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UNITED STATES PETROLEUM STATISTICS (2014 DATA)

IPAA is proud to announce the latest addition to its extensive collection of industry publications and statistics. The updated **United States Petroleum Statistics (USPS)** brochure is now available online with expanded data, showcasing detailed information on U.S. exploration and production from 1994-2014.

The latest version of the USPS was published earlier this month by the IPAA economics team, and along with updated data from 2014, this version examines industry activity ranging from the number of oil and natural gas wells drilled, completions, imports, prices, demand, reserves, employment, import costs, wellhead revenues, taxes and more. *New features to this year's USPS include federal leases issued; APD approvals; number of E&P firms; royalty information; trade balance data; and percent of horizontal wells.*

In addition to announcing the publication of the latest USPS, IPAA would like to remind its members of the exclusive resources and publications the association now offers. If you would like hard copies of this year's USPS, have questions, or are looking for any other recent publication, please contact IPAA's Fred Lawrence at flawrence@ipaa.org.

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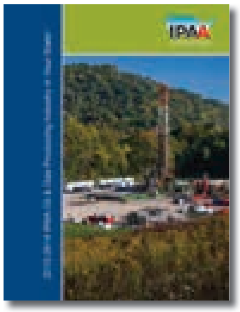

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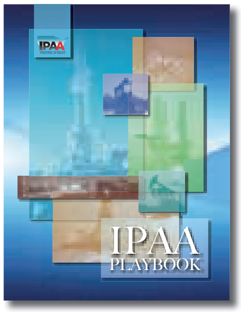

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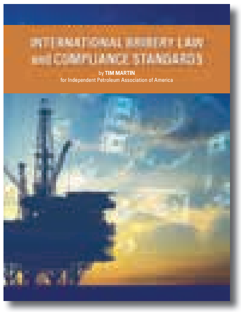

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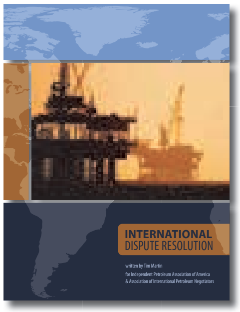

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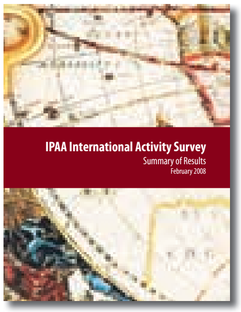

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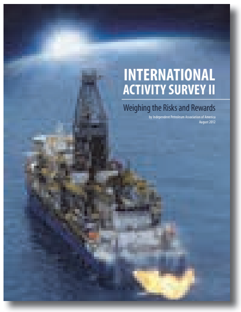

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IHS Global Insight
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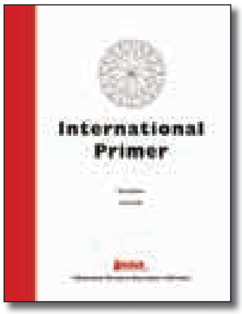

International Primer and Political Risk Supplement

INDEPENDENT PETROLEUM ASSOCIATION OF AMERICA

IPAA represents the American oil and natural gas companies that drill 95% of the nation's wells.

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The Oil & Gas Producing Industry in Your State

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The Oil & Gas Producing Industry in Your State

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2013: The Unconventional Revolution: Transforming America's Energy Future

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Steve Trammel, Research Director and Advisor, IHS

Introduction: After an extended scramble to secure and evaluate leases the unconventional revolution entered a new phase during 2013 with focus on efficient play development and expansion of supplies. The "shale gale" unlocked a 100 year supply for U.S. natural gas. But it also triggered excess production capacity and a collapse of gas prices that forced massive adjustments across the supply chain. Natural gas operations and markets adjusted to abundant low-cost gas and natural gas liquid supplies. Gas well completions decreased by 16 percent during the year but lower 48 states gas production, on the other hand, increased by 1.5 percent as a result of escalating associated gas production from tight oil plays. Driven by surging tight oil production the U.S. continued to lead the world in annual supply growth. Since 2008, U.S. oil production increased by 56 percent - in absolute terms a larger increase than the individual output from eight of the 12 Organization of Petroleum Exporting Countries (OPEC). Moreover, the unconventional oil and gas revolution was an invaluable engine for job creation – 2.1 million jobs by 2012 – and economic growth, delivering $75 billion in federal and state taxes and $283 billion to U.S. GDP during 2012 alone.

In the process of adjusting to maturing shale gas and tight oil plays, the U.S. average rig count (Source: Baker Hughes) dropped by 8.3 percent to 1,761 rigs while total well completions dropped a bit more (7.6 percent) to 41,163 wells. Healthy oil prices, which averaged $94.94 during 2013, continued to drive a continuing shift from natural gas to oil even though natural gas prices increased 34 percent to $3.71 per thousand cubic feet (Mcf) and cold winter temperatures accelerated year-over-year draw of gas from storage. The oil and gas price differential per British Thermal Unit (Btu) was a huge incentive for operators to focus on oil and liquids-rich gas plays. According to Energy Information Administration (EIA) estimates U.S. crude oil production increased 978 thousand barrels of oil per day (Mbo/d) to almost 7.5 MMbo/d during 2013 and total wellhead liquids increased by almost 1.2 million barrels per day (MMb/d) during the year. This was the second consecutive year where U.S. oil and liquids production increased by more than 1 MMb/d. This rivaled the explosive expansion rate of Saudi Arabian oil production from 1970 through 1974.

