



2011-2012 IPAA Oil & Gas Producing Industry in Your State



Over the next ten years,
America's **independent** oil and natural gas producers
will generate almost **\$1 trillion** in government revenue
and help create nearly **one million jobs**.

It's an incredible story.

And we're making sure it's told.



IPAA

INDEPENDENT PETROLEUM
ASSOCIATION OF AMERICA

the **national** voice of American oil and natural gas

Join IPAA today - 202.857.4722

www.IPAA.org



1201 15th St NW, Suite 300
Washington, DC 20005
(202) 857-4722 Fax: (202) 857-4799
www.ipaa.org

Chairman
Virginia "Gigi" Lazenby

Vice Chairman
Michael D. Walford

Treasurer
Diemer True

Immediate Past Chairman
Bruce Vincent

President & CEO
Barry Russell

GOVERNMENT RELATIONS
Vice President of Government Relations
Lee O. Fuller

Vice President of Federal Resources & Political Affairs
Dan Naatz

Vice President of Crude Oil & Natural Gas
Regulatory Affairs
Susan Ginsberg

Manager of Government Relations
Ryan Ullman

Manager of Government Relations
Matthew Kellogg

Manager of Government Relations
Kristen Lingley

Western Regional Representative
Cortney Hazen

BUSINESS DEVELOPMENT, CAPITAL
MARKETS AND MEMBERSHIP

Vice President of Business Development, Capital Markets
and Membership
Bob Jarvis

ECONOMICS & ANALYSIS
Vice President of Economics & International Affairs
Frederick Lawrence

MEETINGS
Vice President of Meetings
Tina Hamlin

Director of Meetings
Kim Egan

Director of Meetings
Nikki McDermott

Meetings Manager
Taryn Peine

Meetings & Database Manager
Jennifer U. Bradley

Assistant/Registrar of Meetings
Brittany Green

COMMUNICATIONS
Vice President of Public Affairs & Communications
Jeff Eshelman

Director of Public Affairs
Nicole Daigle

Director of Communications
Brendan Bradley

Manager of Public and Industry Affairs
Julia Bell

EDUCATIONAL CENTER
Director of Education
Anne Ford

Associate Director
Jessica Thomas

Associate Director
Sarah Hewitt

ADMINISTRATION
Vice President of Administration and Member Services
Therese McCafferty

Director of Member Services
LuAnne Tyler

Office Manager
Vanessa Johnson

Director of Information Technology and Webmaster
Kirk Friedman

Receptionist and Membership Assistant
Kathleen Burke

Senior Accounting Associate
Josh Compton

THE OIL & GAS PRODUCING INDUSTRY IN YOUR STATE

The Year in Review

Perspective 2010: Is the U.S. on the Verge of a Game-Changer in Oil?	3
New Content and Methodology	6

Chart Summary

Drilling Trends	25
Employment Trends	26
Royalties and Severance Taxes	27
Marginal Wells in the U.S.	28

Statistical Summary

State Rankings	21
Top Producing Congressional Districts ...	22
Crude Oil Summary	29
Natural Gas Summary	30
Drilling Summary	31

State Statistics

United States	34
Federal Offshore	36
Alabama	38
Alaska	40
Arizona	42
Arkansas	44
California	46
Colorado	48
Florida	50
Illinois	52
Indiana	54
Kansas	56
Kentucky	58
Louisiana	60
Maryland	62
Michigan	64
Mississippi	66
Missouri	68
Montana	70
Nebraska	72
Nevada	74
New Mexico	76
New York	78
North Dakota	80
Ohio	82
Oklahoma	84
Oregon	86
Pennsylvania	88
South Dakota	90
Tennessee	92
Texas	94
Utah	96
Virginia	98
West Virginia	100
Wyoming	102

Exploration and Drilling

Rotary Rigs Operating	104
New-Field Wildcat Wells Drilled	105
Exploratory Wells Drilled	106
Development Wells Drilled	107
Total Wells Drilled	108
Vertical Wells Drilled	120
Directional Wells Drilled	121
Horizontal Wells Drilled	122

Production

Producing Crude Oil Wells	109
Producing Natural Gas Wells	110
Crude Oil Production	111
Natural Gas Production	112

Marginal Wells

Producing Oil Marginal Wells	113
Marginal Oil Well Production	114
Producing Marginal Gas Wells	115
Marginal Gas Production	116
Abandonments and Well Summary	120

Financial

Cost-Drilling & Equipping Wells	117
Crude Oil Revenues	118
Natural Gas Revenues	119
Severance & Production Taxes	121

Prices

Crude Oil Wellhead Prices	122
Natural Gas Wellhead Prices	123
Refiner Acquisition Cost of Crude Oil	124
Retail Gasoline Prices	124
Wholesale Prices - Total U.S.	125

Consumption

Energy Consumption by State	128
Petroleum Consumption	126
Natural Gas Consumption	127

Miscellaneous

Emerging Shale Plays	32
2010 Key Trends for Shale Plays	33
World Crude Oil Reserves	124
Industry Employment - 2010	129

Reference Information

Abbreviations/Conversions	131
Additional Energy Education & Employment Resources	17
Cooperating Oil & Gas Associations	10
Data Sources	131
Glossary	132
Oil and Gas Museums	18
State Education Programs	13
State Energy Contacts	7
Federal Organizations	8
Young Professionals in Energy	16

Image: Concho Resources, Inc. operations in the Permian Basin. Photo provided by Wayne Stratton

THE OIL & GAS PRODUCING INDUSTRY IN YOUR STATE

Vol. 81

Editor: Frederick J. Lawrence

The Oil & Natural Gas Producing Industry In Your State is published each year as the special statistical issue of America's Independent, official magazine of the Independent Petroleum Association of America, (IPAA).

Roustabout and corporate members of IPAA receive one free copy of this issue; additional copies or regular member copies are available for \$25 each. Non-members of IPAA are charged \$75 per copy. Complimentary subscribers are entitled to one free issue; additional copies cost \$25 each.

IPAA offers the following publications as part of its Economic Reports:

The Oil & Natural Gas Producing Industry In Your State (annual)
U.S. Petroleum Statistics (annual)
2009 Profile of Independent Producers
Industry Fact Sheets (periodically)
International Primer (first edition & supplements)
International Taxation Primer
IPAA International Activity Survey

IPAA Members may receive all the above reports on a regular basis by paying \$75 per year. Non-members of IPAA may subscribe to the reports listed above for \$400 per year. Reports also may be purchased on an individual basis.

To subscribe or inquire about any of IPAA's Economic Reports, contact:

Independent Petroleum Association of America
Economics & Analysis Department (flawrence@ipaa.org)
1201 15th St., N.W., Suite 300
Washington, D.C. 20005
Phone: 202-857-4722
Fax: 202-857-0444
www.ipaa.org

THE YEAR IN REVIEW: INTRODUCTION TO 2010 O&NG IN YOUR STATE

Perspective 2010: Is the U.S. on the Verge of a Game-Changer in Oil?

Written by: Pete Stark, Ph.D., IHS Inc. & Frederick Lawrence, IPAA

Introduction

The period of 2009-2011 was a momentous one for the U.S. upstream as the shale phenomenon gained traction and proliferated from natural gas to oil. The U.S. petroleum industry was caught between euphoria over breakthroughs in the so-called 'shale gale' to deliver large volumes of oil and gas from domestic shale and tight reservoirs and anguish over the black eye to industry's credibility imparted by the April 20, 2010 blowout and fire on the Deepwater Horizon rig in the Gulf of Mexico. It is important to frame the events in 2010 by some of the noteworthy trends that juxtaposed the events in the onshore compared to those in the offshore.

Prior to the Deepwater Horizon accident the U.S. government announced that it would open parts of the offshore Atlantic continental margin and Eastern Gulf of Mexico to leasing and E&P activity. It looked as though a new period of goodwill between the federal government, the public and the petroleum industry had arrived. In response to the oil spill and damage to the Gulf of Mexico marine environment, however, a moratorium was placed on deepwater drilling and the opening of new areas for leasing on federal acreage was withdrawn. Moreover, public perception that the petroleum industry could safely develop an increasing share of U.S. energy supplies was severely damaged. After an almost year-long freeze, the Bureau of Ocean Energy Management (BOEM) issued the first permits to drill deepwater wells and the first post-spill deepwater exploration plan was approved near the end of March 2011. Prior to the moratorium, offshore Gulf of Mexico oil production had added 360 thousand barrels per day since 2007 and total production exceeded 1.64 Mmb/d.

The Onshore in Focus and Shift to Liquids

Onshore, on the other hand, the U.S. industry continued to demonstrate that the 'shale gale' was not a fluke. With respect to natural gas, U.S. lower 48 states dry gas production increased by 12 percent (+2.4 trillion cubic feet-Tcf) from 2007 through 2010 even though the number of gas well completions dropped by 50 percent and the price of natural gas dropped by almost 40 percent during this period. Records were set for both producing natural gas wells (490,185) and natural gas consumption (23,775 billion cubic feet) as the fuel continued to expand upon its base as one of our country's energy pillars. The natural gas trade balance also continued to improve as the Natural Gas Summary on page 30 illustrates with shale plays reducing natural gas imports while growing exports to a record high of 1,137 Bcf.

This phenomenon fortified the realization that the industry could deliver large volumes of clean, relatively low-cost gas for multiple decades ahead. An IHS study determined that the sweet spots in the major U.S. shale gas plays could deliver a 30 year supply of gas at costs of less than \$4.00 per thousand cubic feet (Mcf). This new supply potential constituted a huge plus for American energy security and economy. The 'shale gale' made a game-changing impact on U.S. natural gas reserves and near-term supplies with proven reserves growing by almost 12 percent and marketed production by 3.5 percent. The data on pages 129-130 show the growing role played by natural gas in U.S. energy demand for heating and cooling our homes and buildings, providing power generation, helping our manufacturing sector rebuild with reliable feedstock and even powering a growing fleet of natural gas vehicles.

A total of eight producing states established natural gas production (marketed) records in 2010, illustrating the wide breadth of shale's reach. From Colorado in the west to North Dakota in the north, the records pushed south to include Arkansas and then east to reach Indiana, Kentucky, West Virginia, Virginia and Pennsylvania. Upstream employment, based on available state data, grew almost three percent from 2009 to 2010 as the shale gale matured in both traditional and emerging energy-producing states.

Even though energy demand has improved along with the health of the U.S. economy the divergence between oil and natural gas prices continued throughout 2010. Oil prices (WTI spot) rose from \$71 to over \$91 per barrel in 2010 but natural gas prices languished around \$4 per Mcf. Monthly average wellhead prices for natural gas generally dropped from \$5.69 per Mcf (monthly high) in January 2010 to \$4.68 per Mcf in December with a monthly low of \$3.83 per Mcf in September. The disparity between oil and natural gas prices continued to drive a major shift away from gas drilling, which had dominated U.S. activity for the past 18 years, toward oil. The Baker Hughes rotary rig oil and gas split began the year at 35 percent oil and 64 percent natural gas and finished the year at 45 percent oil and 54 percent gas. IHS Upstream Statistics show that oil completions increased by 67 percent and exceeded gas well completions over the 12 months from March 2010 through March 2011. Total oil and natural gas liquids (NGL) production grew by almost four percent from 2009 levels and proven oil reserves reached a level (23.3 billion barrels) not seen since 1992.

But there is more than price behind this industry shift to oil. Thankfully, the same horizontal drilling and multi-staged hydraulic fracturing technologies that unlocked production from gas rich shales also proved successful in delivering high flow rates and recoveries of oil from tight fine grained reservoirs and oil rich shales. Based on IHS data, horizontal wells grew by almost 45 percent since 2009 and this edition includes detailed state drilling data on pages 120-122 to illustrate some of the key shifts taking place with drilling technology.

In addition to oil, the growth of NGLs rose in parallel as plays such as the Granite Wash (north Texas/western Oklahoma) and the Eagle Ford (south Texas) developed based on drilling and geoscience knowledge that delineated the more liquid-prone regions of the play. The Crude Oil Summary on page 29 shows NGL production reaching 2.07 Mmb/d thanks to the evolution of the gas and liquid plays as seen on pages 32-33. NGL production from the Cana Woodford (Oklahoma), DJ Basin Niobrara (Colorado/Wyoming), Eagle Ford, Granite Wash, and the Marcellus (Pennsylvania/West Virginia/Ohio/Virginia) will continue to drive much of the overall growth in output (led by the Eagle Ford and Granite Wash) and provide more feedstock for industry as well as for export. Clearly, the U.S. industry has transitioned into a new phase of the unconventional revolution. What does this mean for future U.S. oil supplies?

The Unconventional Revolution in Oil

Given the rise of tight oil on the heels of natural gas shale, this edition will delve into some of the history and highlights regarding this unique development. The unconventional revolution in oil has germinated since the late 1980's when operators tested the first horizontal wells in the Bakken at the Elkhorn Ranch field in North Dakota, the Cane Creek shale in the Paradox Basin (Utah/Colorado) and the Niobrara formation at the Silo field in southeastern Wyoming.

THE YEAR IN REVIEW: INTRODUCTION TO 2010 O&NG IN YOUR STATE

The modern surge was ignited during 2003 when operators established that horizontal wells could unlock commercial oil production from the middle Bakken dolomite at the Elm Coulee Field in Richland County, Montana.

The upside potential of 'shale oil' or specifically oil from tight fine grained reservoirs was firmly established during 2008 when the USGS estimated the technically recoverable undiscovered Bakken resource to be 3.65 billion barrels of oil (Bbo) plus 1.85 Tcf of gas. Correspondingly, operators rapidly expanded the Bakken play, including the underlying Three Forks limestone throughout the known oil generating window in the Williston Basin. Bakken oil production has expanded rapidly, increasing from about 100,000 b/d during 2007 to more than 400,000 b/d during 2010. IHS estimates that Bakken oil production could reach 800,000 b/d or more in the 2016-2018 time frame. This may not be the maximum production if recent estimates of 11 to 24 billion barrels of oil equivalent (Bboe) ultimate recovery for the overall Bakken play are correct. In the 2009-2010 Oil and Gas Producing Industry in Your State essay, it was noted that one company called the Bakken, Three Forks/Sanish play a 'game-changer.'

Following the success in the Bakken, operators began to pursue a wide variety of oil rich rocks that might yield commercial production from horizontal wells. These reservoirs are complex packages of source rocks and porous, permeable and fractured tight rocks that serve as reservoirs. Three primary play types characterize the unconventional revolution in oil: expansion of established gas plays, frontier oil plays and emerging plays.

Expansion of Established Natural Gas Plays

Barnett Combo Play: EOG Resources was one of the first operators to exploit this play type when it expanded the Barnett (northeast Texas) gas play to the north where the source rocks generate oil. The core Barnett Combo Play is not large – about 230 square miles with estimated recovery of 1.0 to 1.9 MMboe per square mile but the play could more than double in size. This is an example of a play where numerous vertical wells with long production histories evolved into one where horizontal wells are being utilized to search for oil and liquids.

Eagle Ford shale: Success in the liquids-rich gas trend of the Hawkville field stimulated operators to move updip into the Eagle Ford oil window. IHS estimated a 70 Tcfe resource including about 20 percent liquids (2.3 Bboe) in the gas part of the play. The central part of the Eagle Ford oil window embraces about 3,000 square miles over a 120 mile trend extending southwest from Gonzales County, TX and into the Maverick Basin. With estimated 1.14 MMboe recoverable per square mile the Eagle Ford could produce 3 to 5 Bboe from the oil window. Interest in this play picked up in late 2009 and early 2010 as oil prices strengthened and independents gathered more experience in the play. State data revealed a ten-fold increase in permit applications from 2009, numbering over 1,000, and the number of rigs in the play grew from 63 in January 2010 to over 230 by year-end 2011.

Frontier Oil Plays

Several additional frontier 'shale oil' plays were spawned from the Bakken success.

Niobrara Denver Basin: Some 5 million acres have been leased in the Niobrara oil play in the Denver Basin and drilling is expanding to prove the commercial extent of the commercial oil window. With estimated 20 to 30 MMboe in place per square mile and 580 Mboe to 1 MMboe recoverable per mile, the Niobrara play could yield 2 Bboe or more in the Den-

ver Basin. It appears that a substantial part of this play could underlie the large Wattenberg gas field (Colorado). The Niobrara also could yield additional oil in the Powder River Basin (northeastern Wyoming/southeastern Montana) where recent horizontal wells are promising.

Bone Spring – Avalon shale (Permian and Delaware Basins): The Permian Leonard Bone Spring play in the north part of the Delaware Basin (west Texas/southern New Mexico) targets oil from a thick sedimentary sequence where the porous Avalon sandstone and first, second and third Bone Spring sandstones serve as reservoirs that can be tapped with horizontal wells. Drilling results indicate that recoverable oil may average 750 Mboe to 860 Mboe per square mile with a mix of about 72 percent liquids and 28 percent gas. The geographic extent of the play and drilling templates have not yet been firmly established but the potential recovery could range from 3 Bboe to 5 Bboe.

Emerging Plays

Other frontier plays that await confirmation of commercial production include the upper Mississippian Heath shale in central Montana where early drilling results are promising and indicate the prospective trend could extend to the east. The Mowry shale has yielded marginal oil production from the Powder River and Big Horn Basins (Wyoming). There, independent operators are trying to find the key to establish commercial production with horizontal wells. A small but possible sleeper Cherokee/Atoka play in southeast Colorado could trigger a much broader play in the mid-continent region where these organic rich rocks are in the oil window.

Operators also are testing horizontal wells to unlock potentially huge additional oil recoveries from the complex Monterey formation in California. This could be a case where horizontal wells in tight parts of mature fields could yield the best results. The Lower Tuscaloosa marine shale in Mississippi and Louisiana is estimated to have 7 Bboe of potentially recoverable oil but efforts to date have failed to establish commercial production.

However, a new potential winner for the east is the emerging Ordovician Utica shale oil play along the Pennsylvania – Ohio border. Leasing has extended across most of the state borders where the Utica enters the up dip oil window westward from the Appalachian Basin. A few historic vertical commercial oil wells demonstrate the potential for the Utica. Horizontal wells are planned. EnCana also has shifted its emerging Ordovician Collingwood shale activity to areas within the oil window in the Michigan Basin.

Enhanced Recoveries from Mature Fields

Expansion of multi-staged fracs and horizontal wells to enhance recoveries from tight reservoirs in mature fields is the third and exciting stage in the unconventional oil revolution.

Wolfberry: The Spraberry – Wolfcamp or "Wolfberry" play in the Midland basin (west Texas) is a classic example where new staged hydraulic fracturing technology is enhancing economic completions over thick tight sand pay sections at reduced well spacing. This huge play spans 11,000 square miles and could yield 9 Bboe (90 percent liquids) or more in new recoveries.

Mississippi(an) Lime: The focus area for this rapidly expanding horizontal play covers an area of about 10,000 square miles in northwest Oklahoma and southwest Kansas. Horizontal wells and staged hydraulic fracturing are yielding estimated EURs ranging from about 290 Mboe to 500 Mboe with about 52 percent liquids.

THE YEAR IN REVIEW: INTRODUCTION TO 2010 O&NG IN YOUR STATE

These results from laterals that average about 4,000 feet are about 2X to 4X larger than historic vertical well completions in this area. A firm well template has not been established but results to date indicate the play may have an upside potential of 8 Bboe or more.

Others: Operators also have initiated projects to evaluate the potential to boost recoveries from mature San Andres and Clearfork reservoirs on the Central Basin Platform in west Texas, the Woodbine sandstone in east Texas and tight Green River reservoirs in the Uinta Basin (Utah). These are just the leading edge of initiatives that could take a new look at enhancing recoveries from most of the giant mature oil fields in the U.S.

Financial Trends

U.S. shale plays played a major role in boosting global mergers and acquisitions which set a record in 2010. Some of the largest deals involved super-majors buying into the U.S. Marcellus shale play (Shell buying East Resources and Chevron buying Atlas Resources) which had seen a steady ramp up of activity in 2008 and 2009. The Permian and the Gulf of Mexico also saw considerable deal activity with Apache buying BP Permian assets in addition to Mariner Energy and Devon's shallow Gulf of Mexico assets.

In addition, international investment continued to grow with National Oil Companies (NOCs) and International Oil Companies (IOCs) forming joint ventures with U.S. independents to partake in the unconventional revolution and strategically expand their global portfolios. Independents held a bountiful array of unconventional assets given their early-mover status but some took the opportunity to shed non-core assets and re-balance their portfolios from gas-weighted to more liquids-rich properties. In addition to transitioning toward oil, many companies took the opportunity to de-lever their balance sheets given the impact of weaker natural gas prices on reserves and financing.

Summary

Over the past three years, the *Oil and Gas Producing Industry in Your State* has used the Emerging Shale Plays and Key Trends for Shale Plays (pages 32-33) to monitor some of the geographic and operator highlights. Independent producers have been at the forefront of this revolution that began in the Barnett and spread to the Fayetteville (Arkansas), Woodford (Oklahoma), Haynesville/Bossier (east Texas/western Louisiana) and Marcellus for natural gas. Again, the independents are in the vanguard in the transition to tight oil and mixed gas/liquid plays which began with the Bakken and have proliferated with the Eagle Ford, Permian and Bone Springs, Niobrara, Granite Wash, Mississippian and Utica. The unconventional revolution has added many new chapters to our country's energy potential but with reward there is also risk that needs to be managed as the Deepwater incident revealed.

License to Operate: In contrast to the heady 'shale oil' story, the U.S. industry must take into account the government and community's confidence in its ability to produce this new oil in a manner that does not jeopardize water supplies, harm the environment or violate established community standards. Managing industry's "license to operate" will demand proactive effort and vigilance from all operations across the supply chain to target zero defects in safety and operations.

Potential: The rapidly expanding unconventional revolution in oil has identified more than 50 Bboe of potentially recoverable hydrocarbons with oil and liquids comprising about 80 percent of volume. With the Bakken play expected to produce 800 Mboe/d or more before end of the decade, it's feasible the

combined identified resource could yield 2 MMboe/d or more before end of this decade. Based on findings in the IHS Global Insight study for IPAA, "*The Economic Contribution of the Onshore Independent Oil and Natural Gas Producers to the U.S. Economy*," onshore independents' upstream business ecosystem contributed \$320.6 billion (2.2%) of U.S. GDP in 2010 and will rise to \$466.7 billion (2.4%) of U.S. GDP by 2020.

The potential increase in onshore oil production would offset the losses in offshore production while also replacing about 20 percent of U.S. oil imports. This does not directly translate to energy independence but it is transformational for the U.S. economy, job creation and energy security. Independent producers are front and center of this upstream sea change that began in the Barnett shale and will continue to be active in more than 30 states that produce oil and natural gas.

Beyond the state numbers for production, wells drilled and reserves, these plays have major state, regional and national implications for job and revenue creation, reduced import dependence and greater national security. As the U.S. economy began to pull itself out of the 'Great Recession' of 2009, the role of energy (and especially oil and natural gas) could not be underestimated in the role it played in our recovery and the beginning of an industrial renaissance. But, as with every success story, there is a need to work on the balancing of perspectives that the industry offers and managing the risks that are attendant with the production of oil and natural gas.

NEW CONTENT FOR OUR 2011-2012 EDITION

As featured on the cover of this edition, the Permian Basin in western Texas provides an apt example for a play that has been revitalized by the technologies that have fostered the resurgence of shale natural gas and tight oil. The successful, proven combination of hydraulic fracturing and horizontal drilling has unlocked vast amounts of new resources in new plays such as the Eagle Ford as well as vintage legacy plays around the country. Successful development of oil and natural gas reserves has been a recurring theme in basins both new and old.

The Permian Basin was initially explored in the 1920s with a production history over 30 million barrels but production had been tapering off as conventional technology failed to make millions of barrels economically recoverable. As with many other plays that have been revitalized because of more advanced completion technologies, the Permian represents a new chapter in our country's production renewal. The play currently hosts 65,000 producing oil wells – about 40 percent of all oil wells produced in Texas. Original oil in place is estimated at 95.4 billion barrels with 33.7 billion of that produced or in discovered, recoverable reserves. The total estimate of undiscovered technically recoverable reserves is 41 trillion cubic feet of natural gas and 2.3 billion barrels of liquids. In addition, the play has proliferated into the horizontal Wolfcamp shale formation in addition to the Bone Spring in the Delaware Basin which extends from New Mexico's southeastern corner into Texas.

The editorial team continues to mark geographical and company-specific highlights of the unconventional revolution taking place with its "Emerging Play" map (page 32) and the "Key Trends for Shale Plays" (page 33). The state pages and the well summary in the historical section have been expanded to better illustrate how

specific drilling trends have evolved with the new plays, highlighting the increased role of horizontal drilling and showing state by state comparisons for the various types of wells drilled over time. The data illustrates some of the highlights unfolding in both new plays such as the Eagle Ford, Mississippian Lime and Bakken as well as more vintage plays such as the Permian Basin, the Austin Chalk and the Arkoma.

IPAA and IHS continue to provide a detailed look at the upstream sector of an industry that is plays such a vital role in fueling America's economy, providing critical job growth and improving our national security. For the upstream alone, employment has jumped by more than 60 percent, or nearly 200,000 jobs over the 2001-2011 period. IPAA would like to thank the IHS team which includes Dr. Pete Stark, Dean Williams, Janey Harwell, Kim Sheppard, Randy Peterson, John Wakefield, Ed Marker and Marc Eckhardt for their continued efforts in making this publication both comprehensive and unique. IPAA would also like to thank Ron Planting for all of his contributions to the publication.

If you have ideas or feedback for future publications, please send your comments to Frederick Lawrence at IPAA (flawrence@ipaa.org). Thank you for your continued support and readership of one of the industry's longest running sources of upstream state data.

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.
- IHS production data used on state pages includes peak production, total (dry) production, average production, average output per well, coalbed methane, heavy oil and marginal wells. IHS data is used for summary production data and wells drilled rankings. EIA data is used on state pages for natural gas marketed production.
- EIA production data is used for determining wellhead value of production, cumulative crude oil wellhead value, state production rankings, state consumption figures and natural gas marketed production. State reserve data is from EIA. All price data comes from EIA or states.
- All Federal Offshore statistics include only those wells in Federal waters. All state well statistics include inland/non-Federal 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 has been used as a proxy for deepest well statistics. Cumulative number of total wells drilled data comes from IHS.
- 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, i.e. injection, storage, service, 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.
- 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).

STATE ENERGY CONTACTS

Alabama

Alabama State Oil & Gas Board
420 HACKBERRY LN
PO BOX 869999
TUSCALOOSA AL 35486-6999
(205) 349-2852
www.ogb.state.al.us

Alaska

AK Dept. of Natural Resources
Division of Oil & Gas
550 WEST 7th AVE STE 1100
ANCHORAGE AK 99501-3563
(907) 269-8800
www.dog.dnr.alaska.gov

Alaska Oil & Gas Conservation Commission
333 W 7TH AVE STE 100
ANCHORAGE AK 99501-3192
(907) 279-1433
www.doa.alaska.gov/ogc/

Arkansas

Arkansas Oil & Gas Commission
301 NATURAL RESOURCES DR
STE 102
LITTLE ROCK AR 72205
(501) 683-5814
www.aogc.state.ar.us

Arizona

AZ O & G Conservation Comm.
416 W CONGRESS ST STE 100
TUCSON, AZ 85701
(520) 770-3500
www.azogcc.az.gov

Arizona Geological Society
PO BOX 40952
TUCSON, AZ 85717
(520) 663-5295
www.arizonageologicalsociety.org

California

California Dept. of Conservation
801 K ST MS 24-01
SACRAMENTO CA 95814
(916) 322-1080
www.consrv.ca.gov/index

Colorado

Colorado Oil & Gas Conservation Commission
1120 LINCOLN ST STE 801
DENVER CO 80203
(303) 894-2100
www.cogcc.state.co.us

Florida

FL Dept. of Env. Protection
Oil & Gas Section
2051 EAST PAUL DIRAC DR
MS715
TALAHASSEE FL 32310
(850) 488-8217
www.dep.state.fl.us/water/mines/oil_gas/

Florida Bureau of Geology
Division of Resource Management
903 W TENNESSEE ST
TALLAHASSEE FL 32304
(904) 488-4191

Illinois

Illinois Department of Natural Resources
Oil and Gas Division
1 NATURAL RESOURCES WAY
SPRINGFIELD IL 62702-1271
(217) 782-6302
www.dnr.state.il.us/mines/dog

Indiana

Indiana Department of Natural Resources
Oil and Gas Division
402 W WASHINGTON ST
ROOM 293
INDIANAPOLIS IN 46204
(317) 232-4055
www.in.gov/dnr/dnroil

Kansas

Kansas Corporation Commission
FINNEY STATE OFFICE BUILDING
130 SOUTH MARKET ROOM 2078
WICHITA KS 67202-3802
(316) 337-6200
www.kcc.state.ks.us

Kentucky

Energy and Environment Cabinet
Division of Fossil Energy
Development
500 MERO ST 12TH FL
FRANKFURT KY 40601
(502) 564-7192
www.eec.ky.gov

Louisiana

Louisiana Department of Natural Resources
617 N THIRD ST - LA SALLE BLDG
BATON ROUGE LA 70802
(225) 342-4500
dnr.louisiana.gov

Maryland

Maryland Geological Survey
2300 ST PAUL ST
BALTIMORE MD 21218
(410) 554-5500
www.mgs.md.gov

Michigan

Michigan Geological Survey
Department of Natural Resources
PO BOX 30028
LANSING MI 48909
(517) 373-2352
www.michigan.gov/dnr

Missouri

MO Dept. of Natural Resources
Geological Survey Program
111 FAIRGROUNDS RD
PO BOX 250
ROLLA MO 65402-0250
(800) 361-4827
dnr.mo.gov/geology/geosrv/ogc

Mississippi

MS State Oil and Gas Board
500 GREYMONT AVE STE E
JACKSON MS 39202-3446
(601) 576-4900
www.ogb.state.ms.us

Montana

MT Board of O & G Conservation
2535 ST JOHNS AVE
BILLINGS MT 59102
(406) 656-0040
bogc.dnrc.mt.gov

North Dakota

ND Industrial Commission
Oil and Gas Division
600 E BOULEVARD AVE DEPT 405
BISMARCK ND 58505-0840
(701) 328-8020
www.dmr.nd.gov/oilgas

Nebraska

NE O & G Cons. Commission
922 ILLINOIS
PO BOX 399
SIDNEY NE 69162
(308) 254-6919
www.nogcc.ne.gov

New Mexico

New Mexico Energy, Minerals and Natural Resources Department
1220 S ST FRANCIS DR
SANTA FE NM 87505
(505) 476-3200
www.emnrd.state.nm.us

Nevada

Nevada Division of Minerals
400 WEST KING ST STE 106
CARSON CITY NV 89703
(775) 684-7040
www.minerals.state.nv.us

New York

NY State Dept. of Env.Cons.
625 BROADWAY
ALBANY NY 12233-0001
(518) 402-8013
www.dec.ny.gov

NY State Geological Survey
3000 CULTURAL EDUCATION
CENTER
ALBANY NY 12230
(518) 473-6262
www.nysm.nysed.gov/nysgs

STATE ENERGY CONTACTS AND FEDERAL ORGANIZATIONS

NYS Energy Res. and Dev. Auth.
17 COLUMBIA CIR
ALBANY, NY 12203-6399
(518) 862-1090 (866) NYSERDA
www.getenergysmart.org

Ohio

OH Dept. of Natural Resources
Division of Oil and Gas
2045 MORSE RD
BLDG F
COLUMBUS OH 43229-6693
(614) 265-6922
www.ohiodnr.com/mineral

Oklahoma

Interstate O & G Compact Comm.
PO BOX 53127
OKLAHOMA CITY OK 73105
(405) 525-3556
www.iogcc.state.ok.us

OK Corporation Commission
Oil and Gas Division
2101 N LINCOLN BLVD
OKLAHOMA CITY OK 73105
(405) 521-2302
www.occ.state.ok.us

Oregon

Oregon Department of Geology and Mineral Industries
800 NE OREGON ST 28
STE 965
PORTLAND OR 97232-2162
(971) 673-1555
www.oregongeology.org

Pennsylvania

PA Dept. of Env. Protection
Oil and Gas Division
Bureau of Oil & Gas Management
PO BOX 8765
HARRISBURG PA 17105-8765
(717) 772-2199
www.depweb.state.pa.us

South Dakota

SD Dept. of Environment and Natural Resources
PMB 2020
SD DENR
JOE FOSS BLDG
523 E CAPITOL
PIERRE SD 57501
(605) 773-3151
www.denr.sd.gov

Tennessee

TN Dept. of Env. and Cons.
Oil and Gas Board
401 CHURCH ST
13th FL L & C TOWER
NASHVILLE TN 37243-0445
(615) 532-1500
www.tn.gov/environment/boards/og

Texas

Texas Railroad Commission
Oil & Gas Division
PO BOX 12967
AUSTIN TX 78711-2967
(512) 463-6838
www.rrc.state.tx.us

Utah

UT Dept. of Natural Resources
Division of Oil, Gas and Mining
1594 WEST NORTH TEMPLE
SALT LAKE CITY UT 84116
(801) 538-5340
www.oilgas.ogm.utah.gov

Virginia

Virginia Department of Mines, Minerals and Energy
Division of Geology and Mineral Resources
900 NATURAL RESOURCES DR
STE 500
CHARLOTTESVILLE VA 22903
(434) 951-6341
www.dmme.virginia.gov

West Virginia

WV Dept. of Env. Protection
Office of Oil & Gas
601 57TH ST SE
CHARLESTON WV 25304
(304) 926-0450
www.dep.wv.gov/oil-and-gas

Wyoming

WY Dept. of Env. Quality
122 WEST 25TH ST
HERSCHLER BLDG
CHEYENNE WY 82002
(307) 777-7937
<http://deq.state.wy.us>

WY O & G Cons. Commission
2211 KING BLVD
PO BOX 2640
CASPER WY 82602
(307) 234-7147
<http://wogcc.state.wy.us>

Federal Organizations

Bureau of Ocean Energy Mgmt., Regulation and Enforcement
Office of Public Affairs
1849 C ST NW
WASHINGTON DC 20240
(202) 208-3985
www.boemre.gov

Environmental Protection Agency
ARIEL RIOS BLDG
1200 PENNSYLVANIA AVE NW
WASHINGTON DC 20004
(202) 272-0167
www.epa.gov

Federal Energy Regulatory Commission
888 FIRST ST NE
WASHINGTON DC 20426
(866) 208-3372
www.ferc.gov

Nat'l Energy Tech. Laboratory
626 COCHRANS MILL RD
PO BOX 10940
PITTSBURGH PA 15236-0940
800-553-7681
www.netl.doe.gov/technologies/oil-gas

U.S. Department of Energy
Fossil Energy
1000 INDEPENDENCE AVE SW
WASHINGTON DC 20585
(800) DIAL DOE (342-5363)
www.fe.doe.gov

U.S. Department of Energy
Office of Scientific and Technical Information
PO BOX 62
OAX RIDGE TN 37831
(865) 576-1188
www.osti.gov

U.S. Department of the Interior
1849 C ST NW
WASHINGTON DC 20240
(202) 208-3100
www.doi.gov

U.S. Energy Information Administration
1000 INDEPENDENCE AVE SW
WASHINGTON DC 20585
(202) 586-8800
www.eia.gov

U.S. Geological Survey
USGS National Center
12201 SUNRISE VALLEY DR
RESTON VA 20192
(703) 648-4000
www.usgs.gov

NAPE - THE OIL & GAS EXPO THAT PRODUCES PROSPECTS!

ATTEND ONE, OR ALL OF OUR UPCOMING EXPOS!



WINTER NAPE EXPO



FEBRUARY 5-8, 2013
GEORGE R. BROWN
CONVENTION CENTER
HOUSTON, TEXAS



EAST NAPE EAST



APRIL 10-12, 2013
DAVID L. LAWRENCE
CONVENTION CENTER
PITTSBURGH, PA



2013 SUMMER SUMMER NAPE EXPO



AUGUST 14-16 2013
GEORGE R. BROWN
CONVENTION CENTER
HOUSTON, TEXAS

COOPERATING OIL & GAS ASSOCIATIONS

Alabama

Coalbed Methane Assoc. of Alabama
3829 LORNA RD STE 306
BIRMINGHAM AL 35244
(205) 733-8087
www.coalbed.com

Arkansas

Arkansas Ind Producers & Royalty Owners
1401 W CAPITOL AVE STE 440
LITTLE ROCK AR 72201
(501) 975-0565
www.aipro.org

California

CA Independent Petroleum Assoc.
1001 K ST 6TH FL
SACRAMENTO CA 95814
(916) 447-1177
www.cipa.org

Independent Oil Producers' Agency
4520 CALIFORNIA AVE #230
BAKERSFIELD CA 93309
(661) 377-0411

Western States Petroleum Assoc.
1415 L ST STE 600
SACRAMENTO CA 95814
(916) 498-7750
www.wspa.org

Colorado

Colorado Oil & Gas Assoc.
1660 LINCOLN ST STE 2710
DENVER CO 80264
(303) 861-0362
www.coga.org

Western Energy Alliance
410 17TH ST STE 700
DENVER CO 80202
(303) 623-0987
www.westernenergyalliance.org

Florida

Florida Independent Petroleum Producers
5860 B SPANISH TRAIL
PENSACOLA, FL 32504
(850) 969-1034
www.flippaoil.org

Illinois

Illinois O&G Assoc.
PO BOX 788
MOUNT VERNON IL 62864
(618) 242-2857
www.ioga.com

Indiana

Ind. Oil Producers Assoc. Tri-State
2104 LINCOLN AVE
EVANSVILLE IN 47714
(812) 479-9451

Indiana O&G Assoc.
1200 REFINERY RD
MT VERNON IN 47620
(812) 838-8515
www.inoga.org

Kansas

Kansas Independent O & G Assoc.
800 SW JACKSON ST STE 400
TOPEKA KS 66612
(785) 232-7772
www.kioga.org

Eastern Kansas O & G Assoc.
17 S EVERGREEN AVE
CHANUTE KS 66720
(620) 431-1020
www.ekoga.org

SW Kansas Royalty Owners Assoc.
209 EAST 6TH ST
HUGOTON KS 67951
(620) 544-4333
www.swkroa.com

Liaison Committee of Cooperating Oil & Gas Associations
800 SW JACKSON ST STE 1400
TOPEKA KS 66612
(785) 232-7772

Kentucky

Kentucky O & G Assoc.
#1-A PHYSICIANS PARK
FRANKFORT KY 40601
(502) 226-1955
www.kyoilgas.org

Louisiana

Louisiana Landowners Assoc.
8982 DARBY AVE
BATON ROUGE, LA 70806
(225) 927-5619
209.204.240.177/LLA/index.htm

Louisiana O&G Assoc.
PO BOX 4069
BATON ROUGE LA 70821-4069
(800) 443-1433
www.loga.la

Michigan

Michigan Oil & Gas Assoc.
124 W ALLEGAN ST STE 1610
LANSING MI 48933
(517) 487-1092
www.michiganoilandgas.org

Mississippi

MS Ind. Producers & Royalty Owners
PO BOX 13393
JACKSON MS 39236
(601) 813-3309
www.mipro.ms

Montana

Montana Petroleum Association
25 NEILL AVE STE 202
HELENA MT 59601
(406) 442-7582
www.montanapetroleum.org

Northern Montana O & G Assoc.
PO BOX 488
CUT BANK, MT 59427
(406) 873-9000

New Mexico

Ind. Petroleum Assoc. of NM
PO BOX 1836
ROSWELL NM 88202
(575) 622-2566
www.ipanm.org

New Mexico Oil & Gas Assoc.
203 E SANTA FE AVE
PO BOX 1864
SANTA FE NM 87504
(505) 982-2568
www.nmogaa.org

New York

Independent O & G Assoc. of New York
38 LAKE ST
HAMBURG NY 14075
(716) 202-4688
www.iogany.org

North Dakota

North Dakota Petroleum Council
120 N 3RD ST STE 200
PO BOX 1395
BISMARCK ND 58501
(701) 223-6380
www.ndoil.org

Ohio

Ohio O & G Assoc.
1718 COLUMBUS RD SW
PO BOX 535
GRANVILLE OH 43023-0535
(740) 587-0444
www.ooga.org

Southeastern Ohio O&G Assoc.
PO BOX 136
RENO OH 45773
(740) 374-3203
www.sooga.org

Oklahoma

OK Independent Petroleum Assoc.
3555 NORTHWEST 58TH ST STE 400
OKLAHOMA CITY OK 73112
(405) 942-2334
www.oipa.com

Petroleum Technology Transfer Council
PO BOX 8531
TULSA OK 74101-8531
(981) 629-1056
www.pttc.org

National Stripper Well Assoc.
PO BOX 18336
OKLAHOMA CITY OK 73154
(405) 228-4112
www.nswa.us

National Assoc. of Royalty Owners
15 W 6TH ST STE 2626
TULSA OK 74119
(800) 558-0557
www.naro-us.org

COOPERATING OIL & GAS ASSOCIATIONS

Pennsylvania

Pennsylvania Independent O&G Assoc.
115 VIP DR STE 210
NORTHRIDGE OFFICE PLAZA II
WEXFORD PA 15090-7906
(724) 933-7306
www.pioga.org

Tennessee

Tennessee Oil & Gas Assoc.
750 OLD HICKORY BLVD STE 150-2
BRENTWOOD TN 37027
(615) 371-6137
www.tennoil.com

Texas

American Assoc. of Prof Landmen
4100 FOSSIL CREEK BLVD
FORT WORTH TX 76137-2791
(817) 847-7700
www.landman.org

Assoc. of Energy Service Companies
14531 FM 529 STE 250
HOUSTON TX 77095
(713) 781-0758
www.aesc.net

East Texas Producers and Royalty Owners Assoc.
PO BOX 1700
KILGORE TX 75663
(903) 984-8676

Int'l Assoc. of Geophysical Contractors
1225 NORTH LOOP WEST STE 220
HOUSTON TX 77008
(866) 558-1756
www.iagc.org

Panhandle Producers and Royalty Owners Assoc.
3131 BELL STE 209
AMARILLO TX 79106
(806) 352-5637
www.pproa.org

Permian Basin Petroleum Assoc.
415 W WALL STE 103
MIDLAND TX 79702
(432) 684-6345
www.pbpa.info

Petroleum Equipment Suppliers Assoc.
1240 BLALOCK RD STE 110
HOUSTON TX 77055
(713) 932-0168
www.pesa.org

Society of Independent Professional Earth Scientists
4925 GREENVILLE AVE STE 1106
DALLAS TX 75206
(214) 363-1780
www.sipes.org

Texas Alliance of Energy Producers
719 SCOTT AVE STE 930
WICHITA FALLS TX 76301
(800) 299-2998 (940) 723-4131
www.texasalliance.org

Texas Independent Producers and Royalty Owners Assoc.
919 CONGRESS AVE STE 1000
AUSTIN TX 78701
(512) 477-4452
www.tipro.org

Utah

Utah Petroleum Association
10714 S JORDAN GATEWAY STE 260
SOUTH JORDAN UT 84095
(801) 364-1510
www.utahpetroleum.org

Virginia

Virginia O&G Assoc.
PO BOX 2285
ABINGDON VA 24212
www.vaoilandgas.com

West Virginia

Independent Oil & Gas Assoc. of WV
300 SUMMERS ST STE 820
CHARLESTON WV 25301
(304) 344-9867
www.iogawv.com

West Virginia Oil and Natural Gas Assoc.
PO BOX 3231
CHARLESTON WV 25332-3231
(866) 343-1609
www.wvonga.com

Wyoming

Petroleum Assoc. of Wyoming
951 WERNER CT STE 100
CASPER WY 82601
(307) 234-5333
www.pawyo.org

Networking Associations

AK Oil and Gas Assoc.
121 W FIREWEED LN STE 207
ANCHORAGE AK 99503-2035
(907) 272-1481
www.aoga.org

Am. Assoc. of Petroleum Geologists
1444 S BOULDER AVE
TULSA OK 74119
(800) 364-2274
www.aapg.org

Am Exploration and Production Council
1350 EYE ST NW STE 510
WASHINGTON DC 20005
(202) 652-2359
www.axpc.us

American Petroleum Institute
1220 L ST NW
WASHINGTON DC 20005-4070
(202) 682-8000
www.api.org

Canadian Assoc. of Petroleum Producers
350 7TH AVE SW STE 2100
CALGARY ALBERTA T2P 3N9
CANADA
(403) 267-1100
www.capp.ca

IL Petroleum Resources Board
PO BOX 491
MOUNT VERNON IL 62864
(618) 242-2861
www.iprb.org

Int'l Assoc. of Drilling Contractors
10370 RICHMOND AVE STE 760
PO BOX 4287
HOUSTON TX 77210
(713) 292-1945
www.iadc.org

LA Mid-Continent O&G Assoc.
730 NORTH BLVD
BATON ROUGE LA 70802
(225) 387-3205
www.lmoga.com

Mid-Continent O&G Assoc. of Oklahoma
6701 N BROADWAY STE 300
OKLAHOMA CITY OK 73116
(405) 843-5741
www.okmoga.com

NE Independent O&G Assoc.
414 S WALNUT ST
PO BOX 427
KIMBALL NE 69145-1434
(308) 235-2906

North Dakota Industrial Commission Mineral Resources, Oil and Gas
600 EAST BOULEVARD AVE DEPT 405
BISMARCK ND 58505-0840
(701) 328-8020
www.oilgas.nd.gov

Public Lands Advocacy
1155 S HAVANA ST #11-327
DENVER CO 80012
(303) 506-1153
www.publiclandsadvocacy.org

Society of Petroleum Engineers
830 S GREENVILLE AVE
ALLEN TX 75002
(800) 456-6863
www.spe.org

Stripper Well Consortium
The Pennsylvania State University
C-211 CUL
UNIVERSITY PARK PA 16802
(814) 865-4802
www.energy.psu.edu/swc/

Texas Oil and Gas Assoc.
304 W 13TH ST
AUSTIN TX 78701
(512) 478-6631
www.txoga.org

YOUNG TALENT CAN EVOLVE INTO SEASONED SOLUTIONS.

While you are planning for recruitment and hiring, don't forget that new petroleum engineering graduates are coming soon.

Objective

*A job in my chosen field:
petroleum engineering*

Skills

- *Strong understanding of the challenges facing the petroleum industry*
- *Able to grasp new information quickly*
- *Enthusiastic, motivated, and willing to learn*
- *Committed to becoming a future leader in the petroleum industry*

Tap into the talent pipeline—
hire a new petroleum engineering graduate.

Log on to www.worldwideworker.com/graduate
or www.ipaa.org/careers to view resumes of
recent petroleum engineering graduates.



www.spe.org



www.ipaa.org

IPAA/PESA EDUCATION CENTER

The Independent Petroleum Association of America continues to expand upon its commitment to education outreach through its Houston-based Education Center. Over the past six years, the Education Center has established four high school engineering, geosciences and leadership academies within the Houston Independent School District and the Fort Worth Independent School District. To date, more than 1,000 students have participated in the academies' programs, with 350 students currently enrolled. In August 2012, the Petroleum Equipment Suppliers Association announced its partnership with IPAA. PESA has been a vigorous supporter of the petroleum academies since their inception.

