	0	1	0	0	1	0	0	0
Iowa	0	0	0	0	0	0	1	0	0	0
Illinois	77	82	118	75	37	51	47	33	46	47
Indiana	34	72	69	33	20	10	19	12	37	24
Kansas	437	407	295	190	148	251	400	281	292	345
Kentucky	122	86	80	63	46	58	121	125	173	269
Louisiana	63	92	106	92	85	87	64	83	72	73
Maryland	2	0	0	0	0	0	0	0	0	0
Michigan	54	47	60	44	30	23	25	30	23	27
Mississippi	49	53	43	30	31	33	33	43	41	33
Missouri	0	1	1	1	3	1	3	2	0	0
Montana	73	70	106	119	65	100	177	156	187	248
Nebraska	37	27	38	18	17	30	19	17	22	18
Nevada	18	19	11	7	1	3	4	2	3	3
New Mexico	103	123	143	128	104	95	115	75	98	103
New York	3	6	4	11	18	26	46	38	32	59
North Carolina	0	0	0	2	0	0	0	0	0	0
North Dakota	92	143	132	88	41	51	52	22	23	53
Ohio	130	108	83	55	25	26	35	27	22	24
Oklahoma	259	149	153	86	67	103	188	109	209	251
Oregon	0	1	0	2	5	0	0	0	0	0
Pennsylvania	10	3	2	7	13	10	31	29	70	206
South Dakota	6	9	11	7	2	1	2	6	5	4
Tennessee	13	17	16	11	12	21	16	26	54	56
Texas	1,189	1,179	1,228	1,033	789	848	1,000	706	786	762
Utah	37	54	35	45	23	19	72	41	35	47
Virginia	0	0	1	1	1	9	5	14	10	2
Washington	0	1	1	1	1	0	1	0	0	0
West Virginia	3	1	8	11	18	28	76	88	41	144
Wyoming	105	109	195	180	143	142	178	151	143	126
Federal Offshore	24	49	62	74	78	106	106	70	83	81
<b>TOTAL U.S.</b>	<b>3,257</b>	<b>3,162</b>	<b>3,266</b>	<b>2,670</b>	<b>2,032</b>	<b>2,340</b>	<b>3,123</b>	<b>2,352</b>	<b>2,685</b>	<b>3,241</b>

Source: IHS

Note: Data include oil wells, gas wells, and dry holes and may not total due to Federal Offshore data duplication.

# DEVELOPMENT WELLS DRILLED

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Alabama	171	227	94	168	205	152	346	246	371	405
Alaska	151	176	158	200	94	128	164	179	165	193
Arizona	1	0	0	0	1	0	0	0	0	0
Arkansas	174	165	215	177	136	155	227	144	216	278
California	1,242	1,681	2,431	2,134	1,478	2,113	2,181	1,925	1,928	2,161
Colorado	512	389	677	720	636	955	1,392	1,332	1,511	1,892
Florida	1	3	4	1	0	4	0	1	0	0
Illinois	363	334	456	339	213	328	367	289	308	277
Indiana	73	72	76	55	34	53	117	81	145	125
Kansas	1,136	1,137	1,414	728	497	911	1,099	902	1,339	1,542
Kentucky	674	621	685	587	601	729	865	891	752	573
Louisiana	886	1,079	1,249	1,098	757	1,031	1,217	790	1,003	1,188
Maryland	0	0	0	0	1	0	0	0	0	0
Michigan	822	612	610	540	298	374	414	337	353	403
Mississippi	108	118	151	159	86	192	242	168	240	237
Missouri	0	10	1	1	5	14	6	0	1	0
Montana	157	126	345	242	383	418	406	388	644	504
Nebraska	9	19	44	14	3	11	13	14	16	32
Nevada	7	2	4	4	1	1	3	2	0	0
New Mexico	948	998	1,169	1,097	935	1,461	1,574	1,200	1,526	1,686
New York	50	108	60	54	69	70	77	54	46	77
North Dakota	71	121	186	145	42	121	158	154	199	168
Ohio	559	625	697	517	495	547	690	493	493	525
Oklahoma	1,349	1,476	2,172	1,847	1,582	2,176	2,982	2,351	2,783	2,884
Oregon	0	0	0	5	5	0	0	0	0	0
Pennsylvania	764	1,111	1,245	1,502	1,362	1,591	2,232	2,183	2,505	2,290
South Dakota	0	11	6	3	4	10	9	6	3	8
Tennessee	52	56	67	98	109	165	103	81	198	146
Texas	6,438	7,071	9,276	7,012	4,697	6,931	8,052	6,534	8,592	9,522
Utah	198	240	376	455	237	414	549	383	381	554
Virginia	63	168	263	221	278	245	304	291	358	361
Washington	0	0	0	0	0	0	0	0	0	2
West Virginia	420	584	709	764	670	653	887	870	974	1,081
Wyoming	545	567	1,025	1,075	2,438	4,744	5,331	3,045	2,768	3,717
Federal Offshore	82	117	122	114	154	146	177	120	105	114
<b>TOTAL U.S.</b>	<b>18,026</b>	<b>20,024</b>	<b>25,987</b>	<b>22,076</b>	<b>18,506</b>	<b>26,843</b>	<b>32,184</b>	<b>25,454</b>	<b>29,923</b>	<b>32,945</b>

DEVELOPMENT WELLS DRILLED

Source: IHS

Note: Data include oil wells, gas wells, and dry holes and may not total due to Federal Offshore data duplication.

**TOTAL WELLS DRILLED**

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Alabama	220	273	124	187	225	169	368	263	394	441
Alaska	161	187	170	213	99	136	178	196	176	206
Arizona	7	0	3	7	1	1	0	1	0	1
Arkansas	206	182	239	192	149	169	250	154	228	304
California	1,291	1,746	2,502	2,200	1,545	2,193	2,271	1,989	1,978	2,221
Colorado	683	504	792	855	740	1,043	1,529	1,389	1,593	1,992
Florida	1	3	4	1	0	4	0	1	0	0
Georgia	0	0	0	1	0	0	1	0	0	0
Illinois	440	416	574	414	250	379	414	322	354	324
Indiana	107	144	145	88	54	63	136	93	182	149
Iowa	0	0	0	0	0	0	1	0	0	0
Kansas	1,573	1,544	1,709	918	645	1,162	1,499	1,183	1,631	1,887
Kentucky	796	707	765	650	647	787	986	1,016	925	842
Louisiana	949	1,171	1,355	1,190	842	1,118	1,281	873	1,075	1,261
Maryland	2	0	0	0	1	0	0	0	0	0
Michigan	876	659	670	584	328	397	439	367	376	430
Mississippi	157	171	194	189	117	225	275	211	281	270
Missouri	0	11	2	2	8	15	9	2	1	0
Montana	230	196	451	361	448	518	583	544	831	752
Nebraska	46	46	82	32	20	41	32	31	38	50
Nevada	25	21	15	11	2	4	7	4	3	3
New Mexico	1,051	1,121	1,312	1,225	1,039	1,556	1,689	1,275	1,624	1,789
New York	53	114	64	65	87	96	123	92	78	136
North Carolina	0	0	0	2	0	0	0	0	0	0
North Dakota	163	264	318	233	83	172	210	176	222	221
Ohio	689	733	780	572	520	573	725	520	515	549
Oklahoma	1,608	1,625	2,325	1,933	1,649	2,279	3,170	2,460	2,992	3,135
Oregon	0	1	0	7	10	0	0	0	0	0
Pennsylvania	774	1,114	1,247	1,509	1,375	1,601	2,263	2,212	2,575	2,496
South Dakota	6	20	17	10	6	11	11	12	8	12
Tennessee	65	73	83	109	121	186	119	107	252	202
Texas	7,627	8,250	10,514	8,045	5,486	7,779	9,052	7,240	9,378	10,284
Utah	235	294	411	500	260	433	621	424	416	601
Virginia	63	168	264	222	279	254	309	305	368	363
Washington	0	1	1	1	1	0	1	0	0	2
West Virginia	423	585	717	775	688	681	963	958	1,015	1,225
Wyoming	650	676	1,220	1,255	2,581	4,886	5,509	3,196	2,911	3,843
Federal Offshore	904	1,089	1,237	1,078	971	1,135	1,158	758	807	786
<b>TOTAL U.S.</b>	<b>22,081</b>	<b>24,109</b>	<b>30,306</b>	<b>25,636</b>	<b>21,277</b>	<b>30,066</b>	<b>36,182</b>	<b>28,374</b>	<b>33,227</b>	<b>36,777</b>

Source: IHS

Note: Data include oil wells, gas wells, and dry holes and may not total due to Federal Offshore data duplication.

## PRODUCING CRUDE WELLS

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Alabama	596	568	564	549	521	502	494	481	485	502
Alaska	2,144	2,226	2,229	2,349	2,256	2,243	2,304	2,310	2,283	2,384
Arizona	21	24	27	29	30	28	27	24	24	21
Arkansas	2,735	2,660	2,553	2,352	2,167	2,244	5,498	4,385	2,718	2,143
California	44,079	44,515	45,731	46,267	45,293	46,654	47,148	46,811	47,060	47,666
Colorado	5,715	5,551	5,519	5,370	5,305	5,400	5,322	5,272	5,133	5,140
Florida	105	102	107	99	88	79	73	72	96	67
Kansas	52,339	49,083	47,594	45,683	42,539	42,358	41,774	41,629	41,261	40,167
Louisiana	21,227	20,829	20,199	19,290	18,300	19,604	18,530	17,996	17,991	17,569
Michigan	1,014	928	958	2,519	2,631	3,688	3,845	3,672	3,790	3,761
Mississippi	1,833	1,805	1,854	1,796	1,715	1,742	1,768	1,616	1,664	1,685
Montana	3,845	3,766	3,823	3,735	3,617	3,741	4,409	3,662	3,713	3,918
Nebraska	1,584	1,553	1,493	1,424	1,269	1,270	1,250	1,224	1,222	1,224
Nevada	75	74	80	75	70	69	69	71	71	68
New Mexico	17,759	18,141	18,452	18,517	18,189	18,809	19,512	19,420	19,652	20,034
New York	NA	NA	NA	NA	NA	NA	10	NA	2,417	2,406
North Dakota	3,493	3,518	3,572	3,483	3,391	3,418	3,481	4,224	3,519	3,779
Ohio	17,756	17,254	16,866	16,222	15,443	16,760	17,277	17,529	17,165	17,147
Oklahoma	71,587	70,844	69,172	66,986	64,254	61,074	60,923	58,088	53,530	52,326
South Dakota	145	149	157	148	143	144	144	143	143	145
Texas	184,626	180,854	179,250	175,147	166,711	163,487	161,943	158,410	154,932	152,693
Utah	2,070	2,158	2,242	2,201	2,112	2,142	2,201	2,163	2,217	2,433
West Virginia	1,606	1,804	2,041	1,895	1,558	1,263	1,708	2,188	1,469	2,099
Wyoming	12,233	12,358	12,096	11,775	11,599	11,910	11,921	11,716	11,688	11,743
Federal Offshore	4,631	4,605	4,571	4,405	4,256	4,240	4,235	4,127	3,957	3,840
<b>TOTAL U.S.</b>	<b>453,218</b>	<b>445,369</b>	<b>441,150</b>	<b>432,316</b>	<b>413,457</b>	<b>412,869</b>	<b>415,866</b>	<b>407,233</b>	<b>398,200</b>	<b>394,960</b>

Source: IHS. Data not available for certain states.