The emergence of shale gas and tight oil in the U.S. also began to demonstrate how innovation can change the balance of global economic and political power. By the end of 2013, America's shale gas and tight oil already were impacting global energy markets and were increasing America's industrial competitiveness. Endowed with huge new shale gas supplies, U.S. natural gas prices were only about a third of those in Europe, while Asia paid five times as much. Five years ago it was expected that the U.S. would be importing huge volumes of liquefied natural gas (LNG) to make up for anticipated shortfall in domestic gas production. But the U.S. essentially imported no LNG during the year with resultant savings of $100 billion on projected annual imports. Globally, much of the new LNG capacity was developed initially to supply the U.S. market. Instead, global LNG supplies were redirected to other markets. In Europe, new LNG supplies were a welcomed alternative to Russian gas. In Japan, increased LNG supplies were used to generate electricity – a welcomed offset to the shut-down of Japan's nuclear power industry following the disaster at the Fukushima Daiichi nuclear power plant in 2011. Moreover, inexpensive natural gas began to change the balance of competitiveness in the world economy with the advantage going to the U.S. More than $100 billion in new investment was targeted to U.S. manufacturing – reversing, for instance, more than a decade void of new investment in U.S. petrochemical plants. Increasing oil production also cut an additional $100 billion from U.S. energy imports.

The surge in tight oil production also contributed to boosting the U.S. as an energy power. In this regard, the International Energy Agency predicted the U.S. would overtake Saudi Arabia and Russia to become the world's largest oil producer. The North American unconventional revolution also began to influence global geopolitics. China ramped up its policies and initiatives to develop its extensive shale gas resources as a means to reduce its heavy reliance on coal-fired power and the associated impacts on air quality and health problems. Faced with realization that the surge in U.S. oil production added teeth to economic sanctions and limits to its oil exports, Iran was impelled to commence serious negotiations of its nuclear program. Leading Arab and OPEC producing countries also increased their attention to the unconventional revolution, initially as the drop in U.S. oil exports caused them to seek new markets for their oil and secondly to assess their own shale potential – especially as a means to increase domestic natural gas supplies.

The unprecedented success of the unconventional revolution and implications to America's energy future as well as evolving implications to the global energy future were substantiated during 2013. During the year the predominance of the "Big 3" oil plays – Eagle Ford, Bakken-Three Forks and the Permian Basin was confirmed along with the enormous potential of the "Mighty Marcellus" and its emerging companion, Utica Shale, for shale gas. Operators continued to evaluate new shale reservoirs and expanded the use of horizontal wells to boost recoveries from tight conventional oil reservoirs. Deepwater offshore Gulf of Mexico successes also signaled a future rebound of offshore oil production that would add to U.S. oil supplies. But the successes and expansion of drilling into populated areas and into areas with little or no prior oil and gas production also led to heightened public concerns about perceived risks from horizontal drilling and hydraulic fracturing. During the year initiatives to ban hydraulic fracturing in several states and communities were proposed and citizen coalitions pressured regulators to consider new regulations on drilling, completion and production practices. The rise of these initiatives posed new challenges to an industry already dealing with increasing regulatory burdens.

E&P Trends

Drilling Activity: Industry adjustments to maturing shale gas and tight oil developments were reflected in 2013 drilling activity. Even though average West Texas Intermediate (WTI) crude oil prices increased by 4.6 percent to $94.94 per barrel and the average spot gas prices increased by 34.4 percent to $3.71 per Mcf, the average Baker Hughes active rig count dropped by 8.3 percent and total new well completions dropped by almost the same percentage to 41,163 wells. In spite of improved natural gas prices, the shift in emphasis toward oil continued. For 2013, the number of oil well completions was about the same as during 2012 but the number of gas well completions dropped by 17 percent. As industry increased focus on tight oil plays the shift away from vertical wells to horizontal wells also continued. During 2013, vertical well completions dropped by 10 percent while horizontal well completions increased by 12 percent to 18,183. With exception of the Marcellus in the Appalachian Basin, horizontal drilling slumped in dry gas plays such as the Fayetteville Shale in Arkansas and the Haynesville Shale in north Louisiana. Horizontal oil wells, on the other hand, with associated gas production more than offset the decline in horizontal gas wells as drilling surged in liquids-rich plays such as the Denver Basin Niobrara, the Mississippi Lime in Kansas, the Utica Shale in Ohio, Cretaceous tight sands in the Powder River Basin and in the oily Permian Basin. While extending the recovery of post-Macondo offshore drilling, both overall offshore well completions and new-field wildcat wells increased by 34 percent during the year. Traditional conventional new-field wildcat drilling, however, dropped by more than ten percent during 2013 as attention increasingly was devoted to enhancing performance in core tight oil and shale gas assets along with establishing commerciality of several promising emerging plays.

Exploration: The shape of U.S. exploration shifted emphasis toward increasingly important tight oil and liquid-rich gas plays. Noble Energy's efforts to test Devonian shales in Nevada were a highlight for lower48 frontier unconventional exploration. This activity stimulated an uptick in Nevada leasing activity. Industry interest also was directed toward efforts to establish commercial gas production from pre-volcanic shales in western Idaho. Wildcat successes stimulated interest in tight Mississippian Spergen and Cherokee reservoirs in southeastern Colorado. Exploratory wells targeted the Humbug Formation and Gothic Shale in the Paradox Basin and the Conasauga Shale in northwest Georgia. But, apart from the small but promising Colorado successes, no significant new unconventional plays were confirmed during 2013. Exploration also targeted remote onshore conventional reservoirs on the Diablo Platform in West

Texas, on the Pedernal Uplift and Tucumcari Basin in New Mexico, in Alabama's Black Warrior Basin and in the Forest City Basin of Kansas but apparently without commercial success. But the continuing revival of the deepwater Gulf of Mexico was another story. Deepwater Gulf of Mexico exploratory drilling yielded nine discoveries – eight oil and one gas – with estimated 980 MMboe recoverable resources. Miocene sands and tight Lower Tertiary reservoirs were the primary targets. This represented more than a 40 percent increase over 2012 Gulf of Mexico successes. Gulf of Mexico producers also were optimistic about the future as the western and central lease sales generated $1.2 billion in bids for new blocks, and the first Eastern Gulf of Mexico sale since 2008 was announced before year-end. Alaska's North Slope also yielded success in conventional reservoirs. There, two Kuparak discoveries added an estimated 198 MMboe resources.