Key Components of the IPAA/PESA Academy Program:

- Partnerships with oil and gas businesses and associations
- Dual credit status
- Scholarships for college; \$150,000 awarded in 2012
- Real-world career experiences through a paid Externship Program
- Science, Technology, Engineering and Mathematics (STEM) academic focus with dual credits
- Guest Speaker Career Series
- Industry & University field trips
- Industry software, including a \$27 million grant from Halliburton
- Social and career networking opportunities
- Professional and leadership training strategies
- Academic and Public speaking competitions
- Engineering and geosciences summer camp programs
- Mentoring by young and tenured industry professionals
- LinkedIn allowing companies to stay in touch in order to hire academy graduates as college interns and later as employees

Participating IPAA/PESA High School Energy Magnet Schools:

Texas

Milby High School

1601 BROADWAY
HOUSTON TX 77012-3789
(713) 928-2765
www.milby.org

Southwest Academy of Petroleum Engineering & Technology (SAPET)

100 N UNIVERSITY DR
FORT WORTH TX 76107
(817) 871-2000
http://sapet.webs.com

Westside High School

14201 BRIAR FOREST DR
HOUSTON TX 77077-1806
(281) 920-8000
http://hs.houstonisd.org/westsidehs

Young Women's College Preparatory Academy

Engineering & Geosciences Academy
1906 CLEBURNE
HOUSTON TX 77004-4131
(713) 942-1441
http://schools.houstonisd.org/YWCPA

University Energy and Geology Programs (Non-affiliated):

Alabama

The University of Alabama

Department of Geological Sciences
Professor Ernest Mancini
(205) 348-5095
geology@geo.ua.edu
www.as.ua.edu/geo

Alaska

University of Alaska - Fairbanks

Mining & Geological Engineering
Professor Scott L Huang
(907) 474-6880
silhuang@alaska.edu
cem.uaf.edu/mingeo

University of Alaska - Fairbanks

Petroleum Engineering
Associate Professor Catherine Hanks,
Department Chair
(907) 474-2668
chanks@hi.alaska.edu
cem.uaf.edu/pete

Arkansas

Arkansas Tech University

Department of Physical Sciences
Dr. Cathy Baker
(479) 968-0661
cbaker@atu.edu
www.atu.edu/geology

University of Arkansas Community College at Morrilton

Petroleum Technology A.A.S. and
Technical Certificate
Professor Jeff Lambert, Petroleum
Technology
(501) 977-2178
lambert@uaccm.edu
www.uaccm.edu/academics/academics

California

CA State University, Bakersfield

Department of Geology
Dr. Robert Horton, Department Chair
(661) 654-3059
rhorton@csb.edu
www.csub.edu/geology/

CA State University, Long Beach

Dept. of Geological Sciences
Prof. Matthew Becker, Dept. Chair
(562) 985-8983
mbecker3@csulb.edu
geology.campus.ad.csulb.edu/index.shtml

Stanford University

Department of Energy Resources
Engineering
Professor Louis Durlafsky, Chairman
(650) 723-4142
lou@stanford.edu
pangea.stanford.edu/departments/ere/

University of Southern California

Viterbi School of Engineering
Director Iraj Ershaghi, Ph.D., P.E.
(213) 740-1076
peteng@usc.edu
viterbi.usc.edu/academics/programs

Colorado

Colorado Mountain College

Process Technology
John Prater, Process Technology
(970) 625-6947
jprater@coloradomtn.edu
www.coloradomtn.edu/cms/one.aspx?pagelid=3639044

Colorado School of Mines

Department of Petroleum Engineering
Professor Ramona M Graves,
Department Head
(303) 273-3746
rgraves@mines.edu
petroleum.mines.edu

Colorado School of Mines

Department of Geology and Geological
Engineering
John D. Humphrey, Department Head
(303) 273-3819
jhumphre@mines.edu
www.mines.edu/academic/geology

Mesa State College

Department of Business
Dr. Morgan Bridge, Business
Department Head
(970) 248-1169
mbridge@mesastate.edu
www.coloradomesa.edu/business/certificates.html

Western State College of Colorado

Department of Geology
Tim Wawrzyniec, Director and Moncrief
Chair, and Dale Orth, Department Chair
(970) 943-3437
twawrzyniec@western.edu
dorth@western.edu
www.western.edu/academics/geology

STATE EDUCATION PROGRAMS

Kansas

Fort Hays State University
Department of Geosciences
Dr. John Heinrichs, Chair
(785) 628-4536
kneuhaus@fhsu.edu
www.fhsu.edu/geo

The University of Kansas School of Engineering
Petroleum Engineering
Laurence R. Weatherley, Ph.D, Chair
(785) 864-4965
weather@ku.edu
www.cpe.engr.ku.edu/petro.html

Louisiana

Louisiana State University
Craft and Hawkins Department of Petroleum Engineering
Karsten Thompson, Chair
(225) 578-6040
karsten@lsu.edu
www.pete.lsu.edu

Nicholls State University
Department of Applied Sciences
Michael Gautreaux, Program Director
(985) 448-4740
michael.gautreaux@nicholls.edu
www.nicholls.edu/doas/degree-programs/petroleum-services

Tulane University
Freeman School of Business
Eric Smith, Associate Director
(504) 865-5031
esmith11@tulane.edu
www.freeman.tulane.edu/energy

University of Louisiana at Lafayette
Professional Land and Resource Management Department
Dr. Fathi Boukadi, Department Head
(337) 482-5085
fxb1275@louisiana.edu
petroleum.louisiana.edu

Missouri

Missouri University of Science and Technology
Petroleum Engineering
Dr. Ralph Flori, Department Chair
(573) 341-7583
reflori@mst.edu
petroleum.mst.edu

Montana

Montana Tech - University of Montana
School of Mines and Engineering
Leo Heath, Department Head
(406) 496-4507
lheath@mttech.edu
www.mtech.edu/mines/pet_eng

New Mexico

NM Institute of Mining & Technology
Department of Petroleum and Natural Gas Engineering
Thomas W Engler, Ph.D, Chair
(575) 835-5293
engler@nmt.edu
infohost.nmt.edu/~petro

North Dakota

University of North Dakota
Department of Geology and Geological Engineering
Dr. Joseph Hartman, Department Chair
(701) 777-5055
joseph.hartman@engr.und.edu
www.geology.und.edu/geoE_ugdegreedirectory.php

Ohio

Marietta College
Department of Petroleum Engineering
Dr. Robert Chase, Professor
(740) 376-4776
chaser@marietta.edu
www.marietta.edu/~petr/index.html

Oklahoma

University of Oklahoma
ConocoPhillips School of Geology and Geophysics
Doug Elmore, Director
(405) 325-4493
delmore@ou.edu
www.ou.edu/mcee/geology.html

University of Oklahoma
Mewbourne School of Petroleum and Geological Engineering
Chandra Rai, Director and Chair
(405) 325-6866
crai@ou.edu
mpge.ou.edu

University of Oklahoma
Price College of Business Department of Management
Steve Long, Program Director
(405) 325-0758
slong@ou.edu
www.ou.edu/content/price/left/divisions.html

University of Tulsa
Collins College of Business
Department of Energy Management
Ted Jacobs, Program Director
(918) 631-3588
ted-jacobs@utulsa.edu
www.utulsa.edu/Academics/Colleges/Collins-College-of-Business

Pennsylvania

Pennsylvania State University
Dept of Energy & Mineral Engineering
Andrew N. Kleit, Program Officer and Professor
(814) 865-0711
ank1@psu.edu
www.eme.psu.edu/ebf/

University of Pittsburgh

Swanson School of Engineering
J Karl Johnson, Interim Chair
(412) 624-5644
karlj@engr.pitt.edu
www.engr2.pitt.edu/chemical

South Dakota

SD School of Mines and Technology
Geology and Geological Engineering Department
Laurie C Anderson, Chair
(605) 394-2461
lauri.anderson@sdsmt.edu
geology.sdsmt.edu

Texas

Del Mar College
Technology Education Department
Denise Rector, Assistant Professor
(361) 698-1713
drector@delmar.edu
www.delmar.edu/academics/busproftech.php

Kilgore College
Department of Continuing Education
Bill Brantly, Jr, Director
(903) 983-8680
bbrantley@kilgore.edu
www.kilgore.edu/petro_tech.asp

Midland College
Petroleum Professional Development Center
W. Hoxie Smith, Director
(432) 683-2832
hsmith@midland.edu
www.midland.edu/~ppdc

Panola College
Department of Applied Sciences
Gary Hughes, Division Director
1109 WEST PANOLA ST
CARTHAGE, TX 75633
(903) 693-4650
ghughes@panola.edu
www.panola.edu/industrial/petroleum

Texas A&M - Kingsville
Department of Chemical and Natural Gas Engineering
Ali A. Pilehvari, Chair
(361) 593-2089
ali.pilehvari@tamuk.edu
www.engineer.tamuk.edu/departments/ngen

Texas A&M University
Harold Vance Department of Petroleum Engineering
Gail Krueger, Administrative Assistant
(979) 845-6955
undergraduate_program@pe.tamu.edu
www.pe.tamu.edu

Texas Tech University
Department of Petroleum Engineering
M. Y. Soliman, Chair
(806) 742-1801 x232
Mohamed.Soliman@ttu.edu
www.depts.ttu.edu/pe

Texas Tech University

Rawls College of Business - Center
for Energy Commerce
Kellie Estes, Director of Operations
(806) 834-2046
kellie.estes@ttu.edu
ec.ba.ttu.edu

University of Houston

Department of Chemical and
Biomolecular Engineering
Ramanan Krishnamoorti, Ph.D.,
Chair
(713) 743-4307
ramanan@uh.edu
www.che.uh.edu

University of Houston - Downtown

Department of Management,
Marketing, and Business
Dr. Lucille Pointer, Chair
(713) 222-5382
pointerl@uhd.edu
www.uhd.edu/academic/colleges/
business/mmba/mmba_index.htm

University of Texas - Austin

Department of Petroleum and
Geosystems Engineering
Gary Pope, Director
(512) 471-3235
gpope@mail.utexas.edu
www.pge.utexas.edu/index.cfm

West Virginia

Glennville State College

Department of Land Resources
Dr. Milan C. Vavrek
(304) 462-6375
Milan.Vavrek@glennville.edu
www.glennville.edu/landresources_
department.asp

West Virginia University

College of Engineering and Mineral
Resources
Professor Sam Ameri, Chair
(304) 293-3949
samuel.ameri@mail.wvu.edu
www.pnge.cemr.wvu.edu/welcome

Wyoming

Western Wyoming Community College

Oil and Gas Technology
Paul Johnson, Division Chair
(307) 382-1784
pjohnson@wwcc.wy.edu
www.wwcc.wy.edu/academics/
oilgastech

University of Wyoming - College of Engineering & Applied Science

Department of Chemical and
Petroleum Engineering
Dave Bagley, Dept Head & Prof.
(307) 766-2500
bagley@uwoyo.edu
www.eng.uwoyo.edu/chemical

CANADA

University of Calgary

Haskayne School of Business
Bob Schulz, Program Director
(403) 220-6591
bob.schulz@haskayne.ucalgary.ca
www.haskayne.ucalgary.ca/
undergrad/plma

YOUNG PROFESSIONALS IN ENERGY

YOUNG PROFESSIONALS IN ENERGY CHAPTERS
Founded in 2005, YPE is a global network of young professionals who seek to engage with peers in the energy industry.
www.yopenergy.org

California

Bay Area

Director - Kari Brutsaert
(415) 971-1366
kbrutsaert@firstsolar.com

Bay Area

Director - Aaron Platshon
(650) 248-7656
aaron.platshon@betterplace.com

Colorado

Denver

Director - John Heinle
(303) 296-1624
heinlejohn@hotmail.com

Denver

Director - Parker Heikes
(303) 864-7343
pheikes@bokf.com

Louisiana

New Orleans/Shreveport

Director - Kevin Lorenzen
(318) 703-9263
kevinlorenzen@basinminerals.com

New Orleans/Shreveport

President - H. David Gold
vpeboston@gmail.com

Massachusetts

Boston

President H. David Gold
ypeboston@gmail.com

New York

New York City

Director - Michael Conti
(973) 809-6328
imichaelconti@gmail.com

Oklahoma

Oklahoma City

Director - Eric Bynum
eric.bynum@chk.com

Tulsa

Director - J. Nick Cooper
(918) 588-6375
jncooper@bokf.com

Pennsylvania

Philadelphia

Director - Jessica Maizel
(215) 255-2364
jlmaizel@delinvest.com

Philadelphia

Assistant Director – Chris Moon
(215) 255-2364
chmoon@icpim.com

Pittsburgh

Josh Hickman
Josh-hickman@ypenergy.org

Texas

Austin

Director - Steven Shannon
(713) 252-8847
sjacobshannon@gmail.com

Dallas

Director - Ted Smith
(214) 800-5191 x5186
tsmith@freemanmillspc.com

Fort Worth

Director - Matt Thompson
(214) 369-5554
matt.thompson@exterran.com

Houston

Director - Matt Gelotti
(832) 476-6609
matt.gelotti@aon.com

Midland Odessa

Director - Doug Schmidt
(432) 686-3084
dschmidt@conchoresources.com

District of Columbia

Washington, DC

Director - Suzanne Matwyshe-
Gillen
(240) 481-8133
sgillen@afpm.org

International

Calgary, Canada

President - Joanna Shea
(403) 966-7842
ypecalgary@gmail.com

Toronto, Canada

Director - Dan Pinault
(647) 986-7415
dan.pinault@navigantconsulting.com

China

Director - Scott Hou
(86) 137-0121-4139
shuohou@gmail.com

Dubai

Director - Freddy Haddad
freddyshaddad@gmail.com

London, England

Director - Roman Batichtchev
+44 (0) 20 7930 2120
rbatichtchev@firstreserve.com

Korea

Co-President William B. Choi
(82) 10-4175-9356
william@cbwilliams.com

Korea

Co-President Kevin P. Kane
(82) 10-9742-2477
kevinpkane@gmail.com

Moscow, Russia

Director - Sergei Kurilov
+7-495-777-7707
svkurilov@tnk-bp.com

ADDITIONAL ENERGY EDUCATION & EMPLOYMENT RESOURCES

Alaska

Alaska BLM - Campbell Creek Science Center
5600 SCIENCE CENTER DR
ANCHORAGE AK 99507-2599
(907) 267-1248
(907) 267-1258 Fax
www.blm.gov/ak/st/en/prog/sciencecenter.html

California

Energy Quest - California Energy Commission
1516 9TH ST MS-29
SACRAMENTO CA 95814
(916) 654-4989
www.energyquest.ca.gov

Western States Petroleum Assoc. (WSPA)
1415 L ST STE 600
SACRAMENTO CA 95814
(916) 498-7750
www.wspa.org

Colorado

Colorado School of Mines
Division of Economics and Business
816 15th ST
Golden, CO 80401
(303) 273-3480 (303) 273-3416
www.mines.edu

District of Columbia

Energy Kids
US Department of Energy
1000 INDEPENDENCE AVE
WASHINGTON DC 20585
(202) 586-8800
www.eia.gov/kids

Federal Energy Regulatory Commission Student Relations
(202) 502-8476
amanda.perry@ferc.gov
www.ferc.gov/careers/student-rel.asp

Louisiana

LSU Center for Energy Studies
Energy, Coast and Environment Building
NICHOLSON DRIVE EXTENSION
BATON ROUGE LA 70803
(225) 578-4400
www.enrg.lsu.edu

Montana

Northern Montana Independent O&G Assoc.
PO BOX 488
CUT BANK MT 59427
(406) 873-9000

Ohio

Environmental Education Council of Ohio
PO BOX 1004
LANCASTER, OH 43130
(740) 653-2649 Office
(740) 215-3376 Cell
www.eeco-online.org

Ohio Energy Project (OEP)
200 E WILSON BRIDGE RD
STE 320
WORTHINGTON OH 43085
(614) 785-1717
www.ohioenergy.org

Ohio O&G Energy Education Program (OOGEEP)
1718 COLUMBUS RD SW
PO BOX 187
GRANVILLE OH 43023-0535
(740) 587-0410
www.oogEEP.org

Oklahoma

Assoc. of Desk and Derrick Clubs
5153 E 51ST ST STE 107
TULSA OK 74135
(918) 622-1749
adotulsa@swbell.net
www.addc.org

Oklahoma Commission on Marginally Producing O&G Wells
421 NW 13TH ST STE 180
OKLAHOMA CITY OK 73103
(800) 390-0460
www.ok.gov/marginalwells

Oklahoma Energy Resources Board (OERB)
3555 NW 58TH ST STE 430
OKLAHOMA CITY OK 73112
(405) 942-5323
(800) 664-1301
info@oerb.com
www.oerb.com

University of Oklahoma Mewbourne College of Earth & Energy
100 EAST BOYD ROOM 1510
NORMAN OK 73019
(405) 325-3821
www.ou.edu/mcee.html

Texas

East Texas Historical Assoc.
PO BOX 6223 SFA STATION
NACOGDOCHES TX 75962
(936) 468-2407
www.easttexashistorical.org

Offshore Energy Center (OEC) - Ocean Star Museum
200 N DAIRY ASHFORD STE 6220
HOUSTON TX 77079
(281) 679-8040
oec@oceanstaroec.com
www.oceanstaroec.com

Virginia

National Energy Education Development Project (NEED)
8408 KAO CIRCLE
MANASSAS VA 20110
(703) 257-1117
www.need.org

Wisconsin

Wisconsin K-12 Energy Education Program (KEEP)
403 LRC, UWSP
STEVENS POINT WI 54481
(715) 346-4770
energy@uwsp.edu
www.uwsp.edu/cnr/wcee/keep

Wyoming

Wyoming State Historical Society
PO BOX 247
WHEATLAND WY 82201
(307) 322-4237
www.wyshs.org

CANADA

BP - A+ for Energy
240 4TH AVE SW
CALGARY AB T2P 2H8 CANADA
(403) 233-1359
aplusforenergycanada@bp.com
www.aplusforenergy.org

ENERGY IN DEPTH OFFICES

CALIFORNIA

Energy in Depth California
633 WEST 5TH STREET
SUITE 1600
LOS ANGELES, CA 90071-2027
www.energyindepth.org

DISTRICT OF COLUMBIA

Energy in Depth Headquarters
1201 15TH STREET NW STE 300
WASHINGTON DC 20005
(202) 857-4722
www.energyindepth.org

MICHIGAN

Energy in Depth Michigan
BLOOMFIELD HILLS MI
erik@energyindepth.org

OHIO

Energy in Depth Ohio
2434 WRENS DRIVE
STOW OH 44224
(330) 714-1271
www.eidohio.org

PENNSYLVANIA/NEW YORK

Energy in Depth Marcellus
100 FOURTH STREET STE 33
HONESDALE PA 18431
(573) 251-9550
www.eidmarcellus.org

OIL AND GAS MUSEUMS

Alabama

Choctaw Cnty Historical Museum
40 MELVIN RD
GILBERTOWN AL 26908
(205) 459-3383
www.ohwy.com/al/c/choccoh.htm

Arkansas

AK Museum of Natural Resources
3583 SMACKOVER HWY
SMACKOVER AR 71762
(870) 725-2877
www.amnr.org

Arkansas Museum of Science and History

500 PRESIDENT CLINTON AVE
STE 150
LITTLE ROCK AR 72201
(501) 396-7050
www.amod.org

California

Brea Museum and Heritage Center
125 WEST ELM STREET
BREA CA 92821
(714) 256-2283
www.breamuseum.org

California Oil Museum

1001 E MAIN ST
SANTA PAULA CA 93061
(805) 933-0076
www.oilmuseum.net

Hathaway Ranch and Oil Museum

11901 FLORENCE AVE
SANTA FE SPRINGS CA 90670
(562) 777-3444
www.hathaworld.com/hrm

Kern County Museum

3801 CHESTER AVE
BAKERSFIELD CA 93301
(661) 868-8400
www.kcmuseum.org

Olinda Historic Museum & Park

4025 SANTA FE ROAD
BREA CA 92821
(714) 671-4447
www.ci.brea.ca.us/article.cfm?id=940

Santa Barbara Maritime Museum

113 HARBOR WAY STE 190
SANTA BARBARA CA 93109
(805) 962-8404
www.sbmm.org

West Kern County Museum

PO BOX 491
TAFT CA 93268
(661) 765-6664
www.westkern-oilmuseum.org

Colorado

Museum of Nature and Science

2001 COLORADO BLVD
DENVER CO 80205
(303) 370-6000
www.dmns.org

Illinois

Illinois Oilfield Museum
10570 N 150TH ST
OBLONG IL 62449
(618) 592-4664
www.theonlyoblong.com/oil_field/

Museum of Science and Industry

57TH ST AND LAKE SHORE DR
CHICAGO IL 60637
(773) 684-1414
www.msichicago.org

Wabash County Museum

320 N MARKET ST
MT CARMEL IL 62863
(618) 262-8774
www.museum.wabash.il.us

Wood River Refinery Museum

PO BOX 76
ROXANNA IL 62084-0076
(618) 255-3718
www.wrrhm.org

Indiana

Red Crown Mini-Museum

6TH AND SOUTH ST
LAFAYETTE IN 47901
www.oldgas.com/info/redcrown.htm

Trump's Texaco Museum

BREWER AND WASHINGTON ST
KNIGHTSTOWN IN 46148
(765) 345-7135

Kansas

Hill City Oil Museum

801 W MAIN STREET
HILL CITY KS 67642
(785) 421-2543
www.grahamhistorical.ruraltel.net/oil/oil.html

Independence Historical Museum and Art Center

123 N 8TH ST
PO BOX 294
INDEPENDENCE KS 67301
(620) 331-3515
independencehistoricalmuseum.org

Kansas Oil Museum and Hall of Fame

383 E CENTRAL AVE
ELDORADO KS 67042
(316) 321-9333
www.kansasoilmuseum.org

Norman #1 Museum & RV Park

106 S 1ST
NEODESHA KS 66757
(620) 325-5316
www.neodesha.com/DocumentView.aspx?DID=46

Oil Patch Museum

I-70 AND US 281
RUSSELL KS
(785) 483-3637
www.russellks.org/attractions.html#oil

Stevens Cnty Gas & Hist. Museum

905 S ADAMS
HUGOTON KS 67951
(620) 544-8751
skyways.lib.ks.us/towns/Hugoton/museum.html

Louisiana

Int'l Petroleum Museum and Expo

PO BOX 1988
MORGAN CITY LA 70381
(985) 384-3744
www.rigmuseum.com

LA State Oil and Gas Museum

200 S LAND AVE
OIL CITY LA 71061
(318) 995-6845
www.sos.la.gov/tabid/242/default.aspx

Michigan

Henry Ford Museum

20900 OAKWOOD BLVD
DEARBORN MI 48124-4088
(313) 982-6001
www.hfmgv.org/museum

New Mexico

Farmington Museum

3041 E MAIN
FARMINGTON NM 87401
(505) 599-1174
www.farmingtonmuseum.org

New York

Pioneer Oil Museum

PO BOX 332
BOLIVAR NY 14715
(585) 928-1796
www.pioneeroilmuseum.com

Ohio

Allen County Museum and Historical Society

620 W MARKET ST
LIMA OH 45801
(419) 222-9426
www.allencountymuseum.org

County Line Historical Society

281 N MARKET ST
BOX 614
SHREVE OH 44616
(330) 567-2501
www.shreveohio.com/resources/county-line-historical-society

Hancock Historical Museum

422 W SANDUSKY ST
FINDLAY OH 45840
(419) 423-4433
www.hancockhistoricalmuseum.org

Wood County Historical Center and Museum

13660 COUNTY HOME RD
BOWLING GREEN OH 43402
(419) 352-0967
www.woodcountyhistory.org

Oklahoma

Anadarko Basin Museum of Natural History

204 N MAIN ST
ELK CITY OK 73644
(580) 243-0441

Bartlesville Area History Museum

401 SOUTH JOHNSTONE AVE
BARTLESVILLE OK 74003
(918) 338-4290
www.bartlesvillehistory.com

Cherokee Strip Regional Heritage Center

507 S 4TH ST
ENID OK 73701
(508) 237-1907
www.csrhc.org

Conoco Museum

501 W SOUTH AVE
PONCA CITY OK 74601
(580) 765-8687
www.conocomuseum.com

Drumright Community Historical Museum

301 E BROADWAY
DRUMRIGHT OK 74030
(918) 352-3002
www.drumrighthistoricalociety.org

Frank Phillips Home

1107 CHEROKEE AVE
BARTLESVILLE OK 74003
(918) 336-2491
www.frankphilliphshome.org

Greater Southwest Historical Museum

35 SUNSET DR
ARDMORE OK 73401
(580) 226-3857
www.gshm.org

Healdton Oil Museum

315 E MAIN ST
HEALDTON OK 73438-1836
(580) 229-0900
www.okhistory.org/outreach/affiliates/healdtonoil.html

Nowata County Hist. Museum

121 S PINE
NOWATA OK 74048
(918) 273-1191
www.ohwy.com/ok/y/ynowhimu.htm

Oklahoma Historical Society

800 NAZIH ZUHDI DR
OKLAHOMA CITY OK 73105
(405) 521-2491
www.okhistory.org

Oklahoma Oil Museum

1800 HWY 9 W
SEMINOLE OK 74868
(405) 382-1500
www.seminoleoklahoma.com/museum

Phillips Petroleum Company Museum

410 KEELER
BARTLESVILLE OK 74004
(918) 661-8687
www.phillips66museum.com

Sam Noble Museum of Natural History

2401 CHAUTAUQUA AVE
NORMAN OK 73072-7029
(405) 325-4712
www.snomnh.ou.edu

Stephens Cnty. Hist. Museum

160 N ALEXANDER ST
TOCCOA GA 30577
(706) 282-5055
www.toccoahistory.com

Tulsa Historical Society

2445 S PEORIA
TULSA OK 74114
(918) 712-9484
www.tulsaohistory.org/learn/earlytulsa/oil

Woolaroc Museum

1925 WOOLAROC RANCH RD
BARTLESVILLE OK 74003
336-0307 x10
www.woolaroc.org

Pennsylvania

Barbara Morgan Harvey Center for the Study of Oil Heritage

web.clarion.edu/BMHarveyCenter/
HCWBuild/Harvey_Center_Web_
Site/Home.html

Coolspring Power Museum

179 COOLSPRING RD
COOLSPRING PA 15730
(814) 849-6883
www.coolspringpowermuseum.org

Drake Well Museum

202 MUSEUM LN
TITUSVILLE PA 16354
(814) 827-2797
www.drakewell.org

Oil Region National Heritage Area

217 ELM ST
OIL CITY PA 16301-1412
(814) 677-3152
www.oilregion.org

Penn-Brad Oil Museum

ROUTE 219
BRADFORD PA 16701
(814) 368-5574
www.pennbradoilmuseum.com

Petroleum History Institute

PO BOX 165
OIL CITY PA 16301-0165
www.petroleumhistory.org

Pumping Jack Museum

PO BOX 25
EMLENTON PA 16373
(724) 867-0030
www.pumpingjack.org

Simpler Times Museum

111 SIMPLER TIMES LN
TIDIOUTE PA 16351
(814) 484-3483

Venango Museum of Art, Science and Industry

270 SENECA ST
OIL CITY PA 16301
(814) 676-2007
www.venangomuseum.org

Texas

Bob Bullock Texas State History Museum

PO BOX 12874
AUSTIN TX 78711
(866) 369-7108
www.thestoryoftexas.com

Central Texas Oil Patch Museum

421 E DAVIS ST
LULING TX 78648
(830) 875-1922
www.oilmuseum.org

Depot Museum

514 N HIGH ST
HENDERSON TX 75652
(903) 657-4303
www.depotmuseum.com

East Texas Oil Museum

HWY 259 AND ROSS ST
KILGORE TX 75662
(903) 983-8295
www.easttexasoilmuseum.com

Fort Worth Museum of Science and History

1600 GENDY ST
FORT WORTH TX 76107
(817) 255-9300
www.fwmuseum.org

Gaston Museum

6558 HWY 64 W
PO BOX 301
JOINERVILLE TX 75658
(903) 847-2205
www.gastonmuseum.org

Heritage Museum of Montgomery County

PO BOX 2262
CONROE TX 77305-2262
(936) 539-6873
www.heritagemuseum.us

Houston Museum of Natural Science

5555 HERMANN PARK DR
HOUSTON TX 77030
(713) 639-4629
www.hmns.org

OIL AND GAS MUSEUMS

Hutchinson County Historical Museum

618 N MAIN
BORGER TX 79007
(806) 273-0130
www.hutchinsoncountymuseum.org

London Museum and Tea Room

690 S MAIN
NEW LONDON TX 75682
(903) 895-4602

Million Barrel Museum

400 MUSEUM BLVD
MONAHANS TX 79756
www.monahans.org/chamber/node/207

Museum of the Plains

1200 N MAIN
PERRYTON TX 79070
(806) 435-6400
www.museumoftheplains.com

Panhandle-Plains Historical Museum

2503 4TH AVE
CANYON TX 79015
(806) 651-2244
www.panhandleplains.org

Permian Basin Petroleum Museum

1500 W INTERSTATE 20
MIDLAND TX 79701
(432) 683-4403
www.petroleummuseum.org

Ranger Historical Preservation Society

PO BOX 320
RANGER TX 76470-0320
(254) 647-5353
www.txbusiness.com/rhps

Spindletop-Gladys City Boomtown Museum

PO BOX 10070
HWY 69 AND UNIVERSITY DR
Beaumont, TX 77710
(409) 880-1750
www.spindletop.org

Square House Museum

PO BOX 276
PANHANDLE TX 79068
(806) 537-3524
www.squarehousemuseum.org

Texas Energy Museum

600 MAIN ST
BEAUMONT TX 77701
(409) 833-5100
www.texasenergymuseum.org

Van Area Oil and Historical Museum

PO BOX 55
VAN TX 75790
(903) 963-5051
www.vantexas.com/history.html

W. K. Gordon Center for Industrial History

PO BOX 218
MINGUS TX 76463
(254) 968-1886
www.tarleton.edu/gordoncenter

West Virginia

West Virginia Oil and Gas Museum

PO BOX 1685
119 THIRD ST
PARKERSBURG WV 26101
(304) 485-5446
www.oilandgasmuseum.com

Wyoming

Hot Springs County Museum and Cultural Center

700 BROADWAY
THERMOPOLIS WY 82443
(307) 864-5183
www.hschemistry.org

Salt Creek Oil Museum

531 PEAKE ST
MIDWEST WY 82643
(307) 437-6633
www.wyomingtourism.org/overview/saltcreekoilmuseum/4155

Tate Geological Museum

125 COLLEGE DR
CASPER WY 82601-4699
(307) 268-2447
www.caspercollege.edu/tate

Oil and Gas museum information compiled by the American Oil and Gas Historical Society. For additional details, visit www.aoghs.org.

STATE RANKINGS

Crude Oil Wells Drilled		Natural Gas Wells Drilled		Crude Oil Production		Natural Gas Production	
1	Texas	1	Texas	1	Federal Offshore	1	Texas
2	California	2	Colorado	2	Texas	2	Wyoming
3	Kansas	3	Pennsylvania	3	Alaska	3	Federal Offshore
4	Oklahoma	4	Wyoming	4	California	4	Louisiana
5	North Dakota	5	Arkansas	5	North Dakota	5	Oklahoma
6	Pennsylvania	6	Louisiana	6	Oklahoma	6	Colorado
7	New Mexico	7	Oklahoma	7	Louisiana	7	New Mexico
8	Utah	8	West Virginia	8	New Mexico	8	Arkansas
9	Louisiana	9	Virginia	9	Wyoming	9	Pennsylvania
10	Illinois	10	Utah	10	Kansas	10	Utah
11	Kentucky	11	Kentucky	11	Colorado	11	Alaska
12	New York	12	Ohio	12	Montana	12	Kansas
13	Wyoming	13	Kansas	13	Utah	13	California
14	Colorado	14	New Mexico	14	Mississippi	14	West Virginia
15	Alaska	15	Alabama	15	Illinois	15	Alabama
16	Mississippi	16	Montana	16	Alabama	16	Michigan
17	Montana	17	New York	17	Michigan	17	Virginia
18	Federal Offshore	18	Federal Offshore	18	Arkansas	18	Kentucky
19	Arkansas	19	California	19	Ohio	19	Montana
20	Ohio	20	Indiana	20	Pennsylvania	20	North Dakota
21	Michigan	21	Michigan	21	Kentucky	21	Ohio
22	Indiana	22	Mississippi	22	Nebraska	22	Mississippi
23	Nebraska	23	Tennessee	23	West Virginia	23	New York
24	Missouri	24	South Dakota	24	Indiana	24	Florida
25	Alabama	25	Illinois	25	Florida	25	Indiana
26	Tennessee	26	Nebraska	26	South Dakota	26	Tennessee
27	South Dakota	27	Alaska	27	Nevada	27	Nebraska
28	West Virginia	28	Oregon	28	New York	28	South Dakota
29	Florida	29	North Dakota	29	Tennessee	29	Oregon
30	Virginia	30	Missouri	30	Missouri	30	Illinois
31	Nevada	31	Maryland	31	Arizona	31	Arizona
32	Arizona	32	Arizona	32	Virginia	32	Maryland
33	Iowa	33	Washington			33	Nevada
34	Washington	34	Florida				
		35	Nevada				
		36	Idaho				

Sources: IHS for wells drilled and EIA for production.

TOP PRODUCING CONGRESSIONAL DISTRICTS - CRUDE OIL

Rank	State	District	% of US Prod
1	FOS Gulf & Pacific	7, 3	46.1284
2	California	20, 22	13.7477
3	Texas	11	11.8131
4	New Mexico	2	5.6317
5	Texas	19	4.4161
6	Louisiana	3	2.5380
7	Wyoming	At Large	2.2979
8	FOS Gulf & Pacific	California	1.6425
9	Texas	23	1.6112
10	Utah	2	1.3906
11	Oklahoma	3	1.1119
12	Oklahoma	4	0.8627
13	North Dakota	At Large	0.8532
14	Texas	13	0.6645
15	Texas	1	0.6040
16	Kansas	1	0.5682
17	Texas	15	0.5118
18	Montana	At Large	0.5014
19	Colorado	3	0.4224
20	Louisiana	4	0.3220
21	Louisiana	7	0.3058
22	Texas	14	0.2892
23	Colorado	4	0.2776
24	Texas	28	0.1545
25	Texas	22	0.1541
26	Texas	25	0.1515
27	Texas	2, 8	0.1289
28	Texas	17	0.1133
29	Texas	29, 18, 7, 9	0.1109
30	Texas	27	0.0989
31	Texas	2	0.0842
32	Texas	8	0.0812
33	New Mexico	3	0.0734
34	Alabama	1	0.0670
35	Texas	6	0.0567
36	Michigan	1	0.0542
37	Louisiana	5	0.0418
38	Texas	12	0.0318
39	Oklahoma	2	0.0311
40	Texas	5	0.0233
41	Texas	23, 28	0.0107
42	Texas	17, 6	0.0079
43	Mississippi	3	0.0048
44	Texas	26	0.0039
45	Texas	11, 23	0.0032
46	Mississippi	2, 3	0.0008
47	Arkansas	2	0.0000
48	Texas	12, 26, 24, 6	0.0000
49	Virginia	9	0.0000
50	West Virginia	3	0.0000

Source: IPAA and IHS.

*Districts have been aggregated for ranking purposes and rounded in certain cases.

TOP PRODUCING CONGRESSIONAL DISTRICTS - NATURAL GAS

Rank	State	District	% of US Prod
1	Wyoming	At Large	13.5063
2	FOS Gulf & Pacific	7, 3	7.8857
3	Colorado	3	7.5501
4	Louisiana	4	6.3906
5	Texas	1	5.1387
6	New Mexico	3	4.9746
7	Texas	17	4.7805
8	Oklahoma	3	4.6031
9	Texas	12, 26, 24, 6	3.7134
10	Texas	13	3.0618
11	Oklahoma	2	2.8976
12	Arkansas	2	2.2873
13	Texas	6	2.2089
14	Texas	15	2.1568
15	Utah	2	2.0708
16	Louisiana	5	2.0043
17	Texas	23	1.9954
18	Texas	12	1.9007
19	Mississippi	3	1.4587
20	Texas	28	1.4476
21	Colorado	4	1.3979
22	Texas	26	1.3296
23	Texas	23, 28	1.3192
24	Louisiana	3	1.2876
25	New Mexico	2	1.1967
26	Kansas	1	1.1585
27	Texas	11	1.0666
28	Texas	25	1.0442
29	Texas	2	0.7325
30	Texas	27	0.6995
31	Virginia	9	0.6455
32	Texas	14	0.6220
33	Alabama	1	0.5698
34	Michigan	1	0.5230
35	Louisiana	7	0.5220
36	Texas	17, 6	0.5167
37	Oklahoma	4	0.5137
38	Alabama	6, 7	0.4168
39	Arkansas	3	0.3583
40	Mississippi	2, 3	0.3532
41	Texas	11, 23	0.3422
42	Texas	8	0.2938
43	Arkansas	4	0.2802
44	Texas	2, 8	0.1669
45	Texas	29, 18, 7, 9	0.1237
46	Texas	5	0.1046
47	West Virginia	3	0.0944
48	Montana	At Large	0.0907
49	Texas	19	0.0725
50	Texas	22	0.0698
51	North Dakota	At Large	0.0265
52	California	20, 22	0.0181
53	FOS Gulf & Pacific	California	0.0104

TOP PRODUCING CONGRESSIONAL DISTRICTS - NATURAL GAS

Source: IPAA and IHS.

*Districts have been aggregated for ranking purposes and rounded in certain cases.

Be Part of the New IPAA Grassroots Initiative

What is the RIG Program?

IPAA's RIG Program is a new grassroots initiative intended to maximize the independent producer's voice regarding national energy policy. This will be a campaign based on volunteers, and is designed to further enhance our ongoing Government Relations efforts that will focus on increased involvement in the political process by IPAA members.

By increasing our visibility and establishing sustained, one-to-one relationships between IPAA members and their elected officials, we will be able to further the education of policymakers while encouraging balanced energy policy that promotes American production of oil and natural gas.



What do I have to do?

Small tasks can have a larger impact than may first be evident. That is why the RIG Program is volunteer-based and asks only that you participate in activities that you can. For example – attending a Representative's townhall meeting, signing up for email alerts from your Representative, etc.

How does the RIG Program work?

As a volunteer of the RIG Program, you will receive an informational packet on the Member of Congress that represents the district you live in or work in. Included in the packet are suggested steps to get started that will help you along the way. There are no additional costs to participate in the program; all that is needed is a commitment to do your part to encourage balanced energy policy that promotes American production of oil and natural gas.

How do I get started?

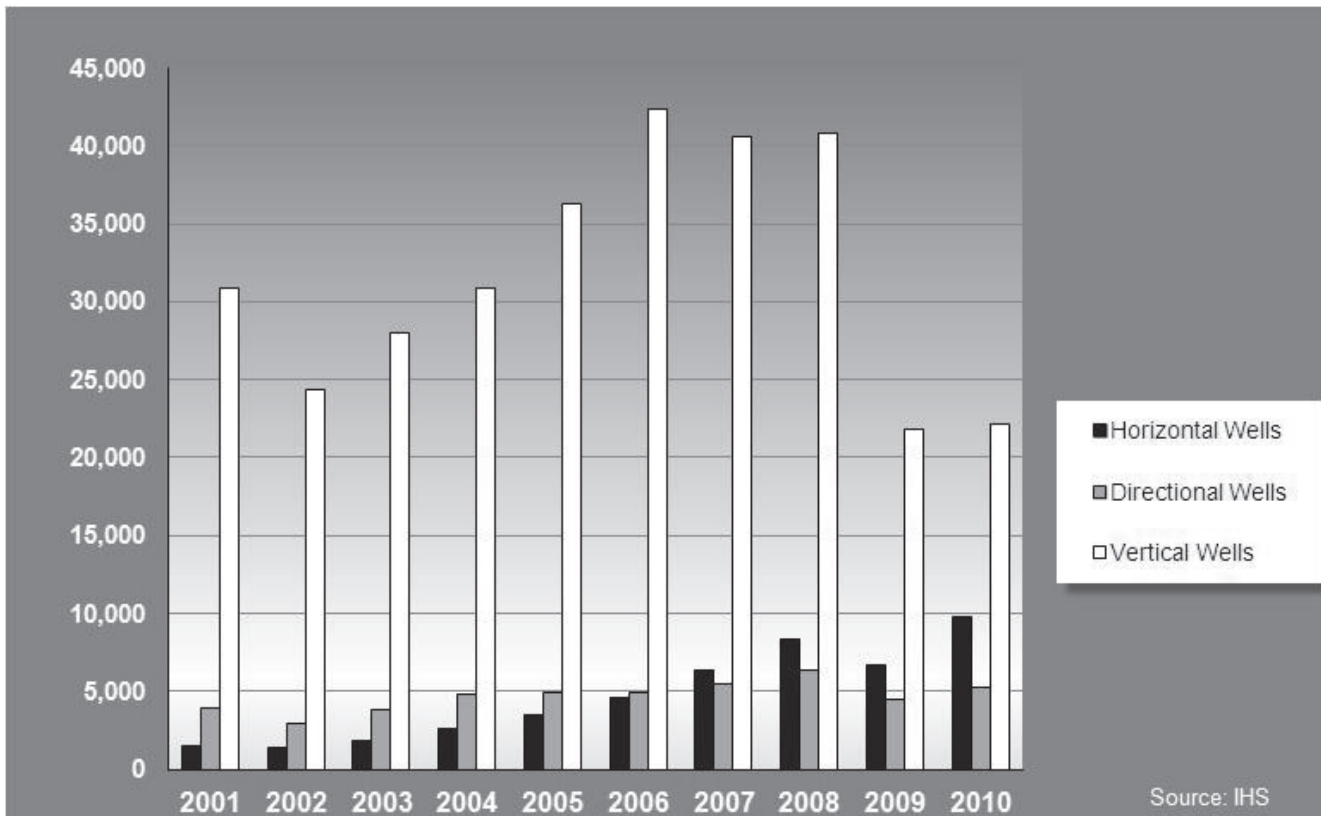
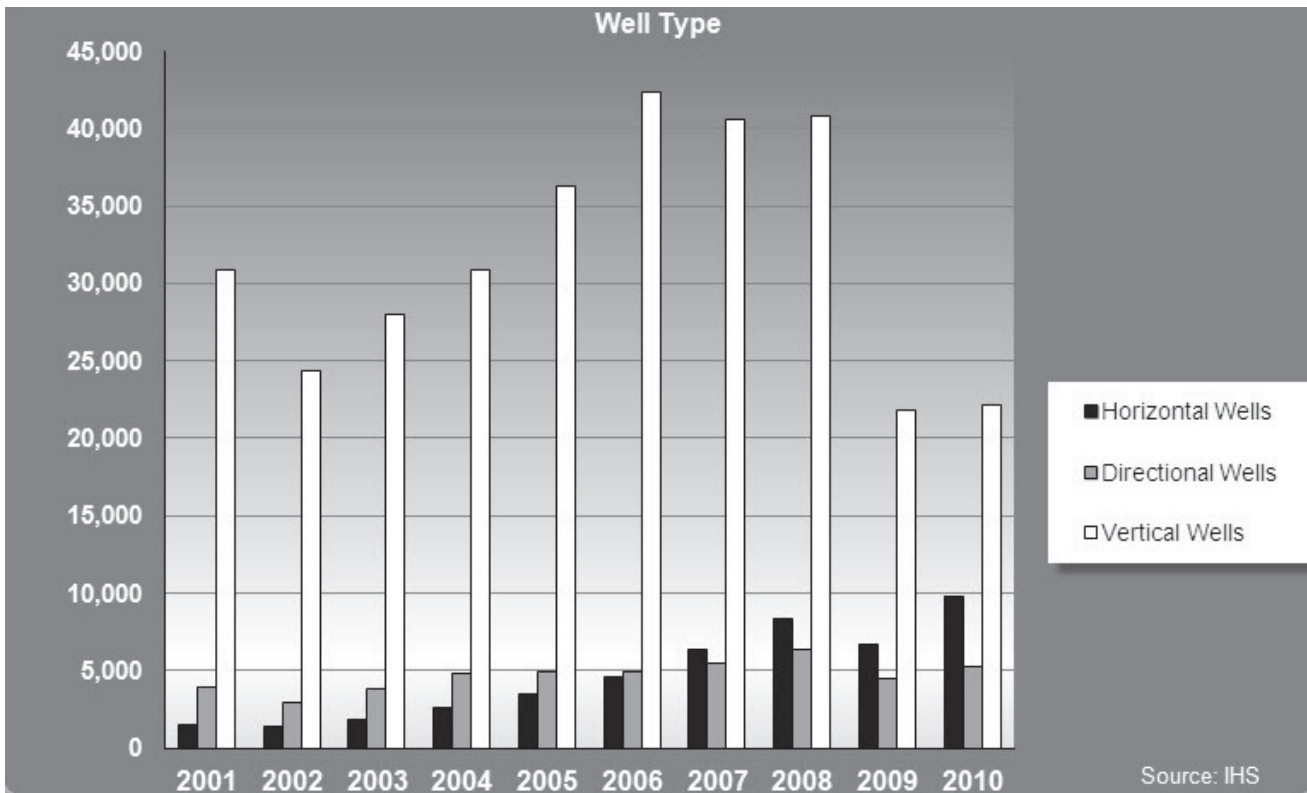
Visit www.ipaa.org/rig to find more information and to sign up. After you sign up, you will receive an email with all the necessary and simple instructions for getting started.

Questions about the RIG Program?

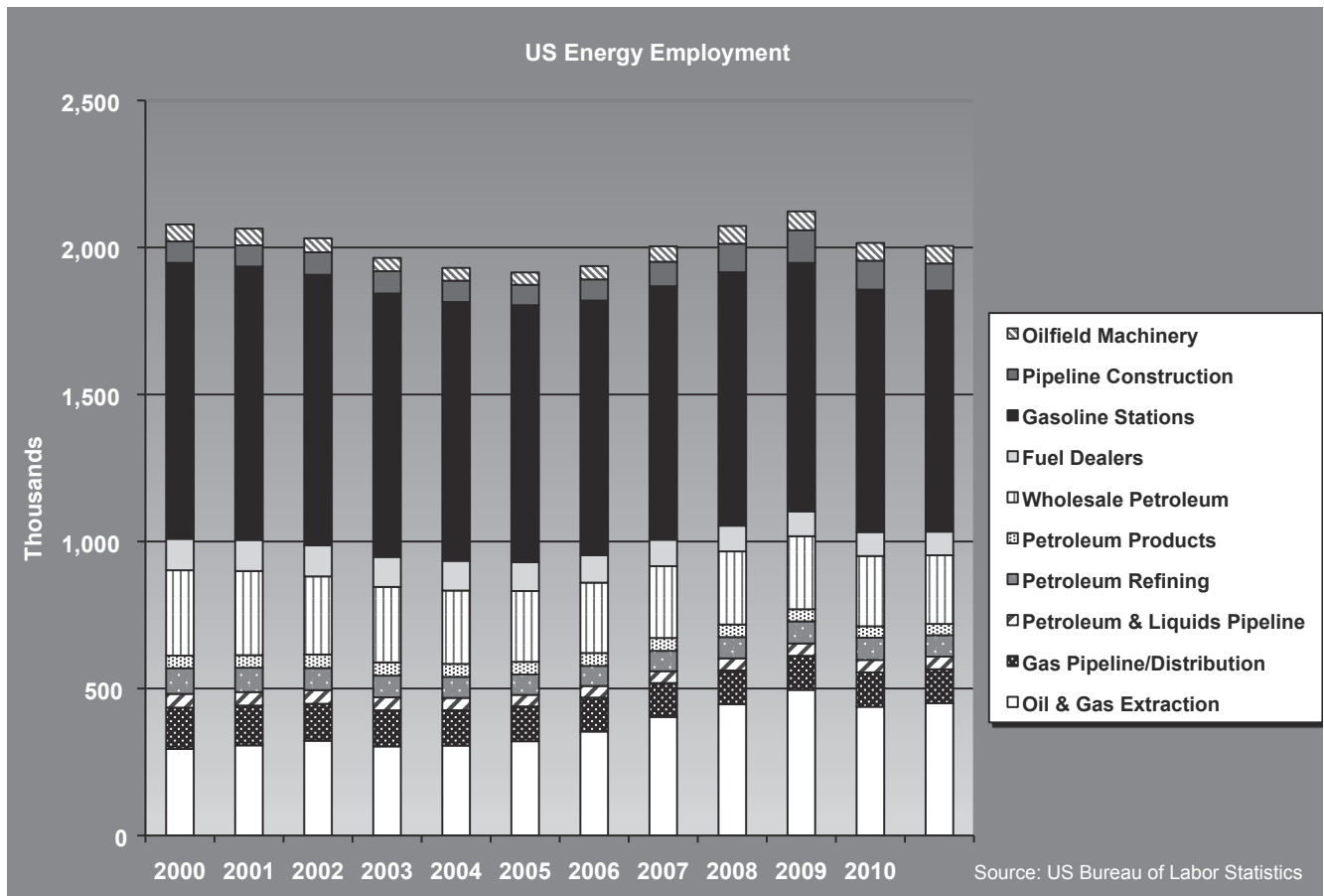
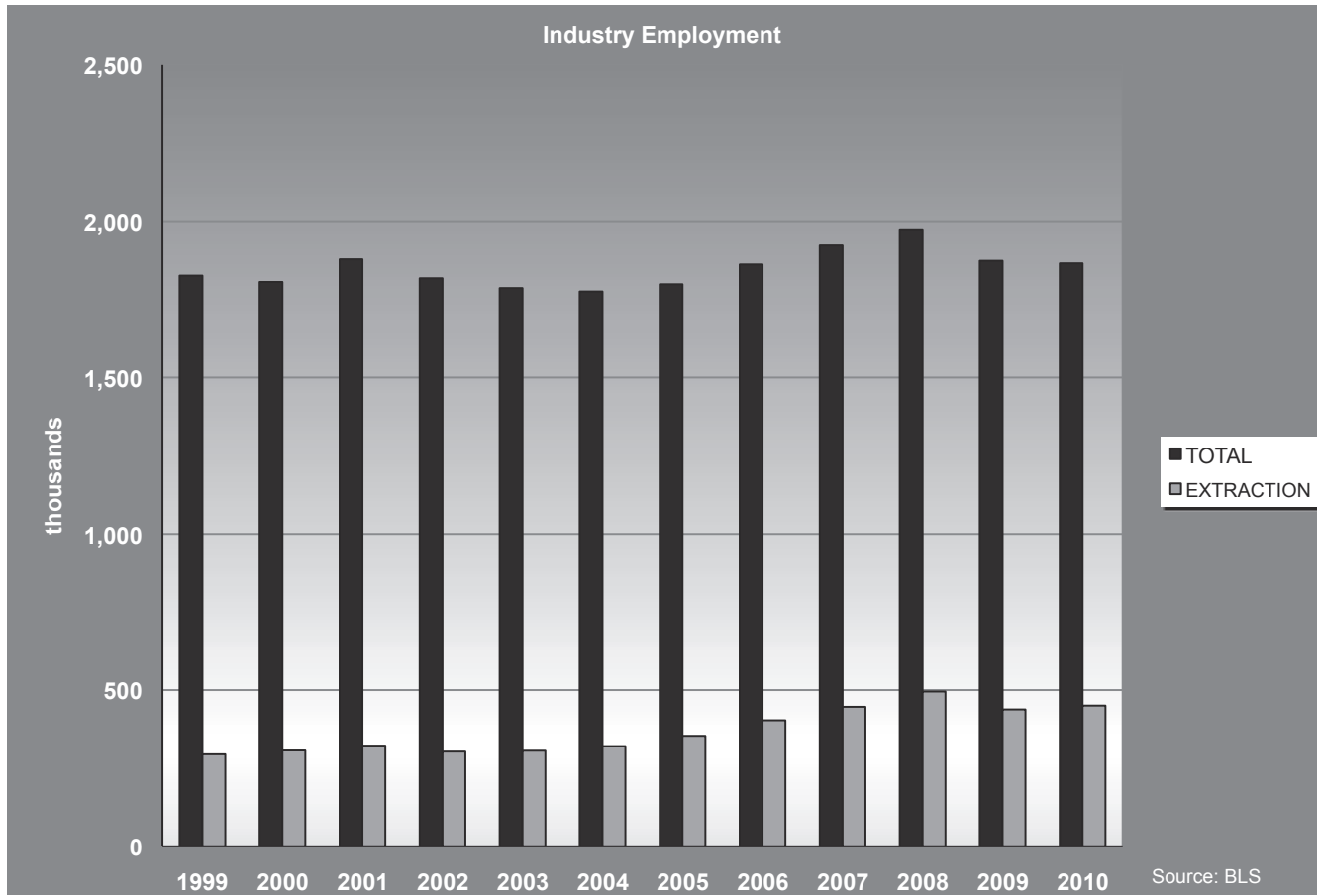
Please contact Kristen Lingley at (202) 857-4722

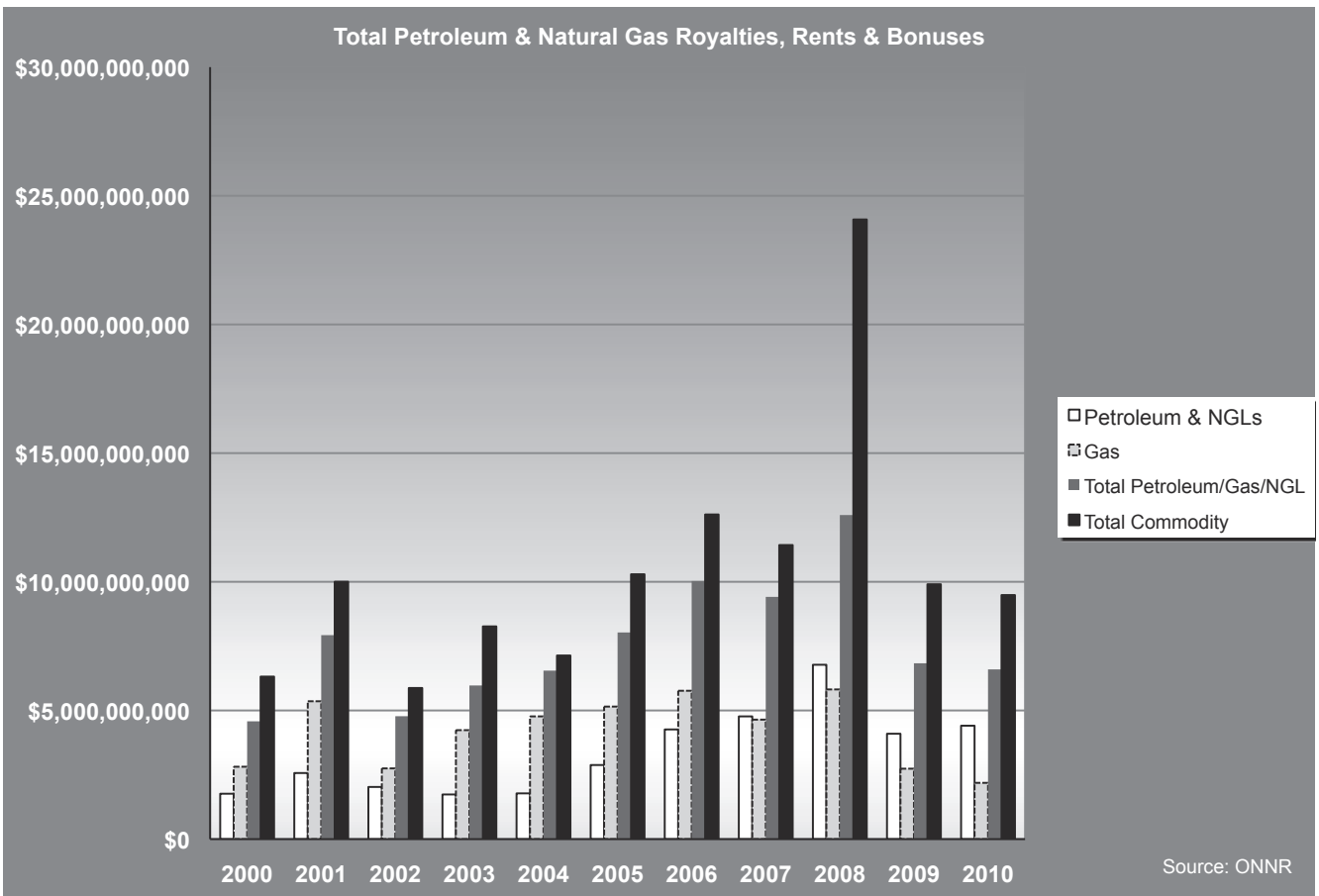
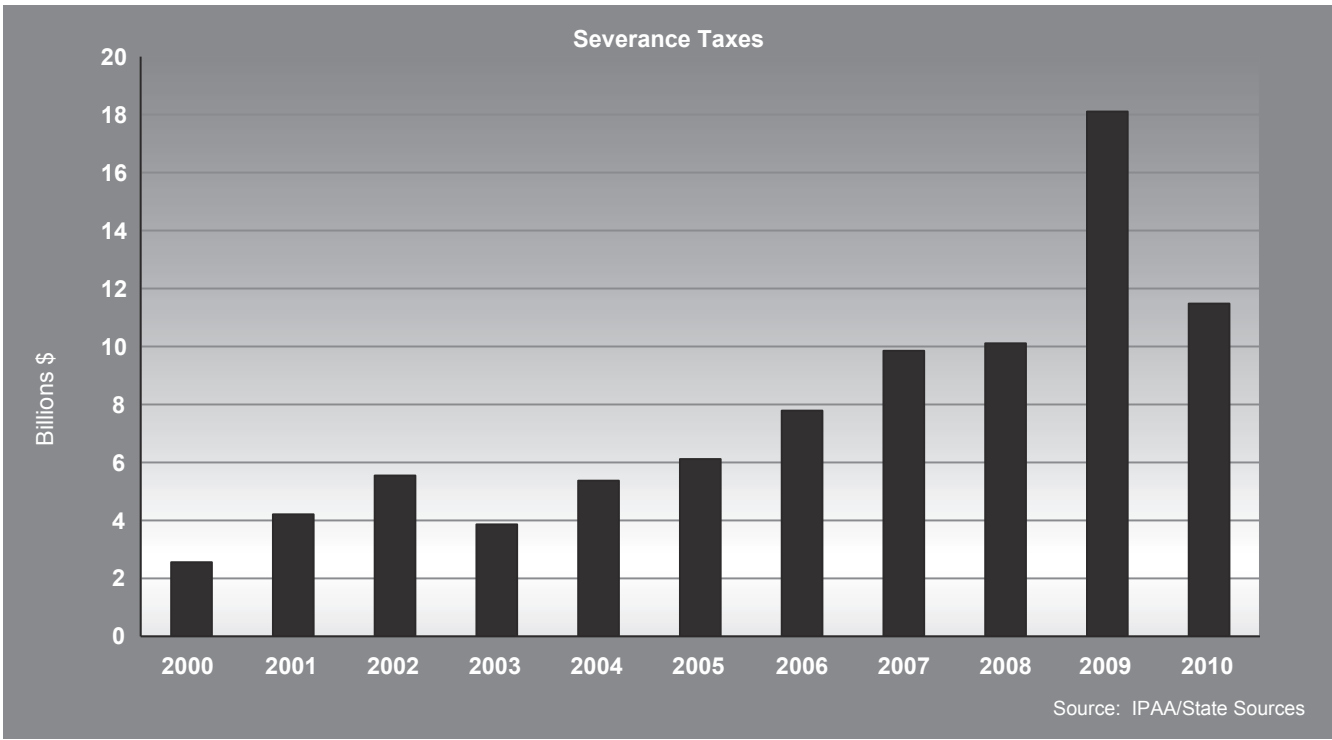
Email to rigprogram@ipaa.org

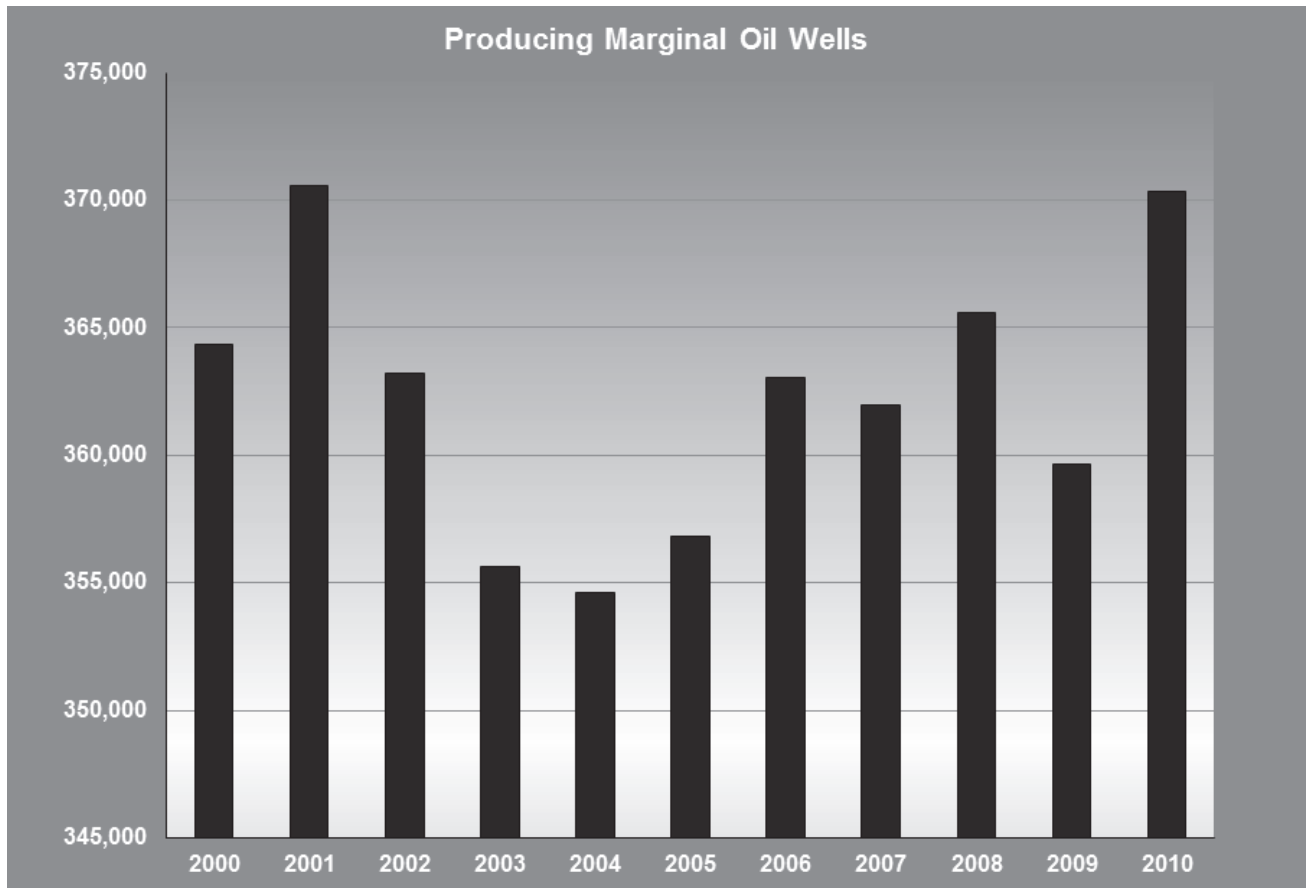
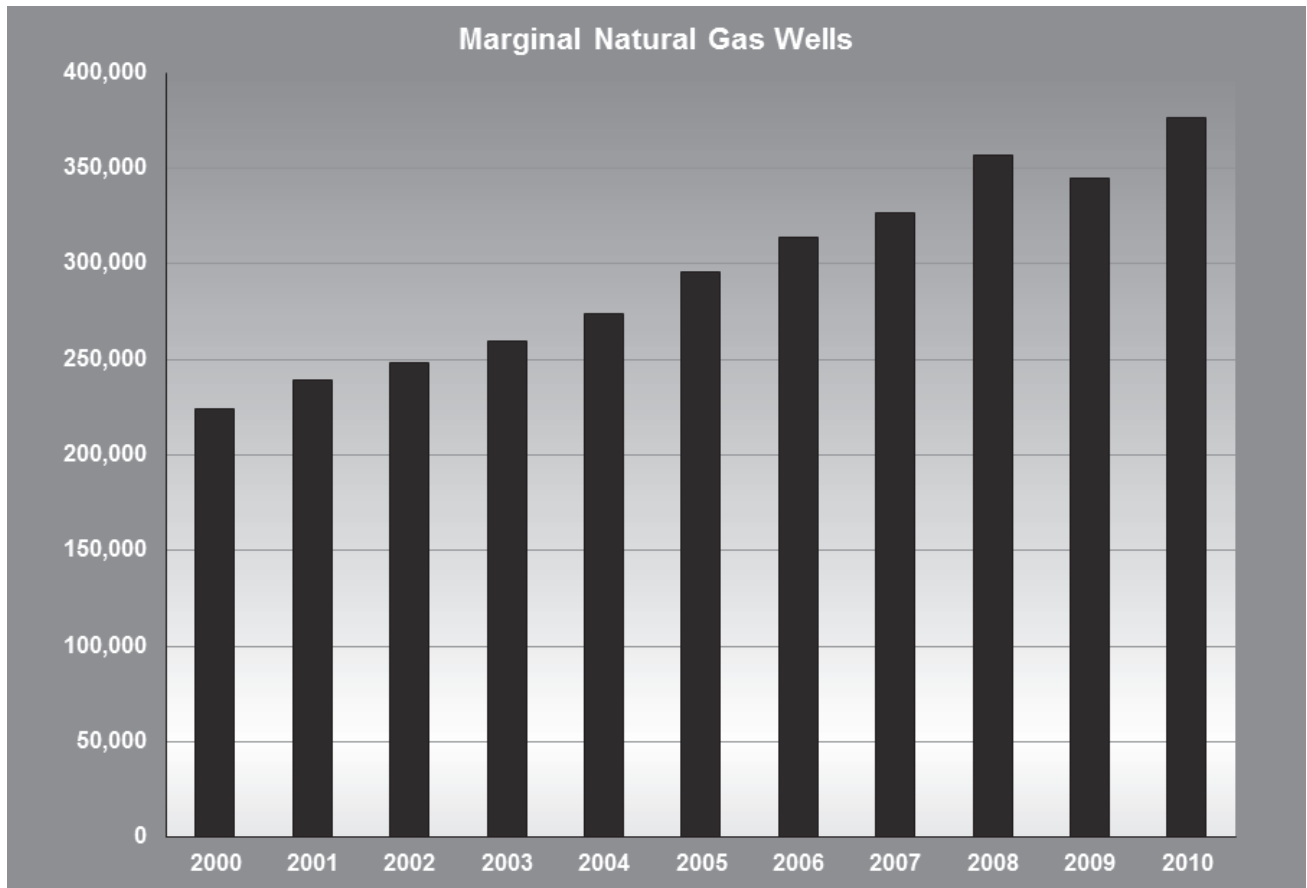
Or visit www.ipaa.org/rig



Source: IHS and EIA.