PRODUCING CRUDE WELLS

## PRODUCING NATURAL GAS WELLS

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Alabama	3,442	3,453	3,362	3,469	3,497	3,698	3,891	4,130	4,460	4,784
Arizona	7	7	8	7	7	7	7	8	6	7
Arkansas	3,025	3,060	3,068	3,117	3,073	3,336	3,454	3,510	3,704	3,959
California	1,390	1,367	1,447	1,287	1,309	1,359	1,484	1,416	1,467	1,497
Colorado	12,523	12,790	13,342	13,541	16,040	16,824	18,137	19,280	20,821	22,693
Kansas	15,136	15,344	15,757	15,789	15,781	18,069	16,684	17,827	16,998	17,740
Kentucky	NA	NA	9,045	9,598	9,859	10,225	10,541	11,038	11,510	12,298
Louisiana	13,784	13,942	13,862	13,931	13,889	13,907	8,405	8,250	8,367	8,734
Michigan	5,037	5,707	6,237	6,992	7,152	7,234	7,642	7,957	8,282	8,524
Mississippi	616	622	640	648	665	765	913	992	1,151	1,284
Montana	3,195	3,219	3,389	3,531	3,862	4,115	4,419	4,603	4,864	5,299
Nebraska	80	80	90	100	108	99	102	104	108	112
New Mexico	20,383	20,638	21,010	21,512	22,225	23,213	24,506	25,454	26,687	28,160
New York	3,829	5,726	5,601	5,638	5,722	5,713	6,120	5,544	6,517	6,707
North Dakota	85	84	87	83	82	92	100	97	111	133
Ohio	22,585	22,608	22,568	21,619	20,661	22,011	22,585	22,426	22,613	22,212
Oklahoma	23,064	23,417	24,094	24,633	25,200	26,297	27,829	29,077	30,551	32,214
Oregon	18	21	20	20	21	18	18	16	16	16
South Dakota	56	59	58	56	56	58	58	58	58	60
Texas	54,237	55,816	57,692	59,072	59,760	61,388	64,760	66,747	70,056	74,550
Utah	1,420	1,427	1,591	1,812	2,060	2,353	2,792	3,118	3,392	3,715
West Virginia	36,447	38,040	38,283	40,298	39,429	29,977	39,465	40,846	39,763	41,309
Wyoming	4,587	4,816	5,467	6,119	7,470	11,115	15,705	19,269	21,099	23,749
Federal Offshore	4,588	4,773	4,789	4,645	4,606	4,628	4,672	4,374	4,277	4,137
<b>TOTAL U.S.</b>	<b>229,534</b>	<b>237,016</b>	<b>251,507</b>	<b>257,517</b>	<b>262,534</b>	<b>266,501</b>	<b>284,289</b>	<b>296,141</b>	<b>306,878</b>	<b>323,893</b>

Source: IHS. Data not available for certain states.

# CRUDE OIL PRODUCTION

(thous. bbls.)	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
<b>Alabama</b>	10,910	9,917	8,787	7,453	6,406	5,983	5,415	5,163	4,970	4,662
<b>Alaska</b>	541,630	510,767	472,957	429,232	383,199	355,149	351,466	359,496	362,371	335,740
<b>Arizona</b>	67	81	79	74	62	55	58	61	45	50
<b>Arkansas</b>	8,058	8,222	7,878	7,093	6,187	6,454	6,873	6,470	6,586	5,845
<b>California</b>	278,467	282,730	285,047	284,232	273,222	271,027	260,545	255,195	247,393	239,485
<b>Colorado</b>	21,152	19,207	17,990	16,668	13,971	13,884	13,209	12,771	12,682	12,014
<b>Florida</b>	5,682	6,169	6,262	5,938	4,888	4,624	4,406	3,644	3,263	2,875
<b>Illinois</b>	14,682	13,541	13,514	12,807	11,274	10,906	10,198	11,127	11,707	10,699
<b>Indiana</b>	2,584	2,482	2,399	2,179	1,962	2,035	2,073	1,969	1,870	1,729
<b>Kansas</b>	44,618	42,825	41,211	36,644	34,084	34,238	33,957	33,056	33,711	33,802
<b>Kentucky</b>	1,704	1,687	1,587	1,372	1,459	1,545	1,490	1,381	1,347	1,210
<b>Louisiana</b>	96,768	95,014	94,694	90,606	80,263	75,860	71,204	60,626	58,658	56,983
<b>Michigan</b>	6,992	6,811	6,395	7,360	6,846	7,502	7,070	6,583	6,230	5,763
<b>Mississippi</b>	18,855	18,429	19,648	19,620	16,389	18,564	18,040	16,781	15,678	15,635
<b>Montana</b>	16,598	16,307	16,254	16,688	15,346	15,719	16,172	16,940	19,309	24,674
<b>Nebraska</b>	3,790	3,536	3,315	3,166	2,666	2,953	2,911	2,746	2,810	2,520
<b>Nevada</b>	1,342	1,062	974	799	706	621	571	553	492	463
<b>New Mexico</b>	66,301	68,726	67,926	63,591	59,667	61,659	60,957	58,293	57,004	56,723
<b>New York</b>	0	0	0	0	0	0	0	0	94	110
<b>North Dakota</b>	28,799	31,746	35,334	35,071	32,360	32,042	30,653	29,876	28,413	30,142
<b>Ohio</b>	5,623	5,781	5,842	5,163	4,563	4,935	5,532	4,917	4,521	4,264
<b>Oklahoma</b>	79,719	77,788	75,990	71,992	65,297	62,930	61,248	58,543	56,770	54,899
<b>Oregon</b>	0	0	0	0	0	0	0	0	0	0
<b>South Dakota</b>	1,351	1,257	1,335	1,208	1,100	1,162	1,246	1,209	1,239	1,356
<b>Texas</b>	514,382	499,768	490,861	459,255	408,993	400,930	380,943	365,891	359,907	351,459
<b>Utah</b>	16,913	16,908	17,085	17,042	14,560	14,156	13,913	12,610	12,089	13,718
<b>West Virginia</b>	774	704	691	627	533	538	706	571	768	586
<b>Wyoming</b>	69,559	66,324	64,279	58,893	52,901	52,987	48,963	46,020	43,174	41,689
<b>Federal Offshore</b>	367,456	371,851	394,332	415,456	454,621	470,192	473,252	496,663	505,364	476,795
<b>TOTAL U.S.</b>	<b>2,224,775</b>	<b>2,179,642</b>	<b>2,152,667</b>	<b>2,070,229</b>	<b>1,953,524</b>	<b>1,928,649</b>	<b>1,883,071</b>	<b>1,869,155</b>	<b>1,858,465</b>	<b>1,785,890</b>
<b>DAILY AVG.</b>	<b>6,560</b>	<b>6,465</b>	<b>6,452</b>	<b>6,252</b>	<b>5,881</b>	<b>5,822</b>	<b>5,801</b>	<b>5,746</b>	<b>5,681</b>	<b>5,419</b>

Source: IHS & EIA.

Notes: Daily Average derived from EIA data.

CRUDE OIL PRODUCTION



# NATURAL GAS PRODUCTION

(MMcf)	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
<b>Alabama</b>	426,774	420,998	427,006	428,112	415,442	396,775	381,831	370,977	355,701	324,437
<b>Arizona</b>	526	417	397	404	333	281	239	236	183	218
<b>Arkansas</b>	159,342	163,271	166,023	152,174	146,407	149,085	149,662	147,897	153,236	170,222
<b>California</b>	83,755	78,885	76,204	78,588	90,546	86,347	89,748	78,277	83,695	75,362
<b>Colorado</b>	520,890	552,390	616,398	673,310	706,407	758,839	803,229	912,289	997,085	1,062,396
<b>Kansas</b>	780,219	731,761	690,603	612,428	574,048	528,307	490,685	464,540	431,149	405,594
<b>Kentucky</b>	0	0	70,077	72,949	75,096	76,073	77,031	81,344	83,452	85,668
<b>Louisiana</b>	1,406,821	1,502,932	1,448,720	1,387,931	1,310,820	1,322,815	1,371,071	1,261,846	1,252,126	1,266,290
<b>Michigan</b>	213,012	235,111	244,858	247,144	227,506	215,038	203,038	192,482	178,082	170,023
<b>Mississippi</b>	113,817	116,089	119,636	119,764	120,227	110,869	132,500	142,950	157,847	170,157
<b>Montana</b>	44,256	45,249	48,585	52,105	55,197	64,740	74,416	79,235	78,092	87,046
<b>Nebraska</b>	1,526	1,307	1,114	1,209	1,021	861	871	894	1,183	1,217
<b>New Mexico</b>	1,276,188	1,320,823	1,352,312	1,400,987	1,454,198	1,461,998	1,466,020	1,412,648	1,375,603	1,372,580
<b>New York</b>	19,157	18,625	16,822	17,034	17,148	18,476	30,181	36,252	35,725	45,785
<b>North Dakota</b>	13,210	13,926	16,023	16,108	13,732	12,896	14,744	14,485	12,823	13,329
<b>Ohio</b>	85,993	92,133	86,329	87,785	74,411	74,125	72,225	70,426	68,428	66,562
<b>Oklahoma</b>	1,514,879	1,503,475	1,474,597	1,417,037	1,393,706	1,433,317	1,448,236	1,396,439	1,412,925	1,446,878
<b>Oregon</b>	2,520	1,743	1,381	1,263	1,555	1,596	1,115	840	734	468
<b>South Dakota</b>	847	905	689	760	685	598	538	510	523	509
<b>Texas</b>	4,569,889	4,770,629	4,819,180	4,854,011	4,715,593	4,869,777	4,940,417	4,886,656	4,962,056	5,072,699
<b>Utah</b>	263,306	234,250	230,900	253,950	239,524	244,989	265,032	260,714	257,510	264,789
<b>West Virginia</b>	179,579	180,674	168,619	172,312	218,565	161,940	190,798	194,328	183,091	195,084
<b>Wyoming</b>	913,487	954,271	1,000,235	1,045,758	1,118,077	1,266,885	1,390,353	1,539,308	1,636,903	1,735,410
<b>Fed. Offshore</b>	4,231,525	4,531,605	4,576,487	4,406,420	4,316,714	4,177,882	4,278,528	3,829,757	3,715,894	3,355,752
<b>TOTAL U.S.</b>	<b>16,821,517</b>	<b>17,471,470</b>	<b>17,653,194</b>	<b>17,499,544</b>	<b>17,286,958</b>	<b>17,434,509</b>	<b>17,872,507</b>	<b>17,375,334</b>	<b>17,434,045</b>	<b>17,388,474</b>

Source: IHS. Data not available for certain states.