Oil: With average 2013 WTI oil price at 25 times the BTU equivalent price of natural gas - the steady shift toward oil and liquids-rich gas plays continued through 2013. As a result of this shift, the dominance of the "Big 3" tight oil plays - Eagle Ford Shale, Bakken-Three Forks, and the Permian Basin - was solidified. Having consolidated and drilled prime lease positions in these major tight oil plays, operators began to focus on improving operating efficiencies and performance. Expanding horizontal wells into secondary reservoirs helped to boost recoverable oil resources and asset values.

In the Williston Basin, 1,000 barrel per day tests signaled that commercial production could expand into the 2nd, 3rd and even the 4th Three Forks bench. A secondary sweet spot was established west of the Sanish-Parshall Field in North Dakota and essentially doubled the size of the Bakken -Three Forks sweet spot. In the Permian Basin high volume tests also confirmed multiple pays in the Wolfcamp, including the Wolfcamp "D" or Cline Shale, and 1st, 2nd and 3rd Bone Spring zones. The Denver Basin Niobrara play expanded into three carbonate benches and into the underlying Codell Sand as well. In the Eagle Ford trend operators continued horizontal well successes in underlying and adjacent tight conventional reservoirs such as the Buda, Edwards and Georgetown formations. Operators also extended or defined play boundaries and expanded sweet spots as part of the development process. Play expansion was prominent in the Midland Basin where operators rapidly enlarged the Wolfcamp play boundaries while also testing commerciality of multiple pay zones. In addition to the "Big 3" plays, the Niobrara in the Denver Basin, Mississippi Lime in northwest Oklahoma, the Cleveland-Tonkawa-Marmaton and Granite Wash in the Anadarko Basin and the Wasatch in the Uinta Basin continued to deliver positive results as part of the established tight oil scene.

In addition, several emerging tight oil plays also demonstrated the potential to become important new components of the tight oil scene. Company estimates indicated the South Central Oklahoma Oil Province (SCOOP) Woodford play could recover 2 billion boe or more. A northeastern extension of the Eagle Ford trend into equivalent reservoirs and the Woodbine Sands ("Eaglebine" play) also established materiality as did the wet gas and volatile oil windows in the eastern Ohio Utica (Point Pleasant Shale). In the Powder River Basin a series of horizontal successes in tight Cretaceous Sands highlighted the potential for tight and under-performing conventional reservoirs to boost future U.S. oil supplies. On a smaller scale, promising horizontal well results indicated upside potential for tight sands in the Canyon Granite Wash of the Dalhart Basin in the Texas Panhandle.

Challenges and disappointments also dotted the emerging tight oil landscape. Goodrich Petroleum and Encana continued to evaluate the deep and expensive Tuscaloosa Marine Shale potential along the southern boundary of Mississippi and Louisiana but the commerciality of this play was not confirmed during 2013. A few promising horizontal completions indicated the Caney Shale might have renewed potential in southern Oklahoma but mixed results signaled that the commercial Barnett oil window might be limited to a small area north of the core shale gas production. Mixed results also cast doubts on the commerciality of the Collingwood Shale in Michigan, the Brown Dense limestone in Louisiana and the Heath Shale in Montana. Meanwhile, the Monterey Shale continued to be an enigma as operators were not able to unlock production from complex Monterey source rocks.

THE YEAR IN REVIEW: INTRODUCTION TO 2013 O&NG IN YOUR STATE

Natural Gas: U.S. natural gas continued to adjust to a lower price environment that was triggered by the combination of excess supplies and decreased demand during the 2008 – 2009 recession. Importantly to the adjustments, the same operating efficiencies and performance enhancements described for tight oil also benefitted the major shale gas plays and allowed domestic gas production to grow in spite of a continuing slump in gas-directed drilling. Moreover, many of the expanding tight oil plays produced substantial volumes of associated wet gas which offset part of the decrease in dry gas production. Mixed signals also made it more difficult to predict future gas market trends. According to Baker Hughes gas-directed rig activity fell 31 percent but IHS gas well completions only fell by about 17 percent during 2013. In line with reduced gas drilling, lower 48 states' gas well gas production dropped by almost 1.5 percent but this was offset by increased associated gas production. As a result, U.S. lower 48 states gas production recorded a modest increase during 2013. Moreover, thanks to the revolution in shale gas and tight oil, U.S. lower 48 states gas production increased by more than 23 billion cubic feet per day (Bcfd) since January 2007. Even though the 2013 average spot gas price increased by 34 percent to $3.71 per Mcf, upstream activity continued to shift away from high cost 2nd and 3rd tier gas fairways as operators focused on the best performing sweet spots in U.S. gas plays and on liquids-rich projects. This trend was exemplified by activity in the Eagle Ford play where, according to Baker Hughes, active gas rigs dropped from 68 on January 1, 2013 to 26 on December 31, 2013 while active oil rigs increased from 165 to 202 over the year.