CRUDE OIL SUMMARY

Year	Production			Imports Total	Supply		Exports	Demand		Crude Reserves		Price Oil Wellhead (\$/bbl.)
	Crude Oil	NGL	Total		Other	Total		Domestic	Total	Proved Reserves (mill. bbls.)	New Reserves (mill. bbls.)	
(thous. b/d)												
1962	7,332	1,021	8,353	2,082	133	10,568	168	10,400	10,568	31,389	2,181	2.90
1963	7,542	1,098	8,640	2,123	188	10,951	208	10,743	10,951	30,970	2,174	2.89
1964	7,614	1,155	8,769	2,258	198	11,225	202	11,023	11,225	30,991	2,665	2.88
1965	7,804	1,210	9,014	2,468	217	11,699	187	11,513	11,700	31,352	3,048	2.88
1966	8,295	1,284	9,579	2,573	130	12,282	198	12,085	12,283	31,452	2,964	2.88
1967	8,810	1,409	10,219	2,537	111	12,867	307	12,560	12,867	31,377	2,962	2.92
1968	9,096	1,504	10,600	2,840	184	13,624	231	13,393	13,624	30,707	2,455	2.94
1969	9,238	1,590	10,828	3,166	376	14,370	233	14,137	14,370	29,632	2,120	3.09
1970	9,637	1,660	11,297	3,419	240	14,956	259	14,697	14,956	39,001	2,689	3.18
1971	9,463	1,694	11,157	3,925	354	15,436	224	15,213	15,437	38,063	2,318	3.39
1972	9,441	1,744	11,185	4,741	663	16,589	222	16,367	16,589	36,339	1,558	3.39
1973	9,208	1,738	10,946	6,256	337	17,539	231	17,308	17,539	35,300	2,146	3.89
1974	8,774	1,688	10,462	6,112	300	16,874	221	16,652	16,873	34,250	1,994	6.87
1975	8,375	1,632	10,007	6,056	467	16,531	209	16,322	16,531	32,682	1,318	7.67
1976	8,132	1,604	9,736	7,313	635	17,684	223	17,461	17,684	30,942	1,085	8.19
1977	8,245	1,618	9,863	8,808	4	18,674	243	18,431	18,674	31,780	1,140	8.57
1978	8,707	1,567	10,274	8,364	572	19,209	362	18,847	19,209	31,355	2,583	9.00
1979	8,552	1,583	10,135	8,456	392	18,984	471	18,513	18,984	29,810	1,410	12.64
1980	8,597	1,573	10,170	6,909	521	17,600	544	17,056	17,600	29,805	2,970	21.59
1981	8,572	1,590	10,162	5,995	495	16,653	595	16,058	16,653	29,426	2,570	31.77
1982	8,649	1,539	10,188	5,113	810	16,111	815	15,296	16,111	27,858	1,382	28.52
1983	8,688	1,547	10,235	5,051	684	15,970	739	15,231	15,970	27,735	2,897	26.19
1984	8,879	1,626	10,505	5,437	506	16,448	722	15,726	16,448	28,446	3,748	25.88
1985	8,971	1,595	10,566	5,067	874	16,507	781	15,726	16,507	28,416	3,022	24.09
1986	8,680	1,546	10,226	6,223	616	17,066	785	16,281	17,066	26,889	1,446	12.51
1987	8,349	1,591	9,940	6,678	811	17,429	764	16,665	17,429	27,256	3,240	15.40
1988	8,140	1,621	9,761	7,402	935	18,098	815	17,283	18,098	26,825	2,380	12.58
1989	7,613	1,546	9,159	8,060	964	18,184	859	17,325	18,184	26,501	2,262	15.86
1990	7,355	1,559	8,914	8,017	913	17,845	857	16,988	17,845	26,254	2,258	20.03
1991	7,417	1,659	9,076	7,626	1,012	17,715	1,001	16,714	17,715	24,682	940	16.54
1992	7,171	1,697	8,868	7,888	1,227	17,983	949	17,033	17,983	23,745	1,509	15.99
1993	6,847	1,736	8,583	8,620	1,037	18,240	1,003	17,237	18,240	22,957	1,551	14.25
1994	6,662	1,727	8,389	8,996	1,275	18,660	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	19,290	22,017	1,839	18.46
1997	6,452	1,817	8,269	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	1,079	20,620	971	19,649	20,620	22,446	2,316	21.84
2002	5,746	1,880	7,624	11,530	1,591	20,745	984	19,761	20,745	22,677	2,106	22.51
2003	5,644	1,719	7,363	12,264	1,434	21,061	1,027	20,034	21,061	21,891	1,091	27.56
2004	5,435	1,809	7,244	13,145	1,390	21,779	1,048	20,731	21,779	21,371	1,299	36.77
2005	5,186	1,717	6,903	13,714	1,350	21,967	1,165	20,802	21,967	21,757	2,119	50.28
2006	5,089	1,739	6,828	13,707	1,469	22,004	1,317	20,687	22,004	20,972	867	59.69
2007	5,077	1,783	6,860	13,468	1,785	22,113	1,433	20,680	22,113	21,317	2,036	66.52
2008	5,000	1,784	6,784	12,915	1,601	21,300	1,802	19,498	21,300	19,121	-524	94.04
2009	5,353	1,910	7,263	11,691	1,841	20,795	2,024	18,771	20,795	20,682	3,312	56.35
2010	5,479	2,074	7,553	11,793	2,187	21,533	2,353	19,180	21,533	23,267	4,352	74.71

Sources: Energy Information Administration.

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 Gas Wellhead (\$/Mcf.)
	Marketed	Dry	Loss		Other*	Total	Proved Reserves	New Reserves					
							(Bcf)						
1962	13,877	13,253	624	402	838	14,509		838	16	13,267	272,279	19,750	.16
1963	14,747	14,077	670	406	899	15,399		899	17	13,970	276,151	18,418	.16
1964	15,547	14,824	723	443	866	16,153		866	20	14,814	281,251	20,447	.15
1965	16,040	15,287	753	456	934	16,703		934	26	15,280	286,469	21,470	.16
1966	17,207	16,468	739	480	1,116	18,089		1,116	25	16,452	289,333	20,355	.16
1967	18,171	17,386	785	564	1,052	19,084		1,052	82	17,388	292,908	21,956	.16
1968	19,322	18,494	828	652	1,236	20,476		1,236	94	18,632	287,350	13,816	.16
1969	20,698	19,831	867	727	1,329	21,938		1,329	51	20,056	275,109	8,482	.17
1970	21,921	21,015	906	821	1,388	23,294		1,388	70	21,139	290,746	37,598	.17
1971	22,493	21,610	883	935	1,427	24,052		1,427	80	21,793	278,806	10,136	.18
1972	22,532	21,624	908	1,019	1,679	24,400		1,679	78	22,101	266,085	9,791	.19
1973	22,648	21,731	917	1,033	1,456	24,297		1,456	77	22,049	249,950	6,471	.22
1974	21,601	20,713	887	959	1,624	23,373		1,624	77	21,223	237,132	8,501	.30
1975	20,109	19,236	872	953	1,687	21,949		1,687	73	19,538	228,200	10,786	.45
1976	19,952	19,098	854	964	1,640	21,767		1,640	65	19,946	216,026	7,368	.58
1977	20,025	19,163	863	1,011	1,654	21,884		1,654	56	19,521	207,413	12,978	.79
1978	19,974	19,122	852	966	1,817	21,958		1,817	53	19,627	208,033	19,425	.91
1979	20,471	19,663	808	1,253	1,620	22,592		1,620	56	20,241	200,997	12,221	1.18
1980	20,180	19,403	777	985	1,385	21,822		1,385	49	19,877	199,021	16,723	1.59
1981	19,956	19,181	775	904	1,499	21,643		1,499	59	19,404	201,730	21,446	1.98
1982	18,582	17,820	762	933	1,647	20,452		1,647	52	18,001	201,512	17,288	2.46
1983	16,884	16,094	790	918	1,523	18,590		1,523	55	16,835	200,247	14,523	2.59
1984	18,304	17,466	838	843	1,894	20,258		1,894	55	17,951	197,463	14,409	2.66
1985	17,270	16,454	816	950	2,005	19,464		2,005	55	17,281	193,369	11,891	2.51
1986	16,859	16,059	800	750	1,364	18,234		1,364	61	16,221	191,586	13,827	1.94
1987	17,433	16,621	812	993	1,484	19,152		1,484	54	17,211	187,211	11,739	1.67
1988	17,918	17,103	816	1,294	1,807	20,278		1,807	74	18,030	168,024	-2,517	1.69
1989	18,095	17,311	785	1,382	2,917	21,717		2,917	107	19,119	167,116	16,075	1.69
1990	18,594	17,810	784	1,532	2,265	21,693		2,265	86	19,174	169,346	19,463	1.71
1991	18,532	17,698	835	1,773	2,699	22,299		2,699	129	19,562	167,062	14,918	1.64
1992	18,712	17,840	872	2,138	2,805	22,999		2,805	216	20,228	165,015	15,376	1.74
1993	18,982	18,095	886	2,350	3,105	23,690		3,105	140	20,790	162,415	15,189	2.04
1994	19,710	18,821	889	2,624	2,598	24,205		2,598	162	21,247	163,837	19,744	1.85
1995	19,506	18,599	908	2,841	3,333	24,927		3,333	154	22,207	165,146	19,275	1.55
1996	19,812	18,854	958	2,937	3,725	25,669		3,725	153	22,610	166,474	21,456	2.17
1997	19,866	18,902	964	2,994	3,641	25,694		3,641	157	22,737	167,223	19,960	2.32
1998	19,961	19,024	938	3,152	2,975	25,310		2,975	159	22,246	164,041	15,538	1.96
1999	19,805	18,832	973	3,585	2,585	25,166		2,585	163	22,405	167,406	22,293	2.19
2000	20,198	19,182	1,016	3,782	3,053	26,261		3,053	244	23,333	177,427	29,240	3.68
2001	20,570	19,616	954	3,977	2,110	26,076		2,110	373	22,239	183,460	25,812	4.00
2002	19,885	18,928	957	4,015	2,734	26,193		2,734	516	23,027	186,946	22,839	2.95
2003	19,974	19,099	876	3,944	2,526	26,249		2,526	680	22,277	189,044	21,523	4.88
2004	19,517	18,591	927	4,259	2,689	26,393		2,689	854	22,403	192,513	22,637	5.46
2005	18,927	18,051	876	4,341	2,621	25,742		2,621	729	22,014	204,385	30,330	7.33
2006	19,410	18,504	906	4,186	1,919	25,333		1,919	724	21,699	211,085	25,245	6.39
2007	20,196	19,266	930	4,608	2,356	27,052		2,356	822	23,104	237,726	46,107	6.25
2008	21,112	20,159	953	3,984	2,465	27,571		2,465	963	23,277	244,656	27,453	7.97
2009	21,648	20,624	1,024	3,751	1,824	27,227		1,824	1,072	22,910	272,509	27,853	3.67
2010	22,402	21,332	1,070	3,741	1,993	28,203		1,993	1,137	23,775	304,625	54,355	4.48

Sources: Energy Information Administration.
 Note: Reserves estimated as of December 31 each year.

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.)	
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	1,658	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	2,259	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	1,980	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	5,247	10,230	9,522	8,468	672	27,988	134.5	
1990	1,493	1,010	2,685	5,150	12,445	11,126	8,496	802	32,067	156.2	
1991	1,251	860	2,195	4,511	12,542	9,768	7,476	1,070	29,786	145.1	
1992	847	721	1,762	3,467	9,379	8,149	5,857	989	23,385	120.2	
1993	952	755	1,683	3,482	8,828	9,829	6,093	716	24,750	133.8	
1994	1,087	775	1,613	3,622	7,334	9,358	5,092	669	21,784	125.0	
1995	1,253	723	1,605	3,152	8,248	8,082	4,814	885	21,144	117.4	
1996	1,307	779	1,676	3,021	8,836	9,027	4,890	791	22,753	126.6	
1997	1,336	943	1,757	3,166	11,206	11,498	5,874	1,017	28,578	161.7	
1998	1,566	827	1,478	2,483	7,682	11,639	4,761	838	24,082	137.6	
1999	1,125	625	1,244	1,924	4,805	12,027	3,550	478	20,382	103.1	
2000	62*	918	1,506	2,286	8,090	17,051	4,146	930	29,287	144.6	
2001	60	1,156	1,684	3,160	9,549	22,216	4,827	-	36,592	181.0	
2002	52	830	1,378	2,376	7,355	17,429	3,995	-	28,779	146.1	
2003	40	1,032	1,626	2,727	8,910	20,776	4,250	-	33,936	178.0	
2004	47	1,192	1,935	3,412	9,658	24,408	4,366	-	38,432	206.1	
2005	55	1,381	2,189	4,164	11,700	28,528	4,875	-	45,103	240.4	
2006	61	1,649	2,469	4,713	14,302	32,731	5,415	-	52,448	283.2	
2007	71	1,769	2,495	5,386	14,358	33,359	5,223	-	52,940	305.1	
2008	74	1,880	2,346	5,121	17,647	33,285	5,582	-	56,514	337.3	
2009	66	1,089	1,397	2,876	11,772	18,650	3,529	-	33,951	214.8	
2010	65	1,546	1,581	2,718	16,470	16,734	3,971	-	37,175	256.1	

Sources: EIA & IHS, World Oil, Baker Hughes & American Petroleum Institute (wells drilled data pre-2005).

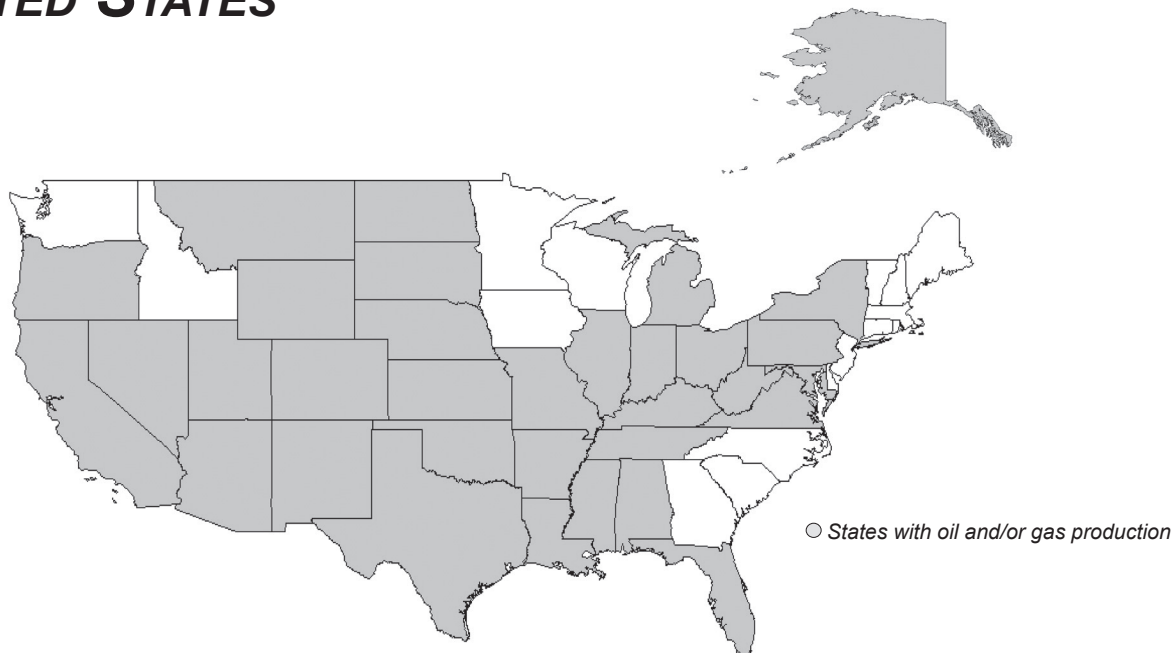
Notes: Total well completions include exploratory and development wells. API historical data may not match IHS data used for recent decade on state and summary pages.

*Switched to maximum U.S. active seismic crew count as per www.eia.doe.gov/emeu/mer/pdf/pages/sec5_5.pdf.

EMERGING SHALE PLAYS (2010)



UNITED STATES



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 (Texas)	27,011
Natural gas (Texas)	30,712

Year and depth of deepest well drilled (ft.)

2010 (Federal Offshore)	37,165
-------------------------	--------

Cumulative number of total wells drilled

as of 12/31/10 (excluding service wells)

Oil wells	1,778,094	48%
Gas wells	862,681	23%
Dry holes	1,087,530	29%
Total	3,728,305	100%

Cumulative crude oil wellhead value

as of 12/31/10 (thous. \$) \$2,558,198,258

Cumulative production & new reserves

as of 12/31/10

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	218,799	55,406	274,205	1,451,318
Production	195,622	41,206	236,828	1,149,392

Value of Oil and Gas

Average wellhead price (2010)

Crude oil (\$/bbl.)	\$74.71
Natural gas (\$/Mcf)	\$ 4.48

Wellhead value of production (2010, in thous. \$)

Crude oil	\$149,399,903
Natural gas	\$100,361,592
Total	\$249,761,495

Average natural gas price (2010, \$/Mcf)

Residential consumers	\$ 11.39
Commercial consumers	\$ 9.47
Industrial consumers	\$ 5.49
Electric utilities	\$ 5.27
City Gate	\$ 6.18

Severance taxes paid (2010, in thous. \$)

\$10,576,364

Top 10 producing counties/fields

(2010 on a BOE basis)

County	State	% US Prod
Mississippi Canyon	FOS	4.78
Sublette	WY	4.05
Green Canyon	FOS	3.60
Beechey Point	AK	3.36
De Soto	LA	2.31
Tarrant	TX	2.20
Garfield	CO	2.18
Kern	CA	2.09
Johnson	TX	1.80
San Juan	NM	1.71

* US cumulative well total does not include Federal Offshore

2010 Industry Statistics

Number of wells drilled

	Exploratory	Development	Total
Oil	731	15,658	16,389
Gas	958	15,701	16,659
Dry	993	2,886	3,879
Total	2,682	34,245	36,927

Total footage drilled

(thous. ft.)

	Exploratory	Development	Total
Oil	5,874.3	89,716.5	95,590.9
Gas	7,761.4	131,226.4	138,987.8
Dry	5,421.3	13,692.3	19,113.6
Total	19,057.0	234,635.2	253,692.2

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

New-field wildcats drilled	1,548
Footage (thous. ft.)	10,988.7

Average rotary rigs active	1,541
----------------------------	-------

Permits	63,504
---------	--------

Worldwide rank

	Crude Oil	Natural Gas
Wells drilled	1st	1st
Production	3rd	3rd
Reserves (2010)*	11th	5th

Number of operators	15,518
---------------------	--------

Number of producing wells

(12/31/10)

Crude oil	416,427
Natural gas	490,185
Total	906,612

Average production

Crude oil (thous. b/d)	4,924
NGL (thous. b/d)	532
Natural gas (MMcf/d)	57,684

Total production

Crude oil (YTD bbls, in thous.)	1,797,329
Natural gas (YTD MMcf)	21,054,798

Natural gas marketed production

(MMcf)	22,402,141
--------	------------

Average output per producing well

Crude oil (bbls.)	4,316
Natural gas (Mcf)	42,953

Coalbed methane (YTD MMcf)

Oil Wells	23
Gas Wells	43,829
Daily Average (MMcf) / Well	4,759.1

Heavy oil (av. bbls/day, in thous.)

Wells	64,119
Av. bbls per day (in thous.)	1,083
Av. bbls per well	6,168

Source: For specific methodology and source details, please see pages 6 and 131.

* Canadian oil sands included

2010 Latest Available Data

Petroleum reserves

as of 12/31/10 (mill. bbls.)

	Crude Oil	NGL	Total
New reserves	4,352	2,502	6,854
Production	1,767	969	2,736
Net annual change	2,585	1,533	4,118
Proved reserves	23,267	11,723	34,990

Natural gas reserves

as of 12/31/10 (Bcf)

	Associated Dissolved	Non- Associated	Dry Gas
New reserve	4,808	52,184	54,355
Production	2,445	20,779	22,239
Net annual change	2,363	31,405	32,116
Proved reserves	35,746	281,901	304,625

Cost of drilling and equipping wells

	Cost/ft. (\$)	Cost/ well (\$)	Total Cost (thous. \$)
Oil	349	2,037,269	33,388,807
Gas	235	1,963,962	32,717,647
Dry	372	1,832,392	7,107,849

Marginal oil wells

Producing marginal wells	370,315
Crude oil production in bbls. (thous.)	362,734
Crude oil production b/d (thous.)	994

Marginal natural gas wells

as of 12/31/10

Producing marginal wells	376,087
Natural gas production (MMcf)	3,085,140

Mineral lease royalties, bonuses & rent

Oil	\$ 4,408,049,879
Gas	\$ 2,187,464,890
Total Royalties	\$ 9,484,611,015

Horizontal wells drilled

Horizontal wells drilled	9,755
Directional wells drilled	5,228
Vertical wells drilled	22,183

Average number of employees

Oil and natural gas extraction	450,435
Refining	110,972
Transportation	158,289
Wholesale	173,960
Retail	819,695
Pipeline construction	92,319
Oilfield machinery	59,602
Total petroleum industry	1,865,272

Horizontal drilling in many regions of the U.S. was on the rise.

FEDERAL OFFSHORE



Federal Offshore planning areas

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.)

Natural gas (water depth 9,356)	25,400
Crude oil	37,165

Year and depth of deepest well drilled (ft.)

Water depth (2004)	10,011
Well depth (2010)	37,165

Cumulative number of total wells drilled as of 12/31/10 (excluding service wells)

Oil wells	22,105	32%
Gas wells	27,598	40%
Dry holes	19,060	28%
Total	68,763	100%

Cumulative crude oil wellhead value

as of 12/31/10 (thous. \$) \$468,337,725

Cumulative production & new reserves

	Crude Oil	NGL	Total	Natural Gas
	(mill. bbls.)			(Bcf)
Reserves	23,656	4,985	28,641	153,615
Production	17,102	3,191	20,293	72,544

Value of Oil and Gas

Average wellhead price (2010)

Crude oil (\$/bbl.)	\$115.96
Natural gas (\$/Mcf)	\$4.48

Wellhead value of production (2010, in thous. \$)

Crude oil	\$68,142,966
Natural gas	\$10,305,541
Total	\$78,448,507

Federal Revenues

(2010, in thousands \$)

Bonuses and other revenues	\$ 1,184,001.1
Rents	\$ 233,146.7
Royalties	\$ 4,402,530.3
Total	\$ 5,819,678.1

Top 10 producing fields

(2010 on a BOE basis)

Field	% Production	
	State	US
Mississippi Canyon	28.48	4.78
Green Canyon	21.47	3.60
Garden Banks	4.83	0.81
Viosca Knoll	4.06	0.68
Eugene Island	2.60	0.44
Atwater	2.60	0.44
South Timbalier	2.30	0.39
West Cameron	2.24	0.38
Santa Cruz Area	2.15	0.36
South Marsh Island	2.03	0.34

2010 Industry Statistics

Number of wells drilled

	Exploratory	Development	Total
Oil	3	78	81
Gas	11	64	75
Dry	44	48	92
Total	58	190	248

Total footage drilled

(thous. ft.)

	Exploratory	Development	Total
Oil	41.9	687.0	729.0
Gas	131.8	595.0	726.8
Dry	543.6	387.7	931.3
Total	717.2	1,669.8	2,387.0

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

New-field wildcats drilled	53
Footage (thous. ft.)	650.2

Average rotary rigs active	32
----------------------------	----

Permits	659
---------	-----

Statewide rank

	Crude Oil	Natural Gas
Wells drilled	18th	18th
Production	1st	3rd
Reserves (2010)	2nd	7th

Number of producing wells

(12/31/10)

Crude oil	3,358
Natural gas	2,635
Total	5,993

Average production

Crude oil (thous. b/d)	1,473.2
NGL (est.)	138.2
Natural gas (MMcf/day)	4,742.8

Total production

Crude oil (YTD bbls, in thous.)	537,735
Natural gas (YTD MMcf)	1,731,131

Natural gas gross withdrawals

(MMcf)	2,300,344
--------	-----------

Average output per producing well

Crude oil (bbls.)	160,136
Natural gas (Mcf)	656,976

Producing well depth

	Oil Wells	Gas Wells
Shelf (wd <1,000 ft)	2,818	2,504
Deep (wd 1,000-4,999 ft)	466	99
Ultra Deep (wd >5,000 ft)	74	32
Total	3,358	2,635

Number of operators*	112
----------------------	-----

Producing oil**	120
Producing natural gas**	120

Source: For specific methodology and source details, please see pages 6 and 131.

*Number of Operators -- IHS

**Producing Oil and Natural Gas --BOEM

*** Figures do not include total U.S. well cost data (on previous US page)

2010 Latest Available Data

Petroleum reserves

as of 12/31/10 (mill. bbls.)

	Crude Oil	NGL	Total
New reserves	909	139	1,048
Production	542	114	656
Net annual change	367	25	392
Proved reserves	4,496	555	5,051

Natural gas reserves

as of 12/31/10 (Bcf)

	Associated Dissolved	Non- Associated	Dry Gas
New reserves	545	943	1,367
Production	564	1,660	2,154
Net annual change	-19	-717	-787
Proved reserves	5,204	6,916	11,765

Cost of drilling and equipping wells***

	Cost/ft. (\$)	Cost/ well (\$)	Total Cost (thous. \$)
Oil	3,411	30,698,771	2,486,600
Gas	596	5,776,997	433,275
Dry	1,348	13,645,374	1,255,374

2010 Lease Statistics

G&G permits	57
Platform installations	23
Platform removals	161
Platform in place	3,432

Lease characteristics

Existing leases	
<200 meters of water	3,371
200-400 meters of water	115
401-900 meters of water	104
>900 meters of water	167

Oil & natural gas fields

Producing	754
Non-producing	545

Mineral lease royalties, bonuses & rent

Oil	\$3,177,177,789
Gas	\$595,177,485
Total Royalties	\$5,254,161,316

The April 20 rig explosion and oil spill reshaped the regulatory environment in federal offshore and how exploration companies operate in the Gulf of Mexico. In the months following the blast, drilling in the Gulf nearly came to a standstill as a result of the deepwater drilling moratorium and the decision by operators to rethink exploration plans due to regulatory uncertainties.

ALABAMA



○ Counties with oil and/or gas production

Background Information

Counties

Number of counties	67
With oil and/or gas production	22

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	18,448
Natural gas	23,330

Year and depth of deepest well drilled (ft.)

1995	24,275
------	--------

Cumulative number of total wells drilled as of 12/31/10 (excluding service wells)

Oil wells	1,453	9%
Gas wells	9,197	60%
Dry holes	4,783	31%
Total	15,433	100%

Cumulative crude oil wellhead value as of 12/31/10 (thous. \$)

\$13,304,484

Cumulative production & new reserves as of 12/31/10

	Crude	NGL	Total	Natural
	Oil	(mill. bbls.)		Gas (Bcf)
Reserves	528	459	987	8,238
Production	502	398	900	7,895

Value of Oil and Gas

Average wellhead price (2010)

Crude oil (\$/bbl.)	\$75.54
Natural gas (\$/Mcf)	\$ 4.46

Wellhead value of production (2010, in thous. \$)

Crude oil	\$ 536,485
Natural gas	\$ 994,277
Total	\$1,530,762

Average natural gas price (2010, \$/Mcf)

Residential consumers	\$15.81
Commercial consumers	\$13.36
Industrial consumers	\$ 6.67
Electric utilities	\$ 4.85
City Gate	\$ 6.46

Severance taxes paid (2010 in thous. \$)

\$90,613

Top 10 producing counties (2010 on a BOE basis)

County	% Production	
	State	US
Tuscaloosa	28.51	0.25
Mobile	20.90	0.18
Baldwin	19.75	0.17
Escambia	8.74	0.08
Jefferson	8.34	0.07
Conecuh	5.40	0.05
Walker	2.18	0.02
Shelby	1.02	0.01
Monroe	0.95	0.01
Lamar	0.94	0.01

2010 Industry Statistics

Number of wells drilled

	Exploratory	Development	Total
Oil	21	4	25
Gas	2	189	191
Dry	29	8	37
Total	52	201	253

Total footage drilled

(thous. ft.)

	Exploratory	Development	Total
Oil	242.4	34.4	276.8
Gas	19.6	397.8	417.4
Dry	311.8	57.9	369.7
Total	573.8	490.1	1,063.9

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

New-field wildcats drilled	50
Footage (thous. ft.)	548.9

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

Permits	303
---------	-----

Statewide rank

	Crude Oil	Natural Gas
Wells drilled	25th	15th
Production	16th	15th
Reserves (2010)	17th	15th

Number of operators	82
---------------------	----

Number of producing wells

(12/31/10)

Crude oil	528
Natural gas	6,297
Total	6,825

Average production

Crude oil (thous. b/d)	14.5
NGL (thous. b/d)	5.2
Natural gas (MMcf/d)	613.3

Total production

Crude oil (YTD bbls. in thous.)	5,275
Natural gas (YTD MMcf)	223,853

Natural gas marketed production

(MMcf) 222,932

Average output per producing well

Crude oil (bbls.)	9,991
Natural gas (Mcf)	35,549

Coalbed methane (YTD MMcf)

Oil Wells	3
Gas Wells	5,856
Daily Average (MMcf) / Well	284.3

Heavy oil (av. bbls/day, in thous.)	NA
-------------------------------------	----

Wells	NA
-------	----

Av. bbls per day (in thous.)	NA
------------------------------	----

Av. bbls per well	NA
-------------------	----

Source: For specific methodology and source details, please see pages 6 and 131.

2010 Latest Available Data

Petroleum reserves

as of 12/31/10 (mill. bbls.)

	Crude Oil	NGL	Total
New reserves	10	23	33
Production	5	8	13
Net annual change	5	15	20
Proved reserves	42	86	128

Natural gas reserves

as of 12/31/10 (Bcf)

	Associated Dissolved	Non- Associated	Dry Gas
New reserves	15	-8	-19
Production	6	225	223
Net annual change	9	-233	-242
Proved reserves	38	2,686	2,629

Cost of drilling and equipping wells

	Cost/ft (\$)	Cost well (\$)	Total Cost (thous. \$)
Oil	1,151	12,740,633	318,516
Gas	1.035	2,262,949	432,223
Dry	939	9,382,807	347,164

Marginal oil wells

Producing marginal wells	341
Crude oil production in bbls. (thous.)	752
Crude oil production b/d (thous.)	2

Marginal natural gas wells

as of 12/31/10

Producing marginal wells	5,465
Natural gas production (MMcf)	72,987

Mineral lease royalties, bonuses & rent

Oil	\$ 5,010,920
Gas	\$21,834,538
Total Royalties	\$42,181,058

Horizontal wells drilled	16
--------------------------	----

Directional wells drilled	18
---------------------------	----

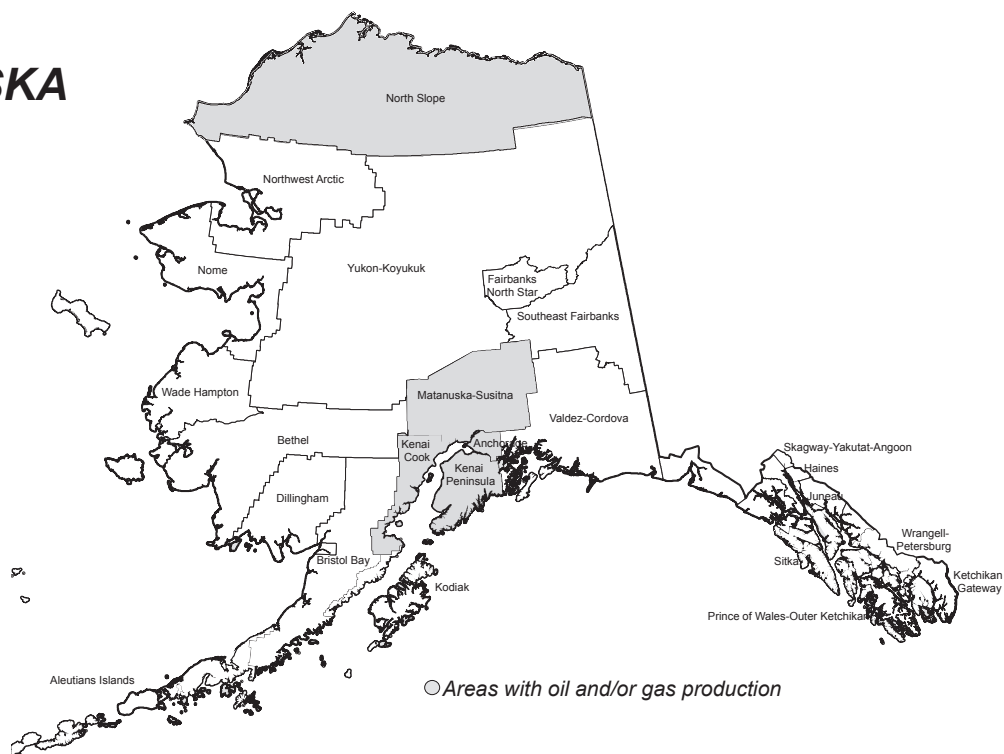
Vertical wells drilled	219
------------------------	-----

Average number of employees

Oil and natural gas extraction	1,807
Refining	1,598
Transportation	2,955
Wholesale	2,990
Retail	17,238
Pipeline construction	1,660
Oilfield machinery	0
Total petroleum industry	28,248

Renaissance Petroleum helped jump-start Smackover exploration in the state, testing its first well1 Craft-Black Stone "17-5" at a daily rate of 1,008 bbls of crude. The 13,780-ft discovery is in southern Alabama's Escambia County.

ALASKA



Background Information

Areas

Number of areas	25
With oil and/or gas production	10

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	26,090
Natural gas	17,864

Year and depth of deepest well drilled (ft.)

2009	26,090
------	--------

Cumulative number of total wells drilled as of 12/31/10 (excluding service wells)

Oil wells	5,020	78%
Gas wells	351	6%
Dry holes	1,054	16%
Total	6,425	100%

Cumulative crude oil wellhead value as of 12/31/10 (thous. \$)

\$309,741,329

Cumulative production & new reserves as of 12/31/10

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	20,699	497	21,196	22,840
Production	16,568	418	16,986	13,150

Value of Oil and Gas

Average wellhead price (2010)

Crude oil (\$/bbl.)	\$72.33
Natural gas (\$/Mcf)	\$ 3.17

Wellhead value of production (2010, in thous. \$)

Crude oil	\$ 15,879,039
Natural gas	\$ 1,186,296
Total	\$ 17,065,335

Average natural gas price (2010, \$/Mcf)

Residential consumers	\$8.89
Commercial consumers	\$8.78
Industrial consumers	\$4.23
Electric utilities	NA
City Gate	\$6.67

Severance taxes paid (2010, in thous. \$)

\$2,871,000

Top producing areas (2010 on a BOE basis)

Areas	% Production	
	State	US
Beechey Point	68.71	3.36
Harrison Bay	19.47	0.95
Tyonek	2.99	0.15
Kenai Offshore	2.94	0.14
Kenai	2.79	0.14
Harrison Bay Offshore	1.58	0.07
Tyonek Offshore	1.24	0.06
Seldovia	0.17	0.01
Barrow	0.11	0.01
DeLong Mountains	<0.01	<0.01

2010 Industry Statistics

Number of wells drilled

	Exploratory	Development	Total
Oil	1	124	125
Gas	NA	4	4
Dry	2	1	3
Total	3	129	132

Total footage drilled

(thous. ft.)

	Exploratory	Development	Total
Oil	15.6	694.0	709.6
Gas	NA	28.5	28.5
Dry	3.1	3.3	6.4
Total	18.6	725.7	925.1

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

New-field wildcats drilled	2
Footage (thous. ft.)	3.1

Average rotary rigs active	8
----------------------------	---

Permits	177
---------	-----

Statewide rank

	Crude Oil	Natural Gas
Wells drilled	15th	27th
Production	3rd	11th
Reserves (2010)	3rd	9th

Number of operators	12
---------------------	----

Number of producing wells

(12/31/10)

Crude oil	2,495
Natural gas	196
Total	2,691

Average production

Crude oil (thous. b/d)	597.1
NGL (thous. b/d)	2.7
Natural gas (MMcf/day)	381.6

Total production

Crude oil (YTD bbls, in thous.)	217,932
Natural gas (YTD MMcf)	139,299

Natural gas marketed production

(MMcf)	374,226
--------	---------

Average output per producing well

Crude oil (bbls.)	87,348
Natural gas (Mcf)	710,708

Coalbed methane (YTD MMcf)	NA
----------------------------	----

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

Heavy oil (av. bbls/day, in thous.)	NA
Wells	NA
Av. bbls per day (in thous.)	NA
Av. bbls per well	NA

Source: For specific methodology and source details, please see pages 6 and 131.

2010 Latest Available Data

Petroleum reserves

as of 12/31/10 (mill. bbls.)

	Crude Oil	NGL	Total
New reserves	351	0	351
Production	195	11	206
Net annual change	156	-11	145
Proved reserves	3,722	288	4,010

Natural gas reserves

as of 12/31/10 (Bcf)

	Associated Dissolved	Non- Associated	Dry Gas
New reserves	-23	76	54
Production	174	145	317
Net annual change	-197	-69	-263
Proved reserves	7,896	1,021	8,838

Cost of drilling and equipping wells

	Cost/ft. (\$)	Cost/ well (\$)	Total Cost (thous. \$)
Oil	2,739	15,549,512	1,943,689
Gas	3,267	23,240,562	92,962
Dry	6,868	14,545,147	43,635

Marginal oil wells

Producing marginal wells	182
Crude oil production in bbls. (thous.)	348
Crude oil production b/d (thous.)	1

Marginal natural gas wells

as of 12/31/10

Producing marginal wells	0
Natural gas production (MMcf)	0

Mineral lease royalties, bonuses & rent

Oil	\$21,730,740
Gas	\$11,979,776
Total Royalties	\$40,964,608

Horizontal wells drilled	99
Directional wells drilled	31
Vertical wells drilled	2

Average number of employees

Oil and natural gas extraction	12,877
Refining	404
Transportation	0
Wholesale	525
Retail	1,722
Pipeline construction	528
Oilfield machinery	0
Total petroleum industry	16,056

Oil production from Alaska's

North Slope field totaled 215.77 million bbls in 2010. While an impressive total, that's 70 percent lower than the region's amazing record annual output of 722.45 million bbls reached in 1988.

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	6,382
Natural gas	5,753

Year and depth of deepest well drilled (ft.)

1981	18,013
------	--------

Cumulative number of total wells drilled as of 12/31/10 (excluding service wells)

Oil wells	71	6%
Gas wells	52	5%
Dry holes	999	89%
Total	1,122	100%

Cumulative crude oil wellhead value as of 12/31/10 (thous. \$)

\$70,818,382

Cumulative production & new reserves as of 12/31/10

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

Value of Oil and Gas

Average wellhead price* (2010)

Crude oil (\$/bbl.)	\$74.72
Natural gas (\$/Mcf)	\$ 4.11

Wellhead value of production (2010, in thous. \$)

Crude oil	\$2,989
Natural gas	\$ 752
Total	\$3,741

Average natural gas price (2010, \$/Mcf)

Residential consumers	\$15.87
Commercial consumers	\$10.72
Industrial consumers	\$ 7.54
Electric utilities	\$ 4.84
City Gate	\$ 6.59

Severance taxes paid - FY (2010, in thous. \$)

\$3,016

Top producing counties (2010 on a BOE basis)

County	% Production	
	State	US
Apache	100	<0.01

2010 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

Permits

24

Statewide rank

	Crude Oil	Natural Gas
Wells drilled	30th	32nd
Production	31st	31st
Reserves (2010)	NA	NA

Number of operators

3

Number of producing wells

(12/31/10)

Crude oil	22
Natural gas	4
Total	26

Average production

Crude oil (thous. b/d)	0.1
NGL (thous. b/d)	0
Natural gas (MMcf/day)	0.3

Total production

Crude oil (YTD bbls, in thous.)	38
Natural gas (YTD MMcf)	122

Natural gas marketed production

(MMcf)

183

Average output per producing well

Crude oil (bbls.)	1,744
Natural gas (Mcf)	30,565

Coalbed methane (YTD MMcf)

NA

Oil Wells

NA

Gas Wells

NA

Daily Average (MMcf) / Well

NA

Heavy oil (av. bbls/day, in thous.)

NA

Wells

NA

Av. bbls per day (in thous.)

NA

Av. bbls per well

NA

Source: For specific methodology and source details, please see pages 6 and 131.

* State Data.

2010 Latest Available Data

Petroleum reserves

as of 12/31/10 (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 12/31/10 (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	21
Crude oil production in bbls. (thous.)	25
Crude oil production b/d (thous.)	<1

Marginal natural gas wells

as of 12/31/10

Producing marginal wells	2
Natural gas production (MMcf)	23

Mineral lease royalties, bonuses & rent

Oil	\$ 504,572
Gas	\$ 229,078
Total Royalties	\$61,669,729

Horizontal wells drilled

NA

Directional wells drilled

NA

Vertical wells drilled

NA

Average number of employees

Oil and natural gas extraction	528
Refining	212
Transportation	271
Wholesale	1,843
Retail	14,912
Pipeline construction	341
Oilfield machinery	0
Total petroleum industry	18,107

There were no oil or gas tests

drilled in Arizona during 2010 or the previous year. The last hydrocarbon drilling was a 5006-ft Upper Devonian dry hole completed during 2008 in the Mohave County in the western part of the state.

ARKANSAS



○ Counties with oil and/or gas production

Background Information

Counties

Number of counties	75
With oil and/or gas production	27

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 — 926,638 MMcf	2010

Deepest producing well (ft.)

Crude oil	12,500
Natural gas	19,850

Year and depth of deepest well drilled (ft.)

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

Cumulative number of total wells drilled as of 12/31/10 (excluding service wells)

Oil wells	14,953	37%
Gas wells	10,816	26%
Dry holes	15,073	37%
Total	40,842	100%

Cumulative crude oil wellhead value as of 12/31/10 (thous. \$)

\$12,739,023

Cumulative production & new reserves as of 12/31/10

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	1,853	94	1,947	24,590
Production	1,779	89	1,868	10,132

Value of Oil and Gas

Average wellhead price (2010)

Crude oil (\$/bbl.)	\$ 71.01
Natural gas (\$/Mcf)	\$ 3.84

Wellhead value of production (2010, in thous. \$)

Crude oil	\$ 407,100
Natural gas	\$3,558,290
Total	\$3,965,390

Average natural gas price (2010, \$/Mcf)

Residential consumers	\$11.53
Commercial consumers	\$ 8.89
Industrial consumers	\$ 7.28
Electric utilities	\$ 5.11
City Gate	\$ 6.76

Severance taxes paid (2010, in thous. \$)

\$70,455

Top 10 producing counties (2010 on a BOE basis)

County	% Production	
	State	US
Van Buren	25.29	0.81
White	23.29	0.75
Conway	16.96	0.54
Cleburne	9.98	0.32
Faulkner	5.35	0.17
Logan	5.18	0.17
Sebastian	4.07	0.13
Franklin	2.55	0.08
Yell	1.00	0.03
Columbia	0.86	0.03

2010 Industry Statistics

Number of wells drilled

	Exploratory	Development	Total
Oil	NA	80	80
Gas	NA	973	973
Dry	11	67	78
Total	11	1,120	1,131

Total footage drilled

(thous. ft.)

	Exploratory	Development	Total
Oil	NA	349.6	349.6
Gas	NA	8,184.7	8,184.7
Dry	61.2	311.9	373.1
Total	61.2	8,846.2	8,907.3

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

New-field wildcats drilled	11
Footage (thous. ft.)	61.2

Average rotary rigs active	39
----------------------------	----

Permits	1,364
---------	-------

Statewide rank

	Crude Oil	Natural Gas
Wells drilled	19th	5th
Production	18th	8th
Reserves (2010)	19th	8th

Number of operators	325
---------------------	-----

Number of producing wells

(12/31/10)

Crude oil	1,415
Natural gas	7,412
Total	8,827

Average production

Crude oil (thous. b/d)	11.6
NGL (thous. b/d)	NA
Natural gas (MMcf/day)	2,522.7

Total production

Crude oil (YTD bbls, in thous.)	4,246
Natural gas (YTD MMcf)	920,787

Natural gas marketed production

(MMcf)	926,638
--------	---------

Average output per producing well

Crude oil (bbls.)	3,001
Natural gas (Mcf)	124,229

Coalbed methane (YTD MMcf)	1,360
----------------------------	-------

Oil Wells	0
Gas Wells	44
Daily Average (MMcf) / Well	3.7

Heavy oil (av. bbls/day, in thous.)	NA
Wells	NA
Av. bbls per day (in thous.)	NA
Av. bbls per well	NA

Source: For specific methodology and source details, please see pages 6 and 131.

2010 Latest Available Data

Petroleum reserves

as of 12/31/10 (mill. bbls.)

	Crude Oil	NGL	Total
New reserves	17	1	18
Production	5	0	5
Net annual change	12	1	13
Proved reserves	40	4	44

Natural gas reserves

as of 12/31/10 (Bcf)

	Associated Dissolved	Non- Associated	Dry Gas
New reserves	13	4,248	4,260
Production	4	948	951
Net annual change	9	3,300	3,309
Proved reserves	29	14,152	14,178

Cost of drilling and equipping wells

	Cost/ft. (\$)	Cost/ well (\$)	Total Cost (thous. \$)
Oil	172	752,931	60,234
Gas	35	297,679	289,642
Dry	264	1,260,479	98,317

Marginal oil wells

Producing marginal wells	1,247
Crude oil production in bbls. (thous.)	1,713
Crude oil production b/d (thous.)	5

Marginal natural gas wells

as of 12/31/10

Producing marginal wells	3,441
Natural gas production (MMcf)	43,771

Mineral lease royalties, bonuses & rent

Oil	\$ 124
Gas	\$ 9,441,286
Total Royalties	\$ 12,644,112

Horizontal wells drilled	911
Directional wells drilled	18
Vertical wells drilled	202

Average number of employees

Oil and natural gas extraction	6,338
Refining	1,003
Transportation	1,733
Wholesale	2,236
Retail	11,517
Pipeline construction	1,495
Oilfield machinery	0
Total petroleum industry	24,322

BHP Billiton Petroleum, a wholly owned subsidiary of Melbourne-based BHP Billiton Ltd, closed its acquisition of all Chesapeake Energy Corp's upstream and midstream interests in the Arkansas Fayetteville shale region for approximately (U.S.) \$4.75 billion.