# PRODUCING MARGINAL OIL WELLS

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Alabama	316	306	317	317	307	295	305	300	304	320
Alaska	91	110	90	128	95	101	136	145	151	140
Arizona	19	21	24	26	27	25	24	22	23	19
Arkansas	2,287	2,191	2,107	1,920	1,871	2,002	5,334	4,141	2,427	1,910
California	27,959	27,890	28,720	29,484	28,803	30,194	31,274	31,314	31,770	33,010
Colorado	4,787	4,598	4,594	4,461	4,437	4,504	4,454	4,455	4,344	4,384
Florida	19	12	16	12	11	9	7	13	33	11
Illinois	6,990	6,677	6,414	5,848	5,463	5,500	5,102	5,166	5,107	5,148
Indiana	1,477	1,394	1,344	1,212	1,124	1,142	1,114	1,108	1,043	1,051
Kansas	51,447	48,210	46,631	44,914	41,825	41,716	41,141	40,933	40,607	39,386
Kentucky	1,446	1,334	1,274	1,107	1,078	1,060	1,034	995	981	965
Louisiana	17,395	17,209	16,699	15,633	15,205	14,894	15,737	15,377	15,587	15,129
Michigan	532	561	594	2,120	2,240	3,306	3,520	3,386	3,502	3,508
Mississippi	916	906	926	948	919	864	867	793	822	850
Montana	2,846	2,795	2,846	2,786	2,733	2,810	3,465	2,714	2,731	2,817
Nebraska	1,480	1,472	1,397	1,335	1,199	1,190	1,172	1,154	1,140	1,177
Nevada	39	36	42	39	32	35	38	39	42	40
New Mexico	14,292	14,574	14,774	14,954	14,727	15,324	15,893	15,916	16,181	16,602
New York	NA	NA	NA	NA	NA	NA	NA	NA	2,249	2,164
North Dakota	2,070	2,089	2,119	2,053	2,019	2,035	2,085	2,819	2,163	2,412
Ohio	15,472	15,435	14,922	14,035	13,809	14,812	15,251	15,762	15,162	15,308
Oklahoma	66,753	66,015	64,411	61,599	59,045	56,384	56,346	53,846	49,700	48,542
South Dakota	44	53	58	58	57	57	54	52	61	64
Texas	162,466	158,891	156,915	153,113	145,466	146,200	145,415	142,031	139,807	138,498
Utah	1,106	1,186	1,263	1,252	1,288	1,315	1,360	1,421	1,442	1,582
West Virginia	1,505	1,673	1,909	1,787	1,456	1,143	1,544	2,016	1,201	1,722
Wyoming	9,122	9,303	9,046	9,020	8,997	9,248	9,360	9,237	9,355	9,473
Federal Offshore	679	645	691	677	599	630	669	707	640	644
<b>TOTAL U.S.</b>	<b>393,555</b>	<b>385,586</b>	<b>380,143</b>	<b>370,838</b>	<b>354,832</b>	<b>356,795</b>	<b>362,701</b>	<b>355,862</b>	<b>348,575</b>	<b>346,876</b>

PRODUCING MARGINAL OIL WELLS

Source: IHS

Notes: A marginal oil well is defined as a well producing 15 barrels/day or less.

# MARGINAL OIL WELL PRODUCTION

(thous. bbls.)	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Alabama	725	717	759	731	709	703	748	752	754	740
Alaska	145	212	136	257	176	185	252	288	243	264
Arizona	36	40	40	40	30	30	39	34	32	24
Arkansas	3,217	2,999	3,068	2,667	2,910	3103	4,095	3,212	2,881	3,042
California	56,852	57,058	59,565	59,951	58,766	62,439	63,431	62,603	62,889	64,825
Colorado	4,495	4,075	4,083	3,831	3,591	3,768	3,881	4,212	4,199	4,188
Florida	39	37	31	23	20	23	20	35	46	27
Illinois	7,146	6,885	6,499	5,884	5,507	5,551	5,068	5,227	5,267	5,104
Indiana	1,555	1,417	1,386	1,255	1,149	1,186	1,178	1,102	1,063	1,020
Kansas	32,441	31,463	30,527	27,114	26,276	25,835	25,504	25,250	25,016	24,607
Kentucky	1,053	992	912	847	793	804	799	753	698	701
Louisiana	13,308	12,995	12,912	11,562	10,702	10,617	10,342	10,043	9,773	9,547
Michigan	1,056	1,209	1,205	1,753	1,769	3,304	3,460	3,367	3,374	3,427
Mississippi	2,206	2,147	2,134	2,176	1,913	1,997	1,994	1,855	1,966	2,010
Montana	3,222	3,223	3,362	3,331	3,223	3,413	3,457	3,344	3,350	3,352
Nebraska	2,857	2,827	2,518	2,228	2,010	1,981	1,857	1,826	1,777	1,842
Nevada	72	67	77	84	60	71	89	92	90	91
New Mexico	19,025	19,761	19,957	19,876	19,574	20,064	20,549	20,516	20,825	21,045
New York	NA	NA	NA	NA	NA	NA	NA	NA	94	110
North Dakota	4,749	4,843	4,791	4,459	4,318	4,572	4,658	4,648	4,815	4,531
Ohio	4,613	4,818	4,383	3,918	3,692	4,042	4,364	4,152	3,871	3,669
Oklahoma	52,024	50,573	48,470	44,715	41,612	41,413	41,037	39,526	37,636	36,618
South Dakota	139	165	175	172	164	198	194	166	208	217
Texas	167,348	165,647	165,124	157,315	150,271	153,498	151,564	147,152	145,505	142,581
Utah	2,363	2,507	2,743	2,682	2,743	2,872	2,875	3,010	3,110	3,391
West Virginia	397	383	428	402	317	330	351	370	343	384
Wyoming	14,564	14,148	14,181	13,752	13,494	13,785	13,611	13,344	13,383	13,289
Federal Offshore	1,519	1,406	1,557	1,578	1,351	1,398	1,576	1,675	1,527	1,520
TOTAL U.S.	397,166	392,614	391,023	372,603	357,140	367,182	366,993	358,554	354,735	352,166

Source: IHS

Notes: Totals may not add due to rounding.

# PRODUCING MARGINAL NATURAL GAS WELLS

(Mmcf)	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Alabama	1,953	1,919	1,777	1,834	1,928	2,199	2,403	2,590	2,889	3,187
Arizona	2	2	3	2	3	3	3	5	2	2
Arkansas	1,679	1,689	1,709	1,827	1,814	2,030	2,155	2,216	2,387	2,526
California	627	635	693	580	617	677	667	681	683	706
Colorado	7,303	7,698	8,091	8,034	12,459	12,674	13,360	13,742	14,725	16,097
Kansas	6,931	7,010	7,379	7,894	8,320	8,948	9,863	10,657	11,858	13,417
Kentucky	NA	NA	8,881	9,444	9,684	10,074	10,405	10,868	11,329	12,129
Louisiana	10,059	10,092	9,926	10,056	10,055	10,023	4,339	4,168	4,220	4,327
Michigan	521	511	482	562	563	609	737	821	892	956
Mississippi	254	286	286	290	296	388	447	506	684	806
Montana	2,926	2,938	3,086	3,206	3,447	3,636	3,854	4,002	4,262	4,536
Nebraska	67	75	84	85	87	87	89	92	95	98
New Mexico	13,118	12,902	12,996	13,159	13,374	14,006	14,847	15,598	16,482	17,650
New York	5,689	5,661	5,550	5,564	5,653	5,645	6,041	5,487	6,155	6,416
North Dakota	71	67	67	67	65	68	69	65	78	82
Ohio	21,970	22,017	21,958	20,976	20,048	21,400	22,082	21,917	22,096	21,689
Oklahoma	12,740	13,036	13,611	14,318	15,054	16,118	17,462	18,785	20,134	21,455
Oregon	4	11	12	12	12	10	9	9	10	11
South Dakota	51	53	55	54	54	56	58	57	57	59
Texas	31,698	32,476	33,799	34,688	35,811	36,844	39,069	40,295	42,002	44,656
Utah	648	618	745	854	976	1,055	1,270	1,459	1,648	1,804
West Virginia	35,622	37,335	37,601	39,699	38,724	29,366	38,704	40,053	38,844	40,452
Wyoming	1,464	1,398	1,706	1,959	2,807	4,671	7,160	9,587	11,139	13,474
Federal Offshore	12	11	22	20	26	28	30	32	40	26
<b>TOTAL U.S.</b>	<b>155,409</b>	<b>158,440</b>	<b>170,519</b>	<b>175,184</b>	<b>181,877</b>	<b>180,615</b>	<b>195,123</b>	<b>203,692</b>	<b>212,711</b>	<b>226,561</b>

Source: IHS

Notes: A marginal natural gas well is defined as a well producing 90 thousand cubic feet per day or less.

PRODUCING MARGINAL NATURAL GAS WELLS

# MARGINAL NATURAL GAS PRODUCTION

(Mmcf)	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Alabama	27,145	27,295	26,995	28,068	30,121	33,921	37,297	39,807	44,565	47,877
Arizona	34	12	37	4	35	25	4	60	37	28
Arkansas	21,944	22,501	23,251	24,862	25,602	28,215	28,948	30,432	32,364	33,641
California	8,399	8,045	9,158	7,406	7,896	7,831	8,547	8,441	8,642	8,986
Colorado	97,906	101,408	103,071	100,311	126,128	129,869	141,830	153,960	172,625	195,674
Kansas	91,130	95,386	99,001	111,463	118,887	129,410	146,535	158,854	178,136	201,997
Kentucky			62,931	66,065	67,591	69,400	71,156	74,072	75,513	78,805
Louisiana	39,908	40,242	39,208	40,645	39,732	40,557	38,425	38,934	39,254	40,083
Michigan	6,930	7,460	7,392	8,467	8,766	9,283	10,538	11,686	12,851	13,559
Mississippi	3,379	4,130	3,965	4,112	4,282	5,837	7,077	8,684	11,210	12,783
Montana	24,219	24,085	26,496	27,769	28,823	30,391	32,251	35,138	37,128	37,963
Nebraska	1,071	1,164	1,078	1,040	908	744	743	755	793	784
New Mexico	166,747	166,299	167,044	167,586	173,320	181,395	189,490	198,823	210,356	229,209
New York	14,938	15,047	14,494	13,726	12,800	12,181	12,340	10,976	11,002	10,874
North Dakota	473	378	367	451	432	430	429	478	663	731
Ohio	68,236	67,855	64,888	61,082	54,295	56,226	57,397	57,026	55,378	53,812
Oklahoma	164,748	170,673	178,628	186,744	195,208	211,217	225,276	239,475	256,811	269,245
Oregon	60	98	123	68	125	154	79	112	113	117
South Dakota	616	678	581	668	600	523	538	473	483	466
Texas	358,833	370,532	387,382	400,261	410,614	421,242	445,495	456,406	479,643	509,051
Utah	8,836	9,388	11,302	12,728	14,089	15,922	19,724	21,985	25,297	27,683
West Virginia	149,729	155,441	143,483	151,707	159,474	126,932	157,127	162,879	152,036	161,214
Wyoming	20,179	20,041	23,711	27,805	36,222	56,571	87,966	110,593	136,750	158,345
Federal Offshore	144	178	300	177	297	341	432	424	472	274
<b>TOTAL U.S.</b>	<b>1,275,604</b>	<b>1,308,336</b>	<b>1,394,886</b>	<b>1,443,215</b>	<b>1,516,247</b>	<b>1,568,617</b>	<b>1,719,644</b>	<b>1,820,473</b>	<b>1,942,122</b>	<b>2,093,201</b>

Sources: IHS

Notes: Totals may not add due to rounding.