Drilling activity decreased substantially (more than 61 percent) in essentially all of the established U.S. shale gas plays from January 1, 2012 through December 31, 2013. Even leading plays in the shale gas revolution such as the Barnett, Arkoma Woodford, Fayetteville and Haynesville Shales suffered greater than 64 percent slumps in active rigs. Drilling activity even decreased by almost 40 percent in the Marcellus (January 1, 2012 to December 31,2013) as operators reduced activity in dry gas fairways to focus on more rewarding wet gas projects – especially those in southwest Pennsylvania. Improving drilling efficiencies and well performance also contributed to the decrease in gas rigs. Operators could drill more wells and produce more gas per well with fewer rigs.

Gas production trends also reflected the resets in natural gas drilling activity. The Marcellus and Utica Shales in the Appalachian Basin were the gas production winners. During the year, Pennsylvania's gas production increased by 1,059 Bcf, West Virginia's increased by 203 Bcf and Ohio's increased by 88 Bcf. Associated gas boosted North Dakota's gas production by 89 Bcf and contributed to gas production increases in Texas and Oklahoma. Louisiana (Haynesville), Federal Offshore Gulf of Mexico (high cost offshore gas) and Colorado (Piceance Basin tight sands) were the big gas production losers.

Technology: Confronting the challenge of producing multiple stacked pays with horizontal wells was a prime reason for the drilling slow down in some of the major tight oil plays. Operators initiated pilot programs to determine both horizontal and vertical spacing for horizontal wells to multiple reservoirs from a single pad. It also was critical to optimizing drilling and completion procedures and operating practices to reduce costs and to realize the economic benefits of multi-well pads. The steady reduction of drilling time was a prime contributor to cost reductions in key plays. Operators also implemented pipelines to distribute water and developed centralized water purification and storage systems to optimize water handling, also reducing costs. High volume frac operations required companies to optimize materials handling to deliver sand, cement and chemicals to the wellsites. To enhance productivity, companies increased both the length of horizontal laterals and the number of frac stages. They also tuned frac designs to specific reservoirs, and using advances in geosteering, optimized placement of horizontal laterals in each reservoir to maximize borehole exposure to the most favorable reservoir rock.

Above Ground Issues: Public concerns about the safety of hydraulic fracturing and drilling operations in proximity to populated areas increased during the year. Primary concerns were directed toward contamination of ground water, methane emissions and inconveniences such as traffic and noise associated with around the clock drilling operations. Several Colorado communities passed bans on hydraulic fracturing and bans were considered by Texas communities and in several states. The number of law suits and injunctions to delay or stop drilling activity, pipeline construction and other petroleum related activities – especially those on federal lands – also increased.

These actions plus cries for increased regulations and threats, such as a vote by the Democratic Party caucus in Pennsylvania to support a ban on hydraulic fracturing stimulated robust responses from the petroleum industry. The Colorado Oil and Gas Association (COGA) challenged the legality of communities to usurp regulatory authority vested in the state. Individual companies and industry groups also expanded public outreach and education initiatives. These public concerns and related anti-hydrocarbon activities posed new challenges for the industry to deal with the possibility of increased regulatory burdens and managing the so called license to operate as part of their corporate responsibilities.

Production: In spite of reduced drilling activity and adjustments to fine-tune drilling and development activity to maximize returns, IHS production data used in the preparation of this report indicate that U.S. oil production averaged more than 7.4 MMb/d (the best since 1989) and natural gas production set a new record, averaging 73 Bcfd.

Oil: Oil production gains in 2013 at the state level were clearly associated with active tight oil plays. Texas with two of the “Big 3” tight oil plays led with an increase of 199.6 MM barrels and was followed by North Dakota and the Bakken -Three Forks play with an increase of 69.9 MM barrels, Oklahoma (Anadarko Basin tight oil) with an increase of 23.8 MM barrels, Colorado (Niobrara play) with an increase of 16.1 MM barrels and New Mexico (Delaware basin tight oil) with an increase of 15.5 MM barrels.

Heavy oil production, which is only reported for eight states plus Federal Offshore areas, contributed 400.8 MM barrels of oil, an average of almost 1.1 Mb/d, from 68,732 wells during 2013. California was the clear leader in this category with 192.7 MM barrels. Oil with gravity of 20 degrees API or less is tabulated in the heavy oil category.

Natural Gas: Total 2013 gas production as reported by IHS was 29.9 Tcf, an increase of 405 bcf over 2012. This total includes Alaska where 97 percent of the gas is associated with oil production and is mostly reinjected to maintain reservoir pressure in North Slope oil fields. Limiting this summary to gas production in the lower 48 states is more relevant to important shale gas production and to gas volumes that are produced and marketed. Lower 48 states gas production was 26,668 Bcf during 2013, an increase of 405.1 Bcf from 2012. Casinghead or associated gas contributed 4,015.97 Bcf or 15 percent of the total. Importantly, casinghead gas production increased by 771 Bcf over that of 2012. This was due to increased emphasis on developing wet gas and volatile oil windows in tight oil and shale gas plays.

Marginal gas wells contributed almost 2,960 Bcf, an average of 8.1 Bcfd and about 11 percent of U.S. gas production. This represented a decrease of 219 million cubic feet per day (MMcfd) - 2.6 percent less than in 2012. The 375,576 marginal gas wells represented 76 percent of the total reported producing gas wells.