○ Counties with oil and/or gas production

Background Information

Counties

Number of counties	58
With oil and/or gas production	35*

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	24,426
Natural gas	18,114

Year and depth of deepest well drilled (ft.)

1993	24,426
------	--------

Cumulative number of total wells drilled as of 12/31/10 (excluding service wells)

Oil wells	170,575	79%
Gas wells	7,116	3%
Dry holes	38,970	18%
Total	216,661	100%

Cumulative crude oil wellhead value as of 12/31/10 (thous. \$)

\$270,911,920

Cumulative production & new reserves as of 12/31/10

	Crude Oil	NGL (mill. bbls.)	Natural Gas (Bcf)	Total
Reserves	31,425	1,568	47,046	32,993
Production	25,455	1,434	37,465	26,889

*Includes offshore areas

Value of Oil and Gas

Average wellhead price (2010)

Crude oil (\$/bbl.)	\$ 74.51
Natural gas (\$/Mcf)	\$ 4.87

Wellhead value of production (2010, in thous. \$)

Crude oil	\$15,005,196
Natural gas	\$ 1,396,916
Total	\$16,402,112

Average natural gas price (2010, \$/Mcf)

Residential consumers	\$ 9.92
Commercial consumers	\$ 8.30
Industrial consumers	\$ 7.02
Electric utilities	\$ 4.99
City Gate	\$ 4.86

Severance taxes paid - Est. (2010, in thous. \$)

\$400,000

Top 10 producing counties (2010 on a BOE basis)

County	% Production	
	State	US
Kern	48.99	2.09
Kern	20.68	0.88
Los Angeles	6.49	0.28
Los Angeles Offshore	4.99	0.21
Ventura	3.68	0.16
Monterey	2.95	0.13
Fresno	2.93	0.13
Orange	1.22	0.05
Santa Barbara	1.20	0.05
Sutter	1.03	0.04

2010 Industry Statistics

Number of wells drilled

	Exploratory	Development	Total
Oil	1	1,833	1,834
Gas	1	72	73
Dry	10	60	70
Total	12	1,965	1,977

Total footage drilled

(thous. ft.)

	Exploratory	Development	Total
Oil	NA	4,185.8	4,185.8
Gas	5.5	502.9	507.5
Dry	93.0	318.5	411.5
Total	98.5	5,006.2	5,104.7

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

New-field wildcats drilled	7
Footage (thous. ft.)	60.9

Average rotary rigs active	32
----------------------------	----

Permits	4,189
---------	-------

Statewide rank

	Crude Oil	Natural Gas
Wells drilled	2nd	19th
Production	4th	13th
Reserves (2010)	4th	17th

Number of operators	380
---------------------	-----

Number of producing wells

(12/31/10)

Crude oil	51,327
Natural gas	1,748
Total	53,075

Average production

Crude oil (thous. b/d)	544.3
NGL (thous. b/d)	0.7
Natural gas (MMcf/day)	192.9

Total production

Crude oil (YTD bbls, in thous.)	198,675
Natural gas (YTD MMcf)	70,406

Natural gas marketed production

(MMcf) 286,841

Average output per producing well

Crude oil (bbls.)	3,871
Natural gas (Mcf)	40,278

Coalbed methane (YTD MMcf)	NA
----------------------------	----

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

Heavy oil (av. bbls/day, in thous.)	192,528
Wells	47,080
Av. bbls per day (in thous.)	527
Av. bbls per well	4,089

Source: For specific methodology and source details, please see pages 6 and 131.

2010 Latest Available Data

Petroleum reserves

as of 12/31/10 (mill. bbls.)

	Crude Oil	NGL	Total
New reserves	301	-4	297
Production	198	10	208
Net annual change	103	-14	89
Proved reserves	2,938	115	3,053

Natural gas reserves

as of 12/31/10 (Bcf)

	Associated Dissolved	Non- Associated	Dry Gas
New reserves	154	-40	117
Production	186	69	243
Net annual change	-32	-109	-126
Proved reserves	2,282	503	2,647

Cost of drilling and equipping wells

	Cost/ft. (\$)	Cost/ well (\$)	Total Cost (thous. \$)
Oil	522	1,190,407	2,183,207
Gas	233	1,621,267	118,352
Dry	495	2,908,560	203,599

Marginal oil wells

Producing marginal wells	39,618
Crude oil production in bbls. (thous.)	69,787
Crude oil production b/d (thous.)	191

Marginal natural gas wells

as of 12/31/10

Producing marginal wells	959
Natural gas production (MMcf)	12,013

Mineral lease royalties, bonuses & rent

Oil	\$160,257,544
Gas	\$ 4,017,794
Total Royalties	\$ 180,901,111

Horizontal wells drilled	205
Directional wells drilled	885
Vertical wells drilled	887

Average number of employees

Oil and natural gas extraction	19,814
Refining	15,682
Transportation	2,821
Wholesale	10,123
Retail	50,197
Pipeline construction	6,528
Oilfield machinery	1,444
Total petroleum industry	106,609

Operators tested horizontal wells to unlock potentially huge additional oil recoveries from the complex Monterey formation in California, where horizontal wells in tight parts of mature fields could yield the best results.

COLORADO



Counties with oil and/or gas production

Background Information

Counties

Number of counties	63
With oil and/or gas production	37

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 — 1,578,379 MMcf	2010

Deepest producing well (ft.)

Crude oil	14,420
Natural gas	17,958

Year and depth of deepest well drilled (ft.)

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

Cumulative number of total wells drilled as of 12/31/10 (excluding service wells)

Oil wells	14,047	15%
Gas wells	49,308	55%
Dry holes	26,093	30%
Total	89,448	100%

Cumulative crude oil wellhead value as of 12/31/10 (thous. \$)

\$30,373,287

Cumulative production & new reserves as of 12/31/10

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	2,403	1,680	4,083	47,255
Production	2,041	714	2,755	20,851

Value of Oil and Gas

Average wellhead price (2010)

Crude oil (\$/bbl.)	\$72.75
Natural gas (\$/Mcf)	\$ 3.96

Wellhead value of production (2010, in thous. \$)

Crude oil	\$2,369,177
Natural gas	\$6,250,381
Total	\$8,619,558

Average natural gas price (2010, \$/Mcf)

Residential consumers	\$ 8.13
Commercial consumers	\$ 7.58
Industrial consumers	\$ 5.84
Electric utilities	\$ 5.16
City Gate	\$ 5.26

Severance taxes paid (2010, in thous. \$)

\$63,702

Top 10 producing counties (2010 on a BOE basis)

County	% Production	
	State	US
Garfield	38.12	2.18
La Plata	25.03	1.43
Weld	13.17	0.75
Rio Blanco	7.35	0.42
Las Animas	7.06	0.40
Yuma	2.36	0.13
Mesa	2.21	0.13
Moffat	1.20	0.07
Archuleta	0.57	0.03
Cheyenne	0.56	0.03

2010 Industry Statistics

Number of wells drilled

	Exploratory	Development	Total
Oil	18	149	167
Gas	18	2,418	2,436
Dry	26	57	83
Total	62	2,624	2,686

Total footage drilled

(thous. ft.)

	Exploratory	Development	Total
Oil	159.8	1,172.1	1,331.8
Gas	108.3	17,979.9	18,088.1
Dry	152.8	296.7	449.5
Total	420.9	19,448.6	19,869.5

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

New-field wildcats drilled	46
Footage (thous. ft.)	312.4

Average rotary rigs active	58
----------------------------	----

Permits	5,278
---------	-------

Statewide rank

	Crude Oil	Natural Gas
Wells drilled	14th	2nd
Production	11th	8th
Reserves (2010)	12th	3rd

Number of operators	335
---------------------	-----

Number of producing wells

(12/31/10)

Crude oil	5,029
Natural gas	42,927
Total	47,956

Average production

Crude oil (thous. b/d)	30.6
NGL (thous. b/d)	58.5
Natural gas (MMcf/day)	4,439.9

Total production

Crude oil (YTD bbls, in thous.)	11,174
Natural gas (YTD MMcf)	1,620,565

Natural gas marketed production

(MMcf)	1,578,379
--------	-----------

Average output per producing well

Crude oil (bbls.)	2,222
Natural gas (Mcf)	37,752

Coalbed methane (YTD MMcf)	527,066
----------------------------	---------

Oil Wells	0
Gas Wells	5,073
Daily Average (MMcf) / Well	1,444.0

Heavy oil (av. bbls/day, in thous.)	13,247
-------------------------------------	--------

Wells	597
Av. bbls per day (in thous.)	36
Av. bbls per well	22,190

Source: For specific methodology and source details, please see pages 6 and 131.

2010 Latest Available Data

Petroleum reserves

as of 12/31/10 (mill. bbls.)

	Crude Oil	NGL	Total
New reserves	133	240	373
Production	26	65	91
Net annual change	107	175	282
Proved reserves	386	994	1,380

Natural gas reserves

as of 12/31/10 (Bcf)

	Associated Dissolved	Non- Associated	Dry Gas
New reserves	615	2,348	2,651
Production	126	1,546	1,590
Net annual change	489	802	1,061
Proved reserves	2,371	23,001	24,119

Cost of drilling and equipping wells

	Cost/ft. (\$)	Cost/ well (\$)	Total Cost (thous. \$)
Oil	36	289,938	48,420
Gas	377	2,797,257	6,814,118
Dry	97	524,259	43,514

Marginal oil wells

Producing marginal wells	4,266
Crude oil production in bbls. (thous.)	3,657
Crude oil production b/d (thous.)	10

Marginal natural gas wells

as of 12/31/10

Producing marginal wells	30,711
Natural gas production (MMcf)	332,373

Mineral lease royalties, bonuses & rent

Oil	\$ 43,185,653
Gas	\$ 243,460,026
Total Royalties	\$ 364,585,189

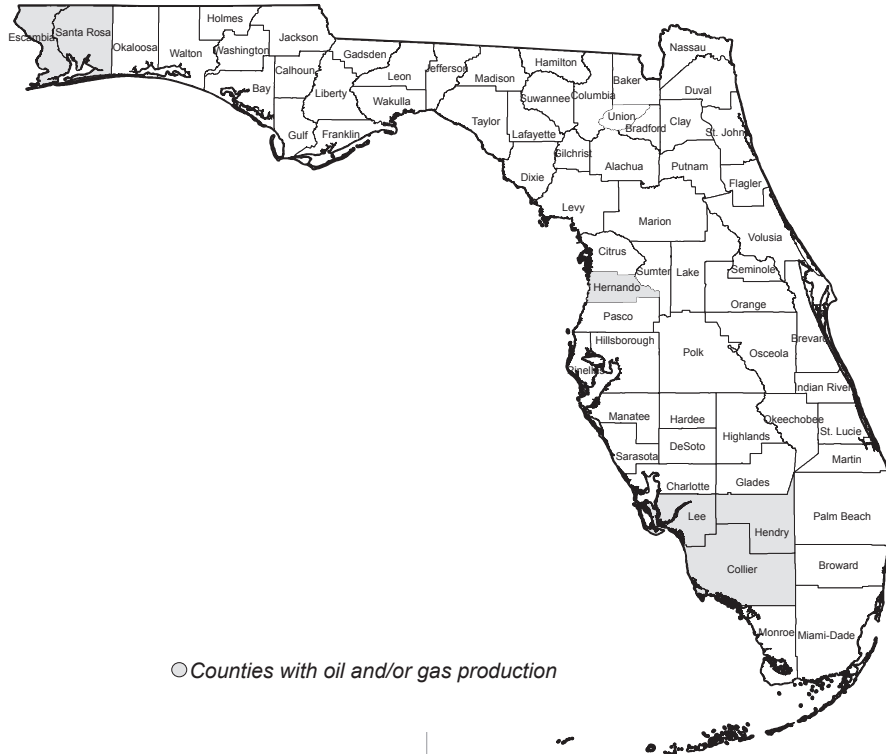
Horizontal wells drilled	82
Directional wells drilled	1,724
Vertical wells drilled	880

Average number of employees

Oil and natural gas extraction	19,753
Refining	855
Transportation	2,109
Wholesale	2,067
Retail	12,024
Pipeline construction	2,372
Oilfield machinery	223
Total petroleum industry	39,403

The Niobrara oil play was responsible for record-busting bids and revenues at area lease sales during 2010. The May Colorado state lease sale drew high bids totaling \$12,616,380 for 83 tracts covering 43,670 acres. The sale's total bonus is more than double the state's previous record of about \$5.5 million.

FLORIDA



Background Information

Counties

Number of counties	67
With oil and/or gas production	6

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	16,220
Natural gas	NA

Year and depth of deepest well drilled (ft.)

2008	18,875
------	--------

Cumulative number of total wells drilled as of 12/31/10 (excluding service wells)

Oil wells	329	26%
Gas wells	3	0%
Dry holes	935	74%
Total	1,267	100%

Cumulative crude oil wellhead value as of 12/31/10 (thous. \$)

\$9,352,458

Cumulative production & new reserves as of 12/31/10

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	706	81	787	685
Production	687	86	773	618

Value of Oil and Gas

Average wellhead price (2010)

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

Wellhead value of production (2010, in thous. \$)

Crude oil	NA
Natural gas	NA
Total	NA

Average natural gas price (2010, \$/Mcf)

Residential consumers	\$17.89
Commercial consumers	\$10.60
Industrial consumers	\$ 8.33
Electric utilities	\$ 6.54
City Gate	\$ 5.49

Severance taxes paid - FY (2010, in thous. \$)

\$3,928

Top producing counties (2010 on a BOE basis)

County	% Production	
	State	US
Santa Rosa	46.42	0.02
Collier	32.11	0.01
Escambia	10.73	<0.01
Hendry	9.20	<0.01
Lee	1.42	<0.01
Hernando	0.12	<0.01

2010 Industry Statistics

Number of wells drilled

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

Total footage drilled

(thous. ft.)

	Exploratory	Development	Total
Oil	NA	13.5	NA
Gas	NA	NA	NA
Dry	NA	NA	NA
Total	NA	13.5	13.5

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

New-field wildcats drilled

Footage (thous. ft.) NA

Average rotary rigs active

1

Permits

1

Statewide rank

	Crude Oil	Natural Gas
Wells drilled	29th	34th
Production	25th	26th
Reserves (2010)	24th	24th

Number of operators

7

Number of producing wells

(12/31/10)

Crude oil	73
Natural gas	0
Total	73

Average production

Crude oil (thous. b/d)	4.8
NGL (thous. b/d)	NA
Natural gas (MMcf/day)	NA

Total production

Crude oil (YTD bbls, in thous.)	1,750
Natural gas (YTD MMcf)	NA

Natural gas marketed production

(MMcf) 12,409

Average output per producing well

Crude oil (bbls.)	23,970
Natural gas (Mcf)	NA

Coalbed methane (YTD MMcf)

NA

Oil Wells

NA

Gas Wells

NA

Daily Average (MMcf) / Well

NA

Heavy oil (av. bbls/day, in thous.)

NA

Wells

NA

Av. bbls per day (in thous.)

NA

Av. bbls per well

NA

Source: For specific methodology and source details, please see pages 6 and 131.

2010 Latest Available Data

Petroleum reserves

as of 12/31/10 (mill. bbls.)

	Crude Oil	NGL	Total
New reserves	11	1	12
Production	2	0	2
Net annual change	9	1	10
Proved reserves	18	1	19

Natural gas reserves

as of 12/31/10 (Bcf)

	Associated Dissolved	Non- Associated	Dry Gas
New reserves	31	33	64
Production	8	7	15
Net annual change	23	26	49
Proved reserves	30	26	56

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	17
Crude oil production in bbls. (thous.)	34
Crude oil production b/d (thous.)	<1

Marginal natural gas wells

as of 12/31/10

Producing marginal wells	0
Natural gas production (MMcf)	0

Mineral lease royalties, bonuses & rent

Oil	--
Gas	--
Total Royalties	\$112,910

Horizontal wells drilled

1

Directional wells drilled

0

Vertical wells drilled

0

Average number of employees

Oil and natural gas extraction	920
Refining	2,628
Transportation	2,030
Wholesale	5,977
Retail	37,235
Pipeline construction	991
Oilfield machinery	22
Total petroleum industry	49,803

A single horizontal Sunniland well

was completed in the state during 2010.

BreitBurn Florida's well pumped over 1,150 bbls of oil per day in Collier County's Raccoon Point field.



○ Counties with oil and/or gas production

Background Information

Counties

Number of counties	102
With oil and/or gas production	44

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	0
Natural gas	NA

Year and depth of deepest well drilled (ft.)

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

Cumulative number of total wells drilled as of 12/31/10 (excluding service wells)

Oil wells	79,469	56%
Gas wells	1,569	1%
Dry holes	61,553	43%
Total	142,592	100%

Cumulative crude oil wellhead value as of 12/31/10 (thous. \$)

\$24,097,518

Cumulative production & new reserves as of 12/31/10

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	3,593	NA	3,593	NA
Production	3,569	NA	3,569	NA

Value of Oil and Gas

Average wellhead price (2010)

Crude oil (\$/bbl.)	\$73.18
Natural gas (\$/Mcf)	NA

Wellhead value of production (2010, in thous. \$)

Crude oil	\$663,523
Natural gas	NA
Total	\$663,523

Average natural gas price (2010, \$/Mcf)

Residential consumers	\$ 9.39
Commercial consumers	\$ 8.76
Industrial consumers	\$ 7.13
Electric utilities	\$ 5.14
City Gate	\$ 5.52

Severance taxes paid (2010, in thous. \$)

--

Top 10 producing counties (2010 on a BOE basis)

County	% Production	
	State	US
White	11.66	0.02
Marion	11.66	0.02
Crawford	10.35	0.02
Lawrence	7.64	0.01
Fayette	6.80	0.01
Clay	5.93	0.01
Wayne	5.68	0.01
Franklin	4.04	0.01
Gallatin	4.00	0.01
Wabash	3.52	0.01

2010 Industry Statistics

Number of wells drilled

	Exploratory	Development	Total
Oil	10	228	238
Gas	NA	12	12
Dry	44	94	138
Total	54	334	388

Total footage drilled

(thous. ft.)

	Exploratory	Development	Total
Oil	24.1	569.1	593.2
Gas	NA	10.9	10.9
Dry	115.0	215.7	330.6
Total	139.1	795.7	934.7

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

New-field wildcats drilled	12
Footage (thous. ft.)	29.1

Average rotary rigs active	2
----------------------------	---

Permits	765
---------	-----

Statewide rank

	Crude Oil	Natural Gas
Wells drilled	10th	25th
Production	15th	30th
Reserves (2010)	15th	NA

Number of operators	811
---------------------	-----

Number of producing wells*

(12/31/10)

Crude oil	15,384
Natural gas	50
Total	15,434

Average production

Crude oil (thous. b/d)	24.8
NGL (thous. b/d)	NA
Natural gas (MMcf/day)	NA

Total production

Crude oil (YTD bbls, in thous.)	9,067
Natural gas (YTD MMcf)	NA

Natural gas marketed production

(MMcf)	1,203
--------	-------

Average output per producing well*

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

Coalbed methane (YTD MMcf)	NA
----------------------------	----

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

Heavy oil (av. bbls/day, in thous.)	NA
-------------------------------------	----

Wells	NA
Av. bbls per day (in thous.)	NA
Av. bbls per well	NA

Source: For specific methodology and source details, please see pages 6 and 131.

* World Oil for Number of producing wells.

2010 Latest Available Data

Petroleum reserves

as of 12/31/10 (mill. bbls.)

	Crude Oil	NGL	Total
New reserves	2	NA	NA
Production	4	NA	NA
Net annual change	-2	NA	NA
Proved reserves	64	NA	NA

Natural gas reserves

as of 12/31/10 (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	178	444,862	105,877
Gas	225	204,960	2,460
Dry	188	449,709	62,060

Marginal oil wells

Producing marginal wells	7,129
Crude oil production in bbls. (thous.)	5,564
Crude oil production b/d (thous.)	15

Marginal natural gas wells

as of 12/31/10

Producing marginal wells	NA
Natural gas production (MMcf)	NA

Mineral lease royalties, bonuses & rent

Oil	\$341,058
Gas	--
Total Royalties	\$341,173

Horizontal wells drilled	10
--------------------------	----

Directional wells drilled	1
---------------------------	---

Vertical wells drilled	377
------------------------	-----

Average number of employees

Oil and natural gas extraction	2,591
Refining	5,377
Transportation	5,287
Wholesale	4,852
Retail	25,920
Pipeline construction	1,373
Oilfield machinery	16
Total petroleum industry	45,416

Discovered in the early 1930s, Clay City Consolidated field remains the top producing oil field in the state of Illinois, producing over 930,000 barrels of oil.



○ Counties with oil and/or gas production

Background Information

Counties

Number of counties	92
With oil and/or gas production	16

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 — 6,802 MMcf	2010

Deepest producing well (ft.)

Crude oil	0
Natural gas	NA

Year and depth of deepest well drilled (ft.)

2008	10,064
------	--------

Cumulative number of total wells drilled as of 12/31/10 (excluding service wells)

Oil wells	21,337	35%
Gas wells	10,192	17%
Dry holes	29,568	48%
Total	61,097	100%

Cumulative crude oil wellhead value as of 12/31/10 (thous. \$)

\$4,067,597

Cumulative production & new reserves as of 12/31/10

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	554	NA	554	NA
Production	552	NA	552	NA

Value of Oil and Gas

Average wellhead price (2010)

Crude oil (\$/bbl.)	\$72.82
Natural gas (\$/Mcf)	\$ 4.13

Wellhead value of production (2010, in thous. \$)

Crude oil	\$ 133,625
Natural gas	\$ 28,092
Total	\$ 161,717

Average natural gas price (2010, \$/Mcf)

Residential consumers	\$ 8.62
Commercial consumers	\$ 7.54
Industrial consumers	\$ 5.65
Electric utilities	\$ 4.91
City Gate	\$ 5.52

Severance taxes paid (2010, in thous. \$)

\$1,629

Top 10 producing counties (2010 on a BOE basis)

County	% Production	
	State	US
Posey	33.78	0.01
Gibson	25.23	0.01
Pike	8.57	<0.01
Vanderburgh	5.20	<0.01
Greene	4.88	<0.01
Daviess	4.56	<0.01
Knox	4.54	<0.01
Spencer	4.33	<0.01
Vigo	2.90	<0.01
Sullivan	2.47	<0.01

2010 Industry Statistics

Number of wells drilled

	Exploratory	Development	Total
Oil	11	46	57
Gas	24	43	67
Dry	22	22	44
Total	57	111	168

Total footage drilled

(thous. ft.)

	Exploratory	Development	Total
Oil	24.4	94.9	119.3
Gas	125.1	222.9	348.0
Dry	32.4	27.4	59.8
Total	181.8	345.2	527.0

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

New-field wildcats drilled	26
Footage (thous. ft.)	77.6

Average rotary rigs active	3
----------------------------	---

Permits	315
---------	-----

Statewide rank

	Crude Oil	Natural Gas
Wells drilled	22nd	20th
Production	24th	25th
Reserves (2010)	25th	NA

Number of operators	229
---------------------	-----

Number of producing wells*

(12/31/10)

Crude oil	5,103
Natural gas	875
Total	5,978

Average production

Crude oil (thous. b/d)	5.0
NGL (thous. b/d)	NA
Natural gas (MMcf/day)	NA

Total production

Crude oil (YTD bbls, in thous.)	1,837
Natural gas (YTD MMcf)	NA

Natural gas marketed production

(MMcf)	6,802
--------	-------

Average output per producing well*

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

Coalbed methane (YTD MMcf)	NA
----------------------------	----

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

Heavy oil (av. bbls/day, in thous.)	NA
-------------------------------------	----

Wells	NA
Av. bbls per day (in thous.)	NA
Av. bbls per well	NA

Source: For specific methodology and source details, please see pages 6 and 131.

* World Oil for Number of producing wells.

2010 Latest Available Data

Petroleum reserves

as of 12/31/10 (mill. bbls.)

	Crude Oil	NGL	Total
New reserves	1	NA	NA
Production	1	NA	NA
Net annual change	0	NA	NA
Proved reserves	8	NA	NA

Natural gas reserves

as of 12/31/10 (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	1,825
Crude oil production in bbls. (thous.)	1,355
Crude oil production b/d (thous.)	4

Marginal natural gas wells

as of 12/31/10

Producing marginal wells	NA
Natural gas production (MMcf)	NA

Mineral lease royalties, bonuses & rent

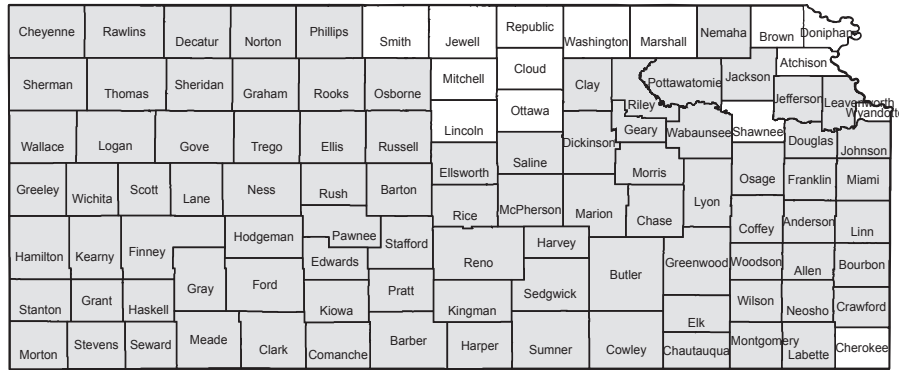
Oil	\$33,895
Gas	--
Total Royalties	\$66,709

Horizontal wells drilled	70
Directional wells drilled	0
Vertical wells drilled	98

Average number of employees

Oil and natural gas extraction	369
Refining	3,442
Transportation	2,454
Wholesale	3,491
Retail	21,000
Pipeline construction	946
Oilfield machinery	98
Total petroleum industry	31,800

Griffin Consolidated field continues to be the largest producing field in Indiana. It produced over 215,000 in 2010.



○ Counties with oil and/or gas production

Background Information

Counties

Number of counties	105
With oil and/or gas production	90

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	9,142
Natural gas	28,780

Year and depth of deepest well drilled (ft.)

1984	11,301
------	--------

Cumulative number of total wells drilled as of 12/31/10 (excluding service wells)

Oil wells	134,322	47%
Gas wells	38,066	13%
Dry holes	112,181	40%
Total	284,569	100%

Cumulative crude oil wellhead value as of 12/31/10 (thous. \$)

\$59,926,532

Cumulative production & new reserves as of 12/31/10

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	6,534	1,502	8,036	45,648
Production	6,303	1,375	7,678	41,746

Value of Oil and Gas

Average wellhead price (2010)

Crude oil (\$/bbl.)	\$72.43
Natural gas (\$/Mcf)	\$ 4.23

Wellhead value of production (2010 in thous. \$)

Crude oil	\$2,931,025
Natural gas	\$1,373,566
Total	\$4,304,591

Average natural gas price (2010, \$/Mcf)

Residential consumers	\$10.54
Commercial consumers	\$ 9.61
Industrial consumers	\$ 5.50
Electric utilities	\$ 5.05
City Gate	\$ 6.08

Severance taxes paid - FY (2010, in thous. \$)

\$330,700

Top 10 producing counties (2010 on a BOE basis)

County	% Production	
	State	US
Stevens	9.26	0.18
Grant	6.61	0.13
Haskell	6.32	0.12
Kearny	5.69	0.11
Finney	5.35	0.10
Barber	5.33	0.10
Morton	4.71	0.10
Ellis	3.55	0.07
Seward	3.41	0.07
Stanton	2.57	0.05

2010 Industry Statistics

Number of wells drilled

	Exploratory	Development	Total
Oil	199	1,559	1,758
Gas	25	293	318
Dry	333	530	863
Total	557	2,382	2,939

Total footage drilled

(thous. ft.)

	Exploratory	Development	Total
Oil	837.6	4,118.7	4,956.3
Gas	109.1	615.9	725.0
Dry	1,486.8	1,910.0	3,378.7
Total	2,415.4	6,644.6	9,060.0

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

New-field wildcats drilled	306
Footage (thous. ft.)	1,341.5

Average rotary rigs active	20
----------------------------	----

Permits	4,272
---------	-------

Statewide rank

	Crude Oil	Natural Gas
Wells drilled	3rd	13th
Production	10th	12th
Reserves (2010)	13th	13th

Number of operators	1,913
---------------------	-------

Number of producing wells

(12/31/10)

Crude oil	42,272
Natural gas	21,849
Total	64,121

Average production

Crude oil (thous. b/d)	110.5
NGL (thous. b/d)	NA
Natural gas (MMcf/day)	919.4

Total production

Crude oil (YTD bbls, in thous.)	40,320
Natural gas (YTD MMcf)	335,570

Natural gas marketed production

(MMcf)	324,720
--------	---------

Average output per producing well

Crude oil (bbls.)	954
Natural gas (Mcf)	15,359

Coalbed methane (YTD MMcf)	38,301
----------------------------	--------

Oil Wells	11
Gas Wells	3,905
Daily Average (MMcf) / Well	104.9

Heavy oil (av. bbls/day, in thous.)	NA
Wells	NA
Av. bbls per day (in thous.)	NA
Av. bbls per well	NA

Source: For specific methodology and source details, please see pages 6 and 131.

2010 Latest Available Data

Petroleum reserves

as of 12/31/10 (mill. bbls.)

	Crude Oil	NGL	Total
New reserves	75	53	128
Production	39	18	57
Net annual change	36	35	71
Proved reserves	295	202	497

Natural gas reserves

as of 12/31/10 (Bcf)

	Associated Dissolved	Non- Associated	Dry Gas
New reserves	7	757	699
Production	11	316	305
Net annual change	-4	441	394
Proved reserves	79	3,858	3,673

Cost of drilling and equipping wells

	Cost/ft. (\$)	Cost/ well (\$)	Total Cost (thous. \$)
Oil	78	220,844	388,244
Gas	114	259,282	82,452
Dry	46	181,568	156,693

Marginal oil wells

Producing marginal wells	41,203
Crude oil production in bbls. (thous.)	26,018
Crude oil production b/d (thous.)	71

Marginal natural gas wells

as of 12/31/10

Producing marginal wells	20,549
Natural gas production (MMcf)	255,529

Mineral lease royalties, bonuses & rent

Oil	\$ 2,715,312
Gas	\$ 3,420,081
Total Royalties	\$ 6,351,023

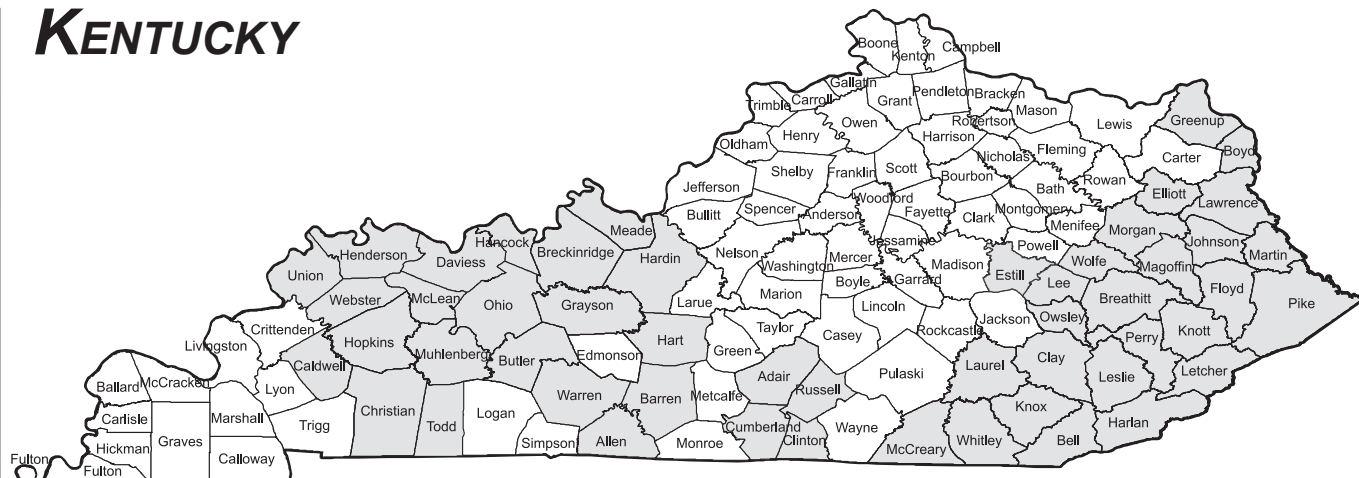
Horizontal wells drilled	7
Directional wells drilled	0
Vertical wells drilled	2,932

Average number of employees

Oil and natural gas extraction	7,488
Refining	1,853
Transportation	2,731
Wholesale	1,902
Retail	9,582
Pipeline construction	1,469
Oilfield machinery	0
Total petroleum industry	25,025

The Mississippian horizontal drilling play gained momentum in 2010, with Chesapeake, SandRidge and Eagle Energy Production among the prolific early operators. Defining the economic limits of the play resulted in new tests scheduled in a widespread geographic area covering varied geologic features.

KENTUCKY



○ Counties with oil and/or gas production

Background Information

Counties

Number of counties	120
With oil and/or gas production	50

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 — 135,303 MMcf	2010

Deepest producing well (ft.)

Crude oil	NA
Natural gas	12,489

Year and depth of deepest well drilled (ft.)

1977	15,200
------	--------

Cumulative number of total wells drilled

as of 12/31/10 (excluding service wells)

Oil wells	33,236	32%
Gas wells	25,889	25%
Dry holes	43,513	43%
Total	102,638	100%

Cumulative crude oil wellhead value

as of 12/31/10 (thous. \$) \$18,287,280

Cumulative production & new reserves

as of 12/31/10

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	765	303	1,068	8,092
Production	764	170	934	5,654

Value of Oil and Gas

Average wellhead price

(2010)

Crude oil (\$/bbl.)	\$70.63
Natural gas (\$/Mcf)	4.47

Wellhead value of production

(2010, in thous. \$)

Crude oil	\$ 177,917
Natural gas	\$ 604,925
Total	\$ 782,842

Average natural gas price

(2010, \$/Mcf)

Residential consumers	\$ 10.02
Commercial consumers	\$ 8.61
Industrial consumers	\$ 5.57
Electric utilities	NA
City Gate	\$ 5.69

Severance taxes paid

(2010, in thous. \$) \$35,001

Top 10 producing counties

(2010 on a BOE basis)

County	% Production	
	State	US
Pike	30.73	0.11
Letcher	15.29	0.06
Knott	11.81	0.04
Floyd	9.91	0.04
Perry	8.28	0.03
Martin	4.93	0.02
Leslie	2.70	0.01
Harlan	1.79	0.01
Clay	1.61	0.01
Henderson	1.51	0.01

2010 Industry Statistics

Number of wells drilled

	Exploratory	Development	Total
Oil	9	184	193
Gas	55	326	381
Dry	37	184	221
Total	101	694	795

Total footage drilled

(thous. ft.)

	Exploratory	Development	Total
Oil	9.9	259.3	269.2
Gas	222.1	1,773.1	1,995.2
Dry	54.7	271.6	326.3
Total	286.7	2,303.9	2,590.7

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

New-field wildcats drilled	39
Footage (thous. ft.)	88.2

Average rotary rigs active	6
----------------------------	---

Permits	1,220
---------	-------

Statewide rank

	Crude Oil	Natural Gas
Wells drilled	11th	11th
Production	21st	18th
Reserves (2010)	20th	16th

Number of operators	566
---------------------	-----

Number of producing wells

(12/31/10)

Crude oil*	18,114
Natural gas	12,941
Total*	31,055

Average production

Crude oil (thous. b/d)	2.6
NGL (thous. b/d)	NA
Natural gas (MMcf/day)	286.9

Total production

Crude oil (YTD bbls, in thous.)	936
Natural gas (YTD MMcf)	104,733

Natural gas marketed production

(MMcf)	135,330
--------	---------

Average output per producing well

Crude oil (bbls.)	NA
Natural gas (Mcf)	8,093

Coalbed methane (YTD MMcf)	136
----------------------------	-----

Oil Wells	0
Gas Wells	17
Daily Average (MMcf) / Well	.37

Heavy oil (av. bbls/day, in thous.)	NA
-------------------------------------	----

Wells	NA
Av. bbls per day (in thous.)	NA
Av. bbls per well	NA

Source: For specific methodology and source details, please see pages 6 and 131.

* World Oil for Number of oil producing wells.

2010 Latest Available Data

Petroleum reserves

as of 12/31/10 (mill. bbls.)

	Crude Oil	NGL	Total
New reserves	-4	25	21
Production	1	5	6
Net annual change	-5	20	15
Proved reserves	15	125	140

Natural gas reserves

as of 12/31/10 (Bcf)

	Associated Dissolved	Non- Associated	Dry Gas
New reserves	80	-111	-73
Production	1	102	96
Net annual change	79	-213	-169
Proved reserves	111	2,674	2,613

Cost of drilling and equipping wells

	Cost/ft. (\$)	Cost/ well (\$)	Total Cost (thous. \$)
Oil	45	63,272	12,212
Gas	18	95,242	36,287
Dry	142	210,250	46,465

Marginal oil wells

Producing marginal wells	1,329
Crude oil production in bbls. (thous.)	679
Crude oil production b/d (thous.)	2

Marginal natural gas wells

as of 12/31/10

Producing marginal wells	12,470
Natural gas production (MMcf)	77,934

Mineral lease royalties, bonuses & rent

Oil	\$222,078
Gas	\$ 85,759
Total Royalties	\$580,582

Horizontal wells drilled	221
Directional wells drilled	0
Vertical wells drilled	574

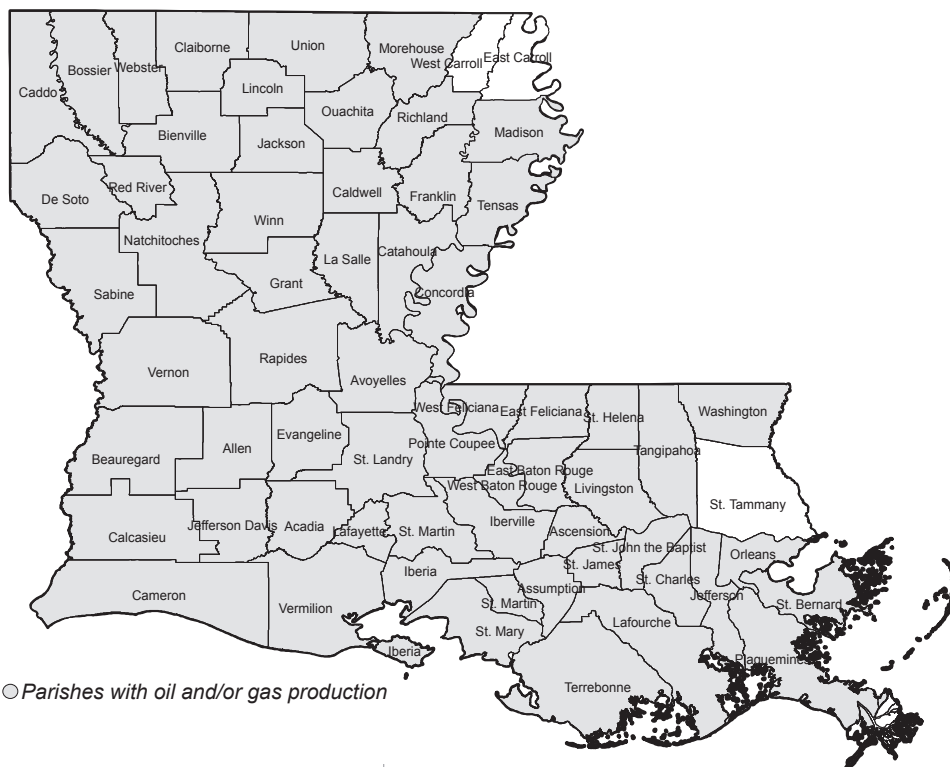
Average number of employees

Oil and natural gas extraction	1,974
Refining	1,299
Transportation	1,721
Wholesale	3,034
Retail	16,746
Pipeline construction	640
Oilfield machinery	0
Total petroleum industry	25,414

The top-producing oil field

was the Hitesville Consolidated. It produced over 82,000 barrels in 2010.

LOUISIANA



Background Information

Parishes

Number of parishes	64
With oil and/or gas production	61

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	23,235

Year and depth of deepest well drilled (ft.)

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

Cumulative number of total wells drilled

as of 12/31/10 (excluding service wells)

Oil wells	86,446	40%
Gas wells	52,697	24%
Dry holes	77,725	36%
Total	216,868	100%

Cumulative crude oil wellhead value

as of 12/31/10 (thous. \$) \$282,591,328

Cumulative production & new reserves

as of 12/31/10

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	27,944	6,501	34,445	292,413
Production	18,864	4,735	23,599	152,662

Value of Oil and Gas

Average wellhead price

(2010)

Crude oil (\$/bbl.)	\$78.25
Natural gas (\$/Mcf)	\$ 4.23

Wellhead value of production

(2010, in thous. \$)

Crude oil	\$ 5,271,859
Natural gas	\$ 9,348,719
Total	\$ 14,620,578

Average natural gas price

(2010, \$/Mcf)

Residential consumers	\$ 11.73
Commercial consumers	\$ 9.87
Industrial consumers	\$ 4.67
Electric utilities	\$ 4.79
City Gate	\$ 5.43

Severance taxes paid - FY

(2010, in thous. \$) \$744,867

Top 10 producing parishes

(2010 on a BOE basis)

Parish	% Production	
	State	US
De Soto	28.40	2.31
Red River	11.51	0.94
Caddo	9.90	0.81
Bossier	6.70	0.55
Plaquemines	5.62	0.46
Bienville	5.58	0.45
Terrebonne	4.03	0.33
Cameron	2.50	0.20
Lafourche	2.39	0.20
Iberia	2.18	0.18

2010 Industry Statistics

Number of wells drilled

	Exploratory	Development	Total
Oil	1	267	268
Gas	6	908	914
Dry	23	167	190
Total	30	1,342	1,372

Total footage drilled

(thous. ft.)

	Exploratory	Development	Total
Oil	2.1	1,365.5	1,367.5
Gas	46.5	13,625.8	13,672.3
Dry	118.3	1,268.7	1,387.0
Total	166.9	16,259.9	16,426.8

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

New-field wildcats drilled	25
Footage (thous. ft.)	150.0

Average rotary rigs active	192
----------------------------	-----

Permits	2,542
---------	-------

Statewide rank

	Crude Oil	Natural Gas
Wells drilled	9th	6th
Production	7th	4th
Reserves (2010)	10th	5th

Number of operators	954
---------------------	-----

Number of producing wells

(12/31/10)

Crude oil	17,388
Natural gas	13,288
Total	30,676

Average production

Crude oil (thous. b/d)	135.3
NGL (thous. b/d)	51.2
Natural gas (MMcf/day)	5,785.3

Total production

Crude oil (YTD bbls, in thous.)	49,388
Natural gas (YTD MMcf)	2,111,650

Natural gas marketed production

(MMcf)	2,210,099
--------	-----------

Average output per producing well

Crude oil (bbls.)	2,840
Natural gas (Mcf)	158,914

Coalbed methane (YTD MMcf)	NA
----------------------------	----

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

Heavy oil (av. bbls/day, in thous.)	24,308
-------------------------------------	--------

Wells	12,149
Av. bbls per day (in thous.)	67
Av. bbls per well	2,001

Source: For specific methodology and source details, please see pages 6 and 131.

2010 Latest Available Data

Petroleum reserves

as of 12/31/10 (mill. bbls.)

	Crude Oil	NGL	Total
New reserves	106	20	126
Production	52	39	91
Net annual change	54	-19	35
Proved reserves	424	322	746

Natural gas reserves

as of 12/31/10 (Bcf)

	Associated Dissolved	Non- Associated	Dry Gas
New reserves	-285	11,047	10,778
Production	108	2,107	2,189
Net annual change	-393	8,940	8,589
Proved reserves	679	28,838	29,277

Cost of drilling and equipping wells

	Cost/ft. (\$)	Cost/ well (\$)	Total Cost (thous. \$)
Oil	599	3,054,864	818,703
Gas	151	2,251,465	2,057,839
Dry	813	5,938,283	1,128,274

Marginal oil wells

Producing marginal wells	15,388
Crude oil production in bbls. (thous.)	9,713
Crude oil production b/d (thous.)	27

Marginal natural gas wells

as of 12/31/10

Producing marginal wells	6,028
Natural gas production (MMcf)	63,246

Mineral lease royalties, bonuses & rent

Oil	\$101,857,417
Gas	\$ 51,557,056
Total Royalties	\$213,254,337

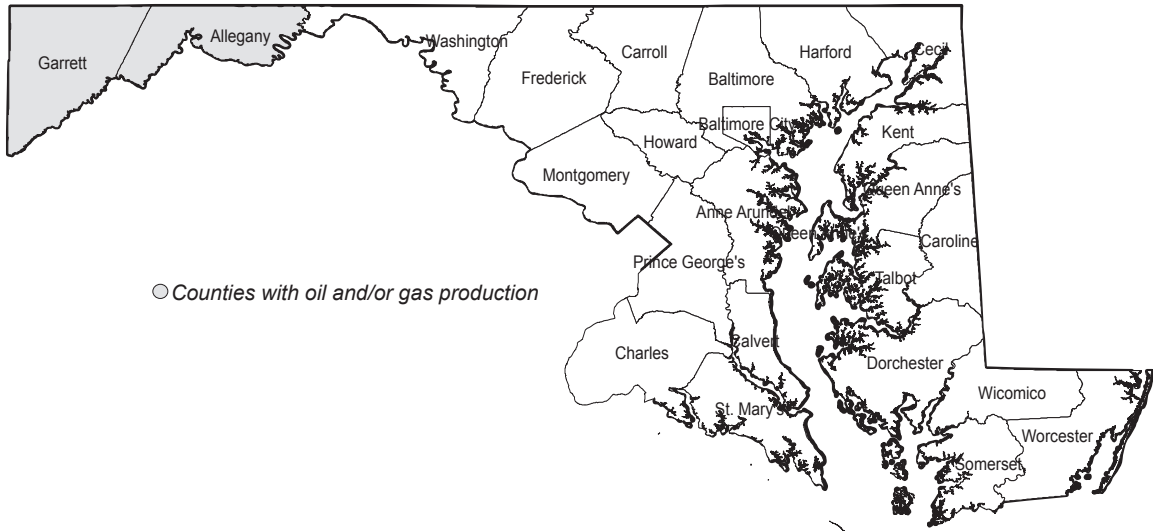
Horizontal wells drilled	739
Directional wells drilled	224
Vertical wells drilled	409

Average number of employees

Oil and natural gas extraction	48,608
Refining	11,443
Transportation	4,546
Wholesale	3,376
Retail	18,328
Pipeline construction	12,989
Oilfield machinery	8,228
Total petroleum industry	107,518

During 2010, 16 Haynesville Shale wells in northwestern Louisiana had initial flow rates topping 20 million cubic feet of gas per day. Most of these high-potential wells were drilled by Encana Oil & Gas in Red River Parish.

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	NA
Natural gas	NA

Year and depth of deepest well drilled (ft.)

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

Cumulative number of total wells drilled as of 12/31/10 (excluding service wells)

Oil wells	NA	NA
Gas wells	88	46%
Dry holes	102	54%
Total	190	100%

Cumulative crude oil wellhead value as of 12/31/10 (thous. \$)

NA

Cumulative production & new reserves as of 12/31/10

	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 (2010)

Crude oil (\$/bbl.)	NA
Natural gas (\$/Mcf)	4.63

Wellhead value of production (2010, in thous. \$)

Crude oil	NA
Natural gas	\$199
Total	\$199

Average natural gas price (2010, \$/Mcf)

Residential consumers	\$12.44
Commercial consumers	\$ 9.87
Industrial consumers	\$ 9.05
Electric utilities	\$ 5.77
City Gate	\$ 6.49

Severance taxes paid (2010, in thous. \$)

\$4

Top producing counties (2010 on a BOE basis)

County	% Production	
	State	US
NA	NA	NA

2010 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

New-field wildcats drilled

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

Average rotary rigs active

0

Permits

0

Statewide rank

	Crude Oil	Natural Gas
Wells drilled	NA	NA
Production	NA	NA
Reserves (2010)	NA	NA

Number of operators

--

Number of producing wells*

(12/31/10)

Crude oil	0
Natural gas	6
Total	6

Average production

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

Total production

Crude oil (YTD bbls, in thous.)	NA
Natural gas (YTD MMcf)	NA

Natural gas marketed production

(MMcf)	43
--------	----

Average output per producing well

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

Coalbed methane (YTD MMcf)

NA

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

Heavy oil (av. bbls/day, in thous.)

NA

Wells	NA
Av. bbls per day (in thous.)	NA
Av. bbls per well	NA

Source: For specific methodology and source details, please see pages 6 and 131.

* World Oil for Number of natural gas producing wells.

2010 Latest Available Data

Petroleum reserves

as of 12/31/10 (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 12/31/10 (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 12/31/10

Producing marginal wells	NA
Natural gas production (MMcf)	NA

Mineral lease royalties, bonuses & rent

Oil	--
Gas	--
Total Royalties	\$8,360

Horizontal wells drilled

0

Directional wells drilled

0

Vertical wells drilled

0

Average number of employees

Oil and natural gas extraction	620
Refining	690
Transportation	497
Wholesale	3,243
Retail	9,230
Pipeline construction	622
Oilfield machinery	0
Total petroleum industry	14,902

The first exploration well was drilled

in 1888 in the Cumberland Narrows. The first evidence of natural gas was in 1944, in a well drilled on the Accident Dome in Garrett County. Later discoveries were in four Appalachian fields: Mountain Lake Park, Accident, Negro Mountain and Pennlands (Artemas). The Marcellus Shale covers the westernmost portion of the state.

MICHIGAN



Background Information

Counties

Number of counties	83
With oil and/or gas production	59

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	12,742
Natural gas	14,716

Year and depth of deepest well drilled (ft.)

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

Cumulative number of total wells drilled as of 12/31/10 (excluding service wells)

Oil wells	15,704	27%
Gas wells	14,670	26%
Dry holes	27,058	47%
Total	57,432	100%

Cumulative crude oil wellhead value

as of 12/31/10 (thous. \$)	\$16,582,170
----------------------------	--------------

Cumulative production & new reserves as of 12/31/10

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	1,287	324	1,611	9,914
Production	1,258	248	1,506	6,208

Value of Oil and Gas

Average wellhead price (2010)

Crude oil (\$/bbl.)	\$74.91
Natural gas (\$/Mcf)	\$ 3.79

Wellhead value of production (2010, in thous. \$)

Crude oil	\$ 506,841
Natural gas	\$ 575,648
Total	\$1,082,489

Average natural gas price (2010, \$/Mcf)

Residential consumers	\$11.32
Commercial consumers	\$ 8.95
Industrial consumers	\$ 9.25
Electric utilities	\$ 4.97
City Gate	\$ 7.07

Severance taxes paid (2010, in thous. \$)

Top 10 producing counties (2010 on a BOE basis)

County	% Production	
	State	US
Otsego	21.33	0.12
Montmorency	19.61	0.11
Antrim	14.63	0.08
Alpena	6.34	0.04
Manistee	4.21	0.02
Oscoda	3.67	0.02
Jackson	3.08	0.02
Alcona	3.04	0.02
Kalkaska	2.74	0.02
Calhoun	2.17	0.01

2010 Industry Statistics

Number of wells drilled

	Exploratory	Development	Total
Oil	22	42	64
Gas	3	55	58
Dry	30	19	49
Total	55	116	171

Total footage drilled

(thous. ft.)

	Exploratory	Development	Total
Oil	73.4	161.6	235.0
Gas	28.4	99.9	128.4
Dry	136.8	72.3	209.1
Total	238.6	333.9	572.4

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

New-field wildcats drilled

Footage (thous. ft.)	33
----------------------	----

Average rotary rigs active

0

Permits

295

Statewide rank

	Crude Oil	Natural Gas
Wells drilled	21st	21st
Production	17th	16th
Reserves (2010)	18th	18th

Number of operators

171

Number of producing wells

(12/31/10)

Crude oil	3,885
Natural gas	10,253
Total	14,138

Average production

Crude oil (thous. b/d)	17.6
NGL (thous. b/d)	2.0
Natural gas (MMcf/day)	362.1

Total production

Crude oil (YTD bbls, in thous.)	6,420
Natural gas (YTD MMcf)	132,173

Natural gas marketed production

(MMcf)	151,886
--------	---------

Average output per producing well

Crude oil (bbls.)	1,652
Natural gas (Mcf)	12,891

Coalbed methane (YTD MMcf)

NA

Oil Wells

NA

Gas Wells

NA

Daily Average (MMcf) / Well

NA

Heavy oil (av. bbls/day, in thous.)

NA

Wells

NA

Av. bbls per day (in thous.)

NA

Av. bbls per well

NA

Source: For specific methodology and source details, please see pages 6 and 131.

2010 Latest Available Data

Petroleum reserves

as of 12/31/10 (mill. bbls.)