# COST OF DRILLING AND EQUIPPING WELLS '04

State	No. of Wells Drilled	Footage Drilled	Depth per Well	Total Cost	Cost per Well	Cost per Foot
		(ft.)			(\$)	
Alabama	441	1,222,859	2,773	258,965,000	587,222	211.77
Alaska	206	1,254,264	6,089	1,825,125,000	8,859,830	1,455.14
Arizona	1	4,350	4,350	503,000	503,000	115.63
Arkansas	304	1,746,401	5,745	171,037,000	562,622	97.94
California	2,222	5,842,199	2,629	1,256,485,000	565,475	215.07
Colorado	1,992	11,503,609	5,775	2,487,828,000	1,248,910	216.26
Florida	-	-	-	-	-	-
Illinois	324	754,504	2,329	147,751,000	456,022	195.83
Indiana	149	239,639	1,608	58,189,000	390,530	242.82
Kansas	1,887	5,533,780	2,933	345,233,000	182,953	62.39
Kentucky	842	2,429,464	2,885	244,462,000	290,335	100.62
Louisiana	1,261	11,607,231	9,205	4,225,422,000	3,350,850	364.03
Michigan	430	785,691	1,827	225,388,000	524,158	286.87
Mississippi	270	1,987,937	7,363	373,893,000	1,384,789	188.08
Montana	752	3,627,476	4,824	1,651,795,000	2,196,536	455.36
Nebraska	50	240,808	4,816	24,764,000	495,280	102.84
Nevada	4	20,017	5,004	4,820,000	1,205,000	240.80
New Mexico	1,789	10,073,491	5,631	1,908,898,000	1,067,020	189.50
New York	136	628,285	4,620	154,458,000	1,135,721	245.84
North Dakota	221	1,789,854	8,099	834,672,000	3,776,796	466.34
Ohio	549	2,277,631	4,149	216,126,000	393,672	94.89
Oklahoma	3,135	20,653,659	6,588	3,280,596,000	1,046,442	158.84
Pennsylvania	2,496	8,770,820	3,514	841,895,000	337,298	95.99
South Dakota	12	101,334	8,445	44,601,000	3,716,750	440.14
Tennessee	202	417,608	2,067	51,020,000	252,574	122.17
Texas	10,284	77,891,689	7,574	16,544,574,000	1,608,768	212.40
Utah	601	4,483,229	7,460	1,808,612,000	3,009,338	403.42
Virginia	363	1,087,946	2,997	113,310,000	312,149	104.15
Washington	2	7,600	3,800	568,000	284,000	74.74
West Virginia	1,226	4,877,837	3,979	427,500,000	348,695	87.64
Wyoming	3,843	12,167,450	3,166	7,253,142,000	1,887,365	596.11
Federal Offshore	786	8,580,367	10,916	11,647,792,000	14,819,074	1,357.49
State Offshore	100	751,478	7,515	1,005,358,000	10,053,580	1,337.84
Total Offshore	886	9,331,845	10,533	12,653,150,785	14,281,209	1,355.91
Total Onshore	35,896	193,289,589	5,385	45,777,919,000	1,275,293	236.84
<b>TOTAL U.S.</b>	<b>36,782</b>	<b>202,621,434</b>	<b>5,509</b>	<b>58,431,068,069</b>	<b>1,588,578</b>	<b>288.38</b>
Exploratory	3,333	21,870,633	6,562	8,742,544,479	2,623,026	399.74
Developmental	33,449	180,750,801	5,404	49,688,523,590	1,485,501	274.90

COST OF DRILLING AND EQUIPPING WELLS '04

Sources: IHS

Notes: Appalachian includes New York, Ohio, Pennsylvania and West Virginia.

COMPILED BY IPAA AUGUST 2007

AMERICA'S INDEPENDENT 97

# CRUDE OIL REVENUES

(thous. \$)	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Alabama	178,379	200,720	163,262	90,032	107,044	165,310	125,520	120,763	143,981	180,839
Alaska	6,022,926	7,824,950	7,018,682	3,635,595	4,828,307	8,438,340	6,449,401	7,020,957	8,664,291	11,136,496
Arizona	1,091	1,620	1,440	865	996	1,470	1,266	1,319	1,198	1,843
Arkansas	119,581	153,505	138,495	78,732	98,311	174,129	149,969	139,105	174,990	214,336
California	3,898,538	4,727,246	4,498,042	2,714,416	3,803,250	6,699,787	5,210,900	5,532,628	6,506,436	8,221,520
Colorado	352,604	393,167	342,350	209,350	242,676	400,553	327,847	322,979	380,589	485,125
Florida	82,389	102,097	122,986	60,746	85,540	134,281	NA	NA	NA	NA
Illinois	248,860	282,465	258,253	163,673	195,829	306,895	242,304	265,268	340,674	414,479
Indiana	43,618	51,303	44,933	27,216	33,962	56,797	48,633	46,134	53,071	66,013
Kansas	722,365	876,628	767,761	446,690	582,155	964,142	800,027	780,452	966,831	1,324,362
Kentucky	27,997	34,145	28,518	16,011	24,336	40,896	33,570	31,059	36,652	44,552
Louisiana	1,650,862	1,983,892	1,820,019	1,140,730	1,411,826	2,188,561	1,734,529	1,496,250	1,777,924	2,283,879
Michigan	116,277	138,400	119,906	91,190	113,849	210,956	160,418	155,885	181,791	225,564
Mississippi	278,300	349,230	332,837	202,675	252,718	486,934	381,185	371,028	430,518	578,964
Missouri	1,920	2,076	2,124	1,068	1,436	2,695	1,833	2,045	2,169	3,269
Montana	247,808	308,039	276,318	188,241	253,823	437,303	374,544	385,554	553,396	950,689
Nebraska	57,532	69,200	60,002	36,409	45,882	82,595	49,865	64,861	80,450	96,818
Nevada	16,440	15,941	14,610	9,005	9,792	14,084	13,544	9,904	12,074	14,807
New Mexico	812,187	1,428,814	1,291,953	785,985	1,041,786	1,775,779	1,387,381	1,405,444	1,682,758	2,226,378
New York*	NA	NA	NA	NA	NA	NA	NA	NA	2,718	4,334
North Dakota*	482,095	617,777	622,938	399,459	540,412	903,264	691,225	721,505	831,649	1,184,581
Ohio*	87,606	115,389	103,812	62,989	74,879	135,663	136,530	111,173	127,402	163,183
Oklahoma	1,328,916	1,602,433	1,447,610	916,458	1,160,328	1,830,004	1,520,175	1,433,718	1,687,204	2,193,215
Oregon	0	0	0	2	6	0	0	0	0	0
Pennsylvania	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
South Dakota*	22,872	24,587	23,763	14,846	18,546	32,745	27,362	28,968	35,857	52,070
Tennessee	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Texas	8,487,303	10,150,288	9,159,466	5,639,651	7,075,579	11,466,598	8,917,876	8,697,229	10,484,091	13,633,095
Utah	277,035	356,759	317,268	213,366	257,566	403,871	335,164	301,001	349,130	539,803
Virginia	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
West Virginia	12,934	13,791	12,134	7,493	8,773	14,591	15,779	12,876	21,550	22,491
Wyoming	1,149,810	1,297,297	1,119,097	630,155	871,279	1,424,820	1,055,153	1,010,599	1,149,724	1,463,284
<b>TOTAL U.S.</b>	<b>32,526,211</b>	<b>40,236,191</b>	<b>37,090,452</b>	<b>22,503,389</b>	<b>30,396,833</b>	<b>51,533,501</b>	<b>40,822,345</b>	<b>42,074,679</b>	<b>51,219,295</b>	<b>65,667,175</b>

Source: IHS, Energy Information Administration, IPAA and state data.

Total does not include Federal OCS.



# NATURAL GAS REVENUES

(thous. \$.)	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Alabama	776,729	1,103,015	1,140,106	946,128	963,825	1,583,132	1,615,145	1,291,000	2,109,307	2,160,750
Alaska	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arizona	631	688	953	760	693	984	985	614	792	1,116
Arkansas	481,213	623,695	669,073	596,522	600,269	779,715	746,813	655,184	792,230	966,861
California	144,896	143,571	183,652	154,818	213,689	415,329	621,954	228,569	421,823	425,795
Colorado	494,846	756,774	1,374,568	1,279,289	1,539,967	2,784,939	3,084,399	2,198,616	4,526,766	5,535,083
Florida	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Illinois	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indiana	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Kansas	1,061,098	1,404,981	1,415,736	1,041,128	1,033,286	1,695,865	1,795,907	1,212,449	1,866,875	2,003,634
Kentucky	NA	NA	1,886,145	174,348	155,449	240,391	368,208	244,845	378,872	450,614
Louisiana	2,222,777	3,501,832	3,418,979	2,803,621	2,910,020	4,867,959	5,470,573	4,037,907	7,061,991	7,547,088
Maryland	31	340	263	164	49	128	133	132	216	213
Michigan	355,730	519,595	536,239	437,445	402,686	524,693	704,542	415,761	714,109	654,589
Mississippi	141,133	192,708	206,970	170,065	195,970	365,868	520,725	437,427	809,755	992,015
Missouri	27	39	9	NA	NA	NA	NA	NA	NA	NA
Montana	60,188	63,801	77,250	79,721	92,731	183,862	232,178	189,372	291,283	392,577
Nebraska	1,816	1,869	1,704	1,572	1,389	1,946	1,881	1,359	3,750	3,919
New Mexico	1,607,997	2,205,774	2,380,069	2,465,737	3,068,358	5,014,653	5,702,818	3,785,897	6,272,750	6,821,723
New York*	44,061	41,161	43,064	43,607	37,040	69,285	150,905	109,844	206,491	319,579
North Dakota	10,964	29,662	34,610	34,471	31,858	50,810	52,046	39,544	45,265	76,375
Ohio*	200,364	242,310	233,088	258,966	180,819	300,948	327,902	318,326	403,725	442,637
Oklahoma	2,181,426	3,322,680	3,421,065	2,508,155	2,857,097	5,202,941	5,836,391	4,105,531	7,022,237	7,986,767
Oregon	2,344	3,939	3,024	3,006	3,919	4,293	4,081	3,335	3,288	1,821
Pennsylvania	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
South Dakota	1,347	1,792	1,440	1,877	1,459	2,129	1,840	1,505	2,605	2,794
Tennessee	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Texas	7,357,521	10,924,740	11,951,566	9,999,263	10,893,020	19,138,224	20,354,518	15,441,833	25,703,450	29,573,835
Utah	302,802	325,608	429,474	439,334	462,281	803,564	932,913	518,821	1,058,366	1,387,494
Virginia*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
West Virginia	398,665	551,056	443,468	408,379	653,509	524,686	786,088	668,488	794,615	918,846
Wyoming	1,626,007	2,452,476	242,569	1,861,129	2,202,612	4,231,396	4,852,332	4,156,132	6,760,409	8,607,634
<b>TOTAL U.S.</b>	<b>20,780,471</b>	<b>29,982,141</b>	<b>31,420,431</b>	<b>26,852,256</b>	<b>29,876,317</b>	<b>50,246,100</b>	<b>55,887,242</b>	<b>41,854,540</b>	<b>68,848,881</b>	<b>78,921,521</b>

Source: IHS, Energy Information Administration, IPAA and state data.

Total from EIA - imputed wellhead value of marketed production.