Coalbed methane continued to make an important contribution to U.S. gas production even though development drilling had been all but suspended in several of the prominent western coalbed methane plays. Coalbed methane wells contributed 1,269 Bcf, an average of almost 3.5 Bcfd and about 4.8 percent of U.S. gas production. This represented a decrease of 530 MMcfd - about 13 percent less than in 2012. The 36,350 coalbed methane wells represented 7.4 percent of the total reported producing gas wells.

Concluding Comment

The headline for 2013 upstream oil and gas was the continuing incredible expansion of the tight oil and shale gas revolution. The magnitude of adjustments to operations as industry migrated toward liquids-rich gas and tight oil plays took second billing. By the end of 2013, the unconventional revolution already had made an unprecedented transformation of U.S. oil and gas supplies and was poised to impact global oil and gas markets.

The 2014-2015 Edition –Editor's Desk

2013 – U.S. Production Growth adds Economic Benefits for the U.S. and Stability in Markets Abroad while Encountering Increased Regulatory Challenge on the Home Front

Frederick J. Lawrence - Editor

The year 2013 clearly exemplified the continued role that tight oil and shale could play in both fortifying the U.S. domestic economy in addition to providing increasing strength in regard to the country's oil and natural gas energy trade. The positive interconnectivity from production growth of these resources was becoming apparent both nationally and internationally. Growing oil and natural gas production continued to add new jobs, grow federal and state royalties, taxes and revenues, and reduce the level of imports brought into the country. In addition, the supply growth of U.S. crude indirectly helped stabilize global crude markets that were grinding through several geopolitical events leading to key production outages, especially among OPEC producers. Despite the fact that the U.S. still could not export crude oil, the oil and gas revolution began to impact global markets as well as buttressing the U.S. economic national interest and security. The magnitude of the shale renaissance went far beyond local and regional borders just as inter-related economic sectors in the U.S. began to realize and enjoy some of the numerous supply chain benefits of increased domestic production.

However, the industry's success also created new challenges. Due to anachronistic laws from the 1970s, the U.S. was still unable to export crude oil. Besides limited market access, a host of regulatory measures joined some of the traditional legislative hurdles faced by industry. From the Obama Administration's Climate Action Plan to BLM Rulemaking and draft tax reform from the House Ways and Means Committee, the industry would have to create new solutions to address the evolving political landscape.

Regulatory and Legislative Front

2013 was a busy year for IPAA as regulatory issues continued to assert themselves on a variety of issues. First, on the legislative side, IPAA launched a major tax campaign, Energy Tax Facts, in order to educate lawmakers on the importance of the oil and gas industry's tax provisions. IPAA focused on protecting critical independent producer tax provisions such as 1) the immediate expensing of intangible drilling costs, 2) the percentage depletion reduction and 3) the passive loss exception for working interests. Regarding hydraulic fracturing, Energy In Depth led the charge against Gasland Two, a pseudo "documentary" that trudges up the same debunked claims about the hydraulic fracturing process. In addition, the Department of Energy released a landmark study that confirmed that chemicals from the hydraulic fracturing process did not cause groundwater contamination. IPAA partnered with the Western Energy Alliance to produce a study which demonstrated the impacts of the Bureau of Land Management's hydraulic fracturing rule on federal lands. IPAA also launched Endangered Species Watch, an action-oriented campaign on issues relating to the Endangered Species Act. ESP Watch tracks the activities of groups that use listings and the "sue and settle" strategy to make development difficult for all types of industries. Other issues included the Extractive Industries Transparency Initiative (EITI), SEC Section 1504 (vis-à-vis Dodd-Frank) and a number of environmental regulatory issues under the Clean Air Act (such as Greenhouse Gas Regulation), the Safe Drinking Water Act and Clean Water Act.

Supply & Demand

In 2013, both oil and natural gas production added growth on top of a relatively strong performance in 2012. U.S. oil production was up over 15 percent year-over-year and when natural gas plant liquids (NGPLs) were added to the mix, the growth was still over 13 percent. The lower-48 onshore led the charge with almost 17 percent growth (which equals the similar 17 percent growth achieved in 2012). Domestic crude production grew by 1.0 million barrels per day (Mmb/d) which was a record gain for any year as well as an amount greater than the combined increase in the rest of the world. Marketed natural gas production grew by just over one percent (which followed more impressive five percent growth in the 2011-2012 time period). Overall, total U.S. oil and natural gas production grew by 2.5 Quad British Thermal Units (BTUs) in 2013 or six percent compared to 2012. Meanwhile, petroleum demand (product supplied) grew by 2.6 percent and natural gas consumption grew by 2.4 percent in 2013 according to the EIA. Domestic production of fossil fuels (oil, natural gas, NGPLs and coal) in total supplied 82 percent of U.S. total energy demand in

2013. Oil and natural gas together constituted over 63 percent of total U.S. energy demand (which compares to just over 62 percent in 1985).

In a year which saw increasing divergence in economic growth between various regions and continued geopolitical stress, the ongoing U.S. energy resurgence provided market stability both nationally and globally. Global consumption rose by 1.4 Mmb/d with non-OECD emerging economies accounting for 51 percent. Global supply failed to keep up, rising by just 560,000 b/d. China's net petroleum imports reached 7 Mmb/d, surpassing the U.S. as the world's largest oil importer. The U.S. energy boom was becoming more linked with the global market. Production trends in the U.S. with the shale and tight oil revolutions served a dual purpose of fueling a growing U.S. economy while also helping to add balance and stability to a tightened global market that was attempting to accommodate growing non-OECD production while also dealing with an increasing tempo of geopolitical interruptions. For example, production in Libya fell almost 500,000 b/d, Iran production dropped around 322,000 b/d, Nigerian dropped by 146,000 b/d, Syrian production dropped around 100,000 b/d, Yemen's production by 40,000 b/d and Sudan by 7,000 b/d. The U.S. gains helped provide critical balance to the global marketplace.