	Crude Oil	NGL	Total
New reserves	12	5	17
Production	5	4	9
Net annual change	7	1	8
Proved reserves	40	63	103

Natural gas reserves

as of 12/31/10 (Bcf)

	Associated Dissolved	Non- Associated	Dry Gas
New reserves	1	326	310
Production	6	151	154
Net annual change	-5	175	156
Proved reserves	72	2,903	2,919

Cost of drilling and equipping wells

	Cost/ft. (\$)	Cost/ well (\$)	Total Cost (thous. \$)
Oil	53	194,669	12,459
Gas	NA	NA	NA
Dry	132	563,674	27,620

Marginal oil wells

Producing marginal wells	3,696
Crude oil production in bbls. (thous.)	3,250
Crude oil production b/d (thous.)	9

Marginal natural gas wells

as of 12/31/10

Producing marginal wells	9,985
Natural gas production (MMcf)	114,548

Mineral lease royalties, bonuses & rent

Oil	\$ 438,723
Gas	\$1,187,423
Total Royalties	\$1,689,404

Horizontal wells drilled

26

Directional wells drilled

45

Vertical wells drilled

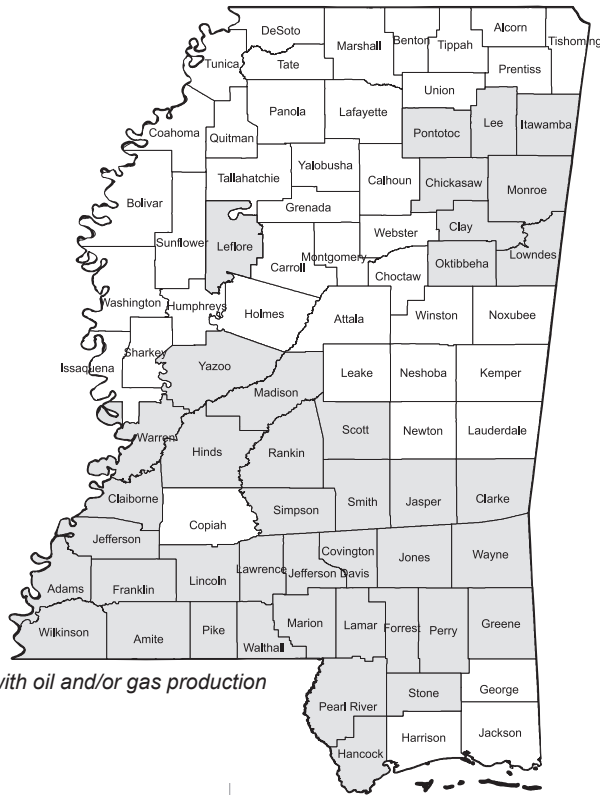
100

Average number of employees

Oil and natural gas extraction	2,322
Refining	1,240
Transportation	3,194
Wholesale	4,685
Retail	23,736
Pipeline construction	1,159
Oilfield machinery	0
Total petroleum industry	36,336

A May 2010 lease sale for drilling land attracted a state record of \$178 million in high bids, nearly 8 times the previous sales record of \$23.6 million in 1981. The sale was driven by news of a successful test of an EnCana-operated well in a new shale play that exists throughout northern Lower Michigan.

MISSISSIPPI



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 — 221,331 MMcf	1988

Deepest producing well (ft.)

Crude oil	21,533
Natural gas	23,894

Year and depth of deepest well drilled (ft.)

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

Cumulative number of total wells drilled as of 12/31/10 (excluding service wells)

Oil wells	11,373	33%
Gas wells	4,454	13%
Dry holes	18,254	54%
Total	34,081	100%

Cumulative crude oil wellhead value as of 12/31/10 (thous. \$)

\$27,595,089

Cumulative production & new reserves as of 12/31/10

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	2,851	137	2,988	10,148
Production	2,629	153	2,782	9,360

Value of Oil and Gas

Average wellhead price (2010)

Crude oil (\$/bbl.)	\$76.41
Natural gas (\$/Mcf)	\$ 4.17

Wellhead value of production (2010, in thous. \$)

Crude oil	\$ 1,806,485
Natural gas	\$ 307,417
Total	\$ 2,113,902

Average natural gas price (2010, \$/Mcf)

Residential consumers	\$10.19
Commercial consumers	\$ 8.75
Industrial consumers	\$ 6.19
Electric utilities	NA
City Gate	\$ 5.73

Severance taxes paid (2010, in thous. \$)

\$93,463

Top 10 producing counties (2010 on a BOE basis)

County	% Production	
	State	US
Rankin	48.39	0.86
Madison	11.71	0.21
Jasper	5.89	0.11
Wayne	4.75	0.08
Yazoo	4.39	0.08
Lincoln	3.57	0.06
Jefferson Davis	3.32	0.06
Jones	2.75	0.05
Lamar	2.55	0.05
Pike	1.83	0.03

2010 Industry Statistics

Number of wells drilled

	Exploratory	Development	Total
Oil	2	92	94
Gas	NA	45	45
Dry	13	31	44
Total	15	168	183

Total footage drilled

(thous. ft.)

	Exploratory	Development	Total
Oil	10.8	732.4	473.1
Gas	NA	458.6	458.6
Dry	112.2	2587.9	400.1
Total	123.0	1,478.9	1,601.9

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

New-field wildcats drilled	12
Footage (thous. ft.)	109.9

Average rotary rigs active	11
----------------------------	----

Permits	440
---------	-----

Statewide rank

	Crude Oil	Natural Gas
Wells drilled	16th	22nd
Production	14th	22nd
Reserves (2010)	14th	21st

Number of operators	177
---------------------	-----

Number of producing wells

(12/31/10)

Crude oil	481
Natural gas	53
Total	534

Average production

Crude oil (thous. b/d)	62.9
NGL (thous. b/d)	3.1
Natural gas (MMcf/day)	1,067.8

Total production

Crude oil (YTD bbls, in thous.)	22,958
Natural gas (YTD MMcf)	389,751

Natural gas marketed production

(MMcf)	73,721
--------	--------

Average output per producing well

Crude oil (bbls.)	9,494
Natural gas (Mcf)	221,198

Coalbed methane (YTD MMcf)	NA
----------------------------	----

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

Heavy oil (av. bbls/day, in thous.)	1,891
-------------------------------------	-------

Wells	241
Av. bbls per day (in thous.)	5
Av. bbls per well	7,848

Source: For specific methodology and source details, please see pages 6 and 131.

2010 Latest Available Data

Petroleum reserves

as of 12/31/10 (mill. bbls.)

	Crude Oil	NGL	Total
New reserves	26	0	26
Production	23	1	24
Net annual change	3	-1	2
Proved reserves	247	11	258

Natural gas reserves

as of 12/31/10 (Bcf)

	Associated Dissolved	Non- Associated	Dry Gas
New reserves	5	19	23
Production	7	81	87
Net annual change	-2	-62	-64
Proved reserves	36	822	853

Cost of drilling and equipping wells

	Cost/ft. (\$)	Cost/ well (\$)	Total Cost (thous. \$)
Oil	665	5,255,489	494,016
Gas	647	6,594,981	296,774
Dry	900	8,187,279	360,240

Marginal oil wells

Producing marginal wells	1,337
Crude oil production in bbls. (thous.)	2,835
Crude oil production b/d (thous.)	8

Marginal natural gas wells

as of 12/31/10

Producing marginal wells	1,345
Natural gas production (MMcf)	14,651

Mineral lease royalties, bonuses & rent

Oil	\$ 1,992,223
Gas	\$ 7,993,913
Total Royalties	\$10,766,772

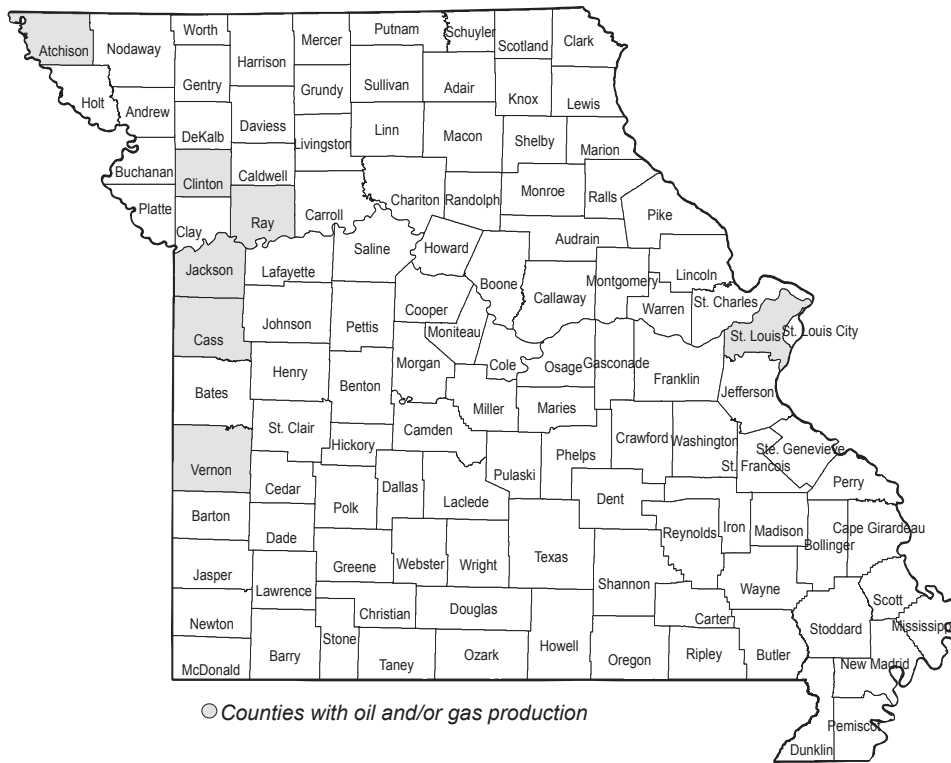
Horizontal wells drilled	25
Directional wells drilled	58
Vertical wells drilled	100

Average number of employees

Oil and natural gas extraction	3,955
Refining	2,392
Transportation	1,620
Wholesale	2,155
Retail	14,062
Pipeline construction	1,572
Oilfield machinery	95
Total petroleum industry	25,851

A high-volume Smackover oil well confirmed Huxford South field in mid-2010. The Venture Oil & Gas-operated well pumped 477 bbls of 41.3-degree crude and 347,000 cu ft of casinghead gas per day in northwestern Escambia County.

MISSOURI



Background Information

Counties

Number of counties	114
With oil and/or gas production	7

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	NA
Natural gas	NA

Year and depth of deepest well drilled (ft.)

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

Cumulative number of total wells drilled as of 12/31/10 (excluding service wells)

Oil wells	2,434	28%
Gas wells	1,671	20%
Dry holes	4,526	52%
Total	8,631	100%

Cumulative crude oil wellhead value as of 12/31/10 (thous. \$)

\$133,510

Cumulative production & new reserves as of 12/31/10

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	NA	NA	NA	NA
Production	7	NA	7	15

Value of Oil and Gas

Average wellhead price (2010)

Crude oil (\$/bbl.)	\$70.48
Natural gas (\$/Mcf)	NA

Wellhead value of production (2010, in thous. \$)

Crude oil	\$10,290
Natural gas	\$ 255
Total	\$10,545

Average natural gas price (2010, \$/Mcf)

Residential consumers	\$11.66
Commercial consumers	\$10.28
Industrial consumers	\$ 8.70
Electric utilities	NA
City Gate	\$ 6.17

Severance taxes paid (2010, in thous. \$)

--

Top producing counties (2010 on a BOE basis)

County	% Production	
	State	US
NA	NA	NA

2010 Industry Statistics

Number of wells drilled

	Exploratory	Development	Total
Oil	NA	33	33
Gas	NA	2	NA
Dry	NA	NA	NA
Total	NA	35	35

Total footage drilled

(thous. ft.)

	Exploratory	Development	Total
Oil	NA	1.4	1.4
Gas	NA	NA	NA
Dry	NA	NA	NA
Total	NA	1.4	1.4

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

New-field wildcats drilled

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

Average rotary rigs active

0

Permits

181

Statewide rank

	Crude Oil	Natural Gas
Wells drilled	24th	30th
Production	30th	NA
Reserves (2010)	NA	NA

Number of operators

--

Number of producing wells*

(12/31/10)

Crude oil	482
Natural gas	14
Total	496

Average production

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

Total production*

Crude oil (YTD bbls, in thous.)	147
Natural gas (YTD MMcf)	60

Natural gas marketed production

(MMcf)

0

Average output per producing well

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

Coalbed methane (YTD MMcf)

NA

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

Heavy oil (av. bbls/day, in thous.)

NA

Wells	NA
Av. bbls per day (in thous.)	NA
Av. bbls per well	NA

Source: For specific methodology and source details, please see pages 6 and 131.

* State data.

2010 Latest Available Data

Petroleum reserves

as of 12/31/10 (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 12/31/10 (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 12/31/10

Producing marginal wells	NA
Natural gas production (MMcf)	NA

Mineral lease royalties, bonuses & rent

Oil	--
Gas	--
Total Royalties	\$13,121,844

Horizontal wells drilled

0

Directional wells drilled

0

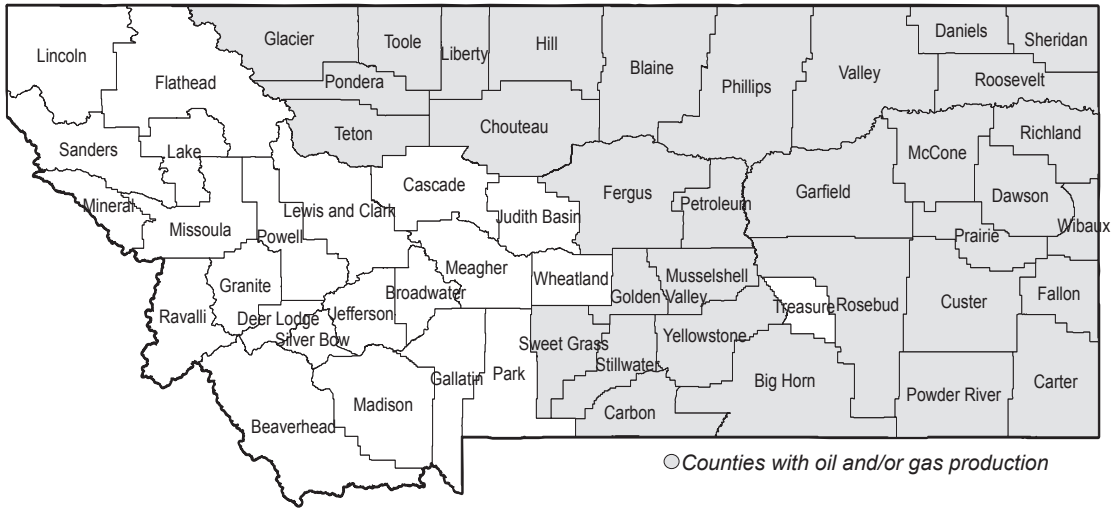
Vertical wells drilled

35

Average number of employees

Oil and natural gas extraction	195
Refining	1,198
Transportation	3,215
Wholesale	3,201
Retail	24,359
Pipeline construction	449
Oilfield machinery	0
Total petroleum industry	32,617

State data shows 482 active producing oil wells (81 permitted) and 14 active commercial gas wells (three permitted) in 2010 with 10 active companies producing in seven counties.



Background Information

Counties

Number of counties	56
With oil and/or gas production	33

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 — 116,848 MMcf	2007

Deepest producing well (ft.)

Crude oil	22,625
Natural gas	19,999

Year and depth of deepest well drilled (ft.)

2006	22,037
------	--------

Cumulative number of total wells drilled as of 12/31/10 (excluding service wells)

Oil wells	15,447	35%
Gas wells	11,101	25%
Dry holes	17,722	40%
Total	44,270	100%

Cumulative crude oil wellhead value as of 12/31/10 (thous. \$)

\$28,034,798

Cumulative production & new reserves as of 12/31/10

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	2,091	58	2,149	4,782
Production	1,734	49	1,783	3,774

Value of Oil and Gas

Average wellhead price (2010)

Crude oil (\$/bbl.)	\$ 70.24
Natural gas (\$/Mcf)	\$ 3.64

Wellhead value of production (2010, in thous. \$)

Crude oil	\$1,779,390
Natural gas	\$ 318,642
Total	\$2,098,032

Average natural gas price (2010, \$/Mcf)

Residential consumers	\$ 8.64
Commercial consumers	\$ 8.54
Industrial consumers	\$ 8.07
Electric utilities	NA
City Gate	\$ 5.17

Severance taxes paid (2010, in thous. \$)

\$206,024

Top 10 producing counties (2010 on a BOE basis)

County	% Production	
	State	US
Richland	35.37	0.27
Fallon	21.59	0.16
Phillips	7.10	0.05
Blaine	4.91	0.04
Big Horn	4.57	0.03
Hill	3.97	0.03
Sheridan	3.75	0.03
Roosevelt	3.49	0.03
Toole	2.44	0.02
Wibaux	2.31	0.02

2010 Industry Statistics

Number of wells drilled

	Exploratory	Development	Total
Oil	18	69	87
Gas	4	150	154
Dry	21	11	32
Total	43	230	273

Total footage drilled

(thous. ft.)

	Exploratory	Development	Total
Oil	233.5	324.7	1,058.2
Gas	6.2	266.2	272.5
Dry	73.2	56.0	129.2
Total	312.9	1,147.0	1,459.9

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

New-field wildcats drilled	28
Footage (thous. ft.)	153.2

Average rotary rigs active	7
----------------------------	---

Permits	406
---------	-----

Statewide rank

	Crude Oil	Natural Gas
Wells drilled	17th	16th
Production	12th	19th
Reserves (2010)	11th	20th

Number of operators	236
---------------------	-----

Number of producing wells

(12/31/10)

Crude oil	4,563
Natural gas	6,722
Total	11,285

Average production

Crude oil (thous. b/d)	69.2
NGL (thous. b/d)	0.2
Natural gas (MMcf/day)	191.5

Total production

Crude oil (YTD bbls, in thous.)	25,266
Natural gas (YTD MMcf)	69,893

Natural gas marketed production

(MMcf)	87,539
--------	--------

Average output per producing well

Crude oil (bbls.)	5,537
Natural gas (Mcf)	10,398

Coalbed methane (YTD MMcf)	9,514
----------------------------	-------

Oil Wells	2
Gas Wells	816
Daily Average (MMcf) / Well	26.1

Heavy oil (av. bbls/day, in thous.)	283
-------------------------------------	-----

Wells	85
Av. bbls per day (in thous.)	1
Av. bbls per well	3,325

Source: For specific methodology and source details, please see pages 6 and 131.

2010 Latest Available Data

Petroleum reserves

as of 12/31/10 (mill. bbls.)

	Crude Oil	NGL	Total
New reserves	51	0	51
Production	25	1	26
Net annual change	26	-1	25
Proved reserves	369	11	380

Natural gas reserves

as of 12/31/10 (Bcf)

	Associated Dissolved	Non- Associated	Dry Gas
New reserves	14	46	61
Production	24	70	93
Net annual change	-10	-24	-32
Proved reserves	302	657	944

Cost of drilling and equipping wells

	Cost/ft. (\$)	Cost/ well (\$)	Total Cost (thous. \$)
Oil	673	8,188,070	712,362
Gas	19	33,953	5,229
Dry	35	141,732	4,535

Marginal oil wells

Producing marginal wells	3,125
Crude oil production in bbls. (thous.)	3,872
Crude oil production b/d (thous.)	11

Marginal natural gas wells

as of 12/31/10

Producing marginal wells	6,365
Natural gas production (MMcf)	52,183

Mineral lease royalties, bonuses & rent

Oil	\$ 28,806,462
Gas	\$ 11,691,695
Total Royalties	\$106,827,080

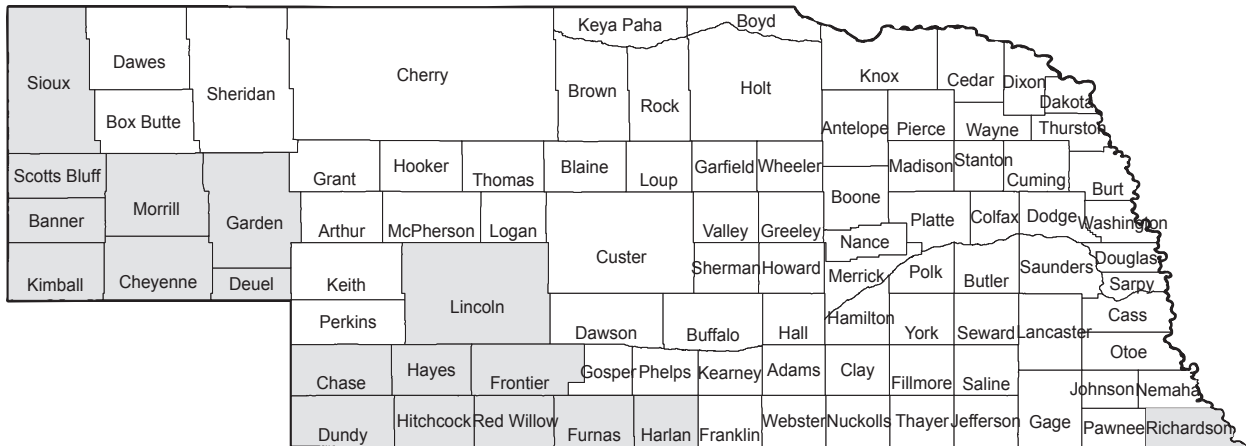
Horizontal wells drilled	76
Directional wells drilled	22
Vertical wells drilled	175

Average number of employees

Oil and natural gas extraction	2,428
Refining	1,076
Transportation	797
Wholesale	903
Retail	5,166
Pipeline construction	617
Oilfield machinery	0
Total petroleum industry	10,987

Production from a horizontal lateral well in Three Forks extended from 10,683 feet southward to a measured total depth of 18,368 feet and tests of the well following fracture stimulation in 15 stages, all using sliding sleeve technology.

NEBRASKA



○ Counties with oil and/or gas production

Background Information

Counties

Number of counties	93
With oil and/or gas production	18

First year of production

Crude oil	1939
Natural gas	1950

Year and amount of peak production

Crude oil —24,894 thous. bbls.	1962
Natural gas —15,743 MMcf	1961

Deepest producing well (ft.)

Crude oil	11,761
Natural gas	5,832

Year and depth of deepest well drilled (ft.)

1997	13,128
------	--------

Cumulative number of total wells drilled as of 12/31/10 (excluding service wells)

Oil wells	6,180	30%
Gas wells	575	3%
Dry holes	13,659	67%
Total	20,414	100%

Cumulative crude oil wellhead value as of 12/31/10 (thous. \$)

	\$4,994,988
--	-------------

Cumulative production & new reserves as of 12/31/10

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	515	NA	515	NA
Production	510	NA	510	NA

Value of Oil and Gas

Average wellhead price (2010)

Crude oil (\$/bbl.)	\$69.65
Natural gas (\$/Mcf)	3.98

Wellhead value of production (2010, in thous. \$)

Crude oil	\$153,718
Natural gas	\$ 8,879
Total	\$162,597

Average natural gas price (2010, \$/Mcf)

Residential consumers	\$ 8.95
Commercial consumers	\$ 7.07
Industrial consumers	\$ 5.85
Electric utilities	NA
City Gate	\$ 5.62

Severance taxes paid (2010, in thous. \$)

	\$3,660
--	---------

Top 10 producing counties (2010 on a BOE basis)

County	% Production	
	State	US
Kimball	24.52	0.01
Hitchcock	20.59	0.01
Cheyenne	11.06	0.01
Red Willow	10.11	0.01
Dundy	9.61	0.01
Banner	6.63	<0.01
Chase	5.36	<0.01
Deuel	3.66	<0.01
Morrill	2.10	<0.01
Richardson	1.49	<0.01

2010 Industry Statistics

Number of wells drilled

	Exploratory	Development	Total
Oil	11	38	49
Gas	NA	4	4
Dry	28	18	46
Total	39	60	99

Total footage drilled (thous. ft.)

	Exploratory	Development	Total
Oil	62.6	167.0	229.6
Gas	NA	8.9	8.9
Dry	155.3	96.8	252.1
Total	217.9	272.6	490.5

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

New-field wildcats drilled	23
Footage (thous. ft.)	120.6

Average rotary rigs active	2
----------------------------	---

Permits	145
---------	-----

Statewide rank

	Crude Oil	Natural Gas
Wells drilled	23rd	26th
Production	22nd	27th
Reserves (2010)	23rd	NA

Number of operators	105
---------------------	-----

Number of producing wells (12/31/10)

Crude oil	1,202
Natural gas	295
Total	1,497

Average production

Crude oil (thous. b/d)	6.0
NGL (thous. b/d)	NA
Natural gas (MMcf/day)	5.7

Total production

Crude oil (YTD bbls, in thous.)	2,197
Natural gas (YTD MMcf)	2,093

Natural gas marketed production

(MMcf)	2,231
--------	-------

Average output per producing well

Crude oil (bbls.)	1,828
Natural gas (Mcf)	7,094

Coalbed methane (YTD MMcf)	NA
----------------------------	----

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

Heavy oil (av. bbls/day, in thous.)	NA
-------------------------------------	----

Wells	NA
Av. bbls per day (in thous.)	NA
Av. bbls per well	NA

Source: For specific methodology and source details, please see pages 6 and 131.

2010 Latest Available Data

Petroleum reserves

as of 12/31/10 (mill. bbls.)

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

Natural gas reserves

as of 12/31/10(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	361	1,689,605	82,791
Gas	668	1,480,989	5,924
Dry	82	447,265	20,574

Marginal oil wells

Producing marginal wells	1,142
Crude oil production in bbls. (thous.)	1,564
Crude oil production b/d (thous.)	4

Marginal natural gas wells

as of 12/31/10

Producing marginal wells	292
Natural gas production (MMcf)	2,093

Mineral lease royalties, bonuses & rent

Oil	\$322,999
Gas	\$232,557
Total Royalties	\$589,524

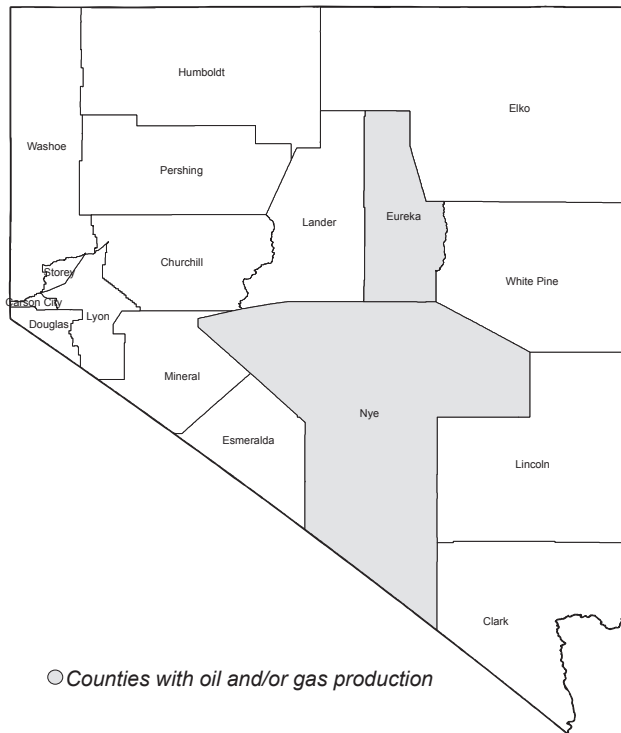
Horizontal wells drilled	0
Directional wells drilled	0
Vertical wells drilled	99

Average number of employees

Oil and natural gas extraction	221
Refining	14
Transportation	1,561
Wholesale	1,188
Retail	8,682
Pipeline construction	295
Oilfield machinery	0
Total petroleum industry	11,961

Porter was the largest producing gas field in 2010. Discovered in 1998, it produced over 546,000 MCFs.

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 — 53 MMcf	1991

Deepest producing well (ft.)

Crude oil	8,050
Natural gas	NA

Year and depth of deepest well drilled (ft.)

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

Cumulative number of total wells drilled as of 12/31/10 (excluding service wells)

Oil wells	123	13%
Gas wells	2	0%
Dry holes	812	87%
Total	937	100%

Cumulative crude oil wellhead value as of 12/31/10 (thous. \$)

\$937,780

Cumulative production & new reserves as of 12/31/10

	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 (2010)

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

Wellhead value of production (2010, in thous. \$)

Crude oil	NA
Natural gas	NA
Total	NA

Average natural gas price (2010, \$/Mcf)

Residential consumers	\$12.25
Commercial consumers	\$ 9.77
Industrial consumers	\$10.53
Electric utilities	\$ 5.75
City Gate	\$ 7.19

Severance taxes paid (2010, in thous. \$)

\$418

Top producing counties (2010 on a BOE basis)

County	% Production	
	State	US
Nye	86.51	0.01
Eureka	13.49	<0.01

2010 Industry Statistics

Number of wells drilled

	Exploratory	Development	Total
Oil	NA	NA	NA
Gas	NA	NA	NA
Dry	3	NA	3
Total	3	NA	3

Total footage drilled

(thous. ft.)

	Exploratory	Development	Total
Oil	NA	NA	NA
Gas	NA	NA	NA
Dry	16.8	NA	16.8
Total	16.8	NA	16.8

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

New-field wildcats drilled	3
Footage (thous. ft.)	16.8

Average rotary rigs active	6
----------------------------	---

Permits	115
---------	-----

Statewide rank

	Crude Oil	Natural Gas
Wells drilled	31st	35th
Production	27th	33rd
Reserves (2010)	NA	NA

Number of operators	6
---------------------	---

Number of producing wells

(12/31/10)

Crude oil	71
Natural gas	0
Total	71

Average production

Crude oil (thous. b/d)	1.2
NGL (thous. b/d)	0
Natural gas (MMcf/day)	0

Total production

Crude oil (YTD bbls, in thous.)	425
Natural gas (YTD MMcf)	0

Natural gas marketed production

(MMcf)	4
--------	---

Average output per producing well

Crude oil (bbls.)	5,980
Natural gas (Mcf)	NA

Coalbed methane (YTD MMcf)	NA
----------------------------	----

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

Heavy oil (av. bbls/day, in thous.)	NA
-------------------------------------	----

Wells	NA
Av. bbls per day (in thous.)	NA
Av. bbls per well	NA

Source: For specific methodology and source details, please see pages 6 and 131.

2010 Latest Available Data

Petroleum reserves

as of 12/31/10 (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 12/31/10 (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	531	2,965,808	8,897

Marginal oil wells

Producing marginal wells	42
Crude oil production in bbls. (thous.)	95
Crude oil production b/d (thous.)	<1

Marginal natural gas wells

as of 12/31/10

Producing marginal wells	NA
Natural gas production (MMcf)	NA

Mineral lease royalties, bonuses & rent

Oil	\$ 3,492,597
Gas	--
Total Royalties	\$26,152,702

Horizontal wells drilled	0
Directional wells drilled	1
Vertical wells drilled	2

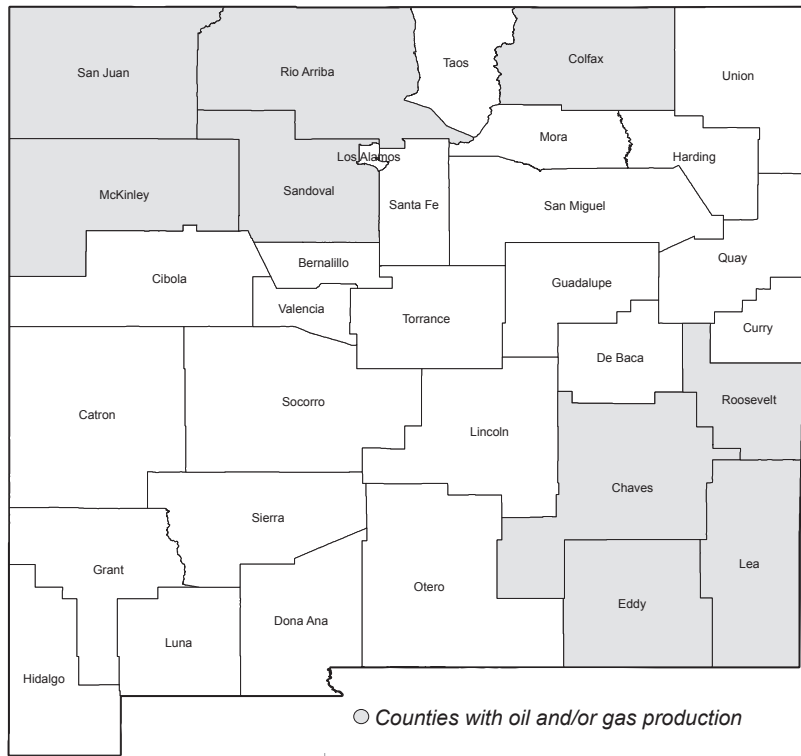
Average number of employees

Oil and natural gas extraction	259
Refining	193
Transportation	30
Wholesale	663
Retail	7,662
Pipeline construction	944
Oilfield machinery	0
Total petroleum industry	9,751

Nevada's most recent commercial

commercial new field discovery, Trap Spring field, was opened by Makoil Inc in 2005. It has since produced 14.9 million bbls of oil and ranks as the state's second largest field, behind Grant Canyon (21.2 MMbo).

NEW MEXICO



Background Information

Counties

Number of counties	33
With oil and/or gas production	10

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	19,323
Natural gas	26,579

Year and depth of deepest well drilled (ft.)

1969	22,926
------	--------

Cumulative number of total wells drilled as of 12/31/10 (excluding service wells)

Oil wells	52,968	46%
Gas wells	41,731	37%
Dry holes	18,793	17%
Total	113,492	100%

Cumulative crude oil wellhead value as of 12/31/10 (thous. \$)

\$75,890,675

Cumulative production & new reserves as of 12/31/10

	Crude Oil	NGL	Total	Natural Gas
	(mill. bbls.)	(mill. bbls.)	(mill. bbls.)	(Bcf)
Reserves	7,460	3,494	10,954	84,570
Production	6,705	2,591	9,296	69,155

Value of Oil and Gas

Average wellhead price (2010)

Crude oil (\$/bbl.)	\$75.64
Natural gas (\$/Mcf)	\$ 5.32

Wellhead value of production (2010, in thous. \$)

Crude oil	\$ 4,945,721
Natural gas	\$ 6,874,424
Total	\$ 11,820,145

Average natural gas price (2010, \$/Mcf)

Residential consumers	\$ 9.63
Commercial consumers	\$ 7.47
Industrial consumers	\$ 6.17
Electric utilities	NA
City Gate	\$ 4.84

Severance taxes paid (2010, in thous. \$)

\$1,431,086

Top producing counties (2010 on a BOE basis)

County	% Production	
	State	US
San Juan	34.98	1.71
Rio Arriba	23.63	1.16
Eddy	19.54	0.96
Lea	17.52	0.86
Chaves	2.21	0.11
Colfax	1.81	0.09
Roosevelt	0.18	0.01
Sandoval	0.10	<0.01
McKinley	0.02	<0.01
Guadalupe	0.00	<0.01

2010 Industry Statistics

Number of wells drilled

	Exploratory	Development	Total
Oil	35	748	783
Gas	11	249	260
Dry	12	25	37
Total	58	1,022	1,080

Total footage drilled

(thous. ft.)

	Exploratory	Development	Total
Oil	268.5	5,013.5	5,282.0
Gas	105.7	1,681.6	1,787.3
Dry	61.7	143.2	204.9
Total	436.0	6,838.2	7,274.2

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

New-field wildcats drilled	52
Footage (thous. ft.)	380.9

Average rotary rigs active	62
----------------------------	----

Permits	2,338
---------	-------

Statewide rank

	Crude Oil	Natural Gas
Wells drilled	7th	14th
Production	8th	7th
Reserves (2010)	6th	6th

Number of operators	509
---------------------	-----

Number of producing wells

(12/31/10)

Crude oil	23,017
Natural gas	34,306
Total	57,323

Average production

Crude oil (thous. b/d)	166.9
NGL (thous. b/d)	13.0
Natural gas (MMcf/day)	2,962.3

Total production

Crude oil (YTD bbls, in thous.)	60,917
Natural gas (YTD MMcf)	1,081,223

Natural gas marketed production

(MMcf)	1,292,185
--------	-----------

Average output per producing well

Crude oil (bbls.)	2,647
Natural gas (Mcf)	31,517

Coalbed methane (YTD MMcf)	399,471
----------------------------	---------

Oil Wells	1
Gas Wells	5,958
Daily Average (MMcf) / Well	1,094.4

Heavy oil (av. bbls/day, in thous.)	14
-------------------------------------	----

Wells	27
Av. bbls per day (in thous.)	0
Av. bbls per well	516

Source: For specific methodology and source details, please see pages 6 and 131.

2010 Latest Available Data

Petroleum reserves

as of 12/31/10 (mill. bbls.)

	Crude Oil	NGL	Total
New reserves	181	138	319
Production	58	70	128
Net annual change	123	68	191
Proved reserves	823	863	1,686

Natural gas reserves

as of 12/31/10 (Bcf)

	Associated Dissolved	Non- Associated	Dry Gas
New reserves	412	785	1,034
Production	181	1,131	1,220
Net annual change	231	-346	-186
Proved reserves	2,213	14,316	15,412

Cost of drilling and equipping wells

	Cost/ft. (\$)	Cost/ well (\$)	Total Cost (thous. \$)
Oil	337	2,274,598	1,781,010
Gas	240	1,652,301	429,598
Dry	455	2,516,990	93,129

Marginal oil wells

Producing marginal wells	19,024
Crude oil production in bbls. (thous.)	22,887
Crude oil production b/d (thous.)	63

Marginal natural gas wells

as of 12/31/10

Producing marginal wells	24,376
Natural gas production (MMcf)	301,286

Mineral lease royalties, bonuses & rent

Oil	\$387,138,957
Gas	\$402,142,200
Total Royalties	\$876,076,664

Horizontal wells drilled	275
Directional wells drilled	166
Vertical wells drilled	639

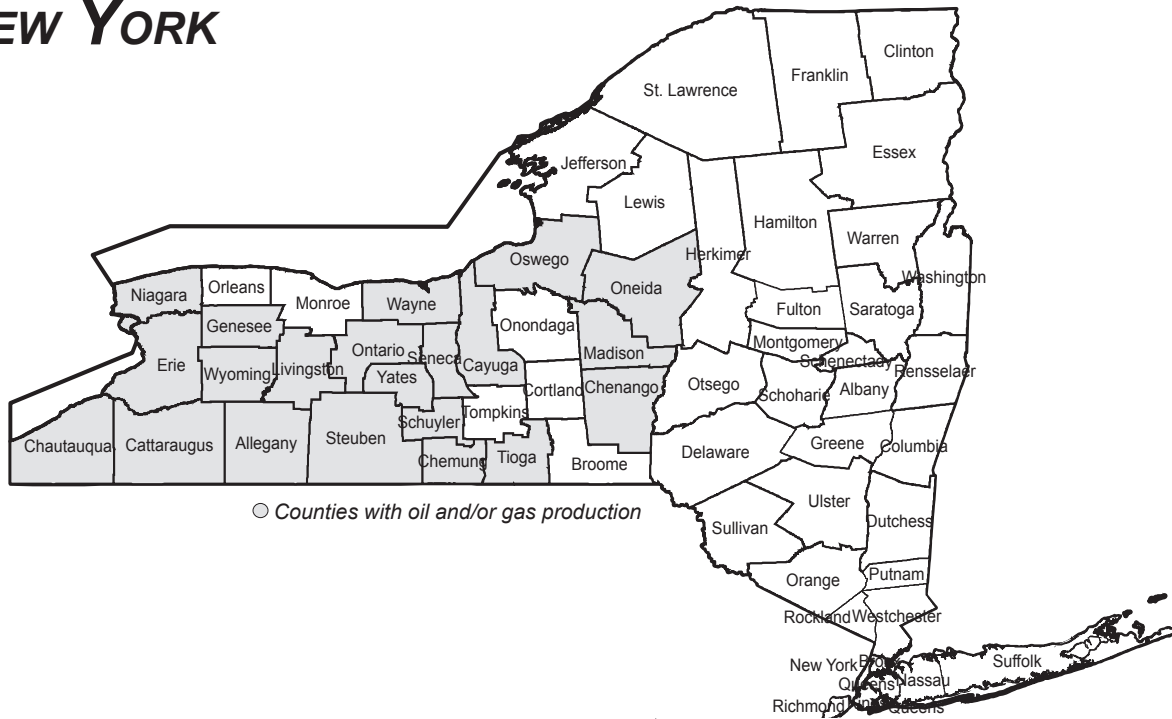
Average number of employees

Oil and natural gas extraction	14,193
Refining	742
Transportation	1,304
Wholesale	1,457
Retail	7,522
Pipeline construction	1,675
Oilfield machinery	114
Total petroleum industry	27,007

Bone Spring and Wolfcamp

horizontal plays are driving activity in the southeast, with multiple operators beginning to discuss the Avalon Shale's potential. Anadarko has 170,000 acres in W. Texas that maybe prospective for the Bone Spring and Avalon Shale.

NEW YORK



Background Information

Counties

Number of counties	62
With oil and/or gas production	21

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 — 55,980 MMcf	2006

Deepest producing well (ft.)

Crude oil	3,990
Natural gas	14,920

Year and depth of deepest well drilled (ft.)

2002	15,079
------	--------

Cumulative number of total wells drilled as of 12/31/10 (excluding service wells)

Oil wells	16,015	52%
Gas wells	10,766	35%
Dry holes	3,937	13%
Total	30,718	100%

Cumulative crude oil wellhead value as of 12/31/10 (thous. \$)

\$1,266,074

Cumulative production & new reserves as of 12/31/10

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	NA	NA	NA	1,637
Production	NA	NA	NA	1,370

Value of Oil and Gas

Average wellhead price (2010)

Crude oil (\$/bbl.)	\$76.00
Natural gas (\$/Mcf)	\$ 4.65

Wellhead value of production (2010, in thous. \$)

Crude oil	\$ 28,728
Natural gas	\$166,530
Total	\$195,258

Average natural gas price (2010, \$/Mcf)

Residential consumers	\$14.04
Commercial consumers	\$10.88
Industrial consumers	\$ 8.55
Electric utilities	\$ 5.73
City Gate	\$ 6.86

Severance taxes paid (2010, in thous. \$)

--

Top 10 producing counties (2010 on a BOE basis)

County	% Production	
	State	US
Chemung	26.85	0.03
Steuben	23.49	0.03
Chautauqua	18.41	0.02
Cattaraugus	8.03	0.01
Erie	7.30	0.01
Cayuga	3.04	<0.01
Seneca	2.94	<0.01
Genesee	2.14	<0.01
Chenango	1.70	<0.01
Allegany	1.57	<0.01

2010 Industry Statistics

Number of wells drilled

	Exploratory	Development	Total
Oil	2	186	188
Gas	43	92	135
Dry	NA	3	3
Total	45	281	326

Total footage drilled

(thous. ft.)

	Exploratory	Development	Total
Oil	9.3	278.7	287.9
Gas	127.9	259.1	387.0
Dry	NA	9.7	9.7
Total	137.1	547.4	684.6

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

New-field wildcats drilled	29
Footage (thous. ft.)	89.1

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

Permits	383
---------	-----

Statewide rank

	Crude Oil	Natural Gas
Wells drilled	12th	17th
Production	28th	23rd
Reserves (2010)	NA	23rd

Number of operators	435
---------------------	-----

Number of producing wells

(12/31/10)

Crude oil	2,890
Natural gas	7,509
Total	10,399

Average production

Crude oil (thous. b/d)	0.8
NGL (thous. b/d)	0.2
Natural gas (MMcf/day)	87.4

Total production

Crude oil (YTD bbls, in thous.)	277
Natural gas (YTD MMcf)	31,895

Natural gas marketed production

(MMcf)	35,813
--------	--------

Average output per producing well

Crude oil (bbls.)	96
Natural gas (Mcf)	4,248

Coalbed methane (YTD MMcf)	NA
----------------------------	----

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

Heavy oil (av. bbls/day, in thous.)	NA
-------------------------------------	----

Wells	NA
Av. bbls per day (in thous.)	NA
Av. bbls per well	NA

Source: For specific methodology and source details, please see pages 6 and 131.

2010 Latest Available Data

Petroleum reserves

as of 12/31/10 (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 12/31/10 (Bcf)

	Associated Dissolved	Non- Associated	Dry Gas
New reserves	11	110	121
Production	1	35	36
Net annual change	10	75	85
Proved reserves	10	271	281

Cost of drilling and equipping wells

	Cost/ft. (\$)	Cost/ well (\$)	Total Cost (thous. \$)
Oil	104	158,821	29,858
Gas	89	255,871	34,543
Dry	657	2,121,699	6,365

Marginal oil wells

Producing marginal wells	2,563
Crude oil production in bbls. (thous.)	277
Crude oil production b/d (thous.)	1

Marginal natural gas wells

as of 12/31/10

Producing marginal wells	7,178
Natural gas production (MMcf)	13,676

Mineral lease royalties, bonuses & rent

Oil	--
Gas	\$6,720
Total Royalties	\$6,720

Horizontal wells drilled	9
--------------------------	---

Directional wells drilled	0
---------------------------	---

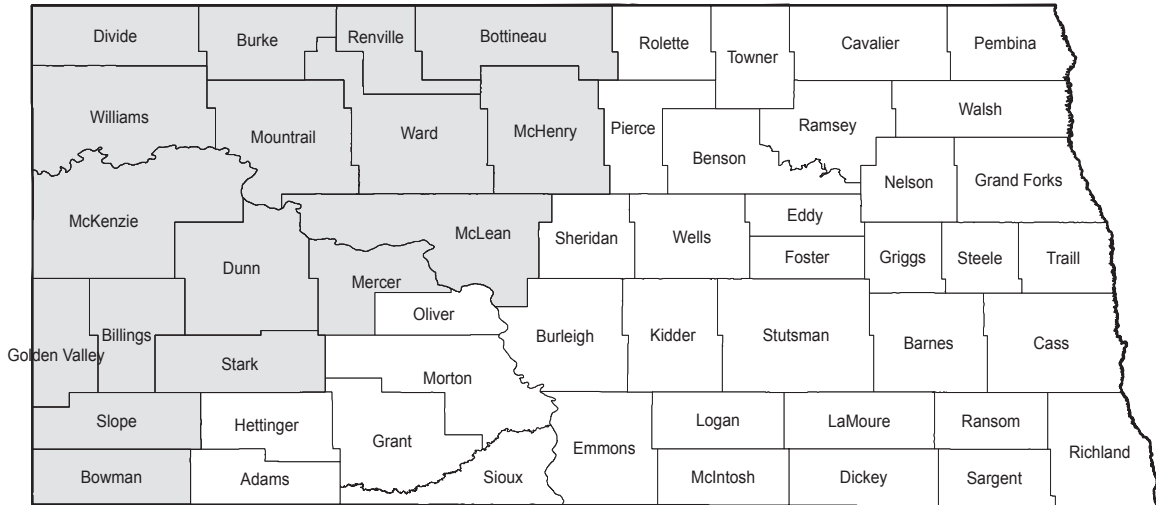
Vertical wells drilled	317
------------------------	-----

Average number of employees

Oil and natural gas extraction	1,459
Refining	1,834
Transportation	7,168
Wholesale	12,357
Retail	28,620
Pipeline construction	1,513
Oilfield machinery	0
Total petroleum industry	52,951

The ban on hydraulic fracturing kept the Marcellus Shale play from expanding into the southern part of the state, where vast quantities of shale gas exist. State elected officials and environmental groups worry that the drilling technique contaminates underground water.

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 — 107,205 thous. bbls.	2010
Natural gas — 81,837 MMcf	2010

Deepest producing well (ft.)

Crude oil (25,828 MD horizontal)	25,828
Natural gas (21,070 MD horizontal)	21,070

Year and depth of deepest well drilled (ft.)

2010	23,468
------	--------

Cumulative number of total wells drilled

as of 12/31/10 (excluding service wells)

Oil wells	12,550	63%
Gas wells	338	2%
Dry holes	6,942	35%
Total	19,830	100%

Cumulative crude oil wellhead value

as of 12/31/10 (thous. \$) \$84,753,644

Cumulative production & new reserves

as of 12/31/10

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	3,644	449	4,093	4,253
Production	1,841	205	2,046	2,602

Value of Oil and Gas

Average wellhead price

(2010)

Crude oil (\$/bbl.)	\$ 70.24
Natural gas (\$/Mcf)	\$ 3.92

Wellhead value of production

(2010, in thous. \$)

Crude oil	\$7,914,615
Natural gas	\$ 320,801
Total	\$8,262,416

Average natural gas price

(2010, \$/Mcf)

Residential consumers	\$ 8.08
Commercial consumers	\$ 7.03
Industrial consumers	\$ 5.22
Electric utilities	\$ 6.51
City Gate	\$ 5.50

Severance taxes paid

(2010, in thous. \$) \$ 749,100

Top 10 producing counties

(2010 on a BOE basis)

County	% Production	
	State	US
Mountrail	41.52	0.93
McKenzie	13.95	0.31
Dunn	13.47	0.30
Bowman	9.53	0.21
Williams	8.95	0.20
Billings	3.14	0.07
Divide	2.86	0.06
Bottineau	1.82	0.04
Burke	1.65	0.04
Stark	1.18	0.03

2010 Industry Statistics

Number of wells drilled

	Exploratory	Development	Total
Oil	167	938	1,105
Gas	1	2	3
Dry	14	57	71
Total	182	997	1,179

Total footage drilled

(thous. ft.)

	Exploratory	Development	Total
Oil	2,453.0	13,192.7	15,645.7
Gas	14.5	15.8	30.2
Dry	131.4	448.0	579.4
Total	2,598.9	13,656.4	16,255.3

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

New-field wildcats drilled	58
Footage (thous. ft.)	708.4

Average rotary rigs active	114
----------------------------	-----

Permits	2,331
---------	-------

Statewide rank

	Crude Oil	Natural Gas
Wells drilled	5th	29th
Production	5th	20th
Reserves (2010)	5th	19th

Number of operators	153
---------------------	-----

Number of producing wells

(12/31/10)

Crude oil	5,315
Natural gas	350
Total	5,665

Average production

Crude oil (thous. b/d)	293.7
NGL (thous. b/d)	12.1
Natural gas (MMcf/day)	45.3

Total production

Crude oil (YTD bbls, in thous.)	107,205
Natural gas (YTD MMcf)	16,519

Natural gas marketed production

(MMcf)	81,837
--------	--------

Average output per producing well

Crude oil (bbls.)	20,170
Natural gas (Mcf)	47,196

Coalbed methane (YTD MMcf)	NA
----------------------------	----

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

Heavy oil (av. bbls/day, in thous.)	NA
-------------------------------------	----

Wells	NA
Av. bbls per day (in thous.)	NA
Av. bbls per well	NA

Source: For specific methodology and source details, please see pages 6 and 131.

2010 Latest Available Data

Petroleum reserves

as of 12/31/10 (mill. bbls.)

	Crude Oil	NGL	Total
New reserves	881	124	1,005
Production	113	10	123
Net annual change	768	114	882
Proved reserves	1,814	230	2,044

Natural gas reserves

as of 12/31/10 (Bcf)

	Associated Dissolved	Non- Associated	Dry Gas
New reserves	742	19	682
Production	95	10	94
Net annual change	647	9	588
Proved reserves	1,717	152	1,667

Cost of drilling and equipping wells

	Cost/ft. (\$)	Cost/ well (\$)	Total Cost (thous. \$)
Oil	629	8,908,325	9,843,699
Gas	NA	NA	NA
Dry	25	201,912	14,336

Marginal oil wells

Producing marginal wells	2,475
Crude oil production in bbls. (thous.)	5,374
Crude oil production b/d (thous.)	15

Marginal natural gas wells

as of 12/31/10

Producing marginal wells	241
Natural gas production (MMcf)	2,718

Mineral lease royalties, bonuses & rent

Oil	\$ 88,055,469
Gas	\$ 4,292,237
Total Royalties	\$141,257,092

Horizontal wells drilled	1,125
--------------------------	-------

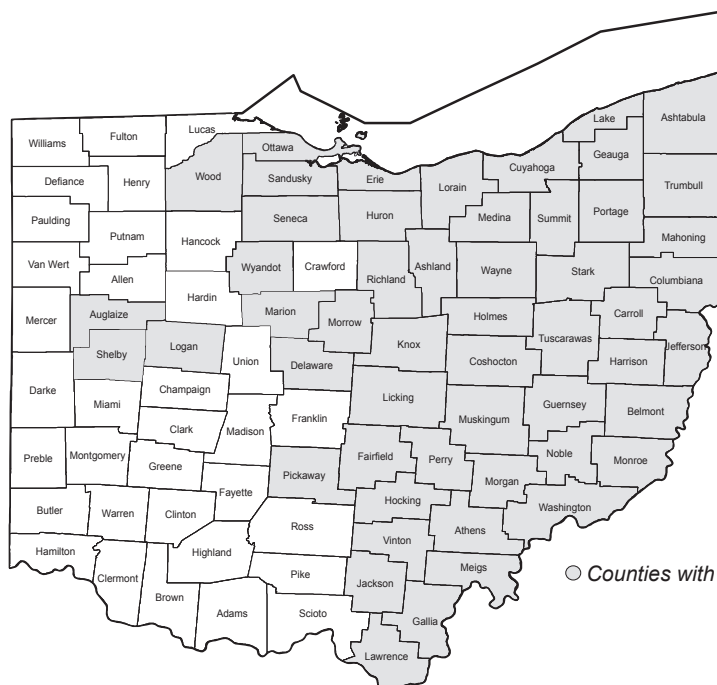
Directional wells drilled	16
---------------------------	----

Vertical wells drilled	38
------------------------	----

Average number of employees

Oil and natural gas extraction	5,569
Refining	0
Transportation	347
Wholesale	1,783
Retail	4,256
Pipeline construction	959
Oilfield machinery	0
Total petroleum industry	12,914

Stable, high oil prices and the extraordinary success of the Bakken shale play, caused many operating companies to investigate domestic oil plays. These companies looked to transfer technologies, techniques and knowledge used in unconventional gas shale plays to potential shale oil plays.