NATURAL GAS REVENUES

## ABANDONMENTS

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Alabama	2	10	8	2	6	6	3	3	34	29
Arizona	0	0	0	0	0	0	0	0	0	0
Arkansas	151	186	138	97	77	116	43	42	108	69
California	1,734	1,849	1,919	1,392	1,046	1,615	1,469	2,452	2,501	1,629
Colorado	190	334	321	153	120	124	168	119	259	212
Illinois	542	514	518	802	590	647	689	710	659	554
Indiana	169	135	129	133	58	72	93	125	102	80
Kansas	1,754	1,716	1,765	1,480	2,025	614	1,614	1,722	2,270	1,473
Kentucky	206	231	166	233	179	232	202	237	312	263
Louisiana	812	614	785	750	620	605	760	731	1,500	898
Michigan	103	121	153	146	139	139	141	155	177	196
Mississippi	88	86	74	58	83	91	62	109	106	90
Missouri	137	235	251	2	4	12	1	4	12	4
Montana	97	74	45	124	136	178	135	65	169	113
Nebraska	36	112	66	90	66	67	83	100	81	55
New Mexico	1,082	619	397	206	105	121	203	217	263	752
New York	68	59	79	58	57	36	36	65	115	83
North Dakota	45	33	51	37	26	35	48	38	40	50
Ohio	379	297	335	243	183	211	216	183	500	572
Oklahoma	1,164	1,740	1,871	1,442	841	922	710	774	1,056	956
Pennsylvania	881	712	640	968	590	300	200	210	328	306
South Dakota	1	0	1	7	2	0	0	2	2	0
Tennessee	71	97	81	77	70	76	45	38	86	50
Texas	7,305	7,063	5,246	5,110	4,078	4,255	5,126	5,228	6,902	6,718
Utah	47	74	20	30	36	16	30	16	17	57
Virginia	0	0	0	0	0	0	0	0	60	45
West Virginia	45	100	100	84	80	78	50	46	327	335
Wyoming	11	12	14	188	10	120	107	228	241	517
<b>TOTAL U.S.</b>	<b>17,120</b>	<b>17,023</b>	<b>15,173</b>	<b>13,912</b>	<b>11,227</b>	<b>10,688</b>	<b>12,234</b>	<b>13,619</b>	<b>18,219</b>	<b>16,106</b>

Source: IOGCC

Note: Figures quoted as of January 1 each successive year.

## DRILLING SUMMARY

	Oil Wells		Gas Wells		Dry Holes		Total Wells	
	2004	%	2004	%	2004	%	2004	%
Number of Wells Drilled	8,664	8.7	21,365	11.2	3,548	(0.5)	33,577	9.2
Footage Drilled (thous. ft.)	41,855	11.9	128,772	15.1	21,395	0.4	192,021	12.6
Total Cost (mill. \$)	\$12,492	51.1	\$36,672	72.6	\$7,015	(4.7)	\$56,179	52.3
Average Depth (ft.)	4,830	2.9	6,027	3.5	6,030	1	5,719	3.1
Average Cost per Well (\$)	\$1,441,812	39.0	\$1,716,442	55.1	\$1,977,289	(4.2)	\$1,673,141	39.5
Average Cost per Foot (\$)	\$298.45	34.9	\$284.78	49.9	\$327.91	(5.2)	\$292.57	35.3

Source: Joint Association Survey.

Note: Data includes both oil and natural gas wells. Percent change versus 2003 JAS data.

# SEVERANCE AND PRODUCTION TAXES

(thous. \$)	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Alabama	50,003	64,102	67,526	55,078	37,899	68,341	107,024	53,235	92,695	101,184
Alaska	750,828	914,890	788,409	395,500	507,000	759,000	558,772	519,368	1,093,356	750,425
Arizona	2,402	5,286	5,952	6,398	6,060	7,026	6,510	8,377	8,377	9,899
Arkansas	5,872	6,027	6,872	4,371	4,616	9,476	9,546	6,608	8,355	9,802
California*	325,000	147,100	174,044	157,652	194,606	215,696	239,921	189,306	214,473	188,753
Colorado	1,632	7,555	18,688	19,756	23,327	24,641	54,384	48,914	23,613	107,145
Florida	7,657	6,908	10,441	7,318	4,157	6,046	8,258	5,197	5,469	6,084
Indiana	674	616	599	550	502	653	572	567	590	845
Kansas	183,864	68,535	78,531	51,686	120,333	56,900	109,232	59,895	84,212	116,677
Kentucky	8,757	10,673	12,653	11,212	8,452	11,414	20,678	14,610	17,800	22,170
Louisiana	364,390	344,302	380,699	336,293	240,055	354,314	478,805	454,429	480,749	677,320
Maryland	1	1	2	1	1	1	2	1	1	1
Michigan	36,822	36,414	40,961	30,982	30,570	40,012	61,279	35,967	54,651	56,186
Mississippi	23,557	28,225	28,343	25,346	14,518	23,751	11,817	28,201	43,413	62,631
Montana	38,652	42,507	42,482	35,065	28,997	43,770	92,818	50,304	75,454	114,218
Nebraska	1,736	2,149	1,915	1,334	1,017	2,108	1,868	1,455	1,845	2,191
Nevada	525	486	283	74	50	62	62	56	248	45
New Mexico	258,100	271,600	372,600	375,800	227,200	345,300	355,370	479,109	571,862	737,200
North Dakota	45,106	52,000	53,500	39,200	35,402	71,275	66,800	62,300	66,846	73,914
Ohio	3,920	3,738	3,655	3,383	3,327	3,090	2,884	2,799	2,900	2,691
Oklahoma	309,553	324,377	413,576	360,285	253,039	410,412	745,236	417,103	600,980	701,156
Oregon	154	204	156	93	98	146	119	145	89	72
South Dakota	1,041	945	1,178	1,018	730	1,051	1,566	1,239	1,522	1,658
Tennessee	247	243	282	213	363	532	380	498	592	592
Texas **	886,620	897,671	1,091,284	926,561	659,396	1,153,086	1,956,108	1,049,054	1,492,743	1,887,879
Utah	13,766	13,145	17,217	13,988	11,109	17,313	42,106	20,603	28,689	39,356
West Virginia	19,086	19,199	17,431	16,118	19,161	18,048	34,549	28,382	30,475	41,544
Wyoming	91,972	123,541	152,448	73,754	125,178	567,445	581,532	327,497	370,381	504,731
<b>TOTAL U.S.</b>	<b>3,431,937</b>	<b>3,392,439</b>	<b>3,781,727</b>	<b>2,949,029</b>	<b>2,557,163</b>	<b>4,210,909</b>	<b>5,548,198</b>	<b>3,863,352</b>	<b>5,372,380</b>	<b>6,216,369</b>

Source: Various state and industry contacts.

Notes: Figures include all state and local tax revenues. States vary on the use of fiscal (Arizona) or calendar year data. West Virginia data switched to FY in 2001.

\* California data recalibrated to methodology that includes property taxes associated with an ad valorem tax base and a nominal assessment based on projected production expenditures.

\*\* Texas includes oilfield clean up tax beginning in 1991.

# CRUDE OIL WELLHEAD PRICES

(\$/Bbl.)	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Alabama	16.35	20.24	18.58	12.08	16.71	27.63	23.18	23.39	28.97	38.79
Alaska	11.12	15.32	14.84	8.47	12.60	23.76	18.35	19.53	23.91	33.17
Arizona*	16.29	20.00	18.23	11.69	16.06	26.72	21.82	21.63	26.63	36.86
Arkansas	14.84	18.67	17.58	11.10	15.89	26.98	21.82	21.50	26.57	36.67
California	14.00	16.72	15.78	9.55	13.92	24.72	20.00	21.68	26.30	34.33
Colorado	16.67	20.47	19.03	12.56	17.37	28.85	24.82	25.29	30.71	40.38
Florida	14.50	16.55	19.64	10.23	17.50	29.04	NA	NA	NA	NA
Illinois	16.95	20.86	19.11	12.78	17.37	28.14	23.76	23.84	29.10	38.74
Indiana	16.88	20.67	18.73	12.49	17.31	27.91	23.46	23.43	28.38	38.18
Kansas	16.19	20.47	18.63	12.19	17.08	28.16	23.56	23.61	28.68	39.18
Kentucky	16.43	20.24	17.97	11.67	16.68	26.47	22.53	22.49	27.21	36.82
Louisiana	17.06	20.88	19.22	12.59	17.59	28.85	24.36	24.68	30.31	40.08
Michigan	16.63	20.32	18.75	12.39	16.63	28.12	22.69	23.68	29.18	39.14
Mississippi	14.76	18.95	16.94	10.33	15.42	26.23	21.13	22.11	27.46	37.03
Missouri*	16.00	18.05	18.63	11.48	15.61	28.37	20.37	21.53	26.45	37.15
Montana	14.93	18.89	17.00	11.28	16.54	27.82	23.16	22.76	28.66	38.53
Nebraska	15.18	19.57	18.10	11.50	17.21	27.97	23.67	23.62	28.63	38.42
Nevada*	12.25	15.01	15.00	11.27	13.87	22.68	17.13	17.91	24.54	31.98
New Mexico	16.74	20.79	19.02	12.36	17.46	28.80	23.72	24.11	29.52	39.25
New York*	16.74	20.95	18.49	11.46	16.18	28.60	22.76	24.92	28.91	39.40
North Dakota	15.58	19.46	17.63	11.39	16.70	28.19	23.55	24.15	29.27	39.30
Ohio	16.67	19.96	17.77	12.20	16.41	27.49	22.55	22.61	28.18	38.27
Oklahoma	16.68	20.60	19.05	12.73	17.77	29.08	24.68	24.49	29.72	39.95
Pennsylvania	16.93	20.99	18.79	13.67	18.49	28.80	24.82	24.86	29.60	39.48
South Dakota	15.53	19.56	17.80	12.29	16.86	28.18	23.89	23.96	28.94	38.40
Tennessee*	16.50	19.55	17.26	11.24	15.93	26.28	21.96	21.89	26.56	36.46
Texas	16.38	20.31	18.66	12.28	17.30	28.60	23.41	23.77	29.13	38.79
Utah	17.71	21.10	18.57	12.52	17.69	28.53	24.09	23.87	28.88	39.35
Virginia*	16.71	19.63	16.40	11.64	16.88	NA	NA	NA	26.23	NA
West Virginia	16.53	19.59	17.56	11.95	16.46	27.12	22.35	22.55	28.06	38.38
Wyoming	15.50	19.56	17.41	10.70	16.47	26.89	21.55	21.96	26.63	35.10
TOTAL U.S.	14.62	18.46	17.23	10.87	15.56	26.72	21.84	22.51	27.56	36.77

Source: Energy Information Administration and State Sources\*

Notes: Data represent average first purchase prices of crude oil at the lease or wellhead.