Technology Advance, New Data Paradigm and New Records

The dissemination of shale technology from natural gas to oil and liquids continued as drilling efficiencies improved. Associated natural gas became a more important data point as oil, natural gas, and natural gas liquids were typically commingled in a significant portion of the new wells that were horizontally drilled and hydraulically fractured. Increasingly it was becoming more important to focus on the metric of wells drilled rather than rigs drilling per se in terms of measuring production activity. For example, the Barnett shale dropped almost 50 percent of its rigs between 2011 and 2013 but production roughly maintained the same rate as a result of better wells with higher initial production rates and ultimate recoveries. These factors helped propel the U.S. into the lead as the largest global producer of petroleum and natural gas hydrocarbons, ahead of both Russia and Saudi Arabia. Records were also set in regard to natural gas production, NGL production and exports of petroleum products and natural gas.

Reserves Grow

In addition to strong production growth, our country's capacity continues to strengthen based on proven reserves as reported by the EIA. U.S. oil reserves continued to rise for the fifth consecutive year in 2013, growing nine percent and surpassing 36 billion barrels for the first time since 1975. North Dakota unsurprisingly had the largest increase (1.9 billion barrels and 51 percent) in oil reserves due to the robust growth of the Bakken-Three Forks formation in the Williston Basin. The 5.7 billion barrels of proved reserves for North Dakota led the state to surpass the federal Gulf of Mexico in the rankings. Texas, Colorado, Oklahoma and New Mexico also saw large petroleum reserve increases.

U.S. natural gas reserves grew by ten percent (31 Tcf) in 2013 and reached a record 354 Tcf. The reserve growth was driven primarily by the Marcellus shale gas play in the Appalachian Basin with Pennsylvania adding 13.5 Tcf (37 percent) and West Virginia adding 8.3 Tcf (56 percent). These two states collectively supported 70 percent of the net increase in total U.S. natural gas proved reserves. The Barnett and Eagle Ford added 4.4 Tcf to Texas (five percent gain) and other states with large gains included Wyoming, Arkansas, North Dakota, Ohio and Colorado. Shale gas represented 45 percent of all U.S. natural gas reserves in 2013. Shale had created a sea change in natural resources that transformed the geologic potential of the country in the future. However, the supply chain impact on our economy went far beyond the wellsite and impacted regional economies, manufacturing hubs and the trade balance.

Job Creation

At a time when most industries in the country were contracting, the energy industry continued to grow its ranks. According to the Bureau of Labor Statistics state-level data, jobs in the upstream sector grew over four percent, from 580,000 in 2012 to almost 605,000 in 2013. The upstream sector represented almost 30 percent of the entire energy jobs complex and the manufacturing, chemical and primary metals sector among others benefitted from the lower input costs that derived from the shale energy revolution. Between 2007 and 2012, the total U.S. private sector grew by about one percent while the oil and natural gas industry employment increased by 40 percent. Based on one source, oil and gas employment had risen 40 percent since 2007 and a PricewaterhouseCoopers study noted that "the shale revolution may add as much as one million manufacturing workers by 2025, due to benefits from affordable energy and demand for products used to extract the gas." The new energy paradigm reinvigorated U.S. manufacturing competitiveness and productivity at a time when so many countries around the world were growing in their energy dependence on others.

Trade

The impact on the trade balance was another global benefit for the U.S. Production grew above imports for the first time in nearly 20 years. During this year, China actually surpassed the U.S. to become the world's largest importer of crude oil, accounting for almost one-third of growth in global demand. Exports of petroleum products from the U.S. averaged 3.5 Mmb/d in 2013, ten percent more than in 2012. The U.S. trade deficit continued to narrow and by value, crude imports were down 16 percent year-on-year in 2013. Meanwhile energy exports grew in value by eight percent compared to 2012, constituting seven percent of overall U.S. goods exports.

Increased domestic production positively impacted the U.S. energy trade deficit. Oil imports continued to drop – from 8.5 Mmb/d in 2012 to 7.7 Mmb/d in 2013 – even as domestic demand rose from 18.5 Mmb/d to 19 Mmb/d. Imports as a percentage of demand dropped from 57 percent in 2012 to 52 percent in 2013. Imports from OPEC dropped from 4.27 Mmb/d to 3.7 Mmb/d, freeing up more OPEC and Persian Gulf oil for other consuming regions of the world. Even as consumption rose, natural gas imports also continued to fall-from 3.14 Tcf to 2.88 Tcf in 2013. In the eyes of classical economists, Adam Smith and David Ricardo, the shale revolution was helping the U.S. expand its market access as well as its comparative advantage.

In 2013, the production surge in the U.S. played a domestic and global role in that it helped reduce our import dependence as well as supplement production declines and outages elsewhere. Global supply disruptions and strong demand supported high prices throughout the year and geopolitical events reduced production in major producers such as Libya, Nigeria and Iran in addition to a range of smaller producers. Non-OPEC production with increased output from Saudi Arabia played a key role in balancing the market. Non-OPEC production rose over two Mmb/d and the U.S. accounted for an impressive 40 percent of this growth. Developing countries continued to drive world energy demand trends with the non-OECD group growing by 2.2 percent on the year. Countries such as India joined China in raising Asia's demand to new highs. In their International Energy Outlook, the EIA noted that "China, India, and other developing countries in Asia account for 72 percent of the net world increase in liquids fuels consumption while Middle East consumers account for another 13 percent from 2010-2040." Growing demand for oil and natural gas in absolute terms made the strides in U.S. output critical – in terms of both economics and national security.