Background Information

Counties

Number of counties	88
With oil and/or gas production	53

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	9,002
Natural gas	11,442

Year and depth of deepest well drilled (ft.)

1967	11,442
------	--------

Cumulative number of total wells drilled as of 12/31/10 (excluding service wells)

Oil wells	104,494	54%
Gas wells	55,768	28%
Dry holes	35,976	18%
Total	196,238	100%

Cumulative crude oil wellhead value as of 12/31/10 (thous. \$)

\$10,293,581

Cumulative production & new reserves as of 12/31/10

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	1,136	NA	1,136	9,665
Production	1,107	NA	1,107	9,193

Value of Oil and Gas

Average wellhead price (2010)

Crude oil (\$/bbl.)	\$73.68
Natural gas (\$/Mcf)	\$ 4.63

Wellhead value of production (2010, in thous. \$)

Crude oil	\$ 350,201
Natural gas	\$ 361,705
Total	\$ 711,906

Average natural gas price (2010, \$/Mcf)

Residential consumers	\$11.13
Commercial consumers	\$ 9.25
Industrial consumers	\$ 7.40
Electric utilities	\$ 5.01
City Gate	\$ 6.87

Severance taxes paid (2010, in thous. \$)

\$2,555

Top 10 producing counties (2010 on a BOE basis)

County	% Production	
	State	US
Trumbull	8.62	0.03
Tuscarawas	8.20	0.02
Stark	8.06	0.02
Mahoning	7.89	0.02
Cuyahoga	7.20	0.02
Muskingum	4.90	0.01
Portage	4.81	0.01
Wayne	4.43	0.01
Summit	4.18	0.01
Geauga	3.49	0.01

2010 Industry Statistics

Number of wells drilled

	Exploratory	Development	Total
Oil	4	70	74
Gas	26	312	338
Dry	12	26	38
Total	42	408	450

Total footage drilled

(thous. ft.)

	Exploratory	Development	Total
Oil	8.9	155.3	164.2
Gas	122.0	1,285.9	1,407.9
Dry	73.7	67.7	141.4
Total	204.6	1,508.9	1,713.5

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

New-field wildcats drilled	7
Footage (thous. ft.)	28.9

Average rotary rigs active	7
----------------------------	---

Permits	593
---------	-----

Statewide rank

	Crude Oil	Natural Gas
Wells drilled	20th	12th
Production	19th	21st
Reserves (2010)	16th	22nd

Number of operators	671
---------------------	-----

Number of producing wells

(12/31/10)

Crude oil	19,181
Natural gas	24,701
Total	43,882

Average production

Crude oil (thous. b/d)	11.2
NGL (thous. b/d)	1.9
Natural gas (MMcf/day)	168.8

Total production

Crude oil (YTD bbls, in thous.)	4,078
Natural gas (YTD MMcf)	61,602

Natural gas marketed production

(MMcf)	78,122
--------	--------

Average output per producing well

Crude oil (bbls.)	213
Natural gas (Mcf)	2,494

Coalbed methane (YTD MMcf)	NA
----------------------------	----

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

Heavy oil (av. bbls/day, in thous.)	NA
-------------------------------------	----

Wells	NA
Av. bbls per day (in thous.)	NA
Av. bbls per well	NA

Source: For specific methodology and source details, please see pages 6 and 131.

2010 Latest Available Data

Petroleum reserves

as of 12/31/10 (mill. bbls.)

	Crude Oil	NGL	Total
New reserves	8	NA	NA
Production	4	NA	NA
Net annual change	4	NA	NA
Proved reserves	42	NA	NA

Natural gas reserves

as of 12/31/10 (Bcf)

	Associated Dissolved	Non- Associated	Dry Gas
New reserves	1	8	9
Production	8	65	73
Net annual change	-7	-57	-64
Proved reserves	90	742	832

Cost of drilling and equipping wells

	Cost/ft. (\$)	Cost/ well (\$)	Total Cost (thous. \$)
Oil	86	190,050	14,064
Gas	197	819,658	277,044
Dry	278	1,034,803	39,323

Marginal oil wells

Producing marginal wells	16,734
Crude oil production in bbls. (thous.)	3,578
Crude oil production b/d (thous.)	10

Marginal natural gas wells

as of 12/31/10

Producing marginal wells	24,187
Natural gas production (MMcf)	52,241

Mineral lease royalties, bonuses & rent

Oil	\$228,613
Gas	\$333,787
Total Royalties	\$750,423

Horizontal wells drilled	4
Directional wells drilled	31
Vertical wells drilled	415

Average number of employees

Oil and natural gas extraction	4,734
Refining	4,310
Transportation	4,650
Wholesale	4,949
Retail	33,131
Pipeline construction	1,585
Oilfield machinery	135
Total petroleum industry	53,494

Canton Consolidated field in Ohio was discovered in the 1940s. In 2010, it produced over 3 million MCFs.

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	19,644
Natural gas	27,400

Year and depth of deepest well drilled (ft.)

1974	31,441
------	--------

Cumulative number of total wells drilled as of 12/31/10 (excluding service wells)

Oil wells	246,788	52%
Gas wells	89,786	19%
Dry holes	137,280	29%
Total	473,854	100%

Cumulative crude oil wellhead value as of 12/31/10 (thous. \$)

\$126,699,058

Cumulative production & new reserves as of 12/31/10

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	15,228	6,259	21,487	129,187
Production	14,666	4,715	19,381	117,616

Value of Oil and Gas

Average wellhead price (2010)

Crude oil (\$/bbl.)	\$75.18
Natural gas (\$/Mcf)	\$ 4.71

Wellhead value of production (2010 in thous. \$)

Crude oil	\$ 5,091,941
Natural gas	\$ 8,606,715
Total	\$13,698,656

Average natural gas price (2010, \$/Mcf)

Residential consumers	\$ 11.13
Commercial consumers	\$ 9.78
Industrial consumers	\$ 8.39
Electric utilities	\$ 4.84
City Gate	\$ 6.18

Severance taxes paid (2010, in thous. \$)

\$ 869,129

Top 10 producing counties (2010 on a BOE basis)

County	% Production	
	State	US
Pittsburg	9.30	0.57
Coal	6.22	0.38
Washita	6.18	0.38
Roger Mills	5.85	0.36
Caddo	5.53	0.34
Hughes	5.24	0.32
Latimer	4.71	0.29
Grady	3.71	0.23
Beckham	3.52	0.21
Canadian	0.16	0.01

2010 Industry Statistics

Number of wells drilled

	Exploratory	Development	Total
Oil	80	1,105	1,185
Gas	84	743	827
Dry	53	220	273
Total	217	2,068	2,285

Total footage drilled

(thous. ft.)

	Exploratory	Development	Total
Oil	694.9	5,514.9	6,209.8
Gas	895.4	7,711.5	8,606.9
Dry	345.9	1,028.2	1,374.0
Total	1,936.2	14,254.5	16,190.7

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

New-field wildcats drilled	62
Footage (thous. ft.)	507.6

Average rotary rigs active	128
----------------------------	-----

Permits	3,830
---------	-------

Statewide rank

	Crude Oil	Natural Gas
Wells drilled	4th	7th
Production	6th	5th
Reserves (2010)	7th	4th

Number of operators	3,091
---------------------	-------

Number of producing wells

(12/31/10)

Crude oil	38,325
Natural gas	39,443
Total	77,768

Average production

Crude oil (thous. b/d)	148.1
NGL (thous. b/d)	37.2
Natural gas (MMcf/day)	4,283.1

Total production

Crude oil (YTD bbls, in thous.)	54,071
Natural gas (YTD MMcf)	1,563,328

Natural gas marketed production

(MMcf)	1,827,328
--------	-----------

Average output per producing well

Crude oil (bbls.)	1,411
Natural gas (Mcf)	39,635

Coalbed methane (YTD MMcf)	36,328
----------------------------	--------

Oil Wells	0
Gas Wells	3,269
Daily Average (MMcf) / Well	99.5

Heavy oil (av. bbls/day, in thous.)	NA
-------------------------------------	----

Wells	NA
Av. bbls per day (in thous.)	NA
Av. bbls per well	NA

Source: For specific methodology and source details, please see pages 6 and 131.

2010 Latest Available Data

Petroleum reserves

as of 12/31/10 (mill. bbls.)

	Crude Oil	NGL	Total
New reserves	132	422	554
Production	44	101	145
Net annual change	88	321	409
Proved reserves	710	1,486	2,196

Natural gas reserves

as of 12/31/10 (Bcf)

	Associated Dissolved	Non- Associated	Dry Gas
New reserves	314	5,483	5,279
Production	97	1,725	1,703
Net annual change	217	3,758	3,576
Proved reserves	1,309	26,873	26,345

Cost of drilling and equipping wells

	Cost/ft. (\$)	Cost/ well (\$)	Total Cost (thous. \$)
Oil	135	710,008	841,359
Gas	201	2,096,098	1,733,473
Dry	130	653,395	178,377

Marginal oil wells

Producing marginal wells	33,962
Crude oil production in bbls. (thous.)	22,879
Crude oil production b/d (thous.)	63

Marginal natural gas wells

as of 12/31/10

Producing marginal wells	29,326
Natural gas production (MMcf)	328,652

Mineral lease royalties, bonuses & rent

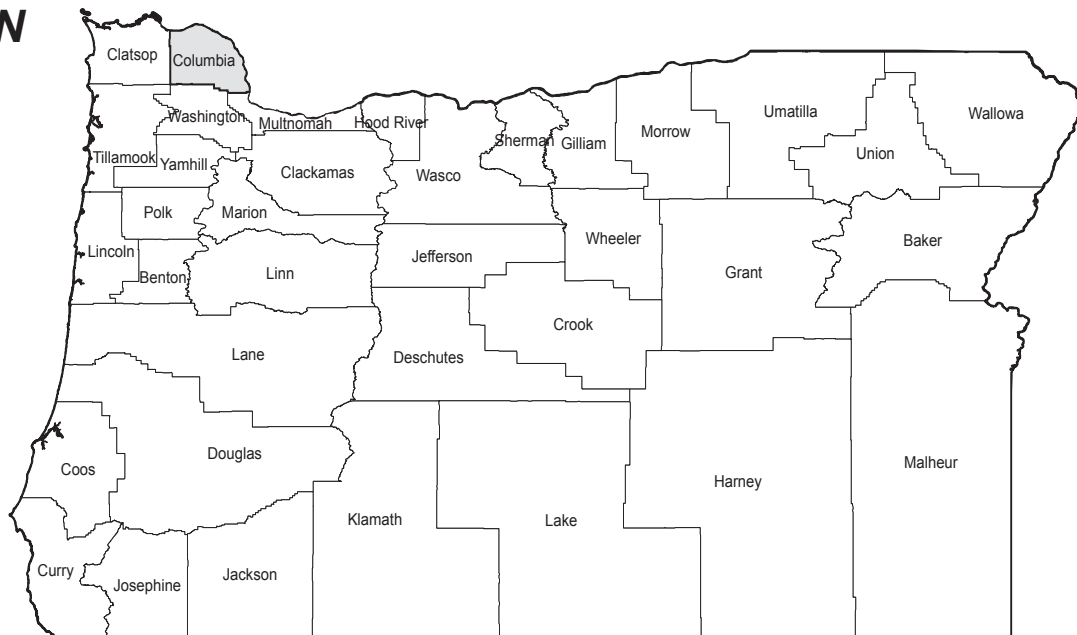
Oil	\$ 14,645,329
Gas	\$ 26,684,764
Total Royalties	\$ 43,499,673

Horizontal wells drilled	830
Directional wells drilled	73
Vertical wells drilled	1,382

Average number of employees

Oil and natural gas extraction	41,955
Refining	2,338
Transportation	6,344
Wholesale	2,765
Retail	14,357
Pipeline construction	2,589
Oilfield machinery	6,703
Total petroleum industry	77,051

The increase in horizontal drilling was very dramatic in the Anadarko Basin, where permits for horizontal wells totaled 18 percent in 2008, 43 percent the following year and 70 percent in 2010.



○ 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	3,747

Year and depth of deepest well drilled (ft.)

1979	13,177
------	--------

Cumulative number of total wells drilled as of 12/31/10 (excluding service wells)

Oil wells	NA	NA
Gas wells	80	18%
Dry holes	375	82%
Total	455	100%

Cumulative crude oil wellhead value as of 12/31/10 (thous. \$)

	NA
--	----

Cumulative production & new reserves as of 12/31/10

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	NA	NA	NA	NA
Production	NA	NA	NA	72

Value of Oil and Gas

Average wellhead price (2010)

Crude oil (\$/bbl.)	NA
Natural gas (\$/Mcf)	\$4.92

Wellhead value of production (2010, in thous. \$)

Crude oil	NA
Natural gas	\$ 6,922
Total	\$ 6,922

Average natural gas price (2010, \$/Mcf)

Residential consumers	\$ 12.49
Commercial consumers	\$ 10.10
Industrial consumers	\$ 7.05
Electric utilities	\$ 4.57
City Gate	\$ 8.82

Severance taxes paid (2010, in thous. \$)

	\$390
--	-------

Top producing counties (2010 on a BOE basis)

County	% Production
Columbia	100
State	US
	<0.01

2010 Industry Statistics

Number of wells drilled

	Exploratory	Development	Total
Oil	NA	NA	NA
Gas	NA	4	4
Dry	NA	NA	NA
Total	NA	4	4

Total footage drilled

(thous. ft.)

	Exploratory	Development	Total
Oil	NA	NA	NA
Gas	NA	12.6	12.6
Dry	NA	NA	NA
Total	NA	12.6	12.6

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

New-field wildcats drilled

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

Average rotary rigs active

0

Permits

3

Statewide rank

	Crude Oil	Natural Gas
Wells drilled	NA	28th
Production	NA	29th
Reserves (2010)	NA	NA

Number of operators

2

Number of producing wells

(12/31/10)

Crude oil	0
Natural gas	26
Total	26

Average production

Crude oil (thous. b/d)	0
NGL (thous. b/d)	0
Natural gas (MMcf/day)	4.0

Total production

Crude oil (YTD bbls, in thous.)	0
Natural gas (YTD MMcf)	1,407

Natural gas marketed production

(MMcf)	1,407
--------	-------

Average output per producing well

Crude oil (bbls.)	NA
Natural gas (Mcf)	56,129

Coalbed methane (YTD MMcf)

NA

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

Heavy oil (av. bbls/day, in thous.)

NA

Wells	NA
Av. bbls per day (in thous.)	NA
Av. bbls per well	NA

Source: For specific methodology and source details, please see pages 6 and 131.

2010 Latest Available Data

Petroleum reserves

as of 12/31/10 (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 12/31/10 (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 12/31/10

Producing marginal wells	20
Natural gas production (MMcf)	305

Mineral lease royalties, bonuses & rent

Oil	--
Gas	--
Total Royalties	\$676,731

Horizontal wells drilled

0

Directional wells drilled

2

Vertical wells drilled

2

Average number of employees

Oil and natural gas extraction	62
Refining	412
Transportation	1,120
Wholesale	1,499
Retail	9,811
Pipeline construction	455
Oilfield machinery	0
Total petroleum industry	13,359

Enerfin Recourses completed four

new Eocene gas wells during the year in Mist field, one of just two fields in the state and its only commercial accumulation. The field has produced 73.3 billion cu ft of gas since 1979.

PENNSYLVANIA



○ Counties with oil and/or gas production

Background Information

Counties

Number of counties	67
With oil and/or gas production	33

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 — 572,902 MMcf	2010

Deepest producing well (ft.)

Crude oil	21,296
Natural gas	27,696

Year and depth of deepest well drilled (ft.)

2010	27,696
------	--------

Cumulative number of total wells drilled as of 12/31/10 (excluding service wells)

Oil wells	60,411	42%
Gas wells	76,408	53%
Dry holes	6,881	5%
Total	143,700	100%

Cumulative crude oil wellhead value as of 12/31/10 (thous. \$)

	\$6,336,209
--	-------------

Cumulative production & new reserves as of 12/31/10

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	1,377	NA	1,377	28,117
Production	1,364	NA	1,364	14,347

Value of Oil and Gas

Average wellhead price (2010)

Crude oil (\$/bbl.)	\$69.80
Natural gas (\$/Mcf)	NA

Wellhead value of production (2010, in thous. \$)

Crude oil	\$242,485
Natural gas	NA
Total	\$242,485

Average natural gas price (2010, \$/Mcf)

Residential consumers	\$12.90
Commercial consumers	\$10.47
Industrial consumers	\$ 8.23
Electric utilities	\$ 5.27
City Gate	\$ 7.04

Severance taxes paid (2010, in thous. \$)

	--
--	----

Top producing counties (2010 on a BOE basis)

County	% Production	
	State	US
Bradford	17.09	0.32
Susquehanna	14.99	0.28
Washington	11.58	0.21
Greene	10.66	0.20
Indiana	7.03	0.13
Tioga	6.40	0.19
Westmoreland	5.05	0.09
Armstrong	4.17	0.08
Fayette	2.70	0.05
Lycoming	2.33	0.04

2010 Industry Statistics

Number of wells drilled

	Exploratory	Development	Total
Oil	4	922	926
Gas	505	1,515	2,020
Dry	4	11	15
Total	513	2,448	2,961

Total footage drilled

(thous. ft.)

	Exploratory	Development	Total
Oil	6.7	1,524.8	1,531.5
Gas	4,656.6	10,240.6	14,861.2
Dry	6.5	25.5	32.0
Total	4,669.9	11,754.8	16,424.7

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

New-field wildcats drilled	374
Footage (thous. ft.)	3,666.5

Average rotary rigs active	85
----------------------------	----

Permits	6,195
---------	-------

Statewide rank

	Crude Oil	Natural Gas
Wells drilled	6th	3rd
Production	20th	9th
Reserves (2010)	22nd	11th

Number of operators	672
---------------------	-----

Number of producing wells

(12/31/10)

Crude oil	11,018
Natural gas	55,215
Total	66,233

Average production

Crude oil (thous. b/d)	4.3
NGL (thous. b/d)	3.4
Natural gas (MMcf/day)	1,468.4

Total production

Crude oil (YTD bbls, in thous.)	1,575
Natural gas (YTD MMcf)	535,968

Natural gas marketed production

(MMcf)

	572,902
--	---------

Average output per producing well

Crude oil (bbls.)	143
Natural gas (Mcf)	9,707

Coalbed methane (YTD MMcf)	NA
----------------------------	----

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

Heavy oil (av. bbls/day, in thous.)	NA
-------------------------------------	----

Wells	NA
Av. bbls per day (in thous.)	NA
Av. bbls per well	NA

Source: For specific methodology and source details, please see pages 6 and 131.

2010 Latest Available Data

Petroleum reserves

as of 12/31/10 (mill. bbls.)

	Crude Oil	NGL	Total
New reserves	14	NA	NA
Production	2	NA	NA
Net annual change	12	NA	NA
Proved reserves	22	NA	NA

Natural gas reserves

as of 12/31/10 (Bcf)

	Associated Dissolved	Non- Associated	Dry Gas
New reserves	21	7,624	7,566
Production	10	585	591
Net annual change	11	7,039	6,975
Proved reserves	144	13,924	13,960

Cost of drilling and equipping wells

	Cost/ft. (\$)	Cost/ well (\$)	Total Cost (thous. \$)
Oil	357	590,595	546,891
Gas	63	466,375	942,078
Dry	302	645,152	9,677

Marginal oil wells

Producing marginal wells	9,959
Crude oil production in bbls. (thous.)	1,439
Crude oil production b/d (thous.)	4

Marginal natural gas wells

as of 12/31/10

Producing marginal wells	53,686
Natural gas production (MMcf)	159,049

Mineral lease royalties, bonuses & rent

Oil	\$ 92,945
Gas	\$122,181
Total Royalties	\$252,631

Horizontal wells drilled	985
--------------------------	-----

Directional wells drilled	6
---------------------------	---

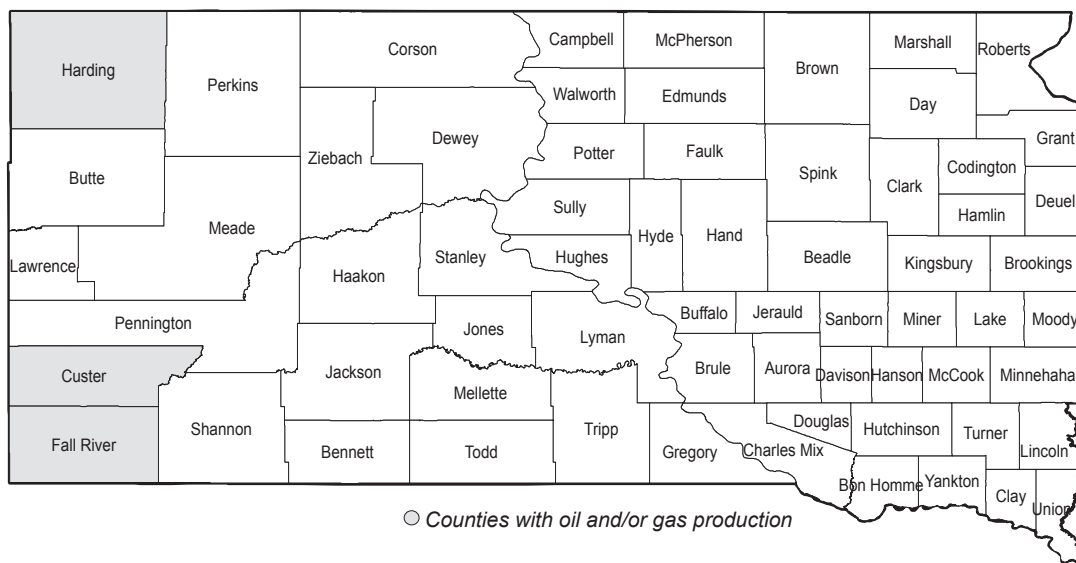
Vertical wells drilled	1,959
------------------------	-------

Average number of employees

Oil and natural gas extraction	12,282
Refining	6,316
Transportation	5,583
Wholesale	10,525
Retail	37,066
Pipeline construction	2,922
Oilfield machinery	315
Total petroleum industry	75,009

Anxious to grab a slice of Marcellus Shale gas production, international companies partnered with U.S. companies to become major participants in the shale play. India's Reliance Industries, Japan's Mitsui & Co., and Norway's Statoil are among the international entrants into the play.

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 — 1,697 thous. bbls. *	2008
Natural gas — 4,369 MMcf	1989

Deepest producing well (ft.)

Crude oil	15,750
Natural gas	11,000

Year and depth of deepest well drilled (ft.)

2006	17,025
------	--------

Cumulative number of total wells drilled as of 12/31/10 (excluding service wells)

Oil wells	470	25%
Gas wells	164	8%
Dry holes	1,272	67%
Total	1,906	100%

Cumulative crude oil wellhead value as of 12/31/10 (thous. \$)

\$1,401,323

Cumulative production & new reserves as of 12/31/10

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

* State data

Value of Oil and Gas

Average wellhead price (2010)

Crude oil (\$/bbl.)	\$69.04
Natural gas (\$/Mcf)	NA

Wellhead value of production (2010, in thous. \$)

Crude oil	\$ 110,878
Natural gas	\$ NA
Total	\$ 110,878

Average natural gas price (2010, \$/Mcf)

Residential consumers	\$ 8.77
Commercial consumers	\$ 7.13
Industrial consumers	\$ 5.92
Electric utilities	\$ 5.50
City Gate	\$ 5.54

Severance taxes paid (2010, in thous. \$)

\$4,746

Top producing counties (2010 on a BOE basis)

County	% Production	
	State	US
Harding	98.53	0.04
Fall River	1.38	<0.01
Custer	0.10	<0.01

2010 Industry Statistics

Number of wells drilled

	Exploratory	Development	Total
Oil	NA	8	8
Gas	NA	16	16
Dry	1	NA	1
Total	1	24	25

Total footage drilled

(thous. ft.)

	Exploratory	Development	Total
Oil	NA	84.0	84.0
Gas	NA	27.9	27.9
Dry	2.6	NA	2.6
Total	2.6	112.0	114.6

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

New-field wildcats drilled	1
Footage (thous. ft.)	2.6

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

Permits	24
---------	----

Statewide rank

	Crude Oil	Natural Gas
Wells drilled	27th	24th
Production	26th	28th
Reserves (2010)	NA	NA

Number of operators	17
---------------------	----

Number of producing wells

(12/31/10)

Crude oil	147
Natural gas	100
Total	247

Average production

Crude oil (thous. b/d)	4.3
NGL (thous. b/d)	0.1
Natural gas (MMcf/day)	4.2

Total production

Crude oil (YTD bbls. in thous.)	1,575
Natural gas (YTD MMcf)	1,536

Natural gas marketed production

(MMcf)	1,862
--------	-------

Average output per producing well

Crude oil (bbls.)	10,716
Natural gas (Mcf)	15,357

Coalbed methane (YTD MMcf)	NA
----------------------------	----

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

Heavy oil (av. bbls/day, in thous.)	NA
-------------------------------------	----

Wells	NA
Av. bbls per day (in thous.)	NA
Av. bbls per well	NA

Source: For specific methodology and source details, please see pages 6 and 131.

2010 Latest Available Data

Petroleum reserves

as of 12/31/10 (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 12/31/10 (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	195	340,438	5,447
Dry	NA	NA	NA

Marginal oil wells

Producing marginal wells	53
Crude oil production in bbls. (thous.)	148
Crude oil production b/d (thous.)	<1

Marginal natural gas wells

as of 12/31/10

Producing marginal wells	87
Natural gas production (MMcf)	607

Mineral lease royalties, bonuses & rent

Oil	\$1,272,378
Gas	\$ 146,181
Total Royalties	\$1,560,699

Horizontal wells drilled	9
Directional wells drilled	0
Vertical wells drilled	16

Average number of employees

Oil and natural gas extraction	149
Refining	17
Transportation	251
Wholesale	1,192
Retail	5,858
Pipeline construction	41
Oilfield machinery	0
Total petroleum industry	7,508

Red River oil production from northwestern South Dakota fields totaled 1.55 million bbls for 2010, down only slightly from the record of 1.61 million bbls established two years earlier.

TENNESSEE



○ Counties with oil and/or gas production

Background Information

Counties

Number of counties	95
With oil and/or gas production	13

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 — 5,478 MMcf	2009

Deepest producing well (ft.)

Crude oil	NA
Natural gas	NA

Year and depth of deepest well drilled (ft.)

1982	11,540
------	--------

Cumulative number of total wells drilled as of 12/31/10 (excluding service wells)

Oil wells	3,010	23%
Gas wells	3,816	29%
Dry holes	6,250	48%
Total	13,076	100%

Cumulative crude oil wellhead value as of 12/31/10 (thous. \$)

\$477,815

Cumulative production & new reserves as of 12/31/10)

	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* (2010)

Crude oil (\$/bbl.)	\$72.04
Natural gas (\$/Mcf)	\$ 4.35

Wellhead value of production (2010, in thous. \$)

Crude oil	\$18,514
Natural gas	\$22,376
Total	\$40,890

Average natural gas price (2010, \$/Mcf)

Residential consumers	\$10.46
Commercial consumers	\$ 9.39
Industrial consumers	\$ 6.64
Electric utilities	\$ 5.04
City Gate	\$ 5.78

Severance taxes paid - FY (2010, in thous. \$)

\$1,532

Top producing counties (2010 on a BOE basis)

County	% Production	
	State	US
NA	NA	NA

2010 Industry Statistics

Number of wells drilled

	Exploratory	Development	Total
Oil	2	18	20
Gas	16	16	32
Dry	3	37	40
Total	21	71	92

Total footage drilled

(thous. ft.)

	Exploratory	Development	Total
Oil	2.3	27.0	29.4
Gas	94.9	81.2	176.1
Dry	7.8	58.0	65.8
Total	105.0	166.2	271.2

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

New-field wildcats drilled	8
Footage (thous. ft.)	45.1

Average rotary rigs active	0
----------------------------	---

Permits	105
---------	-----

Statewide rank

	Crude Oil	Natural Gas
Wells drilled	26th	23rd
Production	29th	26th
Reserves (2010)	NA	NA

Number of operators	--
---------------------	----

Number of producing wells*

(12/31/10)

Crude oil	265
Natural gas	230
Total	495

Average production

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

Total production

Crude oil (YTD bbls, in thous.)	257**
Natural gas (YTD MMcf)	0

Natural gas marketed production

(MMcf)	5,144
--------	-------

Average output per producing well

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

Coalbed methane (YTD MMcf)	NA
Oil Wells	NA
Gas Wells	NA

Daily Average (MMcf) / Well	NA
-----------------------------	----

Heavy oil (av. bbls/day, in thous.)	NA
-------------------------------------	----

Wells	NA
Av. bbls per day (in thous.)	NA
Av. bbls per well	NA

Source: For specific methodology and source details, please see pages 6 and 131.

* World Oil for Number of Producing Wells

** EIA data

COMPILED BY IPAA OCTOBER 2012

2010 Latest Available Data

Petroleum reserves

as of 12/31/10 (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 12/31/10 (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	299	438,445	8,769
Gas	14	76,567	2,450
Dry	419	688,259	27,530

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 12/31/10

Producing marginal wells	NA
Natural gas production (MMcf)	NA

Mineral lease royalties, bonuses & rent

Oil	--
Gas	--
Total Royalties	--

Horizontal wells drilled	26
--------------------------	----

Directional wells drilled	0
---------------------------	---

Vertical wells drilled	66
------------------------	----

Average number of employees

Oil and natural gas extraction	517
Refining	986
Transportation	2,088
Wholesale	3,332
Retail	20,925
Pipeline construction	568
Oilfield machinery	0
Total petroleum industry	28,416

During 2010, Tennessee's twenty-three producing wells accounted for 818 MMCFs of natural gas.

2010 Industry Statistics

Number of wells drilled

	Exploratory	Development	Total
Oil	65	6,290	6,355
Gas	52	4,285	4,337
Dry	216	1,119	1,335
Total	333	11,694	12,027

Total footage drilled

(thous. ft.)

	Exploratory	Development	Total
Oil	378.6	45,258.9	45,637.5
Gas	424.1	46,552.1	46,976.2
Dry	1,629.8	6,487.8	8,117.6
Total	2,432.5	98,298.8	100,731.3

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

New-field wildcats drilled

	244
--	-----

Footage (thous. ft.)	1,662.1
----------------------	---------

Average rotary rigs active

659

Permits

19,967

Statewide rank

	Crude Oil	Natural Gas
Wells drilled	1st	1st
Production	2nd	1st
Reserves (2010)	1st	1st

Number of operators

4,716

Number of producing wells

(12/31/10)

Crude oil	162,417
Natural gas	103,697
Total	266,114

Average production

Crude oil (thous. b/d)	1,006.3
NGL (thous. b/d)	156.0
Natural gas (MMcf/day)	18,398.6

Total production

Crude oil (YTD bbls, in thous.)	367,312
Natural gas (YTD MMcf)	6,715,482

Natural gas marketed production

(MMcf)

6,715,294

Average output per producing well

Crude oil (bbls.)	2,262
Natural gas (Mcf)	64,761

Coalbed methane (YTD MMcf)

87

Oil Wells	0
Gas Wells	6
Daily Average (MMcf) / Well	.2

Heavy oil (av. bbls/day, in thous.)

NA

Wells	NA
Av. bbls per day (in thous.)	NA
Av. bbls per well	NA

Source: For specific methodology and source details, please see pages 6 and 131.

2010 Latest Available Data

Petroleum reserves

as of 12/31/10 (mill. bbls.)

	Crude Oil	NGL	Total
New reserves	1,025	1,157	2,182
Production	357	414	771
Net annual change	668	743	1,411
Proved reserves	5,674	4,665	10,339

Natural gas reserves

as of 12/31/10 (Bcf)

	Associated Dissolved	Non- Associated	Dry Gas
New reserves	2,116	14,526	15,547
Production	748	6,641	6,974
Net annual change	1,368	7,885	8,573
Proved reserves	10,130	84,157	88,997

Cost of drilling and equipping wells

	Cost/ft. (\$)	Cost/ well (\$)	Total Cost (thous. \$)
Oil	265	1,905,850	12,111,680
Gas	244	2,647,652	11,482,868
Dry	472	2,869,009	3,830,127

Marginal oil wells

Producing marginal wells	148,828
Crude oil production in bbls. (thous.)	154,301
Crude oil production b/d (thous.)	423

Marginal natural gas wells

as of 12/31/10

Producing marginal wells	62,475
Natural gas production (MMcf)	697,279

Mineral lease royalties, bonuses & rent

Oil	\$10,639,527
Gas	\$26,514,505
Total Royalties	\$85,267,049

Horizontal wells drilled

3,703

Directional wells drilled

628

Vertical wells drilled

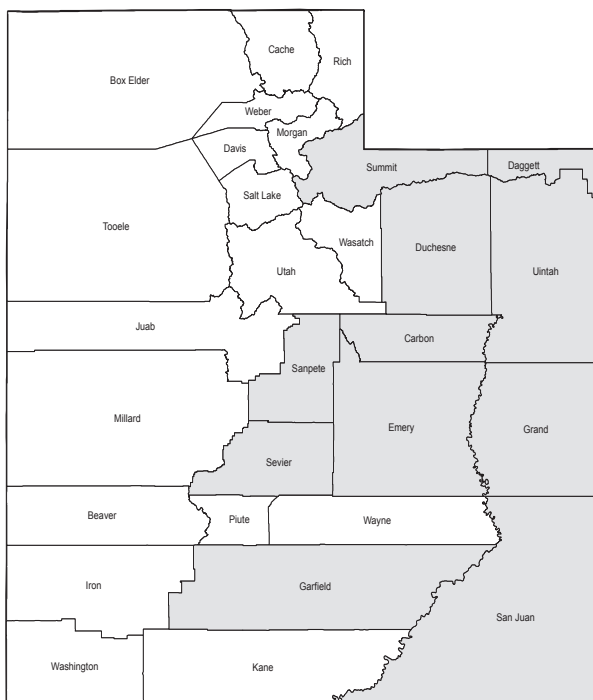
7,695

Average number of employees

Oil and natural gas extraction	201,474
Refining	24,400
Transportation	23,419
Wholesale	15,922
Retail	68,713
Pipeline construction	28,075
Oilfield machinery	40,326
Total petroleum industry	402,329

The Spraberry-Wolfcamp or "Wolfberry"

play in the Midland basin is a complex example where new staged hydraulic frac technology is enhancing economic completions over thick tight sand pay sections at reduced well spacing. This huge play spans 11,000 sq miles and yielded 1 Bboe (90 percent liquids) or more in new recoveries.



○ Counties with oil and/or gas production

Background Information

Counties

Number of counties	29
With oil and/or gas production	11

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 — 433,566 MMcf	2008

Deepest producing well (ft.)

Crude oil	20,600
Natural gas	17,500

Year and depth of deepest well drilled (ft.)

1982	21,874
------	--------

Cumulative number of total wells drilled

as of 12/31/10 (excluding service wells)

Oil wells	8,478	38%
Gas wells	8,503	39%
Dry holes	5,143	23%
Total	22,124	100%

Cumulative crude oil wellhead value

as of 12/31/10 (thous. \$) \$24,392,839

Cumulative production & new reserves

as of 12/31/10

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	1,672	1,917	3,589	14,978
Production	1,270	480	1,750	7,937

Value of Oil and Gas

Average wellhead price

(2010)

Crude oil (\$/bbl.)	\$ 68.09
Natural gas (\$/Mcf)	\$ 4.23

Wellhead value of production

(2010, in thous. \$)

Crude oil	\$ 1,679,099
Natural gas	\$ 1,827,550
Total	\$ 3,506,649

Average natural gas price

(2010, \$/Mcf)

Residential consumers	\$ 8.22
Commercial consumers	\$ 6.83
Industrial consumers	\$ 5.57
Electric utilities	NA
City Gate	\$ 5.53

Severance taxes paid

(2010, in thous. \$)

\$ 60,392

Top 10 producing counties

(2010 on a BOE basis)

County	% Production	
	State	US
Uintah	57.55	1.02
Carbon	15.88	0.28
Duchesne	12.56	0.22
San Juan	5.41	0.10
Sevier	3.00	0.50
Emery	2.75	0.05
Summit	1.48	0.03
Grand	0.95	0.02
Daggett	0.20	<0.01
Garfield	0.19	<0.01

2010 Industry Statistics

Number of wells drilled

	Exploratory	Development	Total
Oil	29	459	488
Gas	8	373	381
Dry	19	51	70
Total	56	883	939

Total footage drilled

(thous. ft.)

	Exploratory	Development	Total
Oil	218.3	3,098.5	3,316.8
Gas	62.5	3,355.8	3,418.3
Dry	76.5	60.9	137.3
Total	357.3	6,515.1	6,872.4

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

New-field wildcats drilled	33
Footage (thous. ft.)	214.2

Average rotary rigs active	27
----------------------------	----

Permits	1,270
---------	-------

Statewide rank

	Crude Oil	Natural Gas
Wells drilled	8th	10th
Production	13th	10th
Reserves (2010)	9th	10th

Number of operators	112
---------------------	-----

Number of producing wells

(12/31/10)

Crude oil	3,885
Natural gas	7,037
Total	10,922

Average production

Crude oil (thous. b/d)	59.6
NGL (thous. b/d)	8.0
Natural gas (MMcf/day)	1,078.3

Total production

Crude oil (YTD bbls, in thous.)	21,743
Natural gas (YTD MMcf)	393,587

Natural gas marketed production

(MMcf) 432,045

Average output per producing well

Crude oil (bbls.)	5,597
Natural gas (Mcf)	55,931

Coalbed methane (YTD MMcf)	57,020
----------------------------	--------

Oil Wells	2
Gas Wells	883
Daily Average (MMcf) / Well	156.2

Heavy oil (av. bbls/day, in thous.)	524
-------------------------------------	-----

Wells	108
Av. bbls per day (in thous.)	1
Av. bbls per well	4,854

Source: For specific methodology and source details, please see pages 6 and 131.

2010 Latest Available Data

Petroleum reserves

as of 12/31/10 (mill. bbls.)

	Crude Oil	NGL	Total
New reserves	73	6	79
Production	22	11	33
Net annual change	51	-5	46
Proved reserves	449	201	650

Natural gas reserves

as of 12/31/10 (Bcf)

	Associated Dissolved	Non- Associated	Dry Gas
New reserves	67	110	156
Production	37	405	432
Net annual change	30	-295	-276
Proved reserves	631	6,515	6,981

Cost of drilling and equipping wells

	Cost/ft. (\$)	Cost/ well (\$)	Total Cost (thous. \$)
Oil	275	1,869,495	912,314
Gas	748	6,712,832	2,557,589
Dry	204	400,274	28,019

Marginal oil wells

Producing marginal wells	2,777
Crude oil production in bbls. (thous.)	5,874
Crude oil production b/d (thous.)	16

Marginal natural gas wells

as of 12/31/10

Producing marginal wells	3,189
Natural gas production (MMcf)	47,301

Mineral lease royalties, bonuses & rent

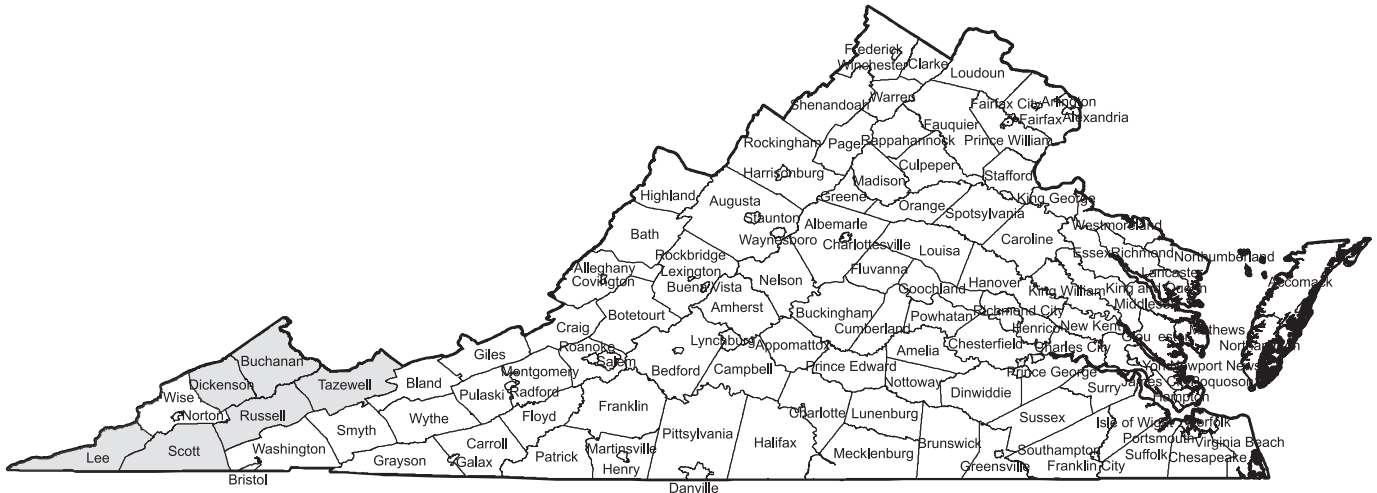
Oil	\$178,390,340
Gas	\$142,888,455
Total Royalties	\$375,370,543

Horizontal wells drilled	21
Directional wells drilled	375
Vertical wells drilled	543

Average number of employees

Oil and natural gas extraction	5,169
Refining	1,217
Transportation	1,198
Wholesale	912
Retail	8,787
Pipeline construction	540
Oilfield machinery	0
Total petroleum industry	17,638

Fidelity Exploration & Production
filed for approval from the Bureau of Land
Management for a multi-well exploration
project targeting the Cane Creek (Paradox)
shale in an area of the Paradox Basin 9-12
miles generally west of Moab.



○ Counties with oil and/or gas production

Background Information

Counties

Number of counties	95
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 — 147,255 MMcf	2010

Deepest producing well (ft.)

Crude oil	NA
Natural gas	10,134

Year and depth of deepest well drilled (ft.)

1977	17,003
------	--------

Cumulative number of total wells drilled as of 12/31/10 (excluding service wells)

Oil wells	156	2%
Gas wells	8,298	94%
Dry holes	335	4%
Total	8,789	100%

Cumulative crude oil wellhead value as of 12/31/10 (thous. \$)

\$11,097

Cumulative production & new reserves as of 12/31/10

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	NA	NA	NA	4,682
Production	NA	NA	NA	1,775

Value of Oil and Gas

Average wellhead price (2010)

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

Wellhead value of production (2010, in thous. \$)

Crude oil	NA
Natural gas	NA
Total	-

Average natural gas price (2010, \$/Mcf)

Residential consumers	\$ 12.73
Commercial consumers	\$ 9.55
Industrial consumers	\$ 6.68
Electric utilities	\$ 5.72
City Gate	\$ 6.88

Severance taxes paid (2010, in thous. \$)

--

Top producing counties (2010 on a BOE basis)

County	% Production	
	State	US
Buchanan	53.45	0.27
Dickenson	23.22	0.12
Tazewell	9.21	0.05
Russell	7.71	0.04
Wise	6.17	0.03
Lee	0.13	<0.01
Scott	0.11	<0.01

2010 Industry Statistics

Number of wells drilled

	Exploratory	Development	Total
Oil	NA	NA	NA
Gas	NA	414	414
Dry	NA	NA	NA
Total	NA	414	414

Total footage drilled

(thous. ft.)

	Exploratory	Development	Total
Oil	NA	NA	NA
Gas	NA	1,177.4	1,177.4
Dry	NA	NA	NA
Total	NA	1,177.4	1,177.4

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

New-field wildcats drilled	NA
Footage (thous. ft.)	NA

Average rotary rigs active	2
----------------------------	---

Permits	520
---------	-----

Statewide rank

	Crude Oil	Natural Gas
Wells drilled	30th	9th
Production	32nd	17th
Reserves (2010)	NA	14th

Number of operators*	22
----------------------	----

Number of producing wells

(12/31/10)

Crude oil	NA
Natural gas	7,454
Total	7,454

Average production

Crude oil (thous. b/d)	NA
NGL (thous. b/d)	NA
Natural gas (MMcf/day)	403.2

Total production

Crude oil (YTD bbls, in thous.)	NA
Natural gas (YTD MMcf)	147,156

Natural gas marketed production

(MMcf) 147,255

Average output per producing well

Crude oil (bbls.)	NA
Natural gas (Mcf)	19,742

Coalbed methane (YTD MMcf)	NA
----------------------------	----

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

Heavy oil (av. bbls/day, in thous.)	NA
-------------------------------------	----

Wells	NA
Av. bbls per day (in thous.)	NA
Av. bbls per well	NA

Source: For specific methodology and source details, please see pages 6 and 131.

* State Data

2010 Latest Available Data

Petroleum reserves

as of 12/31/10 (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 12/31/10 (Bcf)

	Associated Dissolved	Non- Associated	Dry Gas
New reserves	NA	296	296
Production	NA	172	172
Net annual change	NA	124	124
Proved reserves	NA	3,215	3,215

Cost of drilling and equipping wells

	Cost/ft. (\$)	Cost/ well (\$)	Total Cost (thous. \$)
Oil	NA	NA	NA
Gas	175	496,338	205,484
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 12/31/10

Producing marginal wells	6,268
Natural gas production (MMcf)	84,462

Mineral lease royalties, bonuses & rent

Oil	--
Gas	\$ 7,340
Total Royalties	\$ 160,433

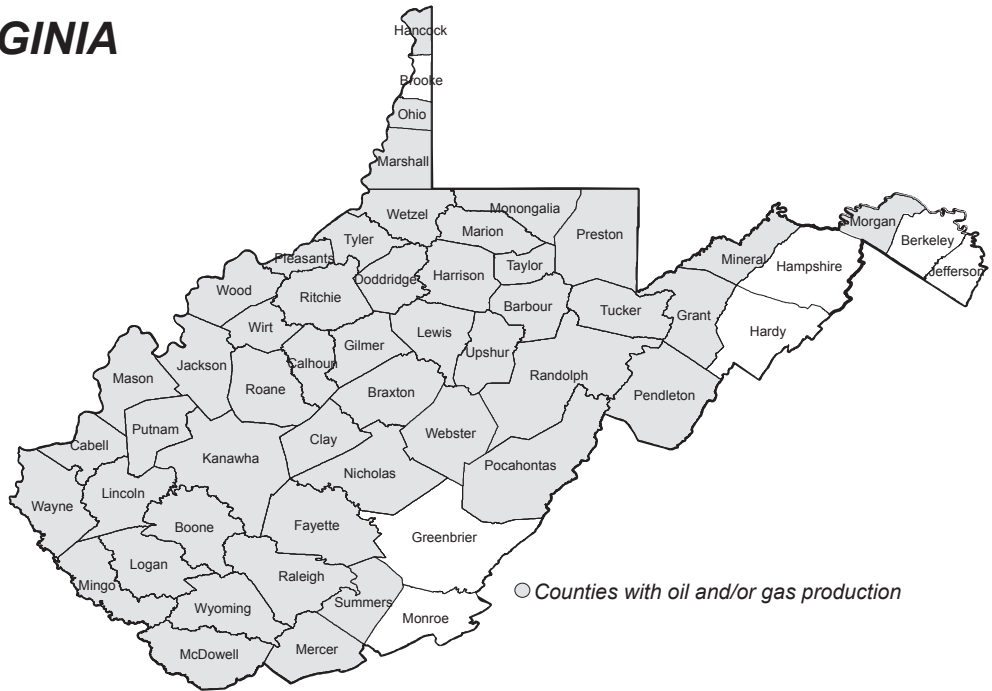
Horizontal wells drilled	21
Directional wells drilled	0
Vertical wells drilled	393

Average number of employees

Oil and natural gas extraction	1,659
Refining	714
Transportation	1,731
Wholesale	4,609
Retail	30,604
Pipeline construction	1,669
Oilfield machinery	0
Total petroleum industry	40,986

Keen Mountain field is Virginia's top producing gas field. It was discovered in the late 1970s. In 2010, over 72,700,000 MCFs were produced there.

WEST VIRGINIA



Background Information

Counties

Number of counties	55
With oil and/or gas production	48

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 — 265,174 MMcf	2010

Deepest producing well (ft.)

Crude oil	8,381
Natural gas	17,111

Year and depth of deepest well drilled (ft.)

1974	20,222
------	--------

Cumulative number of total wells drilled as of 12/31/10 (excluding service wells)

Oil wells	17,542	18%
Gas wells	69,285	73%
Dry holes	8,194	9%
Total	95,021	100%

Cumulative crude oil wellhead value as of 12/31/10 (thous. \$)

\$3,274,140

Cumulative production & new reserves as of 12/31/10

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	607	523	1,130	27,950
Production	620	432	1,052	21,104

Value of Oil and Gas

Average wellhead price (2010)

Crude oil (\$/bbl.)	\$ 70.74
Natural gas* (\$/Mcf)	\$ 3.90

Wellhead value of production (2010, in thous. \$)

Crude oil	\$ 108,798
Natural gas	\$1,034,179
Total	\$1,142,977

Average natural gas price (2010, \$/Mcf)

Residential consumers	\$ 11.39
Commercial consumers	\$ 10.27
Industrial consumers	\$ 5.40
Electric utilities	\$ 5.14
City Gate	\$ 6.31

Severance taxes paid (2010, in thous. \$)

\$70,507

Top 10 producing counties (2010 on a BOE basis)

County	% Production	
	State	US
Harrison	10.58	0.10
Doddridge	7.28	0.07
McDowell	7.09	0.07
Wetzell	6.31	0.06
Logan	6.22	0.06
Wyoming	5.74	0.06
Mingo	5.47	0.05
Kanawha	5.09	0.05
Lewis	4.80	0.05
Upshur	4.55	0.04

2010 Industry Statistics

Number of wells drilled

	Exploratory	Development	Total
Oil	NA	6	6
Gas	63	567	630
Dry	6	9	15
Total	69	582	651

Total footage drilled

(thous. ft.)

	Exploratory	Development	Total
Oil	NA	17.2	17.2
Gas	472.8	3,593.9	4,066.7
Dry	38.8	29.4	68.1
Total	511.6	3,640.5	4,152.0

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

New-field wildcats drilled	21
Footage (thous. ft.)	180.4

Average rotary rigs active	23
----------------------------	----

Permits	1,065
---------	-------

Statewide rank

	Crude Oil	Natural Gas
Wells drilled	28th	8th
Production	23rd	14th
Reserves (2010)	21st	12th

Number of operators	597
---------------------	-----

Number of producing wells

(12/31/10)

Crude oil	2,633
Natural gas	50,765
Total	53,398

Average production

Crude oil (thous. b/d)	2.4
NGL (thous. b/d)	2.6
Natural gas (MMcf/day)	772.9

Total production

Crude oil (YTD bbls, in thous.)	881
Natural gas (YTD MMcf)	282,126

Natural gas marketed production

(MMcf)	265,174
--------	---------

Average output per producing well

Crude oil (bbls.)	335
Natural gas (Mcf)	5,557

Coalbed methane (YTD MMcf)	722
----------------------------	-----

Oil Wells	0
Gas Wells	84
Daily Average (MMcf) / Well	2.0

Heavy oil (av. bbls/day, in thous.)	NA
-------------------------------------	----

Wells	NA
Av. bbls per day (in thous.)	NA
Av. bbls per well	NA

Source: For specific methodology and source details, please see pages 6 and 131.

* State data

2010 Latest Available Data

Petroleum reserves

as of 12/31/10 (mill. bbls.)

	Crude Oil	NGL	Total
New reserves	-1	22	21
Production	1	5	6
Net annual change	-2	17	15
Proved reserves	17	126	143

Natural gas reserves

as of 12/31/10 (Bcf)

	Associated Dissolved	Non- Associated	Dry Gas
New reserves	8	1,365	1,347
Production	3	297	293
Net annual change	5	1,068	1,054
Proved reserves	29	7,134	7,000

Cost of drilling and equipping wells

	Cost/ft. (\$)	Cost/ well (\$)	Total Cost (thous. \$)
Oil	NA	NA	NA
Gas	119	770,815	485,614
Dry	464	2,106,664	31,600

Marginal oil wells

Producing marginal wells	2,193
Crude oil production in bbls. (thous.)	633
Crude oil production b/d (thous.)	2

Marginal natural gas wells

as of 12/31/10

Producing marginal wells	49,527
Natural gas production (MMcf)	190,133

Mineral lease royalties, bonuses & rent

Oil	--
Gas	\$486,893
Total Royalties	\$613,032

Horizontal wells drilled	207
--------------------------	-----

Directional wells drilled	1
---------------------------	---

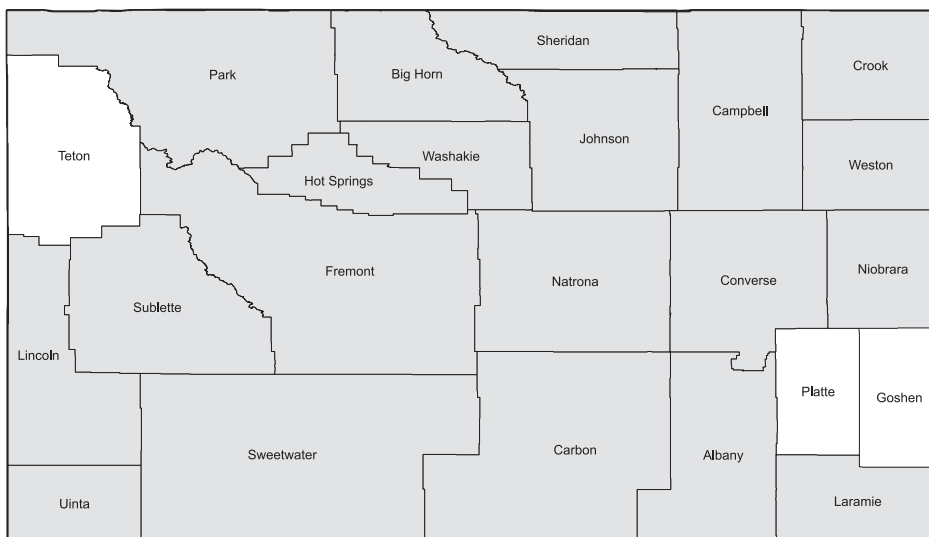
Vertical wells drilled	441
------------------------	-----

Average number of employees

Oil and natural gas extraction	5,246
Refining	868
Transportation	2,263
Wholesale	985
Retail	9,164
Pipeline construction	1,259
Oilfield machinery	0
Total petroleum industry	19,785

Magnum Hunter Resources brought online

its first well in the natural gas liquids-rich leg of the Marcellus Shale play in northwestern West Virginia. The horizontal eastern Tyler County well was tested flowing 7.0 million cu ft of gas equivalent per day. Production is flowing into the company's recently completed Eureka Hunter pipeline system.