# NATURAL GAS WELLHEAD PRICES

(\$/Mcf)	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Alabama	1.82	2.62	2.67	2.21	2.32	3.99	4.23	3.48	5.93	6.66
Alaska	1.64	1.61	1.82	1.32	1.37	1.76	1.99	2.13	2.41	3.42
Arizona	1.20	1.65	2.40	1.88	2.08	3.50	4.12	2.60	4.33	5.12
Arkansas	3.02	3.82	4.03	3.92	4.10	5.23	4.99	4.43	5.17	5.68
California	1.73	1.82	2.41	1.97	2.36	4.81	6.93	2.92	5.04	5.65
Colorado	0.95	1.37	2.23	1.90	2.18	3.67	3.84	2.41	4.54	5.21
Florida*	1.24	2.11	1.06	1.42	2.50	1.76	NA	NA	NA	NA
Illinois*	1.90	2.85	2.81	2.74	2.74	2.05	NA	NA	NA	NA
Indiana	1.90	2.30	2.18	2.09	2.19	3.51	3.28	3.11	5.41	6.30
Kansas	1.36	1.92	2.05	1.70	1.80	3.21	3.66	2.61	4.33	4.94
Kentucky	1.64	2.55	2.66	2.39	2.07	3.16	4.78	3.01	4.54	5.26
Louisiana	1.58	2.33	2.36	2.02	2.22	3.68	3.99	3.20	5.64	5.96
Maryland	1.42	2.52	2.23	2.60	2.73	3.75	4.15	5.98	4.50	6.25
Michigan	1.67	2.21	2.19	1.77	1.77	2.44	3.47	2.16	4.01	3.85
Mississippi	1.24	1.66	1.73	1.42	1.63	3.30	3.93	3.06	5.13	5.83
Missouri	1.70	1.56	1.70	1.62	NA	NA	NA	NA	NA	NA
Montana	1.36	1.41	1.59	1.53	1.68	2.84	3.12	2.39	3.73	4.51
Nebraska	1.19	1.43	1.53	1.30	1.36	2.26	2.16	1.52	3.17	3.22
New Mexico	1.26	1.67	1.76	1.76	2.11	3.43	3.89	2.68	4.56	4.97
New York	2.30	2.21	2.56	2.56	2.16	3.75	5.00	3.03	5.78	6.98
North Dakota	0.83	2.13	2.16	2.14	2.32	3.94	3.53	2.73	3.53	5.73
Ohio	2.33	2.63	2.70	2.95	2.43	4.06	4.54	4.52	5.90	6.65
Oklahoma	1.44	2.21	2.32	1.77	2.05	3.63	4.03	2.94	4.97	5.52
Oregon	0.93	2.26	2.19	2.38	2.52	2.69	3.66	3.97	4.48	3.89
Pennsylvania*	2.84	3.08	3.17	2.97	3.09	2.31	3.41	3.41	NA	NA
South Dakota	1.59	1.98	2.09	2.47	2.13	3.56	3.42	2.95	4.98	5.49
Tennessee	1.54	2.54	2.55	2.15	2.28	4.09	3.60	3.41	5.22	6.90
Texas	1.61	2.29	2.48	2.06	2.31	3.93	4.12	3.16	5.18	5.83
Utah	1.15	1.39	1.86	1.73	1.93	3.28	3.52	1.99	4.11	5.24
Virginia*	1.72	2.79	2.55	2.16	2.49	3.97	4.29	3.16	4.65	NA
West Virginia*	2.22	3.05	2.63	2.37	2.99	3.24	4.12	3.44	4.34	4.71
Wyoming	1.78	2.57	2.42	1.78	1.97	3.34	3.49	2.70	4.13	4.96
TOTAL U.S.	1.55	2.17	2.32	1.96	2.19	3.68	4.00	2.95	4.88	5.46

Source: Energy Information Administration and State Sources\*

NATURAL GAS WELLHEAD PRICES

## REFINER ACQUISITION COST OF CRUDE OIL

(\$/Bbl.)	Domestic	Imported	Composite
1978	10.61	14.57	12.46
1979	14.27	21.67	17.72
1980	24.23	33.89	28.07
1981	34.33	37.05	35.24
1982	31.22	33.55	31.87
1983	28.87	29.30	28.99
1984	28.53	28.88	28.63
1985	26.66	26.99	26.75
1986	14.82	14.00	14.55
1987	17.76	18.13	17.90
1988	14.74	14.56	14.67
1989	17.87	18.08	17.97
1990	22.59	21.76	22.22
1991	19.33	18.70	19.06
1992	18.63	18.20	18.43
1993	16.67	16.14	16.41
1994	15.67	15.51	15.59
1995	17.33	17.14	17.23
1996	20.77	20.64	20.71
1997	19.61	18.53	19.04
1998	13.18	12.04	12.52
1999	17.90	17.26	17.51
2000	29.11	27.70	28.26
2001	24.33	22.00	22.95
2002	24.65	23.71	24.10
2003	29.82	27.71	28.53
2004	38.97	35.90	36.98

Source: Energy Information Administration

## RETAIL GASOLINE PRICES

(¢/gal.)	Excluding Taxes	Taxes	Pump Price
1981	114.7	23.1	137.8
1982	106.0	23.6	129.6
1983	95.4	28.7	124.1
1984	90.7	30.5	121.2
1985	91.2	29.0	120.2
1986	62.4	30.3	92.7
1987	66.9	27.9	94.8
1988	67.3	27.3	94.6
1989	75.6	26.5	102.1
1990	88.3	28.1	116.4
1991	79.7	34.3	114.0
1992	78.7	34.0	112.7
1993	75.9	34.9	110.8
1994	73.8	37.4	111.2
1995	76.5	38.2	114.7
1996	84.7	38.4	123.1
1997	83.9	39.5	123.4
1998	67.3	38.6	105.9
1999	78.1	38.4	116.5
2000	110.6	40.4	151.0
2001	103.2	42.9	146.1
2002	94.7	41.1	135.8
2003	115.6	43.5	159.1
2004	143.5	44.5	188.0

Source: Energy Information Administration. Pump price quoted for unleaded regular.

## WORLD CRUDE OIL RESERVES

(mill. bbls.)	United States	Canada	Latin America	Middle East	Africa	Asia Pacific	Western Europe	Eastern Europe & FSU	Total World
1988	27,256	6,786	121,951	571,519	56,964	21,367	18,557	83,800	907,768
1989	26,825	6,133	125,027	660,247	58,387	22,545	18,822	84,100	1,002,213
1990	26,501	5,783	121,091	662,598	59,892	50,242	14,476	58,855	999,113
1991	26,254	5,588	119,765	661,571	60,488	44,073	14,503	58,774	991,011
1992	24,682	5,292	123,811	661,791	61,872	44,572	15,829	59,193	997,042
1993	23,745	5,096	124,996	662,866	61,963	44,647	16,643	59,168	999,124
1994	22,957	5,096	129,073	660,295	62,177	44,453	16,572	59,196	999,319
1995	22,457	4,898	128,695	659,555	73,154	43,953	15,573	59,188	1,007,475
1996	22,351	4,893	127,943	676,352	67,555	42,299	18,361	59,093	1,018,849
1997	22,017	4,839	126,115	676,952	70,062	42,275	18,128	59,101	1,019,545
1998	22,546	4,931	136,867	673,647	75,442	43,013	18,719	59,053	1,034,265
1999	21,034	4,931	117,931	675,636	74,890	43,985	18,611	59,024	1,016,041
2000	21,765	4,706	122,809	683,516	74,889	43,957	17,185	59,024	1,027,852
2001	22,045	4,858	122,912	685,592	76,677	43,779	17,135	58,555	1,031,553
2002	22,446	180,021	111,173	685,642	77,429	38,712	18,098	79,360	1,212,881
2003	22,677	178,893	114,522	726,842	87,043	38,258	18,233	79,343	1,265,812
2004	21,891	178,800	115,195	729,341	100,784	36,246	16,102	79,343	1,277,702

Source: Oil & Gas Journal. Estimated proved reserves as of 1/1 of stated year. Totals may not add due to rounding. Canadian reserves include oil sands after 2001.

# WHOLESALE PRICES —TOTAL U.S.

Year	Motor Gasoline	Kerosene	Fuel Oil		Average Of Four Products	Crude Oil
			Distillate (¢/gal.)	Residual		
1949	10.71	9.11	7.72	3.31	7.96	3.34
1950	10.86	9.39	7.97	3.98	8.29	3.48
1951	11.40	9.85	8.50	4.42	8.79	3.69
1952	11.38	9.90	8.52	3.84	8.62	3.62
1953	12.01	10.23	8.83	3.73	8.96	3.76
1954	11.66	10.40	8.94	3.97	8.88	3.73
1955	11.62	10.53	9.08	4.53	9.06	3.81
1956	11.75	10.99	9.45	5.30	9.43	3.96
1957	12.34	11.54	10.05	6.15	10.10	4.24
1958	11.74	10.96	9.39	4.82	9.27	3.89
1959	11.64	11.26	9.31	4.79	9.22	3.87
1960	11.61	11.17	8.79	4.88	9.15	3.84
1961	11.62	11.49	9.10	4.85	9.21	3.87
1962	11.52	11.42	9.11	4.78	9.13	3.84
1963	11.35	11.51	9.18	4.61	9.01	3.79
1964	11.27	10.93	8.65	4.50	8.83	3.71
1965	11.52	11.28	9.04	4.81	9.12	3.83
1966	11.59	11.49	9.09	4.73	9.15	3.84
1967	11.84	11.96	9.71	4.53	9.33	3.92
1968	11.55	12.03	9.84	4.30	9.14	3.84
1969	11.80	11.98	10.06	4.20	9.27	3.89
1970	12.33	12.43	10.45	6.14	10.20	4.28
1971	12.70	12.90	10.75	7.76	10.94	4.59
1972	12.70	12.87	10.61	7.60	10.87	4.57
1973	14.72	14.08	12.61	8.45	12.49	5.25
1974	25.53	24.02	22.57	20.43	23.48	9.86
1975	30.27	27.41	26.09	22.03	27.03	11.35
1976	33.82	31.67	30.38	21.66	29.55	12.41
1977	36.99	35.81	34.41	25.87	33.21	13.95
1978	39.22	37.23	35.66	23.00	33.72	14.16
1979	56.84	56.60	54.47	33.63	49.50	20.79
1980	87.40	80.26	78.21	44.43	72.77	30.56
1981	101.63	101.03	97.20	61.17	88.75	37.28
1982	94.56	97.18	91.95	57.80	83.27	34.97
1983	86.97	85.12	80.05	57.30	76.94	32.31
1984	81.14	84.75	79.62	59.14	74.49	31.29
1985	81.11	81.69	76.66	56.41	73.06	30.69
1986	47.74	49.92	44.91	36.23	43.97	18.47
1987	53.22	56.75	52.25	45.36	50.89	21.37
1988	50.31	50.72	46.10	38.72	46.22	19.41
1989	59.15	60.78	56.02	40.87	53.28	22.38
1990	72.13	73.37	67.82	50.99	65.20	27.38
1991	64.24	64.79	59.81	40.94	56.61	23.78
1992	60.90	62.78	58.12	41.67	54.81	23.02
1993	54.85	59.98	55.54	40.22	50.82	21.34
1994	52.95	57.67	53.22	42.50	50.09	21.04
1995	55.51	58.15	53.74	47.41	51.63	21.68
1996	68.29	74.02	69.64	53.78	64.43	27.06
1997	66.21	62.26	66.81	54.69	62.19	26.12
1998	52.60	45.00	43.90	28.00	42.38	17.80
1999	64.50	53.00	53.60	35.40	51.63	21.68
2000	96.30	88.00	89.60	56.60	82.63	34.70
2001	88.60	76.30	77.90	47.60	72.60	30.49
2002	82.80	71.60	71.80	53.00	69.80	29.32
2003	100.20	87.10	88.20	66.10	85.40	35.87
2004	128.80	120.80	117.80	68.10	108.88	45.73

WHOLESALE PRICES —TOTAL U.S.

Sources: Petroleum product prices derived by IPAA from Platt's Oilgram Price Report thru 1997. EIA prices used thereafter. Crude oil wellhead prices from EIA.

Notes: Data reflect price trends only, not actual sale prices. Motor gasoline prices represent leaded fuel prior to 1982, and unleaded thereafter.