Through the Oil and Gas Producing Industry in Your State, IPAA and IHS seek to provide an in-depth perspective of the U.S. upstream sector of an industry that plays such a vital role in powering America's economy and national interest.

IPAA would like to thank the IHS team which includes Dr. Pete Stark, Dean Williams, Steve Trammel, Randy Peterson and John Wakefield for their continued efforts in making this publication both comprehensive and unique. IPAA would also like to thank William Brandorff 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.

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 oil 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 and peak natural gas production.

EIA production data is used for determining the value of production, cumulative crude oil wellhead value, state production rankings, state consumption figures, natural gas marketed production and shale gas production. For this issue, the CityGate natural gas price is used to determine value of production instead of wellhead price which is no longer available. State reserve data is from EIA. All price data comes from EIA or individual states.

NGLs and Natural Gas Reserves Reporting: NGL data is no longer provided for the following sections: Cumulative production & new reserves and Petroleum Reserves. Wet natural gas includes natural gas plant liquids and the reporting category of Dry Gas has been replaced with natural gas, wet after lease separation (Total Gas). For more information regarding reserves methodology, please refer to the following EIA report: U.S. Crude Oil and Natural Gas Proved Reserves (April, 10, 2014).

The mineral lease royalties, bonuses and rent data comes from the Office of Natural Resources Revenue. Additional lines items have been added for the rents, bonuses and other revenues that pertain to oil and natural gas in addition to a new Total that includes all oil and gas revenues in addition to rents and bonuses related to oil and gas. We also include a percentage that relates to oil and gas total to the entire mineral total. Federal production shares figured using data from the Office of Natural Resources Revenue (ONRR - Federal Volumes) and production data from the EIA or ONRR.

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).

The Cost of Drilling and Equipping Wells data are no longer available (post-2010).

State Energy Contacts and Federal Organizations

Alabama

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420 HACKBERRY LN
PO BOX 869999
TUSCALOOSA, AL 35486-6999
(205) 349-2852
ogb.state.al.us

Alaska

AK Dept. of Natural Resources
Division of Oil & Gas
550 W 7th AVE STE 1100
ANCHORAGE, AK 99501-3560
(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/

Arizona

Ariz 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.arizonageologicalsoc.org

Arkansas

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

California

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

Colorado

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

Florida

FL Dept. of Env. Protection
Oil & Gas Section
2600 BLAIR STONE RD MS 3500
TALLAHASSEE, FL 32399
(850) 245-8336
www.dep.state.fl.us/water/mines/oil_gas/

Florida Geological Survey
3000 COMMONWEALTH BLVD STE 1
TALLAHASSEE, FL 32303
(850) 617-0300
www.dep.state.fl.us/geology

Illinois

Illinois Department of Natural Resources
Oil and Gas Division
1 NATURAL RESOURCES WAY
SPRINGFIELD, IL 62702-1271
(217) 782-6302
www.dnr.illinois.gov/oilandgas

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
266 N MAIN ST STE 220
WICHITA, KS 67202-1513
(316) 337-6200
www.kcc.state.ks.us

Kentucky

Energy and Environment Cabinet
Division of Fossil Energy Development
500 MERO ST 5th FL
FRANKFORT, KY 40601
(502) 564-5525
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

Department of Natural Resources
PO BOX 30028
LANSING, MI 48909
(517) 284-6367
www.michigan.gov/dnr

Michigan Geological Survey
Department of Geosciences
WESTERN MICHIGAN UNVERSITY
1903 W MICHIGAN AVE
KALAMAZOO, MI 49008-5241
(269) 387-5840
wmich.edu/geologysurvey

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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

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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

Nebraska

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

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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
minerals.nv.gov

New York

NY State Dept. of Env. Cons.
Office of the State Geologist
625 BROADWAY
ALBANY, NY 12230
(518) 473-6262
www.nysm.nysed.gov/nysgs

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

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

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

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Division of Oil and Gas
2045 MORSE RD
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COLUMBUS, OH 43229-6693
(614) 265-6922
oilandgas.ohiodnr.gov

Oklahoma

Interstate O & G Compact Comm.
PO BOX 53127
OKLAHOMA CITY, OK 73152
(405) 525-3556
www.iogcc.state.ok.us

OK Corporation Commission
Oil and Gas Division
2101 N LINCOLN BLVD
OKLAHOMA CITY, OK 73105
(405) 521-2211
www.occ.state.ok.us

Oregon

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

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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
Mineral and Mining Program
2050 W MAIN ST STE 1
RAPID CITY, SD 57702-2493
(605) 394-5317
www.denr.sd.gov

Tennessee

TN Dept. of Env. and Cons. Board of Water Quality, Oil and Gas
312 ROSA L PARKS AVE
3RD FLOOR NASHVILLE ROOM TN TOWER
NASHVILLE, TN 37243
(615) 532-0109
www.tennessee.gov/environment/

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 Gas and Oil
135 HIGHLAND DR
LEBANON, VA 24266
(276) 415-9700
www.dmme.virginia.gov

West Virginia

WV Dept. of Env. Protection
Office of Oil & Gas
601 57th ST SE
CHARLESTON, WV 25304
(304) 926-0499
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
deq.wyoming.gov

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

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Bureau of Ocean Energy Management
1849 C STREET NW
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(202) 208-6474
http://www.boem.gov

Bureau of Safety and Environmental Enforcement
1849 C STREET NW
WASHINGTON, D.C. 20240
(202) 208-6184
www.bsee.gov