○ Counties with oil and/or gas production

Background Information

Counties

Number of counties	23
With oil and/or gas production	20

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 — 2,335,328 MMcf	2009

Deepest producing well (ft.)

Crude oil	18,302
Natural gas	25,175

Year and depth of deepest well drilled (ft.)

2001	25,830
------	--------

Cumulative number of total wells drilled as of 12/31/10 (excluding service wells)

Oil wells	34,383	30%
Gas wells	48,424	43%
Dry holes	30,469	27%
Total	113,276	100%

Cumulative crude oil wellhead value as of 12/31/10 (thous. \$)

\$84,111,205

Cumulative production & new reserves as of 12/31/10

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	7,320	2,661	9,981	72,873
Production	6,894	1,554	8,448	39,935

Value of Oil and Gas

Average wellhead price (2010)

Crude oil (\$/bbl.)	\$68.10
Natural gas (\$/Mcf)	\$ 4.30

Wellhead value of production (2010, in thous. \$)

Crude oil	\$ 3,626,734
Natural gas	\$ 9,913,758
Total	\$13,540,492

Average natural gas price (2010, \$/Mcf)

Residential consumers	\$ 8.58
Commercial consumers	\$ 7.13
Industrial consumers	\$ 4.91
Electric utilities	NA
City Gate	\$ 5.04

Severance taxes paid (2010, in thous. \$)

\$635,511

Top 10 producing counties (2010 on a BOE basis)

County	% Production	
	State	US
Sublette	45.68	4.05
Johnson	13.73	1.22
Sweetwater	8.75	0.78
Campbell	6.79	0.60
Fremont	6.53	0.58
Carbon	4.44	0.39
Lincoln	2.96	0.26
Uinta	2.56	0.23
Sheridan	2.10	0.19
Natrona	2.04	0.18

2010 Industry Statistics

Number of wells drilled

	Exploratory	Development	Total
Oil	19	159	178
Gas	11	1,619	1,630
Dry	19	59	78
Total	49	1,837	1,886

Total footage drilled

(thous. ft.)

	Exploratory	Development	Total
Oil	137.7	807.3	945.0
Gas	114.3	11,091.9	11,203.2
Dry	131.0	139.7	270.6
Total	382.9	112,038.9	12,421.8

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

New-field wildcats drilled	34
Footage (thous. ft.)	272.3

Average rotary rigs active	40
----------------------------	----

Permits	2,838
---------	-------

Statewide rank

	Crude Oil	Natural Gas
Wells drilled	13th	4th
Production	9th	2nd
Reserves (2010)	8th	2nd

Number of operators	419
---------------------	-----

Number of producing wells

(12/31/10)

Crude oil	11,553
Natural gas	31,253
Total	42,806

Average production

Crude oil (thous. b/d)	115.2
NGL (thous. b/d)	35.6
Natural gas (MMcf/day)	6,495.6

Total production

Crude oil (YTD bbls, in thous.)	42,057
Natural gas (YTD MMcf)	2,370,892

Natural gas marketed production

(MMcf) 2,305,525

Average output per producing well

Crude oil (bbls.)	3,640
Natural gas (Mcf)	75,861

Coalbed methane (YTD MMcf)	563,279
----------------------------	---------

Oil Wells	4
Gas Wells	17,918
Daily Average (MMcf) / Well	1,543.2

Heavy oil (av. bbls/day, in thous.)	8,638
-------------------------------------	-------

Wells	2,067
Av. bbls per day (in thous.)	24
Av. bbls per well	4,179

Source: For specific methodology and source details, please see pages 6 and 131.

2010 Latest Available Data

Petroleum reserves

as of 12/31/10 (mill. bbls.)

	Crude Oil	NGL	Total
New reserves	24	51	75
Production	40	76	116
Net annual change	-16	-25	-41
Proved reserves	567	1,257	1,824

Natural gas reserves

as of 12/31/10 (Bcf)

	Associated Dissolved	Non- Associated	Dry Gas
New reserves	11	2,077	2,009
Production	39	2,271	2,218
Net annual change	-28	-194	-209
Proved reserves	334	36,192	35,074

Cost of drilling and equipping wells

	Cost/ft. (\$)	Cost/ well (\$)	Total Cost (thous. \$)
Oil	125	665,364	118,435
Gas	386	2,654,722	4,327,197
Dry	1,095	3,799,198	296,337

Marginal oil wells

Producing marginal wells	9,266
Crude oil production in bbls. (thous.)	12,732
Crude oil production b/d (thous.)	35

Marginal natural gas wells

as of 12/31/10

Producing marginal wells	17,257
Natural gas production (MMcf)	158,461

Mineral lease royalties, bonuses & rent

Oil	\$ 345,863,744
Gas	\$ 751,086,417
Total Royalties	\$ 1,890,494,750

Horizontal wells drilled	39
--------------------------	----

Directional wells drilled	681
---------------------------	-----

Vertical wells drilled	1,166
------------------------	-------

Average number of employees

Oil and natural gas extraction	15,097
Refining	1,035
Transportation	1,020
Wholesale	726
Retail	3,744
Pipeline construction	3,423
Oilfield machinery	0
Total petroleum industry	25,045

The Wyoming state's sale gathered record-breaking bids, which paid \$24 million for 29 parcels covering 11,000 acres in the Goshen and Platte counties.

ROTARY RIGS OPERATING

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Alabama	5	3	3	3	4	5	5	5	4	5
Alaska	13	11	10	10	9	8	8	8	8	8
Arkansas	2	1	2	6	9	24	45	51	44	39
California	36	23	22	24	27	33	35	42	23	32
Colorado	32	28	39	54	74	89	107	114	50	58
Florida	0	0	1	1	2	0	0	1	0	1
Hawaii	NA	NA	NA	NA	1	0	0	0	1	1
Illinois	0	0	0	0	0	0	0	0	1	2
Indiana	0	0	0	0	0	0	0	2	2	3
Iowa	0	1	1	0	0	0	2	0	0	0
Kansas	23	8	9	7	7	10	14	11	20	20
Kentucky	6	5	4	5	5	7	9	10	10	6
Louisiana	214	163	157	167	182	188	177	167	150	192
Maryland	0	0	0	0	0	0	1	0	0	0
Michigan	1	1	3	3	3	2	2	1	0	0
Mississippi	14	8	8	10	10	10	14	13	10	11
Montana	10	8	14	20	24	22	17	11	3	7
Nebraska	0	0	0	1	0	0	0	0	0	2
Nevada	0	0	1	2	2	1	2	3	3	6
New Mexico	68	42	65	67	83	94	78	78	44	62
New York	5	4	3	5	4	6	6	6	2	1
North Dakota	14	10	14	15	21	32	39	68	50	114
Ohio	10	9	8	7	9	8	13	12	8	7
Oklahoma	130	91	129	159	152	179	188	200	94	128
Oregon	0	0	0	0	0	0	0	1	0	0
Pennsylvania	11	11	10	9	13	16	16	23	42	85
South Dakota	1	0	0	1	2	1	2	2	0	1
Tennessee	1	0	0	0	0	1	5	4	2	0
Texas	462	338	449	506	614	746	834	898	432	659
Utah	21	13	14	22	28	40	42	42	18	27
Virginia	2	2	1	1	2	1	3	5	4	2
Washington	1	0	0	0	0	1	0	1	1	0
West Virginia	18	13	16	15	17	27	32	27	22	23
Wyoming	55	40	54	74	78	99	74	74	40	40
TOTAL U.S.	1,156	830	1,032	1,192	1,381	1,649	1,769	1,880	1,086	1,541
ONSHORE	1,002	716	923	1,095	1,287	1,559	1,696	1,814	1,041	1,509
OFFSHORE	154	114	109	97	94	90	73	66	45	32

Source: Baker Hughes.

Note: Averages may not add up to total due to rounding.

NEW-FIELD WILDCAT WELLS DRILLED

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Alabama	19	16	17	22	17	26	35	24	32	50
Alaska	10	10	10	8	15	8	10	13	9	2
Arizona	0	1	0	1	4	1	1	0	0	0
Arkansas	18	10	10	14	10	34	39	30	11	11
California	39	27	27	30	29	18	17	18	8	7
Colorado	71	40	48	68	136	102	132	86	43	46
Florida	0	0	1	0	2	0	0	0	0	0
Georgia	1	0	0	0	0	0	0	0	0	0
Idaho	0	0	0	0	0	0	0	1	0	2
Illinois	36	17	32	31	34	31	22	20	12	12
Indiana	19	9	17	19	19	39	33	30	34	26
Iowa	1	0	0	0	0	0	0	0	0	0
Kansas	212	153	158	169	225	275	249	305	208	306
Kentucky	98	87	133	176	242	313	227	168	95	39
Louisiana	63	75	62	60	58	52	52	30	19	25
Michigan	19	24	19	23	18	28	21	34	15	33
Mississippi	29	38	33	30	33	30	42	25	17	12
Missouri	3	2	0	0	0	0	0	0	0	0
Montana	90	95	120	148	160	140	107	81	30	28
Nebraska	12	14	15	16	19	21	22	55	17	23
Nevada	3	2	3	6	6	1	5	5	2	3
New Mexico	58	32	60	76	46	67	46	44	38	52
New York	40	36	26	54	30	30	45	50	32	29
North Dakota	19	9	4	26	44	101	98	87	83	58
Ohio	6	6	5	2	16	21	41	34	12	7
Oklahoma	102	70	96	104	108	181	256	273	102	62
Oregon	0	0	0	1	0	0	0	0	0	0
Pennsylvania	25	14	43	126	188	224	349	293	185	374
South Dakota	1	6	5	1	7	4	13	16	6	1
Tennessee	11	27	42	27	37	82	62	28	12	8
Texas	433	347	436	473	468	392	315	383	233	244
Utah	20	30	11	22	32	50	49	49	27	33
Virginia	4	8	8	3	2	10	28	8	0	0
Washington	3	0	0	0	0	0	2	0	0	0
West Virginia	33	30	18	29	27	43	56	53	25	21
Wyoming	80	74	82	90	80	77	62	52	36	34
Federal Offshore	102	68	83	82	72	62	58	52	70	33
TOTAL U.S.	1,680	1,377	1,624	1,937	2,184	2,463	2,494	2,346	1,383	1,581

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

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Alabama	22	17	23	36	27	35	49	36	40	52
Alaska	14	17	12	13	19	14	18	14	10	3
Arizona	0	1	0	1	4	1	1	0	0	0
Arkansas	23	10	12	19	18	45	47	45	19	11
California	89	62	52	69	74	44	36	26	20	12
Colorado	137	57	81	104	206	159	177	124	56	62
Florida	0	0	1	0	2	0	0	0	0	0
Georgia	1	0	0	0	0	0	0	0	0	0
Idaho								1		2
Illinois	48	33	44	47	50	72	84	61	51	54
Indiana	19	12	37	24	40	58	69	79	80	57
Iowa	1	0	0	0	0	0	0	0	0	0
Kansas	398	279	289	341	418	457	479	608	423	557
Kentucky	136	132	188	302	448	598	464	353	286	101
Louisiana	64	83	72	73	70	65	67	56	33	30
Michigan	25	30	23	27	24	34	31	52	24	55
Mississippi	33	43	41	34	44	40	53	32	19	15
Missouri	3	2	0	0	0	0	0	0	0	0
Montana	177	156	186	237	278	254	188	145	48	43
Nebraska	19	17	22	18	30	32	34	71	25	39
Nevada	4	2	3	6	6	1	4	4	2	3
New Mexico	115	75	100	103	98	118	75	69	48	58
New York	45	39	33	57	41	30	78	49	40	45
North Dakota	52	22	23	54	72	165	236	217	135	182
Ohio	36	31	27	28	56	66	147	116	80	42
Oklahoma	187	109	209	253	278	334	601	672	302	217
Pennsylvania	33	30	81	307	513	657	993	765	402	513
South Dakota	2	6	5	4	9	4	13	19	7	1
Tennessee	18	29	57	58	75	120	143	105	45	21
Texas	999	714	795	774	743	696	618	702	385	333
Utah	72	41	34	47	68	123	83	86	44	56
Virginia	5	14	10	2	7	20	53	14	0	0
Washington	3	0	0	0	0	0	2	0	0	0
West Virginia	76	89	41	146	200	215	285	250	134	69
Wyoming	179	151	141	130	132	119	86	79	45	49
Federal Offshore	105	69	83	84	77	59	67	118	87	36
TOTAL U.S.	3,142	2,384	2,644	3,404	4,136	4,623	5,187	4,974	3,065	2,718

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

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Alabama	346	246	371	405	416	407	505	131	250	201
Alaska	164	179	165	193	155	121	133	25	135	129
Arizona	0	0	0	0	0	0	1	0	0	0
Arkansas	227	144	216	278	299	417	470	1,048	1,107	1,120
California	2,181	1,925	1,928	2,161	2,234	2,464	2,343	2,640	1,603	1,965
Colorado	1,392	1,332	1,511	1,892	2,506	2,845	3,269	3,790	2,431	2,624
Florida	0	1	0	0	1	0	0	1	1	1
Illinois	367	289	308	277	379	411	353	434	232	334
Indiana	117	81	145	125	128	72	80	134	93	111
Kansas	1,099	902	1,339	1,542	1,867	2,709	2,770	3,634	2,011	2,382
Kentucky	865	891	752	573	680	805	850	885	712	694
Louisiana	1,217	790	1,003	1,188	1,381	1,569	1,565	1,714	1,138	1,342
Michigan	414	337	353	403	505	524	450	450	194	116
Mississippi	242	168	240	237	255	253	280	241	144	168
Missouri	6	0	1	0	0	0	0	0	0	35
Montana	406	388	644	504	682	863	672	427	209	230
Nebraska	13	14	16	32	46	34	132	163	49	60
Nevada	3	2	0	0	0	0	0	1	1	0
New Mexico	1,574	1,200	1,526	1,686	1,812	1,914	1,763	1,619	1,014	1,022
New York	77	54	46	77	133	227	288	339	203	281
North Dakota	158	154	199	168	227	322	278	500	473	997
Ohio	690	493	493	525	539	637	684	890	521	408
Oklahoma	2,982	2,351	2,783	2,884	3,248	3,671	2,992	3,507	1,813	2,068
Oregon	0	0	0	0	0	0	0	1	4	4
Pennsylvania	2,232	2,183	2,505	2,290	2,908	3,611	3,210	3,425	2,327	2,448
South Dakota	9	6	3	8	34	21	36	25	17	24
Tennessee	103	81	198	146	163	168	32	137	73	71
Texas	8,052	6,534	8,592	9,522	10,800	12,272	13,784	16,033	9,351	11,694
Utah	549	383	381	554	709	880	877	1,116	597	883
Virginia	304	291	358	361	318	531	654	621	522	414
Washington	0	0	0	2	0	0	0	0	0	0
West Virginia	887	870	974	1,081	1,212	1,584	1,562	1,576	860	582
Wyoming	5,331	3,045	2,768	3,717	4,330	4,024	2,977	2,941	1,841	1,837
Federal Offshore	952	612	630	615	551	483	415	370	253	46
TOTAL U.S.	32,416	25,487	30,189	33,653	39,880	46,499	45,946	50,376	31,347	34,291

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

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Alabama	368	263	394	441	443	440	554	348	290	253
Alaska	178	196	176	206	173	132	148	145	145	132
Arizona	0	1	0	1	4	1	2	0	0	0
Arkansas	250	154	228	304	334	495	830	1,093	1,126	1,131
California	2,271	1,989	1,978	2,221	2,296	2,494	2,367	2,666	1,623	1,977
Colorado	1,529	1,389	1,593	1,992	2,710	3,003	3,440	3,914	2,487	2,686
Florida	0	1	0	0	3	0	0	1	1	1
Georgia	1	0	0	0	0	0	0	0	0	0
Idaho	0	0	0	0	0	0	0	2	0	1
Illinois	414	322	354	324	424	478	437	495	283	388
Indiana	136	93	182	149	163	117	113	213	173	168
Iowa	1	0	0	0	0	0	0	0	0	0
Kansas	1,499	1,183	1,631	1,887	2,283	3,161	3,249	4,242	2,434	2,939
Kentucky	986	1,016	925	842	949	1,294	1,269	1,238	998	795
Louisiana	1,281	873	1,075	1,261	1,451	1,633	1,630	1,770	1,171	1,372
Michigan	439	367	376	430	528	558	482	502	218	171
Mississippi	275	211	281	270	299	293	332	273	163	183
Missouri	9	2	1	0	0	0	0	0	0	35
Montana	583	544	831	752	969	1,118	862	572	257	273
Nebraska	32	31	38	50	75	65	165	234	74	99
Nevada	7	4	3	3	5	1	2	5	3	3
New Mexico	1,689	1,275	1,624	1,789	1,906	2,028	1,838	1,688	1,062	1,080
New York	123	92	78	136	160	242	350	388	243	326
North Dakota	210	176	222	221	300	487	519	717	608	1,179
Ohio	725	520	515	549	577	684	806	1,006	601	450
Oklahoma	3,170	2,460	2,992	3,135	3,524	3,995	3,588	4,179	2,115	2,285
Oregon	0	0	0	0	0	0	0	1	4	4
Pennsylvania	2,263	2,212	2,575	2,496	3,344	4,260	4,169	4,190	2,729	2,961
South Dakota	11	12	8	12	41	25	48	44	24	25
Tennessee	119	107	252	202	234	285	71	242	118	92
Texas	9,052	7,240	9,378	10,284	11,532	13,409	14,392	16,735	9,736	12,027
Utah	621	424	416	601	777	1,005	961	1,202	641	939
Virginia	309	305	368	363	324	545	705	635	522	414
Washington	1	0	0	2	0	0	2	0	0	0
West Virginia	963	958	1,015	1,225	1,408	1,791	1,824	1,826	994	651
Wyoming	5,509	3,196	2,911	3,843	4,460	4,134	3,061	3,020	1,886	1,886
Federal Offshore	1,158	758	807	786	716	638	555	488	340	248
TOTAL U.S.	35,558	27,871	32,833	37,057	44,016	51,122	51,133	55,350	34,412	37,175

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

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Alabama	494	481	485	502	557	493	488	506	507	528
Alaska	2,304	2,310	2,283	2,384	2,505	2,465	2,402	2,479	2,518	2,498
Arizona	27	24	24	21	23	25	22	24	23	22
Arkansas	5,498	4,385	2,718	2,143	2,138	2,505	2,487	1,494	1,488	1,415
California	47,148	46,811	47,060	47,666	48,239	49,705	50,591	52,268	51,866	51,327
Colorado	5,322	5,272	5,133	5,140	5,088	5,049	4,999	5,038	4,942	5,029
Florida	73	72	96	67	76	65	64	66	59	73
Kansas	41,774	41,629	41,261	40,167	40,024	40,349	40,782	41,661	41,792	42,272
Louisiana	18,530	17,996	17,991	17,569	17,463	17,999	17,751	18,156	17,315	17,388
Michigan	3,845	3,672	3,790	3,761	3,887	3,847	3,875	3,755	3,774	3,885
Mississippi	1,768	1,616	1,664	1,685	1,647	1,788	1,937	2,082	3,872	2,418
Montana	4,409	3,662	3,713	3,918	4,052	4,272	4,873	5,033	4,535	4,563
Nebraska	1,250	1,224	1,222	1,224	1,211	1,229	1,211	1,234	1,199	1,202
Nevada	69	71	71	68	71	68	74	75	71	71
New Mexico	19,512	19,420	19,652	20,034	20,553	21,219	21,644	22,134	22,563	23,017
New York	2,876	3,213	3,117	3,095	3,270	2,767	3,190	2,816	2,632	2,890
North Dakota	3,481	4,224	3,519	3,779	3,506	3,512	4,841	4,198	4,565	5,315
Ohio	17,277	17,529	17,165	17,147	17,436	17,867	16,192	17,742	17,015	19,181
Oklahoma	60,923	58,088	53,530	52,326	51,869	54,408	51,160	41,382	38,502	38,325
Pennsylvania	NA	NA	NA	NA	NA	NA	NA	NA	5,390	11,018
South Dakota	144	143	143	145	162	153	163	151	145	147
Texas	161,943	158,410	154,932	152,693	152,045	153,455	154,569	158,433	160,173	162,417
Utah	2,201	2,163	2,217	2,433	2,685	2,953	3,107	3,351	3,548	3,885
West Virginia	1,708	2,188	1,469	2,099	2,115	2,107	2,613	2,485	2,284	2,633
Wyoming	11,921	11,716	11,688	11,743	12,147	12,813	12,094	12,011	11,798	11,533
Federal Offshore	4,235	4,127	3,957	3,840	3,631	3,146	3,554	3,574	3,289	3,358
TOTAL U.S.	418,732	410,446	398,900	395,649	396,400	404,259	404,683	402,148	405,865	416,427

Source: IHS. Total includes onshore and offshore counts.

* State Data

PRODUCING NATURAL GAS WELLS

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Alabama	3,891	4,130	4,460	4,784	5,122	5,523	5,728	6,070	6,214	6,297
Alaska	NA	NA	NA	NA	NA	NA	NA	190	203	196
Arizona	7	8	6	7	4	5	5	5	4	4
Arkansas	3,454	3,510	3,704	3,959	4,298	4,481	4,955	5,913	6,652	7,412
California	1,484	1,416	1,467	1,497	1,579	1,715	1,806	1,840	1,841	1,748
Colorado	18,137	19,280	20,821	22,693	25,570	28,407	31,920	36,805	39,296	42,927
Kansas	16,684	17,827	16,998	17,740	18,417	19,891	20,978	21,908	22,140	21,849
Kentucky	10,541	11,038	11,510	12,298	11,754	12,771	16,140	13,727	13,622	12,941
Louisiana	8,405	8,250	8,367	8,734	9,385	10,679	11,245	11,879	12,859	13,288
Michigan	7,642	7,957	8,282	8,524	9,009	9,444	9,792	10,050	10,349	10,253
Mississippi	913	992	1,151	1,284	1,469	1,574	1,714	1,786	2,112	1,762
Montana	4,419	4,603	4,864	5,299	5,716	6,200	6,206	6,277	6,705	6,722
Nebraska	102	104	108	112	115	117	195	328	356	295
New Mexico	24,506	25,454	26,687	28,160	29,723	31,246	32,535	33,625	34,163	34,306
New York	6,120	5,544	6,517	6,707	6,661	6,764	7,138	7,391	7,401	7,509
North Dakota	100	97	111	133	208	371	303	347	350	350
Ohio	22,585	22,426	22,613	22,212	22,151	23,123	20,507	23,384	22,631	24,701
Oklahoma	27,829	29,077	30,551	32,214	34,081	36,358	38,164	39,800	39,817	39,443
Oregon	18	16	16	16	14	13	12	21	23	26
Pennsylvania	NA	NA	NA	NA	NA	NA	NA	NA	32,076	55,215
South Dakota	58	58	58	60	60	62	64	84	87	100
Texas	64,760	66,747	70,056	74,550	79,879	86,272	93,126	100,631	102,471	103,697
Utah	2,792	3,118	3,392	3,715	4,171	4,781	5,257	6,040	6,323	7,037
Virginia	2,891	3,142	3,421	3,856	4,238	5,007	5,748	6,322	7,068	7,454
West Virginia	39,465	40,846	39,763	41,309	44,172	41,364	47,476	44,974	47,569	50,765
Wyoming	15,705	19,269	21,099	23,749	26,475	29,875	31,747	33,628	33,294	31,253
Federal Offshore	4,672	4,374	4,277	4,137	3,878	3,367	3,487	3,255	2,756	2,635
TOTAL U.S.	287,180	299,283	310,299	327,749	348,333	369,410	396,248	402,553	444,760	490,185

Source: IHS. Data not available for certain states.

* Alaska is not included as produced natural gas is re-injected in order to maintain reservoir pressure.

* Previous year data may be revised.

CRUDE OIL PRODUCTION

<i>(thous. bbls.)</i>	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Alabama	5,415	5,163	4,970	4,662	5,197	5,276	4,951	5,560	5,054	5,275
Alaska	351,466	359,496	362,371	335,740	335,740	269,150	262,427	248,800	236,522	217,932
Arizona	58	61	45	50	48	53	41	50	45	38
Arkansas	6,873	6,470	6,586	5,845	5,388	5,292	5,249	5,791	5,202	4,246
California	260,545	255,195	247,393	239,485	228,811	222,874	217,986	214,120	206,195	198,675
Colorado	13,209	12,771	12,682	12,014	11,764	11,357	10,756	10,875	10,192	11,174
Florida	4,406	3,644	3,263	2,875	2,585	2,349	2,080	1,985	696	1,750
Illinois	10,198	11,127	11,707	10,699	8,899	10,324	9,609	9,430	9,099	9,067
Indiana	2,073	1,969	1,870	1,729	1,595	1,714	1,723	1,855	1,803	1,837
Kansas	33,957	33,056	33,711	33,802	33,897	35,621	36,434	39,575	39,448	40,320
Kentucky	1,490	1,381	1,347	1,210	1,215	1,181	2,618	1,034	1,004	936
Louisiana	71,204	60,626	58,658	56,983	50,835	49,443	52,528	48,626	47,487	49,388
Michigan	7,070	6,583	6,230	5,763	5,744	5,686	5,394	6,023	5,846	6,420
Mississippi	18,040	16,781	15,678	15,635	16,402	16,103	19,034	20,859	21,915	22,958
Montana	16,172	16,940	19,309	24,674	32,655	36,027	34,815	31,480	27,771	25,226
Nebraska	2,911	2,746	2,810	2,520	2,405	2,297	2,333	2,389	2,234	2,197
Nevada	571	553	492	463	446	426	410	436	455	425
New Mexico	60,957	58,293	57,004	56,723	54,530	53,661	53,300	54,648	56,133	60,917
New York	0	0	94	110	92	188	267	294	228	227
North Dakota	30,653	29,876	28,413	30,142	34,092	36,763	42,249	58,384	75,200	107,205
Ohio	5,532	4,917	4,521	4,264	4,250	4,372	3,958	4,175	3,572	4,078
Oklahoma	61,248	58,543	56,770	54,899	52,288	53,947	51,093	53,234	48,999	54,071
Oregon	0	0	0	0	0	0	0	0	0	0
Pennsylvania	NA	NA	NA	NA	NA	NA	NA	NA	783	1,575
South Dakota	1,246	1,209	1,239	1,356	1,415	1,394	1,653	1,642	1,646	1,575
Texas	380,943	365,891	359,907	351,459	347,614	346,079	341,763	352,904	349,087	367,312
Utah	13,913	12,610	12,089	13,718	15,298	15,965	16,957	18,438	19,646	21,743
West Virginia	706	571	768	586	676	788	1,030	987	446	881
Wyoming	48,963	46,020	43,174	41,689	41,452	42,287	41,992	40,054	38,489	42,057
Federal Offshore	473,252	496,663	505,364	476,795	427,167	431,321	427,571	395,233	543,395	537,735
TOTAL U.S.	1,883,071	1,869,155	1,858,465	1,785,890	1,722,500	1,661,939	1,650,220	1,628,881	1,758,592	1,797,329
DAILY AVG.	5,159	5,121	5,092	4,879	4,719	4,553	4,521	4,450	4,818	4,924

Source: IHS.

Notes: Daily Average derived from IHS data.

NATURAL GAS PRODUCTION

(MMcf)	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Alabama	381,831	370,977	355,701	324,437	301,634	290,530	264,468	252,449	230,405	223,853
Alaska	NA	NA	NA	NA	NA	NA	NA	NA	149,289	139,299
Arizona	239	236	183	218	154	522	590	457	626	122
Arkansas	149,662	147,897	153,236	170,222	182,452	192,991	262,629	442,536	674,387	920,787
California	89,748	78,277	83,695	75,362	81,952	90,504	89,845	84,317	80,584	70,406
Colorado	803,229	912,289	997,085	1,062,396	1,120,614	1,217,865	1,273,254	1,476,152	1,536,385	1,620,565
Kansas	490,685	464,540	431,149	405,594	386,067	378,032	371,782	379,647	362,162	335,570
Kentucky	77,031	81,344	83,452	85,668	79,419	85,840	95,247	95,013	107,449	104,733
Louisiana	1,371,071	1,261,846	1,252,126	1,266,290	1,219,382	1,290,156	1,279,855	1,302,007	1,471,968	2,111,650
Michigan	203,038	192,482	178,082	170,023	161,614	159,295	151,701	145,875	137,571	132,173
Mississippi	132,500	142,950	157,847	170,157	183,103	206,269	268,328	331,699	336,382	389,751
Montana	74,416	79,235	78,092	87,046	91,456	93,199	88,833	78,197	78,366	69,893
Nebraska	871	894	1,183	1,217	939	898	1,282	2,814	2,713	2,093
New Mexico	1,466,020	1,412,648	1,375,603	1,372,580	1,358,029	1,352,226	1,294,420	1,243,420	1,176,047	1,081,223
New York	30,181	36,252	35,725	45,785	53,535	39,741	54,586	46,221	40,309	31,895
North Dakota	14,744	14,485	12,823	13,329	13,150	17,216	18,546	21,099	18,338	16,519
Ohio	72,225	70,426	68,428	66,562	60,451	62,021	55,657	61,208	57,949	61,602
Oklahoma	1,448,236	1,396,439	1,412,925	1,446,878	1,486,872	1,557,944	1,595,177	1,670,055	1,671,430	1,563,328
Oregon	1,115	840	734	468	457	624	371	663	818	1,459
Pennsylvania	NA	NA	NA	NA	NA	NA	NA	NA	226,017	535,986
South Dakota	538	510	523	509	428	438	453	1,222	1,752	1,536
Texas	4,940,417	4,886,656	4,962,056	5,072,699	5,319,815	5,647,050	6,214,058	7,075,389	6,913,702	6,715,482
Utah	265,032	260,714	257,510	264,789	281,368	321,626	348,601	403,310	408,665	393,587
Virginia	71,468	76,828	80,086	85,752	89,217	102,798	112,224	127,373	140,700	147,156
West Virginia	190,798	194,328	183,091	195,084	215,145	205,051	234,103	237,956	252,895	282,126
Wyoming	1,390,353	1,539,308	1,636,903	1,735,410	1,839,625	1,948,640	2,091,822	2,325,182	2,399,101	2,370,892
Fed. Offshore	4,278,528	3,829,757	3,715,894	3,355,752	2,594,879	2,376,086	2,292,279	1,905,309	1,914,239	1,731,131
TOTAL U.S.	17,943,976	17,452,158	17,514,132	17,474,227	17,121,757	17,637,562	18,460,111	19,709,570	20,282,800	21,054,798

Source: IHS. Data not available for certain states. Data is dry natural gas production.

* Alaska data is not included as produced natural gas is re-injected in order to maintain reservoir pressure.

PRODUCING MARGINAL OIL WELLS

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Alabama	305	300	304	320	387	320	308	317	323	341
Alaska	136	145	151	140	144	153	163	177	161	182
Arizona	24	22	23	19	22	24	21	23	22	21
Arkansas	5,334	4,141	2,427	1,910	1,925	2,256	2,264	1,266	1,277	1,247
California	31,274	31,314	31,770	33,010	34,338	36,161	37,433	39,453	39,521	39,618
Colorado	4,454	4,455	4,344	4,384	4,334	4,331	4,302	4,304	4,252	4,266
Florida	7	13	33	11	15	8	12	12	38	17
Illinois	5,102	5,166	5,107	5,148	4,964	5,270	7,062	7,109	7,092	7,129
Indiana	1,114	1,108	1,043	1,051	995	1,061	1,790	1,792	1,796	1,825
Kansas	41,141	40,933	40,607	39,386	39,250	39,602	39,921	40,575	40,657	41,203
Kentucky	1,034	995	981	965	947	994	1,375	1,415	1,424	1,329
Louisiana	15,737	15,377	15,587	15,129	15,288	15,680	15,533	16,086	15,301	15,388
Michigan	3,520	3,386	3,502	3,508	3,665	3,640	3,689	3,590	3,588	3,696
Mississippi	867	793	822	850	883	965	1,033	1,126	1,141	1,337
Montana	3,465	2,714	2,731	2,817	2,853	2,943	2,945	3,066	3,085	3,125
Nebraska	1,172	1,154	1,140	1,177	1,157	1,182	1,152	1,178	1,131	1,142
Nevada	38	39	42	40	45	45	51	49	45	42
New Mexico	15,893	15,916	16,181	16,602	17,114	17,777	18,278	18,576	18,792	19,024
New York	NA	NA	2,249	2,164	1,966	2,077	2,279	2,513	2,340	2,563
North Dakota	2,085	2,819	2,163	2,412	2,164	2,183	2,249	2,321	2,359	2,475
Ohio	15,251	15,762	15,162	15,308	15,360	15,803	16,225	15,679	14,839	16,734
Oklahoma	56,346	53,846	49,700	48,542	47,937	48,269	47,029	35,010	34,118	33,962
Pennsylvania	NA	NA	NA	NA	NA	NA	NA	NA	4,827	9,959
South Dakota	54	52	61	64	75	71	70	54	48	53
Texas	145,415	142,031	139,807	138,498	138,295	140,374	142,134	145,240	146,530	148,828
Utah	1,360	1,421	1,442	1,582	1,756	1,982	2,116	2,367	2,553	2,777
West Virginia	1,544	2,016	1,201	1,722	1,480	1,689	1,975	2,124	1,946	2,193
Wyoming	9,360	9,237	9,355	9,473	9,911	10,528	9,775	9,688	9,404	9,266
Federal Offshore	669	707	640	648	755	621	609	676	583	573
TOTAL U.S.	362,701	355,862	348,575	346,876	348,021	356,209	361,793	355,786	359,193	370,315

Source: IHS.

Notes: A marginal oil well is defined as a well producing 15 barrels/day or less.

* Previous year data may be revised.

MARGINAL OIL WELL PRODUCTION

(thous. bbls.)	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Alabama	748	752	754	740	809	706	693	708	698	752
Alaska	252	288	243	264	193	322	287	364	350	348
Arizona	39	34	32	24	37	40	27	37	32	25
Arkansas	4,095	3,212	2,881	3,042	3,046	2,882	2,898	1,895	1,875	1,713
California	63,431	62,603	62,889	64,825	66,663	69,810	71,058	73,049	71,214	69,787
Colorado	3,881	4,212	4,199	4,188	4,028	3,983	3,666	3,848	3,713	3,657
Florida	20	35	46	27	25	20	37	28	26	34
Illinois	5,068	5,227	5,267	5,104	4,249	5,159	5,791	5,732	5,702	5,564
Indiana	1,178	1,102	1,063	1,020	916	1,085	1,372	1,272	1,308	1,355
Kansas	25,504	25,250	25,016	24,607	24,541	25,301	24,810	25,673	25,709	26,018
Kentucky	799	753	698	701	677	671	773	740	761	679
Louisiana	10,342	10,043	9,773	9,547	10,029	9,543	9,915	9,781	9,398	9,713
Michigan	3,460	3,367	3,374	3,427	3,443	3,425	3,289	3,395	3,289	3,250
Mississippi	1,994	1,855	1,966	2,010	2,121	2,207	2,324	2,522	2,514	2,835
Montana	3,457	3,344	3,350	3,352	3,508	3,531	3,540	3,676	3,685	3,872
Nebraska	1,857	1,826	1,777	1,842	1,711	1,676	1,575	1,620	1,568	1,564
Nevada	89	92	90	91	103	117	130	114	110	95
New Mexico	20,549	20,516	20,825	21,045	21,788	22,312	22,646	22,850	22,752	22,887
New York	NA	NA	94	110	92	193	270	294	228	277
North Dakota	4,658	4,648	4,815	4,531	4,601	4,811	4,955	5,224	5,144	5,374
Ohio	4,364	4,152	3,871	3,669	3,716	3,732	3,723	3,740	3,147	3,578
Oklahoma	41,037	39,526	37,636	36,618	34,834	35,189	34,423	23,856	22,138	22,879
Pennsylvania	NA	NA	NA	NA	NA	NA	NA	NA	783	1,439
South Dakota	194	166	208	217	229	212	179	138	139	148
Texas	151,564	147,152	145,505	142,581	142,740	145,877	147,623	151,286	151,249	154,301
Utah	2,875	3,010	3,110	3,391	3,908	4,168	4,816	5,332	5,535	5,874
West Virginia	351	370	343	384	422	463	581	582	421	633
Wyoming	13,611	13,344	13,383	13,289	13,448	13,349	13,409	13,375	12,696	12,732
Fed Offshore	1,574	1,675	1,527	1,528	1,889	1,372	1,416	1,679	1,313	1,351
TOTAL U.S.	366,993	358,554	354,735	352,166	353,755	362,155	366,229	362,808	357,497	362,734

Source: IHS.

Notes: A marginal oil well is defined as a well producing 15 barrels/day or less.

* Previous year data may be revised.

PRODUCING MARGINAL NATURAL GAS WELLS

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Alabama	2,403	2,591	2,889	3,187	3,639	4,164	4,563	5,023	5,280	5,465
Arizona	3	5	2	2	2	2	2	2	1	2
Arkansas	2,149	2,208	2,383	2,519	2,736	2,892	2,996	3,346	3,406	3,441
California	676	693	701	720	777	836	899	987	1,014	959
Colorado	13,356	13,738	14,729	16,105	18,560	20,477	22,939	25,918	27,794	30,711
Kansas	10,223	12,044	11,891	13,531	15,083	17,196	18,776	20,006	20,501	20,549
Kentucky	10,405	10,868	11,329	12,129	11,616	12,617	8,444	NA	NA	12,470
Louisiana	4,343	4,164	4,219	4,330	4,645	4,851	5,146	5,454	5,684	6,028
Michigan**	5,670	6,278	7,028	7,454	8,143	8,663	9,220	9,808	10,066	9,985
Mississippi	447	506	684	808	933	1,063	1,194	1,286	1,299	1,345
Montana	3,854	4,002	4,262	4,533	4,790	5,272	5,334	5,625	6,187	6,365
Nebraska	99	101	105	108	111	114	176	325	353	292
New Mexico	14,853	15,601	16,501	17,636	19,191	20,460	21,995	23,068	23,602	24,376
New York	6,147	6,282	6,165	6,421	6,429	6,640	6,898	7,076	7,085	7,178
North Dakota	65	60	73	79	104	156	188	210	222	241
Ohio	22,060	21,908	22,159	21,845	22,082	24,992	20,001	22,862	22,083	24,187
Oklahoma	17,605	18,924	20,321	21,716	23,393	24,955	26,707	28,135	28,692	29,326
Oregon	9	9	10	11	11	10	9	15	16	20
Pennsylvania	NA	NA	NA	NA	NA	NA	NA	NA	31,095	53,686
South Dakota	58	57	57	59	60	62	63	72	70	87
Texas	39,070	40,295	42,003	44,648	47,299	50,945	54,462	58,127	60,479	62,475
Utah	1,268	2,105	1,650	1,802	2,105	2,394	2,657	2,925	3,028	3,198
Virginia	2,260	2,440	2,702	3,085	3,438	4,117	4,802	5,251	5,906	6,268
West Virginia	38,704	40,052	38,843	40,451	43,242	40,544	46,507	43,844	46,225	49,527
Wyoming	7,162	9,591	11,127	13,443	15,526	18,060	19,592	20,554	19,788	17,257
Federal Offshore	771	818	809	796	890	723	735	892	713	658
TOTAL U.S.*	203,660	214,694	222,642	237,418	254,805	272,205	275,861	290,811	330,589	376,087

Source: IHS.

Notes: A marginal natural gas well is defined as a well producing 90 thousand cubic feet per day or less.

* Row may not total because it includes Pacific Coastal wells.

** Michigan data pre-2007 was derived from a calculated gas well count that increased well production and marginal well count compared to actual well counts used thereafter.

MARGINAL NATURAL GAS PRODUCTION

(Mmcf)	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Alabama	37,297	39,224	44,565	47,877	53,491	60,237	66,314	71,335	73,061	72,987
Arizona	4	60	37	28	30	26	21	17	17	23
Arkansas	28,883	30,392	30,260	33,485	36,095	38,061	39,750	43,409	42,460	43,771
California	8,619	8,730	8,910	9,084	9,713	10,121	11,405	12,000	12,090	12,013
Colorado	141,619	153,957	172,671	195,752	219,516	244,131	259,934	292,816	308,372	332,373
Kansas	149,617	165,687	178,241	202,041	222,510	240,039	250,779	264,373	262,210	255,529
Kentucky	71,156	74,072	75,513	78,805	73,076	78,304	NA	NA	87,570	77,934
Louisiana	38,498	38,898	39,256	40,053	43,622	47,268	50,148	54,796	58,113	63,246
Michigan	98,625	104,662	114,313	117,082	123,811	124,848	128,265	126,805	120,181	114,548
Mississippi	7,091	8,692	11,223	12,821	13,051	14,679	16,053	16,358	15,122	14,651
Montana	32,251	35,138	37,138	37,945	40,639	43,571	43,672	47,551	53,071	52,183
Nebraska	803	790	871	833	745	809	1,282	2,741	2,713	2,093
New Mexico	189,482	198,763	210,703	229,172	247,133	261,701	274,675	288,130	293,344	301,286
New York	12,152	11,770	11,015	10,892	10,885	11,582	12,755	13,604	13,949	13,676
North Dakota	446	570	679	967	1,726	2,262	22,64	2,342	2,509	2,718
Ohio	57,316	56,954	55,331	53,979	50,250	52,003	47,802	52,085	48,039	52,241
Oklahoma	225,447	240,546	257,931	270,739	288,113	304,086	320,222	331,595	333,142	328,652
Oregon	79	112	113	117	138	158	134	258	234	305
Pennsylvania	NA	NA	NA	NA	NA	NA	NA	NA	101,553	159,049
South Dakota	538	473	483	466	428	438	420	488	416	607
Texas	445,556	456,420	479,600	508,976	538,749	583,720	623,976	664,340	681,630	697,279
Utah	19,656	21,997	25,294	27,679	30,932	35,244	36,895	41,334	44,089	47,301
Virginia	31,964	35,408	36,924	40,141	43,994	53,268	61,584	70,117	78,627	84,462
West Virginia	157,127	162,879	152,036	161,214	175,204	167,499	189,735	185,857	188,459	190,133
Wyoming	88,040	110,670	136,706	157,753	174,246	187,707	195,370	191,676	167,793	158,461
Federal Offshore	10,033	10,078	9,897	9,722	11,030	8,802	9,109	10,182	7,556	7,621
TOTAL U.S.*	1,853,471	1,967,418	2,091,600	2,247,334	2,408,367	2,570,029	2,642,563	2,784,208	2,908,750	3,085,140

Source: IHS.

Notes: A marginal natural gas well is defined as a well producing 90 thousand cubic feet per day or less.

* Row may not total because it includes Pacific Coastal wells.

* Totals may not add due to rounding.

* Michigan data pre-2007 was derived from a calculated gas well count that increased well production and marginal well count compared to actual well counts used thereafter.

COST OF DRILLING AND EQUIPPING WELLS 2010

State	No. of Wells Drilled	Footage Drilled	Depth per Well	Total Cost	Cost per Well	Cost per Foot
		(ft.)			(\$)	
Alabama	253	1,063,926	4,205	1,097,903,000	4,339,538	1,031.94
Alaska	132	744,383	5,639	2,080,287,000	15,759,750	2,794.65
Arkansas	1,131	8,907,345	7,876	448,194,000	396,281	50.32
California	1,977	5,104,738	2,582	2,505,158,000	1,267,151	490.75
Colorado	2,686	19,869,474	7,397	6,906,051,000	2,571,128	347.57
Florida	1	13,464	13,464	NA	NA	NA
Idaho	2	10,565	5,283	1,440,000	720,000	136.30
Illinois	388	934,742	2,409	170,397,000	439,168	182.29
Indiana	168	527,009	3,137	NA	NA	NA
Kansas	2,939	9,059,985	3,083	627,388,000	213,470	69.25
Kentucky	795	2,590,667	3,259	94,964,000	119,452	36.66
Louisiana	1,372	16,426,812	11,973	4,004,816,000	2,918,962	243.80
Michigan	171	572,417	3,347	40,079,000	234,380	70.02
Mississippi	183	1,601,853	8,753	1,151,303,000	6,289,781	718.56
Montana	273	1,459,881	5,348	722,126,000	2,645,150	494.65
Nebraska	99	490,508	4,995	109,289,000	1,103,929	222.81
Nevada	3	16,771	5,590	8,897,000	2,965,667	530.50
New Mexico	1,080	7,274,232	6,735	2,303,737,000	2,133,090	316.70
New York	326	684,566	2,100	70,766,000	217,074	103.37
North Dakota	1,179	16,255,290	13,787	9,858,034,000	8,361,352	606.45
Ohio	405	1,713,530	3,808	330,430,000	734,289	192.84
Oklahoma	2,285	16,190,697	7,086	2,753,209,000	1,204,905	170.05
Oregon	4	12,592	3,148	NA	NA	NA
Pennsylvania	2,961	16,424,680	5,547	1,498,647,000	506,129	91.24
South Dakota	25	114,574	4,583	5,447,000	217,880	47.54
Tennessee	92	271,223	2,948	38,749,000	421,185	142.87
Texas	12,027	100,731,269	8,375	27,424,675,000	2,208,259	272.26
Utah	939	6,872,379	7,319	3,497,922,000	3,725,157	508.98
Virginia	414	1,177,411	2,844	205,484,000	496,338	174.52
West Virginia	651	4,152,005	6,378	517,214,000	794,492	124.57
Wyoming	1,886	12,421,836	6,586	4,741,969,000	2,514,300	381.74
Federal Offshore	248	2,387,007	9,625	4,175,250,000	16,835,685	1,749.16
Exploratory	2,740	19,774,231	7,217	6,011,887,914	2,194,120	304.03
Developmental	34,435	236,304,993	6,862	71,377,664,906	2,072,823	302.06
TOTAL U.S.	37,175	256,079,224	6,888	77,389,552,820	2,081,763	302.21

Source: IHS.

COST OF DRILLING AND EQUIPPING WELLS 2010

CRUDE OIL REVENUES

(thous. \$.)	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Alabama	216,362	201,879	228,197	288,714	418,677	475,658	510,000	729,774	397,192	536,485
Alaska	6,448,392	7,021,406	8,509,077	11,027,864	14,890,978	15,425,817	16,819,997	22,536,136	12,813,555	15,879,039
Arizona	1,287	1,363	1,252	1,917	2,605	3,383	2,892	4,692	2,620	2,989
Arkansas	165,657	157,896	191,995	246,862	322,656	358,122	387,492	552,642	306,798	407,100
California	5,213,260	5,596,237	6,572,500	8,243,870	11,113,988	12,240,536	14,032,040	19,354,014	11,620,044	15,005,196
Colorado	410,026	448,493	648,257	892,277	1,263,025	1,492,282	1,557,808	2,184,103	1,482,195	2,369,177
Florida	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Illinois	239,786	287,296	340,354	425,520	522,598	616,283	630,927	880,862	504,444	663,523
Indiana	47,436	45,970	52,929	67,006	88,112	102,666	113,067	170,787	100,393	133,625
Kansas	799,674	772,543	973,514	1,326,556	1,806,486	2,165,442	2,439,357	3,644,711	2,147,236	2,931,025
Kentucky	66,892	60,251	69,059	93,817	125,356	136,492	169,558	240,351	144,121	177,917
Louisiana	2,548,300	2,307,012	2,731,264	3,343,113	4,043,624	4,719,199	5,456,018	7,355,128	4,078,018	5,271,859
Michigan	167,339	170,946	190,370	250,848	297,815	310,113	347,791	595,852	332,701	506,841
Mississippi	412,627	398,312	455,644	635,176	877,318	1,030,079	1,400,185	2,090,849	1,354,193	1,806,485
Missouri	1,854	2,045	2,169	3,269	4,239	4,989	4,862	8,312	5,001	10,290
Montana	368,707	383,620	553,711	952,616	1,730,144	2,055,693	2,251,347	2,837,788	1,466,568	1,779,390
Nebraska	69,164	65,640	78,876	96,319	126,393	133,622	146,529	210,648	114,032	153,718
Nevada	9,798	9,904	12,098	14,807	19,078	24,836	26,194	39,885	24,352	NA
New Mexico	1,612,984	1,616,359	1,952,158	2,521,263	3,205,274	3,693,163	4,055,809	5,716,351	3,490,214	4,945,721
New York*	3,778	4,112	4,163	6,698	10,764	20,260	26,395	42,375	18,126	28,728
North Dakota*	746,323	748,481	860,714	1,224,352	1,867,871	2,262,555	2,942,287	5,566,976	4,285,810	7,941,615
Ohio*	136,450	135,750	159,132	221,392	302,212	340,990	371,431	551,097	328,746	350,201
Oklahoma	1,691,345	1,632,063	1,942,380	2,496,955	3,384,253	3,965,896	4,224,583	6,159,850	3,790,538	5,091,941
Pennsylvania	40,208	55,512	71,780	100,200	215,388	232,137	255,710	349,400	210,902	242,485
South Dakota*	29,982	29,087	35,799	52,109	74,405	72,279	104,529	148,352	84,144	110,878
Tennessee	7,708	6,020	8,260	13,162	14,765	10,956	18,565	31,655	14,207	18,514
Texas	9,932,793	9,792,883	11,820,983	15,239,311	20,395,845	24,353,558	27,107,463	38,547,656	23,177,948	32,579,635
Utah	367,421	326,446	378,212	575,651	898,821	1,069,227	1,219,610	1,904,587	1,151,394	1,679,099
West Virginia	27,401	31,164	37,432	51,391	84,011	110,309	105,883	151,447	103,955	108,798
Wyoming	1,237,681	1,201,585	1,395,598	1,811,827	2,355,694	2,817,138	3,157,944	4,556,804	2,684,716	3,626,734
TOTAL U.S.	33,020,634	33,510,275	40,278,009	52,224,862	70,462,396	80,243,676	89,886,271	127,163,085	76,234,163	104,359,009

Source: * EIA price and production data used in addition to state data when EIA not available. Total does not include Federal Offshore.

Note: Totals differ from those on U.S. page. U.S. data is based on national production and cost data.

NATURAL GAS REVENUES

(thous. \$.)	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Alabama	1,509,306	1,204,585	1,874,005	2,160,750	2,751,780	2,166,685	2,011,828	2,488,581	1,019,645	994,277
Alaska**	938,166	986,831	1,180,314	1,613,895	2,314,590	2,574,952	2,440,521	2,944,486	1,163,436	1,186,296
Arizona	1,265	783	1,918	1,695	1,596	3,593	3,917	3,708	2,271	752
Arkansas	832,352	717,089	876,827	1,062,552	1,383,270	1,737,984	1,867,611	3,893,925	2,332,235	3,558,290
California	2,618,320	1,051,799	1,699,569	1,807,542	2,366,396	2,039,402	2,033,399	2,484,410	1,095,237	1,396,916
Colorado	3,138,071	2,258,760	4,591,234	5,622,814	8,418,829	7,361,265	5,678,549	2,702,429	4,812,015	6,250,381
Florida	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Illinois	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indiana	3,490	4,071	7,920	21,426	28,560	17,555	20,843	35,634	19,954	28,092
Kansas	1,757,331	1,187,292	1,813,807	1,961,778	2,455,761	2,081,557	2,081,840	2,564,024	1,120,030	1,373,566
Kentucky	390,636	265,660	397,740	495,802	634,718	841,676	701,462	960,857	NA	604,925
Louisiana	5,993,323	4,357,603	7,616,250	8,065,364	11,301,539	9,432,555	9,572,037	12,024,667	5,915,679	9,348,719
Maryland	133	132	216	213	342	366	NA	NA	NA	199
Michigan	954,375	592,868	950,318	999,772	1,383,894	NA	2,241,113	1,532,255	602,645	575,648
Mississippi	422,636	345,719	686,912	369,348	451,962	414,032	492,182	850,441	328,826	307,417
Montana	253,959	205,719	320,881	436,397	709,021	624,033	668,371	843,968	310,454	31,8642
Nebraska	2,609	1,806	4,609	4,753	4,922	NA	7,557	19,170	8,637	8,879
New Mexico	6,570,696	4,373,974	7,314,308	8,113,719	11,368,097	9,944,998	10,628,430	12,148,114	5,767,127	6,874,424
New York*	138,935	111,552	208,872	321,429	429,300	399,137	486,237	449,861	188,814	166,530
North Dakota	193,204	155,741	196,596	315,202	441,479	360,380	365,149	525,286	222,040	320,801
Ohio*	454,486	466,274	564,282	601,665	754,213	668,941	668,641	668,681	387,273	361,705
Oklahoma	6,509,998	4,649,922	7,744,030	9,139,845	11,819,425	10,674,385	10,885,012	14,462,499	6,557,953	8,606,715
Oregon	4,063	3,323	3,275	1,817	1,930	2,745	2,155	4,147	3,284	6,922
Pennsylvania	446,209	538,098	NA	NA	NA	NA	NA	NA	NA	NA
South Dakota	3,762	3,024	5,493	6,001	7,380	6,163	7,184	13,053	NA	NA
Tennessee	7,200	6,991	9,412	14,490	21,010	18,055	26,135	41,595	20,981	22,376
Texas	21,764,819	16,245,797	27,161,677	29,542,446	39,836,828	36,616,945	42,520,234	58,897,676	25,980,287	31,561,882
Utah	999,374	546,731	1,101,718	1,456,558	2,156,757	1,912,277	1,452,939	2,666,431	1,501,268	1,827,550
Virginia*	329,965	453,915	397,612	NA	NA	NA	NA	NA	NA	NA
West Virginia	790,583	654,457	814,718	928,892	1,563,234	1,617,050	1,585,922	1,822,189	1,163,518	1,034,179
Wyoming	4,759,938	3,925,684	6,357,383	7,897,327	11,245,715	10,624,776	8,942,992	15,605,471	7,940,115	9,913,758
TOTAL U.S.	61,789,202	45,316,197	73,901,897	82,963,490	113,852,652	102,141,507	107,392,504	140,653,765	68,464,044	86,649,841

Source: EIA wellhead price and marketed production data.