# PETROLEUM CONSUMPTION

(thous. bbls.)	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Alabama	103,390	100,639	98,274	97,241	101,611	105,406	103,910	108,095	107,095	117,119
Alaska	41,670	42,786	45,261	45,649	48,552	48,500	51,099	48,702	50,009	58,867
Arizona	75,875	81,317	81,261	87,983	92,935	94,579	95,680	97,769	99,291	103,623
Arkansas	57,665	62,745	65,351	65,207	71,602	73,060	70,015	70,070	69,633	71,732
California	609,415	618,122	604,830	609,758	628,524	654,112	651,731	685,789	701,237	693,074
Colorado	70,893	73,818	70,080	74,975	77,778	83,476	86,885	83,287	86,741	93,698
Connecticut	66,808	75,802	80,280	78,783	83,228	81,151	76,646	70,840	79,816	86,141
Delaware	23,824	26,883	25,028	25,248	25,814	24,891	26,713	26,096	26,632	25,485
Dist.of Columbia	6,744	6,396	6,267	6,724	6,130	6,337	6,134	6,149	5,437	5,629
Florida	292,505	300,686	309,508	339,890	341,362	354,199	352,669	345,386	351,431	382,670
Georgia	177,732	185,265	179,323	183,296	192,580	193,720	192,955	192,533	196,136	206,244
Hawaii	43,842	41,631	39,824	40,484	39,662	40,591	41,479	45,068	46,963	49,029
Idaho	25,702	28,039	26,627	27,584	29,972	30,696	28,578	29,112	25,649	28,765
Illinois	230,037	230,933	232,810	228,573	250,646	248,628	243,014	237,656	243,226	255,110
Indiana	153,751	156,103	157,267	156,411	161,861	164,515	150,466	160,416	165,462	162,202
Iowa	73,427	73,092	72,316	78,771	82,807	82,417	78,835	82,437	76,383	86,508
Kansas	65,938	72,932	75,565	75,831	86,611	79,323	73,689	71,131	83,780	81,806
Kentucky	110,111	116,415	125,702	127,531	132,718	130,234	119,295	129,898	122,678	134,185
Louisiana	288,998	279,292	258,290	248,094	278,926	327,692	325,828	331,522	300,899	310,492
Maine	43,303	45,747	46,522	46,052	48,077	47,149	40,701	41,273	47,265	46,587
Maryland	89,946	93,695	95,120	100,429	105,106	101,866	102,564	99,385	103,326	106,722
Massachusetts	123,401	126,352	134,659	137,959	133,657	138,235	135,404	130,777	133,135	135,480
Michigan	185,790	192,519	196,961	197,388	207,974	201,530	194,018	198,111	193,377	197,383
Minnesota	112,256	118,003	117,226	116,510	122,119	125,610	124,959	126,254	129,168	133,020
Mississippi	8,013	9,225	10,813	9,191	8,428	10,695	9,924	10,059	10,902	10,233
Missouri	128,304	133,107	132,186	139,276	145,135	128,556	135,400	136,932	138,941	140,107
Montana	27,909	29,857	28,413	28,137	30,428	29,617	30,351	29,980	29,502	33,710
Nebraska	39,475	43,386	42,966	45,365	45,930	42,038	41,046	42,903	43,344	44,485
Nevada	37,837	40,842	39,336	40,738	41,930	43,448	45,888	43,814	44,357	48,281
New Hampshire	27,932	31,045	31,881	33,503	34,498	34,037	31,112	32,791	36,597	37,718
New Jersey	224,956	212,526	215,999	212,477	221,494	226,613	232,172	229,503	222,939	229,832
New Mexico	40,928	40,691	43,283	45,322	47,562	45,755	45,322	45,756	46,071	47,841
New York	267,776	290,751	284,727	290,795	294,830	309,082	296,976	287,088	318,783	337,058
North Carolina	156,262	169,977	172,865	174,057	173,019	181,175	176,922	173,171	177,501	185,534
North Dakota	21,047	22,015	22,270	20,844	22,850	22,538	26,430	23,330	22,621	24,966
Ohio	217,205	228,865	233,452	231,500	245,017	242,189	238,414	242,797	250,195	251,195
Oklahoma	80,453	86,011	85,802	86,696	93,533	95,380	106,386	101,616	99,596	98,282
Oregon	66,170	66,658	65,411	70,478	71,845	69,917	67,413	69,518	67,350	70,727
Pennsylvania	242,044	239,866	242,913	248,368	248,237	259,680	264,418	260,212	267,291	276,071
Rhode Island	17,882	17,647	18,599	17,648	17,876	17,815	18,283	18,034	18,620	18,082
South Carolina	79,427	76,094	81,977	84,222	84,747	87,883	93,151	93,224	95,674	109,547
South Dakota	21,082	22,008	21,263	20,896	21,385	22,057	20,948	22,674	21,349	21,618
Tennessee	121,560	118,978	119,814	125,410	129,343	130,828	135,334	141,362	143,528	146,785
Texas	985,141	1,074,126	1,150,568	1,163,631	1,153,529	1,125,559	1,113,025	1,149,987	1,159,943	1,198,370
Utah	41,718	44,628	44,526	45,446	46,806	49,179	48,167	47,607	49,897	50,625
Vermont	15,121	15,882	16,073	15,650	15,732	16,613	16,984	16,166	16,311	17,899
Virginia	141,765	146,082	152,118	153,700	156,669	164,572	168,851	164,216	177,102	189,701
Washington	147,318	146,987	148,570	148,493	153,248	152,852	154,038	147,372	142,921	151,107
West Virginia	49,482	35,699	38,507	40,525	38,772	39,157	47,207	49,247	46,744	51,436
Wisconsin	99,467	114,590	115,551	117,990	126,066	124,943	116,269	117,589	112,226	118,273
Wyoming	23,693	24,229	23,397	23,010	26,294	26,188	28,898	27,817	28,911	28,403
Total U.S.	6,188,524	6,354,496	6,446,254	6,539,197	6,742,611	6,824,941	6,764,211	6,819,978	6,907,848	7,145,971

Source: Energy Information Administration.

# NATURAL GAS CONSUMPTION

(MMcf)	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Alabama	287,239	293,084	324,158	329,134	337,270	353,614	332,693	379,343	350,345	382,367
Alaska	430,000	448,000	425,393	434,871	422,816	427,288	408,960	419,131	414,234	406,319
Arizona	101,731	103,037	134,706	158,355	165,076	205,235	240,812	250,734	272,921	349,622
Arkansas	240,071	252,585	260,113	266,485	252,853	251,329	227,943	242,325	246,916	215,124
California	1,839,721	1,721,217	2,146,211	2,309,883	2,339,521	2,508,797	2,464,565	2,273,193	2,269,405	2,406,889
Colorado	247,180	269,006	314,486	330,259	333,085	367,920	463,738	459,397	436,253	440,378
Connecticut	131,130	126,488	144,708	131,497	152,237	159,712	146,278	177,587	154,075	162,642
Delaware	60,658	54,020	46,511	40,809	56,013	48,387	50,113	52,216	46,177	48,057
Dist.of Columbia	32,735	33,644	34,105	30,409	32,281	33,468	29,802	32,898	32,814	32,227
Florida	507,329	478,471	522,116	503,844	559,366	541,847	543,143	689,337	689,986	734,178
Georgia	362,734	374,882	371,376	368,579	337,576	413,845	351,109	383,546	379,761	394,986
Hawaii	2,773	2,672	2,894	2,654	3,115	2,841	2,818	2,734	2,732	2,774
Idaho	57,407	61,058	68,669	69,277	70,672	72,697	80,279	71,481	69,868	75,335
Illinois	1,065,238	1,104,972	1,077,139	957,254	1,004,281	1,030,604	951,616	1,049,878	998,486	953,207
Indiana	527,719	561,056	556,624	521,748	556,932	570,558	501,711	539,034	527,037	526,701
Iowa	251,262	260,140	254,489	232,057	230,691	232,565	224,336	226,457	230,161	226,819
Kansas	286,430	275,508	338,231	326,674	302,932	312,369	272,500	304,992	281,346	256,779
Kentucky	196,392	207,529	227,931	205,129	218,399	225,168	208,974	227,920	223,226	225,470
Louisiana	1,443,515	1,382,966	1,661,061	1,569,190	1,495,478	1,536,725	1,219,013	1,341,444	1,233,505	1,281,428
Maine	5,333	5,722	6,290	5,716	6,572	44,779	95,733	101,536	70,832	72,565
Maryland	191,272	189,901	212,017	188,552	196,350	212,133	178,376	196,276	197,024	194,725
Massachusetts	360,429	355,609	402,629	358,846	344,790	343,314	349,103	393,194	403,991	372,532
Michigan	936,466	980,555	994,342	876,444	951,143	963,136	906,001	966,354	924,819	916,629
Minnesota	333,900	348,671	354,092	330,513	344,591	362,025	340,911	371,583	371,261	359,898
Mississippi	242,887	216,524	255,475	241,342	306,733	300,652	332,589	343,890	265,842	282,051
Missouri	271,956	286,814	283,294	258,652	265,798	284,763	283,793	275,629	262,529	263,945
Montana	51,660	55,584	59,851	59,840	62,129	67,955	65,051	69,532	68,473	66,829
Nebraska	132,923	128,297	132,221	130,730	121,487	126,962	121,984	120,333	118,922	115,011
Nevada	110,273	122,449	132,128	148,539	154,689	189,170	176,835	176,596	185,846	214,984
New Hampshire	19,877	19,031	20,848	19,127	20,313	24,950	23,398	24,901	54,147	61,172
New Jersey	588,315	599,810	717,011	679,619	715,630	605,275	564,923	598,602	612,890	620,806
New Mexico	105,796	113,059	256,464	245,823	236,264	266,469	266,283	235,098	221,021	223,575
New York	1,131,325	1,121,742	1,324,164	1,232,473	1,274,162	1,244,746	1,171,898	1,199,632	1,101,618	1,098,056
North Carolina	196,626	205,783	215,634	214,092	217,159	233,714	207,108	235,376	218,642	224,796
North Dakota	29,371	32,670	56,179	49,541	56,418	56,528	60,819	66,726	60,907	59,986
Ohio	877,112	915,035	897,693	811,389	841,966	890,962	804,243	830,955	848,388	825,753
Oklahoma	456,674	460,373	567,050	575,855	538,329	538,563	491,458	508,298	540,103	538,576
Oregon	138,545	160,626	185,069	229,403	235,009	224,888	229,665	202,164	212,556	234,997
Pennsylvania	680,495	684,022	706,230	644,017	688,740	702,847	634,794	675,583	689,992	696,175
Rhode Island	69,520	82,041	117,707	130,751	118,001	88,419	95,607	87,805	78,456	72,609
South Carolina	148,980	146,434	153,917	159,458	162,926	160,436	141,785	184,803	146,641	163,787
South Dakota	31,164	33,594	36,115	33,042	35,794	37,939	37,077	41,577	43,881	41,679
Tennessee	239,100	256,053	282,395	279,070	278,841	270,658	255,990	255,515	257,315	231,133
Texas	3,387,065	3,585,201	4,116,722	4,205,459	4,009,689	4,421,777	4,252,152	4,303,831	4,050,632	3,908,243
Utah	126,981	129,651	165,253	169,776	159,889	164,557	159,299	163,379	154,125	155,891
Vermont	7,268	7,325	8,061	7,735	8,033	10,426	7,919	8,367	8,400	8,685
Virginia	239,616	230,140	248,960	260,332	276,793	268,770	237,853	258,202	262,970	277,434
Washington	211,791	231,767	256,366	290,229	287,302	286,653	312,114	233,716	249,599	262,485
West Virginia	113,908	115,622	159,504	142,860	139,961	147,854	141,090	146,455	126,986	122,267
Wisconsin	376,291	398,581	400,651	368,022	380,560	393,601	359,784	385,310	394,711	383,316
Wyoming	70,986	73,609	100,950	109,188	96,726	101,314	98,569	112,872	115,358	107,060
Total U.S.	22,206,889	22,609,080	22,737,342	22,245,956	22,405,151	23,333,121	22,238,624	23,007,017	22,276,502	22,388,975

NATURAL GAS CONSUMPTION

Source: Energy Information Administration. Volumes delivered to consumers.