* State data used when EIA not available.

** Alaska natural gas is reinjected.

Note: Totals differ from those on U.S. page. U.S. data is based on national production and cost data.

HORIZONTAL WELLS

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Alabama	4	8	13	9	16	15	2	12	19	22
Alaska	104	109	107	140	133	114	106	101	100	101
Arkansas	3	2	3	6	17	123	465	691	963	910
California	107	155	125	140	139	165	220	263	151	207
Colorado	2	1	7	3	21	29	44	49	64	83
Georgia	0	0	0	0	0	0	0	0	0	0
Florida	0	2	0	0	1	0	0	1	1	1
Illinois	1	4	4	2	2	1	0	9	2	10
Indiana	1	7	5	4	16	23	48	40	46	70
Iowa	0	0	0	0	0	0	0	0	0	0
Kansas	4	2	0	4	2	25	29	5	7	7
Kentucky	2	1	1	5	11	9	44	229	268	225
Louisiana	43	40	26	60	34	37	36	96	390	738
Michigan	24	19	16	39	79	121	90	136	42	47
Mississippi	2	1	0	1	2	8	23	48	14	25
Missouri	0	0	0	0	0	0	0	0	0	0
Montana	106	130	204	290	348	358	312	130	31	76
Nebraska	0	0	0	0	0	0	1	0	0	0
Nevada	0	0	0	0	0	0	0	0	0	0
New Mexico	38	30	36	49	95	163	218	230	145	275
New York		1	1	4	7	5	16	27	19	9
North Dakota	151	144	180	152	248	397	469	724	609	1,121
Ohio		1	2	3	1	6	5	12	4	4
Oklahoma	95	127	242	383	526	673	761	1,073	671	833
Oregon	0	0	0	0	0	0	0	0	0	0
Pennsylvania	0	3	3	0	0	6	9	55	310	978
South Dakota	11	5	3	10	35	23	50	24	11	9
Tennessee	0	0	0	0	1	0	0	9	32	27
Texas	777	513	866	1,243	1,641	2,254	3,392	4,237	2,771	3,703
Utah	2	2	4	5	11	6	18	28	13	22
Virginia	0	0	0	2	2	0	1	8	31	21
Washington	0	0	0	0	0	0	0	0	0	0
West Virginia	5	12	5	1	4	5	26	184	185	228
Wyoming	18	9	18	15	59	64	47	52	22	38
TOTAL U.S.	1,500	1,328	1,871	2,570	3,451	4,630	5,432	8,473	6,921	9,752

DIRECTIONAL WELLS

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Alabama	3	11	4	8	11	12	17	23	5	18
Alaska	73	83	60	58	26	20	30	36	33	29
Arizona	0	0	0	0	0	0	0	0	0	0
Arkansas	8	7	16	22	25	29	27	18	9	20
California	906	759	925	1,073	1,022	979	1,112	1,090	495	1,036
Colorado	174	259	411	609	833	1,205	1,649	2,395	1,729	1,800
Florida	0	1	1	0	2	0	0	0	1	0
Georgia	0	0	0	0	0	0	0	0	0	0
Illinois	1	1	5	6	1	2	1	3	0	1
Indiana	0	0	0	1	4	1	1	0	0	0
Iowa	0	0	0	0	0	0	0	0	0	0
Kansas	1	0	0	0	1	3	0	3	0	0
Kentucky	6	0	0	1	0	2	4	4	0	0
Louisiana	374	269	380	420	483	510	499	403	209	242
Michigan	37	35	45	52	64	71	59	60	28	46
Mississippi	39	16	26	47	53	37	44	48	24	59
Missouri	0	0	0	0	0	0	0	0	0	0
Montana	8	6	12	19	24	23	40	27	2	22
Nebraska	1	0	0	0	1	0	0	0	0	0
Nevada	0	0	0	0	0	0	0	0	0	1
New Mexico	85	72	109	108	130	163	128	166	167	175
New York	21	19	11	31	19	12	29	23	1	0
North Dakota	3	3	3	7	4	10	13	2	4	21
Ohio	40	23	23	18	29	22	35	30	21	31
Oklahoma	205	127	158	187	248	272	217	217	111	77
Oregon	0	0	0	0	0	0	1	1	2	2
Pennsylvania	3	7	1	2	6	5	26	37	3	7
South Dakota	0	0	0	0	0	1	0	0	0	0
Tennessee	0	0	0	0	0	0	0	0	0	0
Texas	604	497	729	893	899	877	946	1,031	612	683
Utah	13	11	17	24	34	105	150	250	214	404
Virginia	1	0	0	0	1	0	0	0	0	0
Washington	0	0	0	0	0	0	0	0	0	0
West Virginia	4	8	2	6	3	5	10	10	1	1
Wyoming	118	97	139	252	368	444	500	642	588	689
TOTAL U.S.	2,728	2,311	3,077	3,844	4,291	4,810	5,538	6,519	4,259	5,364

DIRECTIONAL WELLS

VERTICAL WELLS

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Alabama	363	254	405	452	436	437	541	312	271	218
Alaska	2	4	10	8	9	8	12	8	12	2
Arizona	0	1	0	1	5	1	2	1	0	0
Arkansas	241	145	207	283	308	399	382	423	191	202
California	1,250	1,077	938	1,052	1,219	1,524	1,317	1,471	1,021	756
Colorado	1,354	1,132	1,172	1,389	1,897	1,858	2,032	1,674	792	843
Florida	0	0	0	0	2	0	0	0	0	0
Georgia	1	0	0	0	0	0	0	0	0	0
Idaho	0	0	0	0	0	0	0	1	0	2
Illinois	413	320	343	329	443	514	468	504	301	378
Indiana	142	90	187	155	168	190	150	192	142	97
Iowa	1	0	0	0	0	0	0	0	0	0
Kansas	1,515	1,196	1,704	2,119	2,730	3,960	3,875	4,343	2,427	2,930
Kentucky	1,029	1,045	983	938	1,330	1,561	1,454	1,352	757	586
Louisiana	882	582	679	790	947	1,116	1,247	1,279	582	395
Michigan	383	325	329	376	413	435	375	387	165	104
Mississippi	241	196	261	227	251	258	272	182	125	100
Missouri	13	11	21	31	17	28	22	208	56	35
Montana	469	408	616	449	600	755	525	425	226	175
Nebraska	31	31	39	50	75	68	165	235	74	99
Nevada	7	4	3	6	8	1	5	8	4	2
New Mexico	1,562	1,177	1,487	1,634	1,708	1,742	1,521	1,330	766	639
New York	105	81	71	125	199	403	464	417	236	328
North Dakota	61	30	43	65	53	104	65	39	19	39
Ohio	697	511	505	564	721	949	1,025	1,002	590	421
Oklahoma	2,877	2,214	2,604	2,642	2,822	3,173	2,703	3,025	1,371	1,374
Oregon		2		1				1	2	2
Pennsylvania	2,397	2,321	2,768	3,103	3,952	4,689	4,847	4,696	2,729	2,033
South Dakota	7	4	6	4	7	7	12	23	16	16
Tennessee	154	135	273	216	254	332	324	243	93	66
Texas	7,713	6,268	7,913	8,318	9,361	10,620	10,472	11,632	6,453	7,683
Utah	608	410	392	574	730	900	793	936	421	514
Virginia	336	323	398	411	439	626	764	631	572	393
Washington	3	0	0	2	0	0	2	0	0	0
West Virginia	971	979	1,067	1,320	1,496	1,978	2,033	1,749	853	465
Wyoming	5,356	3,100	2,749	3,554	4,009	3,693	2,516	2,339	1,269	1,165
TOTAL U.S.	31,184	24,376	28,173	31,188	36,609	42,329	40,385	41,068	22,536	22,062

WELL SUMMARY*

Year	Horizontal Wells	Directional Wells	Vertical Wells
2001	1,556	3,921	30,900
2002	1,346	2,993	24,343
2003	1,884	3,868	27,996
2004	2,599	4,767	30,829
2005	3,529	4,958	36,311
2006	4,640	4,916	42,350
2007	6,353	5,428	40,590
2008	8,293	6,366	40,753
2009	6,729	4,442	21,856
2010	9,755	5,228	22,183

*Data in state and national tables may differ due to date tabulated.

SEVERANCE AND PRODUCTION TAXES

<i>(thous. \$)</i>	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Alabama	107,024	53,235	92,695	101,184	132,300	177,280	139,380	192,752	111,004	90,613
Alaska	558,772	519,368	1,093,356	651,900	863,000	1,199,500	2,208,400	6,879,000	3,112,000	2,871,000
Arizona	7,026	6,510	8,377	8,993	9,899	10,022	6,761	5,488	3,214	3,016
Arkansas	9,546	6,608	8,355	9,802	15,078	15,078	14,928	21,427	28,209	70,455
California	239,921	189,306	214,473	188,753	268,796	328,876	471,185	467,130	400,000	400,000
Colorado	54,384	48,914	23,613	107,145	134,050	196,668	126,244	139,551	273,028	63,702
Florida	8,258	5,197	5,469	6,084	8,278	9,527	9,288	13,386	7,995	3,928
Indiana	572	567	590	845	1,119	1,215	1,350	2,082	1,213	1,629
Kansas	109,232	59,895	84,212	116,677	148,855	148,855	131,217	421,100	388,600	330,700
Kentucky	20,678	14,610	17,800	22,170	28,630	42,586	38,538	55,036	30,878	35,001
Louisiana	478,805	454,429	480,749	677,320	714,729	885,402	981,229	1,017,654	895,855	744,867
Maryland	2	1	1	1	4	4	3	1	5	4
Michigan	61,279	35,967	54,651	56,186	66,749	88,143	67,796	103,928	44,434	57,195
Mississippi	11,817	28,201	43,413	62,631	84,409	6,809	8,364	129,821	109,514	93,463
Montana	92,818	50,304	75,454	114,218	180,077	204,129	242,776	327,932	172,189	206,024
Nebraska	1,868	1,455	1,845	2,191	2,926	2,796	2,894	5,855	2,874	3,660
Nevada	174	182	248	356	527	577	576	907	538	418
New Mexico	355,370	479,109	571,862	737,200	926,884	1,169,271	987,921	1,282,483	1,361,237	1,431,086
North Dakota	66,800	62,300	66,846	73,914	157,500	166,147	185,970	534,700	403,100	749,100
Ohio	2,884	2,799	2,900	2,691	2,615	2,554	2,452	2,501	2,569	2,555
Oklahoma	745,236	417,103	600,980	701,156	875,653	1,168,598	1,001,328	1,266,655	1,174,211	869,129
Oregon	119	145	89	72	79	90	117	364	305	390
South Dakota	1,566	1,239	1,522	1,658	2,507	3,256	3,153	5,527	5,894	4,746
Tennessee	380	498	592	592	813	1,041	1,838	1,952	1,342	1,532
Texas	1,956,108	1,049,054	1,492,743	1,887,879	2,338,380	3,200,807	2,730,513	4,121,527	2,292,249	1,775,739
Utah	42,106	20,603	28,689	39,356	57,116	77,074	70,178	70,919	77,831	60,392
West Virginia	34,549	28,382	30,475	41,544	53,557	84,947	80,294	87,606	91,505	70,507
Wyoming	581,532	327,497	370,381	504,731	713,456	660,461	595,031	947,880	488,568	635,511
TOTAL U.S.	5,548,823	3,863,479	5,372,380	6,117,250	7,787,983	9,851,714	10,109,721	18,105,163	11,480,372	10,576,364

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. Totals may not add due to rounding. Some taxes may include other commodities - for example Arizona's Transaction Privilege Tax includes taxes paid on coal, sand and gravel transactions in addition to oil and natural gas. Nevada's tax has been revised to include the Net Proceeds of Minerals Tax. Texas oil tax includes oil production tax, oil regulation tax and oil well service tax; gas tax includes natural gas production tax and gas utility pipeline tax.

CRUDE OIL WELLHEAD PRICES

(\$/bbl.)	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Alabama	23.18	23.39	28.97	38.79	53.26	63.16	71.10	96.71	55.25	75.54
Alaska	18.35	19.54	23.93	33.17	47.21	57.03	63.81	90.19	54.41	72.33
Arizona*	21.82	21.63	26.63	36.86	52.09	61.51	67.26	90.24	56.96	74.72
Arkansas	21.82	21.50	26.57	36.67	50.86	58.67	64.25	90.91	53.07	71.01
California	20.00	21.69	26.29	34.32	48.26	54.78	64.73	90.21	56.11	74.51
Colorado	24.82	25.29	30.71	40.38	55.34	63.80	67.04	90.80	52.33	72.75
Florida	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Illinois	23.76	23.84	29.10	38.74	51.20	59.70	65.66	93.48	55.47	73.18
Indiana	23.46	23.43	28.38	38.18	51.02	59.31	65.47	91.92	55.65	72.82
Kansas	23.56	23.61	28.68	39.18	53.41	60.74	66.85	92.08	54.41	72.43
Kentucky	22.53	22.49	27.21	36.82	49.45	58.33	63.60	90.87	55.24	70.63
Louisiana	24.36	24.68	30.31	40.08	53.57	63.88	71.18	100.74	59.10	78.25
Michigan	22.69	23.68	29.18	39.14	53.67	60.89	66.87	95.75	56.39	74.91
Mississippi	21.13	22.11	27.46	37.03	49.58	59.35	68.65	94.60	58.29	76.41
Missouri*	20.37	21.53	26.45	37.15	49.87	57.34	60.77	83.96	53.20	70.48
Montana	23.16	22.76	28.66	38.53	52.66	56.69	64.64	89.96	52.96	70.24
Nebraska	23.67	23.62	28.63	38.42	52.38	57.77	62.78	87.99	50.93	69.65
Nevada*	17.13	17.91	24.54	31.98	42.68	58.30	64.20	91.48	53.52	NA
New Mexico	23.72	24.11	29.52	39.25	52.84	61.74	68.94	96.23	57.08	75.64
New York	22.76	24.92	28.91	39.40	54.64	63.51	69.46	109.78	53.47	76.00
North Dakota	23.55	24.15	29.27	39.30	52.38	56.69	65.30	88.68	53.75	70.24
Ohio	22.55	22.61	28.18	38.27	53.47	62.89	68.09	96.43	56.35	73.68
Oklahoma	24.68	24.49	29.72	39.95	54.46	63.11	69.31	96.15	56.56	75.18
Pennsylvania	24.82	24.86	29.60	39.48	54.57	64.02	70.00	96.76	56.96	69.80
South Dakota	23.89	23.96	28.94	38.40	50.65	51.85	62.78	87.42	50.75	69.04
Tennessee*	21.96	21.89	26.56	36.46	45.57	57.06	65.37	92.02	53.01	72.04
Texas	23.41	23.77	29.13	38.79	52.61	61.31	68.30	96.85	57.40	76.23
Utah	24.09	23.87	28.88	39.35	53.98	59.70	62.48	86.58	50.22	68.09
Virginia*	NA	NA	26.23	NA	NA	NA	NA	NA	NA	NA
West Virginia	22.35	22.55	28.06	38.38	53.75	63.07	67.27	95.07	55.77	70.74
Wyoming	21.55	21.96	26.63	35.10	45.63	53.25	58.34	86.07	52.30	68.10
TOTAL U.S.	21.84	22.51	27.56	36.77	50.28	59.69	66.52	94.04	56.35	74.71

Source: Energy Information Administration and State Sources*

Notes: Data represent average first purchase price of crude oil at the lease or wellhead.

Wellhead prices for Alaska, California, Louisiana and Texas are derived from formulas that include proportional production for onshore and offshore.

NATURAL GAS WELLHEAD PRICES

(\$/Mcf)	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Alabama	4.23	3.48	5.93	6.66	9.28	7.57	7.44	9.65	4.32	4.46
Alaska	1.99	2.13	2.41	3.42	4.75	5.79	5.63	7.39	2.93	3.17
Arizona*	4.12	2.60	4.33	5.12	6.86	5.70	5.98	7.09	3.19	4.11
Arkansas	4.99	4.43	5.17	5.68	7.26	6.43	6.61	8.72	3.43	3.84
California	6.93	2.92	5.04	5.65	7.45	6.47	6.62	8.38	3.96	4.87
Colorado	3.84	2.41	4.54	5.21	7.43	6.12	4.57	6.94	3.21	3.96
Florida*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Illinois*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indiana	3.28	3.11	5.41	6.30	9.11	6.01	5.78	7.58	4.05	4.13
Kansas	3.66	2.61	4.33	4.94	6.51	5.61	5.69	6.85	3.16	4.23
Kentucky	4.78	3.01	4.54	5.26	6.84	8.83	7.35	8.42	NA	4.47
Louisiana	3.99	3.20	5.64	5.96	8.72	6.93	7.02	8.73	3.82	4.23
Maryland	4.15	5.98	4.50	6.25	7.43	7.63	6.97	7.46	7.45	4.63
Michigan*	3.47	2.16	4.01	3.85	5.30	NA	8.46	5.63	3.92	3.79
Mississippi	3.93	3.06	5.13	5.83	8.54	6.84	6.70	8.80	3.73	4.17
Montana	3.12	2.39	3.73	4.51	6.57	5.53	5.72	7.50	3.16	3.64
Nebraska	2.16	1.52	3.17	3.22	4.29	NA	4.86	6.22	2.97	3.98
New Mexico	3.89	2.68	4.56	4.97	6.91	6.18	6.88	8.40	4.17	5.32
New York	5.00	3.03	5.78	6.98	7.78	7.13	8.85	8.94	4.21	4.65
North Dakota	3.53	2.73	3.53	5.73	8.40	6.52	6.67	8.55	3.74	3.92
Ohio	4.54	4.52	5.90	6.65	9.03	7.75	7.59	7.88	4.36	4.63
Oklahoma	4.03	2.94	4.97	5.52	7.21	6.32	6.24	7.56	3.53	4.71
Oregon	3.66	3.97	4.48	3.89	4.25	4.42	5.27	5.33	4.00	4.92
Pennsylvania*	3.41	3.41	NA	NA	NA	NA	NA	NA	NA	NA
South Dakota	3.42	2.95	4.98	5.49	7.44	6.40	7.22	7.94	NA	NA
Tennessee	3.60	3.41	5.22	6.90	9.55	6.78	6.63	8.85	3.83	4.35
Texas	4.12	3.16	5.18	5.83	7.55	6.60	6.98	8.51	3.81	4.70
Utah*	3.52	1.99	4.11	5.24	7.16	5.49	3.86	6.15	3.38	4.23
Virginia*	4.29	3.16	4.65	NA	NA	NA	NA	NA	NA	NA
West Virginia*	4.12	3.44	4.34	4.71	7.07	7.17	6.86	7.42	4.40	3.90
Wyoming	3.49	2.70	4.13	4.96	6.86	5.85	4.65	6.86	3.40	4.30
TOTAL U.S.	4.00	2.95	4.88	5.46	7.33	6.39	6.25	7.96	3.67	4.48

Source: Energy Information Administration and State Sources*

REFINER ACQUISITION COST OF CRUDE OIL

RETAIL GASOLINE PRICES

REFINER ACQUISITION COST OF CRUDE OIL

(\$/bbl.)	Domestic	Imported	Composite
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
2005	52.94	48.86	50.24
2006	62.62	59.02	60.24
2007	69.65	67.04	67.94
2008	98.47	92.77	94.74
2009	59.49	59.17	59.29
2010	77.96	75.88	76.69

(¢/gal.)	Excluding Taxes	Taxes	Pump Price
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
2005	182.9	46.6	229.5
2006	212.8	46.1	258.9
2007	234.5	45.6	280.1
2008	277.5	49.1	326.6
2009	188.8	46.2	235.0
2010	230.1	48.7	278.8

Source: Energy Information Administration. Pump price quoted for unleaded regular.

WORLD CRUDE OIL RESERVES

WORLD CRUDE OIL RESERVES

(mill. bbls.)	United States	Canada	Latin America	Middle East	Africa	Asia Pacific	Western Europe	Eastern Europe & FSU	Total World
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
2005	21,371	178,792	116,246	743,411	102,580	35,936	14,842	79,370	1,292,550
2006	21,757	179,210	115,150	739,205	114,073	33,366	14,695	99,992	1,317,447
2007	20,972	178,592	121,507	748,286	114,838	34,350	13,157	99,997	1,331,698
2008	21,317	178,092	133,188	745,998	117,064	34,006	12,546	99,997	1,342,207
2009	19,121	175,214	135,044	753,358	119,114	40,137	12,198	99,998	1,354,182
2010	19,121	175,214	247,532	752,918	123,609	40,251	10,974	99,996	1,469,615

Source: Oil & Gas Journal Worldwide Reserves & Production Report. 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 Jet Fuel	Fuel Oil		Average		Crude Oil
			Distillate (¢/gal.)	Residual	Of Four Products (¢/gal.)	(\$/bbl.)	
1953	12.01	10.23	8.83	3.73	8.96	3.76	2.68
1954	11.66	10.40	8.94	3.97	8.88	3.73	2.78
1955	11.62	10.53	9.08	4.53	9.06	3.81	2.77
1956	11.75	10.99	9.45	5.30	9.43	3.96	2.79
1957	12.34	11.54	10.05	6.15	10.10	4.24	3.09
1958	11.74	10.96	9.39	4.82	9.27	3.89	3.01
1959	11.64	11.26	9.31	4.79	9.22	3.87	2.90
1960	11.61	11.17	8.79	4.88	9.15	3.84	2.88
1961	11.62	11.49	9.10	4.85	9.21	3.87	2.89
1962	11.52	11.42	9.11	4.78	9.13	3.84	2.90
1963	11.35	11.51	9.18	4.61	9.01	3.79	2.89
1964	11.27	10.93	8.65	4.50	8.83	3.71	2.88
1965	11.52	11.28	9.04	4.81	9.12	3.83	2.86
1966	11.59	11.49	9.09	4.73	9.15	3.84	2.88
1967	11.84	11.96	9.71	4.53	9.33	3.92	2.92
1968	11.55	12.03	9.84	4.30	9.14	3.84	2.94
1969	11.80	11.98	10.06	4.20	9.27	3.89	3.09
1970	12.33	12.43	10.45	6.14	10.20	4.28	3.18
1971	12.70	12.90	10.75	7.76	10.94	4.59	3.39
1972	12.70	12.87	10.61	7.60	10.87	4.57	3.39
1973	14.72	14.08	12.61	8.45	12.49	5.25	3.89
1974	25.53	24.02	22.57	20.43	23.48	9.86	6.87
1975	30.27	27.41	26.09	22.03	27.03	11.35	7.67
1976	33.82	31.67	30.38	21.66	29.55	12.41	8.19
1977	36.99	35.81	34.41	25.87	33.21	13.95	8.57
1978	39.22	37.23	35.66	23.00	33.72	14.16	9.00
1979	56.84	56.60	54.47	33.63	49.50	20.79	12.64
1980	87.40	80.26	78.21	44.43	72.77	30.56	21.59
1981	101.63	101.03	97.20	61.17	88.75	37.28	31.77
1982	94.56	97.18	91.95	57.80	83.27	34.97	28.52
1983	86.97	85.12	80.05	57.30	76.94	32.31	26.19
1984	81.14	84.75	79.62	59.14	74.49	31.29	25.88
1985	81.11	81.69	76.66	56.41	73.06	30.69	24.09
1986	47.74	49.92	44.91	36.23	43.97	18.47	12.51
1987	53.22	56.75	52.25	45.36	50.89	21.37	15.40
1988	50.31	50.72	46.10	38.72	46.22	19.41	12.58
1989	59.15	60.78	56.02	40.87	53.28	22.38	15.86
1990	72.13	73.37	67.82	50.99	65.20	27.38	20.03
1991	64.24	64.79	59.81	40.94	56.61	23.78	16.54
1992	60.90	62.78	58.12	41.67	54.81	23.02	15.99
1993	54.85	59.98	55.54	40.22	50.82	21.34	14.25
1994	52.95	57.67	53.22	42.50	50.09	21.04	13.19
1995	55.51	58.15	53.74	47.41	51.63	21.68	14.62
1996	68.29	74.02	69.64	53.78	64.43	27.06	18.46
1997	66.21	62.26	66.81	54.69	62.19	26.12	17.23
1998	52.60	45.00	43.90	28.00	42.38	17.80	10.87
1999	64.50	53.30	53.60	35.40	51.70	21.71	15.56
2000	96.30	88.00	89.60	56.60	82.63	34.70	26.72
2001	88.60	76.30	77.90	47.60	72.60	30.49	21.84
2002	82.80	71.60	71.80	53.00	69.80	29.32	22.51
2003	100.20	87.10	88.20	66.10	85.40	35.87	27.56
2004	128.80	120.80	117.80	68.10	108.88	45.73	36.77
2005	167.00	172.30	172.00	97.10	152.10	63.93	50.28
2006	196.90	196.10	199.10	113.60	176.95	74.10	59.69
2007	218.20	217.10	219.00	135.00	197.00	82.88	66.52
2008	258.60	302.00	297.00	186.60	261.05	109.64	94.04
2009	176.70	171.90	170.70	134.20	163.38	68.62	56.35
2010	216.50	218.50	220.80	169.70	206.53	86.68	74.71

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.

WHOLESALE PRICES — TOTAL U.S.

PETROLEUM CONSUMPTION

(mill. bbls.)	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Alabama	100.2	104.3	103.0	112.4	111.1	112.2	111.6	107.4	101.7	104.8
Alaska	50.7	48.7	50.0	58.9	58.7	60.3	57.0	49.2	45.4	48.8
Arizona	95.4	97.4	98.9	103.2	108.3	110.4	109.5	106.4	99.5	98.6
Arkansas	66.3	65.9	65.3	66.8	66.2	66.3	66.9	66.0	63.5	64.6
California	655.5	679.4	694.5	685.6	698.3	706.7	711.1	677.0	654.6	653.3
Colorado	86.6	83.0	86.4	93.3	92.3	95.8	97.4	94.0	90.1	92.4
Connecticut	75.9	70.1	79.0	85.0	81.8	74.2	72.4	66.7	65.1	63.8
Delaware	24.6	24.0	24.4	23.0	24.5	22.8	22.5	21.3	17.4	17.6
Dist.of Columbia	6.1	6.1	5.4	5.6	5.3	4.3	4.2	3.6	3.7	4.0
Florida	349.9	342.6	348.5	379.3	387.1	370.3	358.4	329.7	309.7	330.1
Georgia	187.6	187.1	190.3	199.6	207.3	201.8	197.0	185.5	193.9	200.7
Hawaii	41.5	44.8	46.7	49.1	51.3	51.6	52.9	42.6	40.9	41.5
Idaho	28.6	29.1	25.7	28.8	29.5	30.6	30.6	29.3	28.5	30.8
Illinois	234.7	229.3	234.2	245.4	266.7	256.3	255.4	246.8	235.4	236.7
Indiana	148.6	158.3	163.1	160.7	159.6	160.1	157.4	150.9	145.5	144.7
Iowa	76.9	80.5	74.3	84.1	86.1	87.8	84.3	82.1	82.7	83.7
Kansas	71.7	69.1	81.6	79.3	62.5	64.5	80.5	77.0	76.6	77.2
Kentucky	116.6	126.6	119.0	131.3	131.0	131.5	130.8	123.1	121.4	119.3
Louisiana	377.6	383.1	362.3	384.7	374.0	413.6	399.7	369.7	336.4	361.7
Maine	40.7	41.3	47.3	46.6	47.6	42.9	43.0	38.7	37.9	37.0
Maryland	103.5	100.4	104.3	108.5	111.9	102.8	102.5	99.0	100.9	97.5
Massachusetts	133.8	129.1	131.4	133.5	135.0	122.6	124.1	119.7	109.5	111.9
Michigan	187.8	191.8	186.7	189.8	191.4	180.0	180.8	167.3	161.1	160.7
Minnesota	124.4	125.7	128.6	132.4	133.4	129.7	130.7	125.1	117.4	117.4
Mississippi	88.0	79.3	88.0	87.1	83.0	85.7	84.4	77.8	76.0	79.0
Missouri	136.0	137.2	139.5	141.4	141.0	139.6	140.8	133.6	127.2	127.0
Montana	28.4	29.3	28.6	32.2	33.5	35.4	38.1	33.7	32.0	31.2
Nebraska	40.8	42.7	43.1	44.2	43.0	43.1	43.5	42.2	40.1	41.3
Nevada	45.9	43.8	44.4	48.3	51.2	54.0	53.6	49.9	46.1	45.3
New Hampshire	31.1	32.8	36.6	37.7	35.4	32.1	32.0	32.1	31.0	29.8
New Jersey	216.3	213.4	205.9	210.5	222.2	216.6	230.2	219.7	195.5	201.7
New Mexico	44.8	45.2	45.5	47.2	47.1	49.6	53.2	49.8	47.7	48.3
New York	292.7	282.5	313.5	330.8	325.3	286.9	289.9	279.0	264.5	251.1
North Carolina	170.3	166.0	169.2	175.8	178.3	173.9	175.4	174.7	161.0	162.8
North Dakota	26.4	23.3	22.6	25.0	25.7	25.4	26.5	26.3	24.0	28.0
Ohio	234.0	238.0	245.0	242.6	240.3	242.1	242.2	233.0	219.5	221.9
Oklahoma	105.7	100.9	98.9	97.4	104.8	111.0	103.9	103.2	90.7	91.9
Oregon	64.8	67.4	65.3	67.5	69.0	70.3	69.8	68.4	67.9	65.8
Pennsylvania	259.4	255.2	261.9	269.7	273.6	264.0	261.4	250.0	241.8	242.6
Rhode Island	18.3	18.0	18.6	18.1	17.9	17.2	16.9	17.3	18.0	17.5
South Carolina	89.1	88.8	91.0	104.9	101.3	102.5	100.0	98.4	100.3	97.9
South Dakota	21.0	22.7	21.3	21.6	22.4	22.1	22.7	22.1	22.7	22.0
Tennessee	130.2	135.9	137.6	140.6	145.5	146.7	145.9	135.7	127.0	130.7
Texas	1,192.2	1,231.3	1,239.3	1,285.0	1,232.0	1,248.1	1,245.8	1,145.5	1,143.5	1,232.2
Utah	48.0	47.5	49.7	50.4	52.8	56.9	55.6	53.0	49.7	49.3
Vermont	17.0	16.2	16.3	17.9	17.3	17.0	16.7	15.7	16.3	15.7
Virginia	163.5	158.8	171.4	183.3	184.0	179.4	181.2	168.7	158.6	158.1
Washington	141.0	135.2	131.5	136.1	140.3	145.4	150.5	145.0	140.2	138.7
West Virginia	39.9	41.6	38.5	42.5	42.3	43.4	43.3	41.5	38.0	38.0
Wisconsin	114.0	115.3	109.7	115.4	114.8	113.2	113.7	110.6	103.6	104.5
Wyoming	28.0	26.9	28.0	27.3	27.9	30.0	30.7	31.4	29.6	30.0
Total U.S.	7,171.8	7,212.9	7,312.2	7,587.6	7,592.8	7,550.9	7,548.3	7,136.3	6,851.6	7,000.7

Source: Energy Information Administration.

NATURAL GAS CONSUMPTION

(MMcf.)	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Alabama	332,711	379,456	350,983	382,663	353,193	391,103	420,399	410,273	462,118	537,246
Alaska	408,960	419,131	414,234	406,319	432,972	373,849	369,966	341,887	342,259	333,317
Arizona	240,812	250,734	272,921	349,622	321,584	358,068	392,954	399,188	369,739	331,256
Arkansas	227,943	242,325	246,916	215,124	213,609	233,869	226,440	234,900	244,192	271,512
California	2,464,565	2,273,192	2,269,405	2,406,889	2,248,256	2,315,720	2,395,674	2,405,264	2,328,504	2,273,960
Colorado	463,738	459,397	436,253	440,378	470,321	450,832	504,775	504,784	523,726	501,439
Connecticut	146,278	177,587	154,075	162,642	168,067	172,682	180,181	166,800	185,055	199,440
Delaware	50,113	52,216	46,177	48,057	46,904	43,190	48,155	48,162	50,148	54,826
Dist.of Columbia	29,802	32,898	32,814	32,227	32,085	29,049	32,966	31,881	33,178	33,302
Florida	543,143	689,337	689,986	734,178	778,209	891,611	917,245	942,700	1,055,341	1,158,521
Georgia	351,109	383,546	379,761	394,986	412,560	420,469	441,107	425,042	462,798	530,155
Hawaii	2,818	2,734	2,732	2,774	2,795	2,783	2,850	2,701	2,608	2,627
Idaho	80,279	71,481	69,868	75,335	74,540	75,709	81,937	88,515	85,198	83,330
Illinois	951,616	1,049,879	998,486	953,207	969,642	893,998	965,591	1,000,501	956,066	939,970
Indiana	501,711	539,034	527,037	526,701	531,111	496,303	535,795	551,423	506,943	561,735
Iowa	224,336	226,457	230,161	226,819	241,340	238,454	293,274	325,772	315,186	311,093
Kansas	272,500	304,992	281,346	256,779	255,123	264,253	286,538	282,904	286,972	282,594
Kentucky	208,974	227,920	223,226	225,470	234,080	211,048	229,798	225,295	206,833	232,005
Louisiana	1,306,502	1,426,433	1,307,548	1,346,429	1,309,728	1,292,761	1,376,700	1,313,695	1,266,139	1,433,873
Maine	95,733	121,540	70,832	86,136	61,673	64,035	63,183	70,145	70,333	77,574
Maryland	178,376	196,276	197,024	194,725	202,509	182,294	201,053	196,069	196,510	208,225
Massachusetts	349,103	393,194	403,991	372,532	378,068	370,664	408,704	406,719	395,852	430,284
Michigan	906,001	966,354	924,819	916,629	913,827	803,336	798,126	779,603	735,341	746,755
Minnesota	340,911	371,583	371,261	359,898	367,825	352,570	388,335	425,351	394,134	422,968
Mississippi	332,589	343,890	265,842	282,051	301,663	307,305	364,068	355,007	364,323	432,023
Missouri	283,793	275,628	262,529	263,945	268,040	252,697	272,536	296,059	264,867	280,177
Montana	65,051	69,532	68,473	66,829	68,355	73,879	73,822	76,422	75,801	72,025
Nebraska	121,984	120,333	118,922	115,011	119,070	129,885	150,809	171,005	163,474	168,940
Nevada	176,835	176,596	185,846	214,984	227,149	249,608	254,406	264,596	275,468	259,274
New Hampshire	23,398	24,901	54,147	61,172	70,484	62,549	62,132	71,178	59,951	60,386
New Jersey	564,923	598,602	612,890	620,806	602,388	547,206	618,965	614,908	620,789	653,459
New Mexico	266,283	235,098	221,021	223,575	220,717	223,635	234,236	246,665	241,194	241,062
New York	1,171,898	1,199,632	1,101,618	1,098,056	1,080,215	1,097,160	1,187,060	1,180,357	1,142,625	1,198,023
North Carolina	207,108	235,376	218,642	224,796	229,715	223,032	237,354	243,091	247,047	304,146
North Dakota	60,819	66,726	60,907	59,986	53,050	53,336	59,453	63,096	54,564	66,394
Ohio	804,243	830,958	848,388	825,753	825,961	742,360	806,350	792,246	740,925	783,097
Oklahoma	491,458	508,298	540,103	538,576	582,536	624,400	658,379	687,988	659,305	675,701
Oregon	229,665	202,164	212,556	234,997	232,562	222,608	251,927	268,484	248,864	239,342
Pennsylvania	634,794	675,583	689,992	696,175	691,591	659,754	752,401	749,883	809,706	859,939
Rhode Island	95,607	87,805	78,456	72,609	80,764	77,204	87,972	89,256	92,744	94,121
South Carolina	141,785	184,803	146,641	163,787	172,032	174,806	175,701	170,076	190,927	219,809
South Dakota	37,077	41,577	43,881	41,679	42,555	40,739	53,938	65,257	66,185	71,509
Tennessee	255,990	255,515	257,315	231,133	230,338	221,626	221,118	229,934	216,944	254,193
Texas	4,278,662	4,328,007	4,074,323	3,932,971	3,526,380	3,459,579	3,543,067	3,568,042	3,407,263	3,364,694
Utah	159,299	163,379	154,125	155,891	160,275	187,400	219,701	224,187	214,220	219,178
Vermont	7,919	8,367	8,400	8,685	8,372	8,056	8,867	8,624	8,638	8,443
Virginia	237,853	258,202	262,970	277,434	299,746	274,175	319,913	299,364	319,136	375,435
Washington	312,114	233,716	249,599	262,485	264,754	263,395	272,613	298,140	310,426	285,865
West Virginia	141,090	146,455	126,986	122,267	117,136	113,085	115,973	111,479	109,652	113,168
Wisconsin	359,784	385,310	394,711	383,316	410,250	372,462	398,370	409,378	387,066	372,916
Wyoming	98,569	112,872	115,358	107,060	108,314	108,481	140,912	142,705	142,794	144,063
Total U.S.	22,238,624	23,027,022	22,276,502	22,402,546	22,014,435	21,699,071	23,103,793	23,277,001	22,910,072	23,775,389

Source: Energy Information Administration. Total Consumption - includes Lease & Plant Fuel and Pipeline and Distribution Use.

NATURAL GAS CONSUMPTION

ENERGY CONSUMPTION BY STATE

Trillion BTU	Petroleum	Natural Gas	Coal	Nuclear	Renewable Energy	Other*	Total	% Petroleum and Natural Gas
Alabama	553.5	546.9	718.7	396.6	245.8	-501.8	1,959.7	56.15
Alaska	274.1	335.0	14.5	-	18.1	-	641.7	94.92
Arizona	508.1	336.6	457.9	326.1	114.0	-343.1	1,399.6	60.35
Arkansas	340.6	274.8	293.7	157.0	125.4	-65.9	1,125.6	54.67
California	3,463.3	2,326.3	55.0	336.6	801.6	842.9	7,825.7	73.98
Colorado	484.7	505.7	382.6	-	77.0	66.9	1,516.9	65.29
Connecticut	329.4	203.8	28.7	175.1	39.3	-22.3	754.0	70.72
Delaware	90.7	56.1	30.3	-	6.1	73.0	256.2	57.30
Dist. Of Columbia	20.9	33.8	0.1	-	0.7	130.0	185.5	29.49
Florida	1,737.3	1,180.5	637.4	250.2	303.3	273.2	4,381.9	66.59
Georgia	1,052.0	541.1	767.9	350.3	239.0	205.4	3,155.7	50.48
Hawaii	234.3	0.2	17.1	-	20.6	-	272.2	86.15
Idaho	165.0	85.1	8.5	-	134.8	140.4	533.8	46.85
Illinois	1,229.7	935.3	1,069.1	1,005.4	190.9	-493.7	3,936.7	55.00
Indiana	762.5	565.1	1,449.9	-	141.3	-47.7	2,871.1	46.24
Iowa	420.9	278.8	493.6	46.5	338.6	-86.1	1,492.3	46.89
Kansas	383.2	288.0	360.2	99.9	75.3	-41.3	1,165.3	57.60
Kentucky	626.9	239.0	1,009.8	-	77.0	23.8	1,976.5	43.81
Louisiana	1,929.0	1,468.0	259.8	194.8	122.9	90.9	4,065.4	83.56
Maine	195.1	81.0	2.3	-	151.3	-22.4	407.3	67.79
Maryland	505.0	213.7	266.1	146.3	60.5	289.5	1,481.1	48.52
Massachusetts	583.5	445.3	83.8	61.9	62.9	159.5	1,396.9	73.65
Michigan	812.9	758.7	749.3	309.6	166.3	1.3	2,798.1	56.17
Minnesota	612.3	427.2	315.3	140.9	213.6	158.0	1,867.3	55.67
Mississippi	421.6	438.1	148.5	100.8	68.5	11.7	1,189.2	72.29
Missouri	658.0	282.1	801.8	94.0	85.6	6.9	1,928.4	48.75
Montana	168.1	72.9	203.3	-	120.3	-163.2	401.4	60.04
Nebraska	217.0	169.6	254.6	115.5	129.7	-42.6	843.8	45.82
Nevada	236.2	267.8	80.2	-	59.2	2.7	646.1	78.01
New Hampshire	152.8	62.6	33.8	114.0	43.5	-111.2	295.5	72.89
New Jersey	1,077.0	670.0	72.0	342.5	59.3	226.7	2,447.5	71.38
New Mexico	248.5	246.1	267.5	-	40.0	-122.0	680.1	72.72
New York	1,324.1	1,224.4	167.1	437.6	437.2	138.0	3,728.4	68.35
North Carolina	825.2	308.7	749.1	425.8	187.4	209.0	2,705.2	41.92
North Dakota	149.7	64.3	409.6	-	86.0	-228.9	480.7	44.52
Ohio	1,169.1	809.4	1,355.4	165.2	126.2	208.4	3,833.7	51.61
Oklahoma	491.3	697.3	346.0	-	102.7	-85.7	1,551.6	76.60
Oregon	343.4	242.9	42.6	-	400.9	-52.7	977.1	60.00
Pennsylvania	1,271.3	889.2	1,311.0	813.5	173.4	-699.6	3,758.8	57.48
Rhode Island	91.8	95.7	-	-	7.2	2.5	197.2	95.08
South Carolina	507.6	225.5	405.0	543.4	130.2	-150.1	1,661.6	44.12
South Dakota	115.0	71.9	39.1	-	130.7	22.9	379.6	49.24
Tennessee	681.2	260.0	515.5	289.9	182.1	321.9	2,250.6	41.82
Texas	5,751.5	3,458.9	1,608.6	432.0	465.1	53.8	11,769.9	78.25
Utah	265.7	229.0	356.1	-	23.1	-110.2	763.7	64.78
Vermont	78.9	8.5	-	50.0	29.1	-18.9	147.6	59.21
Virginia	818.3	385.8	345.7	277.7	139.8	534.8	2,502.1	48.12
Washington	738.7	295.0	94.9	96.6	834.9	-23.6	2,036.5	50.76
West Virginia	200.7	121.8	847.5	-	41.3	-472.4	738.9	43.65
Wisconsin	537.0	376.6	458.4	138.8	179.3	110.0	1,800.1	50.75
Wyoming	166.0	148.5	484.2	-	46.5	-309.9	535.3	58.75
Total U.S.	36,020.5	24,248.6	20,869.1	8,434.4	8,055.6	82.4	97,710.6	61.68

Source: EIA

Note: Totals may not equal sum of components due to independent rounding. Renewable Energy includes conventional hydroelectric power, biomass (wood and biomass waste, fuel ethanol, and losses and co-products from fuel ethanol production), geothermal, solar thermal and photo voltaic, and wind energy. Other* includes Net Interstate Flow of Electricity/Losses and Net Electricity Imports.

ENERGY CONSUMPTION BY STATE

INDUSTRY EMPLOYMENT - 2010

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	
Alabama	1,807	ND	1,598	543	1,660	2,412	2,990	17,238	28,248
Alaska	12,877	ND	404	ND	528	ND	525	1,722	16,056
Arizona	528	ND	212	271	341	ND	1,843	14,912	18,107
Arkansas	6,338	532	471	344	1,495	1,389	2,236	11,517	24,322
California	19,814	13,232	2,450	2,821	6,528	ND	11,567	50,197	106,609
Colorado	19,753	603	252	950	2,372	1,159	2,290	12,024	39,403
Connecticut	26	0	270	204	235	1,046	4,949	5,832	12,562
Delaware	16	ND	286	ND	123	ND	631	2,175	3,231
Dist. of Columbia	ND	ND	0	ND	ND	ND	ND	469	469
Florida	920	186	2,442	253	991	1,777	5,999	37,235	49,803
Georgia	180	54	970	380	1,151	1,573	3,945	26,939	35,192
Hawaii	11	ND	ND	0	80	ND	606	2,396	3,093
Idaho	124	ND	31	ND	133	ND	746	5,814	6,848
Illinois	2,591	3,037	2,340	1,161	1,373	4,126	4,868	25,920	45,416
Indiana	369	ND	3,442	497	946	1,957	3,589	21,000	31,800
Iowa	19	ND	325	337	177	574	1,758	17,677	20,867
Kansas	7,488	1,360	493	809	1,469	1,922	1,902	9,582	25,025
Kentucky	1,974	ND	1,299	923	640	798	3,034	16,746	25,414
Louisiana	48,608	9,502	1,941	2,649	12,989	1,897	11,604	18,328	107,518
Maine	ND	ND	433	99	31	64	3,643	7,211	11,481
Maryland	620	103	587	ND	622	497	3,243	9,230	14,902
Massachusetts	126	ND	734	159	261	3,413	6,698	11,799	23,190
Michigan	2,322	459	781	969	1,159	2,225	4,685	23,736	36,336
Minnesota	66	1,368	672	372	1,302	1,650	2,891	22,410	30,731
Mississippi	3,955	1,951	441	941	1,572	679	2,250	14,062	25,851
Missouri	195	53	1,145	300	449	2,915	3,201	24,359	32,617
Montana	2,428	1,047	29	487	617	310	903	5,166	10,987
Nebraska	221	ND	14	144	295	1,417	1,188	8,682	11,961
Nevada	259	ND	193	30	944	ND	663	7,662	9,751
New Hampshire	28	0	224	ND	ND	186	2,664	4,620	7,722
New Jersey	286	1,741	1,105	318	1,090	5,153	5,366	14,693	29,752
New Mexico	14,193	ND	742	199	1,675	1,105	1,571	7,522	27,007
New York	1,459	39	1,795	353	1,513	6,815	12,357	28,620	52,951
North Carolina	420	158	829	254	910	2,067	6,223	27,307	38,168
North Dakota	5,569	ND	0	347	959	ND	1,783	4,256	12,914
Ohio	4,734	1,651	2,659	949	1,585	3,701	5,084	33,131	53,494
Oklahoma	41,955	1,439	899	1,929	2,589	4,415	9,468	14,357	77,051
Oregon	62	ND	412	ND	455	1,120	1,499	9,811	13,359
Pennsylvania	12,282	2,358	3,958	1,850	2,922	3,733	10,840	37,066	75,009
Rhode Island	4	ND	ND	ND	90	ND	1,249	1,831	3,174
South Carolina	179	18	323	ND	184	850	2,208	16,539	20,301
South Dakota	149	ND	17	66	41	185	1,192	5,858	7,508
Tennessee	517	ND	986	364	568	1,724	3,332	20,925	28,416
Texas	201,474	21,389	3,011	15,936	28,075	7,483	56,248	68,713	402,329
Utah	5,169	980	237	283		915	1,267	8,787	17,638
Vermont	25	0	ND	ND	9	ND	1,596	3,741	5,371
Virginia	1,659	ND	714	369	1,669	1,362	4,609	30,604	40,986
Washington	293	1,764	617	ND	815	1,028	3,062	13,285	20,864
West Virginia	5,246	ND	868	1,526	1,259	737	985	9,164	19,785
Wisconsin	52	ND	430	321	466	701	3,159	22,594	27,723
Wyoming	15,097	975	60	778	3,423	242	726	3,744	25,045
Total U.S.	450,435	72,689	38,283	43,151	92,319	115,138	233,529	819,695	1,865,239

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. Oilfield Machinery included in Wholesale Petroleum Products. Pipeline Construction and Oilfield Machinery separated out on state pages. State page Refining includes Oil and Greases.

INDUSTRY EMPLOYMENT-2010



Join The Voice of America's Oil and Gas Industry

THE INDEPENDENT PETROLEUM ASSOCIATION OF AMERICA...

With 5,000 members located in 46 states and 525 cities nationwide, the Independent Petroleum Association of America (IPAA) is the leading national upstream trade association working around the clock in Washington, D.C., to protect your business from harmful legislation and regulations.

IPAA's award-winning team — with decades of technical experience as former congressional, federal agency and White House staff — ensures that the voices of independent oil and natural gas producers are heard in the nation's capital.

IPAA also holds dozens of industry programs nationwide that draw more than 25,000 attendees annually, including the Oil and Gas Investment Symposia and business development roundtable events. IPAA also is a founding supporter of NAPE®, formerly the North American Prospect Expo. These events not only allow networking with fellow industry leaders, but also offer an array of opportunities to discuss key energy issues and industry trends with financial analysts, money managers, capital providers and industry service and supply companies. The continued success of our programs depends on you. Your involvement has NEVER been more important, so join today!

For more information about IPAA membership benefits, visit us at www.joinipaa.org or call our membership department at 1-800-433-2851.



Data Sources & Notes

The editorial staff gratefully acknowledges the following sources of data that appear on the individual state pages.

Average Production (dry).....	IHS
Average output per producing well	IHS
Cumulative production (marketed) & Reserves (dry)	Energy Information Administration
Cumulative wells drilled	IHS & State Data
Cumulative wellhead value.....	Energy Information Administration
Deepest wells drilled.....	IHS & State Data
End-use natural gas prices.....	Energy Information Administration
Federal Leases & Royalties.....	Department of Interior and Minerals Management Service
First and peak production years	AIME Statistical Yearbook, World Oil, Oil & Gas Journal, & World Petroleum Report (Note: Marketed production)
Marginal wells & Abandonments..	IHS & IOGCC
Mineral lease royalties, bonuses & rent	Department of Interior and Minerals Management Service. Note: Total includes other minerals in addition to oil, ngls and natural gas
Natural gas marketed production	Energy Information Administration
Number of employees	IPAA survey & Bureau of Labor Statistics
Operator	A company or individual who last reported to the state regulatory agency as having control of the operation and management of a producing well or property
Petroleum reserve position.....	Energy Information Administration
Producing wells	IHS & State Data
Rotary drilling rigs.....	Baker Hughes, Inc.
State maps	State data and IHS data for pro- ducing entities by county
Severance and production taxes	IPAA survey
Total Production (dry)	IHS and EIA (marketed gas pro- duction)
Wellhead prices and value	Energy Information Administration and IPAA, State Data
Wells and footage drilled	IHS & State Data
Well summary and wells by type	IHS

Worldwide rank from BP and World Oil for wells drilled.

Abbreviations

bbbl.	= barrel
b/d	= barrels per day
Mcf	= thousand cubic feet
MMcf	= million cubic feet
Bcf	= billion cubic feet
Tcf	= trillion cubic feet
BTU	= 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
= 5,631 cubic feet of natural gas
= 0.22 ton of bituminous coal

One cubic foot of natural gas:

= 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
= 25,437 cubic feet of natural gas

One metric ton of crude oil:

= 2,205 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

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 - A range of petroleum products heavier than gasoline or jet fuel that includes heating 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.

Heavy Oil - A type of high-viscosity crude that may, or may not, naturally flow into a well bore. The limit for heavy oils has been set between 0.1 API gravity and 20.9 API gravity.

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 15 barrels of crude oil or 90 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) or Natural Gas Plant Liquids - Hydrocarbons, such as LPG or natural gasoline, found with natural gas that are recoverable by absorption, cryogenic expansion or other means.

Natural Gas Marketed Production - Gross withdrawals of natural gas from production reservoirs, less gas used for reservoir repressuring, nonhydrocarbon gases removed in treating and processing operations, and quantities vented and flared.

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 ship fuel and 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.



**THE ENERGY YOU NEED.
THE FACTS YOU DEMAND.**



ADVANCING DECISIONS THAT **ADVANCE THE WORLD**

IHS is a leading information company with world-class experts in key areas shaping today's business landscape

Businesses and governments around the world turn to IHS for comprehensive content and expert analysis to navigate risk, develop strategies and to advance high-impact decisions with speed and confidence.

- » Energy & Power
- » Design & Supply Chain
- » Defense, Risk & Security
- » EHS & Sustainability
- » Country & Industry Forecasting
- » Commodities, Pricing & Cost

www.ihs.com/ipaa



IHS | Advancing Decisions
That Advance The World