# INDUSTRY EMPLOYMENT-2004

State	Mining	Refining		Transportation			Wholesale	Retail	Total
	Oil & Gas Extraction	Petroleum Refining	Oils & Greases	Pipelines, Except Gas	Pipeline Construction	Gas Distribution	Petroleum Products	Gasoline Stations	Industry
Alabama	1,500	343	657	83	1,137	2,261	3,712	19,370	29,063
Alaska	8,280	ND	375	ND	459	ND	1,426	1,762	12,302
Arizona	244	ND	228	303	645	172	1,904	16,273	19,769
Arkansas	1,988	463	212	194	486	1,599	2,290	13,093	20,325
California	15,273	12,873	734	767	5,093	33,467	4,889	55,956	129,052
Colorado	9,956	532	65	52	2,049	2,043	2,124	13,179	30,000
Connecticut	32	ND	ND	177	251	1,178	4,970	6,302	12,910
Delaware	41	ND	ND	0	ND	ND	788	2,679	3,508
Dist. of Columbia	ND	ND	ND	ND	ND	ND	0	545	545
Florida	1,466	86	332	251	713	1,580	6,670	39,228	50,326
Georgia	220	119	193	292	1,735	1,879	4,718	28,463	37,619
Hawaii	ND	ND	0	0	38	ND	386	2,834	3,258
Idaho	70	ND	ND	ND	238	ND	727	5,004	6,039
Illinois	2,257	3,000	1,643	416	1,165	5,769	5,693	26,889	46,832
Indiana	283	ND	407	252	940	2,090	3,711	25,004	32,687
Iowa	12	ND	ND	129	277	844	1,875	18,336	21,473
Kansas	6,117	1,215	225	936	917	1,827	2,034	10,905	24,176
Kentucky	1,846	ND	425	58	565	1,780	3,309	20,572	28,555
Louisiana	40,646	9,098	740	559	13,058	3,131	4,087	19,080	90,399
Maine		0	394	ND	37	63	754	7,709	8,957
Maryland	174	50	ND	ND	728	704	3,462	11,313	16,431
Massachusetts	224	ND	ND	117	512	2,667	7,670	12,348	23,538
Michigan	2,363	ND	898	148	1,160	4,134	5,282	25,781	39,766
Minnesota	143	ND	ND	139	480	1,937	3,242	24,622	30,563
Mississippi	3,865	1,553	145	254	640	1,281	2,487	15,821	26,046
Missouri	89	ND	443	130	410	3,375	3,909	25,247	33,603
Montana	1,948	881	12	98	358	575	1,014	5,091	9,977
Nebraska	245	ND	9	168	155	1,789	1,219	9,156	12,741
Nevada	88	74	103	ND	914	ND	774	8,420	10,373
New Hampshire	49	0	167	ND	ND	158	2,487	5,247	8,108
New Jersey	421	1,970	545	153	978	4,347	7,263	13,948	29,625
New Mexico	11,339	ND	701	101	1,716	1,342	1,866	7,765	24,830
New York	804	55	433	319	1,563	3,825	15,794	29,397	52,190
North Carolina	580	ND	1,105	ND	1,140	2,202	7,344	28,181	40,552
North Dakota	1,632	ND	ND	72	61	168	1,744	3,974	7,651
Ohio	4,583	1,385	741	562	1,776	3,960	5,873	35,860	54,740
Oklahoma	29,277	1,273	452	701	1,437	5,002	3,560	12,869	54,571
Oregon	23	ND	420	ND	395	ND	1,900	11,366	14,104
Pennsylvania	4,099	2,391	2,296	517	1,934	5,187	12,436	35,711	64,571
Rhode Island	ND	ND	57	40	72	ND	1,593	2,079	3,841
South Carolina	207	ND	255	65	292	934	2,473	17,734	21,960
South Dakota	24	ND	ND	61	79	227	1,311	5,860	7,562
Tennessee	535	ND	1,096	6	734	2,326	4,163	24,423	33,283
Texas	145,390	21,015	640	3,285	15,392	15,971	16,053	68,832	286,578
Utah	1,687	748	15	36	386	1,154	894	9,696	14,616
Vermont	13	0	0	0	0	0	1,824	3,896	5,733
Virginia	830	ND	737	400	1,619	1,640	5,377	33,902	44,505
Washington	174	1,771	90	159	1,014	1,243	3,032	14,738	22,221
West Virginia	3,638	301	639	1,513	727	1,023	1,110	9,237	18,188
Wisconsin	84	ND	125	138	444	978	4,001	23,284	29,054
Wyoming	12,314	855	909	211	1,888	541	676	4,235	21,629
<b>Total U.S.</b>	<b>317,073</b>	<b>62,051</b>	<b>19,663</b>	<b>13,862</b>	<b>68,807</b>	<b>128,373</b>	<b>187,900</b>	<b>873,216</b>	<b>1,670,945</b>

Source: State Agencies & Bureau of Labor Statistics Note: Reported data only. N.A.I.C. codes used. ND - Non-Disclosure or not available = not included in Total.

Note: State data differ from the Bureau of Labor Statistics national averages (Total US) due to confidentiality rules

## Data Sources & Notes

The editorial staff gratefully acknowledges the following sources of data that appear on the individual state pages.

State maps .....	Cartesia Software, IHS & IPAA Surveys
First and peak production years.....	AIME Statistical Yearbook, World Oil, Oil & Gas Journal, & World Petroleum Report (Note: Marketed production)
Deepest wells drilled.....	IHS & State Data
Cumulative wells drilled .....	IHS & State Data
Cumulative wellhead value.....	IPAA
Cumulative production (marketed) and reserves (dry) .....	Energy Information Administration & IHS
Wellhead prices and value .....	EIA, IPAA, State Data
End-use natural gas prices .....	EIA
Severance and production taxes.....	IPAA survey
Wells and footage drilled .....	API, IHS & State Data
Rotary drilling rigs .....	Baker Hughes, Inc.
Producing wells .....	IHS & State Data
Oil and gas production.....	EIA & IHS
Number of employees .....	IPAA survey & BLS
Petroleum reserve position.....	EIA
Lease and Royalties .....	Minerals Management Service
Marginal wells and Abandonments....	IHS & IOGCC
Federal Leases and Royalties.....	Department of Interior and Minerals Management Service

## Abbreviations

bbl.	= barrel
b/d	= barrels per day
Mcf	= thousand cubic feet
MMcf	= million cubic feet
Bcf	= billion cubic feet
Tcf	= trillion cubic feet
BT	= British Thermal Unit
NGL	= Natural Gas Liquid
LPG	= Liquefied Petroleum Gases
NA	= Data Not Available
ND	= Not Disclosable

## Energy Conversions

### One barrel of crude oil:

= 42 gallons
= 5,800,000 BTU of energy
= 5,614 cubic feet of natural gas
= 0.22 ton of bituminous coal

### One cubic foot of natural gas:

= 7.48 gallons
= 1,030 BTU of energy
= 0.000178 barrel of crude oil
= 0.00004 ton of bituminous coal

### One short ton of bituminous coal:

= 2,000 pounds
= 26,200,000 BTU of energy
= 4.52 barrels of crude oil
= 25,314 cubic feet of natural gas

### One metric ton of crude oil:

= 2,204 pounds
= 7.46 barrels of domestic crude oil
= 6.99 barrels of foreign crude oil

### One cubic meter of natural gas:

= 35.314 cubic feet
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## GLOSSARY

**Abandonments** - The number of producing wells that have been abandoned during a given time period.

**Artificial Lifting** - Any method used to stimulate the production of crude oil and/or natural gas in excess of the flow resulting under natural reservoir pressures, e.g. pumping, secondary or tertiary recovery.

**Associated Gas** - The combined volume of natural gas which occurs in crude oil reservoirs either as free gas (associated) or as gas in solution with crude oil (dissolved).

**Barrel** - Standard volumetric measure for petroleum, equivalent to 42 U.S. gallons.

**Condensate** - A mixture of liquid hydrocarbons at atmospheric conditions which occur in a gaseous state underground, sometimes known as distillate or natural gasoline.

**Crude Oil** - Hydrocarbons in liquid unprocessed form that vary significantly in properties such as API gravity, viscosity, and sulfur content.

**Development Well** - A crude oil, natural gas or dry hole drilled within an area known to be productive.

**Distillate Fuel Oil** - One of the petroleum fractions produced by conventional distillate, includes fuel oil and diesel fuel.

**Dry Hole** - A completed well which is not productive of crude oil and/or natural gas in commercial quantities.

**Dry Natural Gas** - Natural gas that does not contain dissolved liquid hydrocarbons.

**Exploratory Well** - A crude oil, natural gas, or dry hole drilled to discover a petroleum formation or its limits.

**Gas Well** - An exploratory or development well completed for the production of natural gas.

**Liquefied Petroleum Gas (LPG)** - Butane, propane, and other light products separated from natural gasoline or crude oil by fractionation or other processes. At atmospheric pressure, it reverts to the gaseous state.

**Marginal Well** - A producing well which pumps or "strips" less than 10 barrels of crude oil or 60 Mcf of natural gas per day.

**Marginal Well Reserves** - The estimated amount of additional crude oil or natural gas which can be recovered by primary means or secondary recovery methods.

**Middle Distillates** - A general classification of petroleum products that includes distillate fuel oil and kerosene.

**Natural Gas** - Hydrocarbons in gaseous form or mixed with crude oil.

**Natural Gas Liquids (NGL)** - Hydrocarbons found with natural gas that are recoverable by condensation or absorption, such as LPG or natural gasoline.

**Non-associated Gas** - Natural gas not in contact with significant quantities of crude oil in a reservoir.

**Oil Well** - An exploratory or development well completed for the production of crude oil.

**Petroleum** - Includes in its broadest sense the entire spectrum of hydrocarbons - gaseous, liquid, and solid.

**Pipeline** - A line of tubes with pumping machinery that transports crude oil or natural gas from the wellhead to the storage tank or petroleum refinery.

**Proved Reserves** - The estimated quantity of crude oil, natural gas, or NGL that is shown with reasonable certainty to be recoverable from known fields under existing economic and operating conditions.

**Residual Fuel Oil** - The heavy, high-viscosity leftover from the refining process, used mainly for industrial purposes.

**Rotary Drilling Rig** - A derrick equipped with modern rotary equipment capable of drilling a bore hole with a bit attached to a rotating column of steel pipe, in contrast to a cable tool rig which drills on the percussion principle.

**Seismic Exploration Activity** - The search for geological structures which are potential petroleum-bearing formations by interpreting data from seismic shocks.

**Severance Tax** - A tax levied by some states on each barrel of crude oil or each thousand cubic feet of natural gas produced.

**Strategic Petroleum Reserve** - Crude oil inventories held in government underground storage for use during periods of supply interruptions.

**Stratigraphic Test** - A hole drilled to gather information about a stratigraphic formation such as the general permeability and porosity of the rocks; includes core tests.

**Well** - A hole drilled to find or produce hydrocarbons, or to provide services related to their production.

**Wet Natural Gas** - Volumes of natural gas remaining after removal of lease condensate, and after exclusion of nonhydrocarbon gases where they occur in sufficient quantity to render the gas unmarketable.

**Wildcat Well** - A type of exploratory well drilled in an unproven area where there has been no previous production.



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