Environmental Protection Agency
ARIEL RIOS BLDG
1200 PENNSYLVANIA AVE NW
WASHINGTON, DC 20460
(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
(412) 386-4984
www.netl.doe.gov/research/oil-and-gas

U.S. Department of Energy
Fossil Energy
1000 INDEPENDENCE AVE SW
WASHINGTON, DC 20585
(202) 586-6660
www.energy.gov/fe/

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
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www.doi.gov

U.S. Energy Information Administration
1000 INDEPENDENCE AVE SW
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www.eia.gov

U.S. Geological Survey
USGS National Center
12201 SUNRISE VALLEY DR
RESTON, VA 20192
(888) 275-8747
www.usgs.gov

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
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Western States Petroleum Assoc.
1415 L ST STE 600
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www.wspa.org

Colorado

Colorado Oil & Gas Assoc.
1800 GLENAM PL SUITE 1100
DENVER, COLORADO 80202
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www.coga.org

Western Energy Alliance
1775 SHERMAN ST STE 2700
DENVER, CO 80203
(303) 623-0987
www.westernenergyalliance.org

Florida

Florida Independent Petroleum Producers
PO BOX 230
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(850) 434-6830
www.flippaoil.org

Idaho

Idaho Petroleum Council
PO BOX 984
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www.idahopetroleumcouncil.com

Illinois

Illinois O&G Assoc.
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Ind. Oil Producers Assoc. Tri-State
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www.kioga.org

Eastern Kansas O & G Assoc.
17 S EVERGREEN AVE
CHANUTE, KS 66720
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SW Kansas Royalty Owners Assoc.
209 EAST 6th ST
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www.kyoilgas.org

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Louisiana Landowners Assoc.
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BATON ROUGE, LA 70806
(225) 927-5619
lalandowners.org

Louisiana O & G Assoc.
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Michigan

Michigan Oil & Gas Assoc.
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LANSING, MI 48933
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www.michiganoilandgas.org

Mississippi

MS Ind. Producers & Royalty Owners
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www.mipro.ms

Montana

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www.montanapetroleum.org

Northern Montana O & G Assoc.
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CUT BANK, MT 59427
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New Mexico

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

New Mexico Oil & Gas Assoc.
PO BOX 1864
SANTA FE, NM 87504
(505) 982-2568
www.nmoga.org

New York

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New York State Oil Producers Assoc.
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www.newyorkstateoilproducersassociation.com

North Dakota

North Dakota Petroleum Council
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Ohio O & G Assoc.
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COLUMBUS, OH 43215
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Southeastern Ohio O & G Assoc.
214 1/2 WARNER ST
MARIETTA, OH 45750
(740) 374-3203
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Domestic Energy Producers Alliance
PO BOX 18359
OKLAHOMA CITY, OK 73154
(405) 424-1699
www.depausa.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

OK Independent Petroleum Assoc.
500 NE 4th ST SUITE 200
OKLAHOMA CITY, OK 73104
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www.oipa.com

Petroleum Technology Transfer Council
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Texas

American Assoc. of Prof. Landmen
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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.
PO BOX 132
MIDLAND, TX 79702
(432) 684-6345
www.pbpa.info

Petroleum Equipment & Services Assoc.
2500 CITYWEST BLVD STE 1110
HOUSTON, TX 77042-3049
(713) 932-0168
www.pesa.org

Society of Independent Professional Earth Scientists
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DALLAS, TX 75206
(214) 363-1780
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Texas Alliance of Energy Producers
900 8th ST SUITE 400
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(940) 723-4131
www.texasalliance.org

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West Virginia

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www.iogawv.com

West Virginia Oil and Natural Gas Assoc.
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www.wvonga.com

Wyoming

Petroleum Assoc. of Wyoming
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American Petroleum Institute
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Canadian Assoc. of Petroleum Producers
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BATON ROUGE, LA 70802
(225) 387-3205
www.lmoga.com

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414 S WALNUT ST
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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

U.S. Oil & Gas Assoc.
1101 K ST NW STE 425
WASHINGTON, DC 20005
(202) 638-4400
www.usoga.org

IPAA/PESA
Energy Education Center

A win-win for schools and industry

IPAA
INDEPENDENT PETROLEUM
ASSOCIATION OF AMERICA

PESA
PETROLEUM EQUIPMENT
& SERVICES ASSOCIATION

The IPAA Energy Education Center started with a simple idea almost a decade ago. That idea was to **establish a program with public schools that would make mathematics and science more meaningful and relevant and to address the projected loss of 50 percent of engineering and geosciences professionals due to an aging workforce.**

In 2012, IPAA announced a new partnership with the Petroleum Equipment & Services Association (PESA), a vigorous supporter of the academies since their inception, to continue to expand upon our commitment to **education outreach** through the Houston-based **IPAA/PESA Energy Education Center** with current Executive Director, Anne Ford.

Together with the support of the **Petroleum Academy Education Advisory Board** and critical corporate and individual sponsorships, the center is achieving an unprecedented level of success preparing the ***next generation*** of talented professionals who will lead the oil and gas industry forward.

The center's mission is to provide students with a multidisciplinary advanced academic learning experience in science, mathematics and the emerging technology concepts they require to pursue professional training/degrees in engineering, geology, geophysics and global energy management. The five established IPAA/PESA Petroleum Academies in the Houston and Fort Worth Independent School Districts prepare students to become effective leaders and global ambassadors by introducing them to the importance of teamwork in business dynamics.

FOR MORE INFORMATION OR TO CONTRIBUTE TO OUR EDUCATIONAL PROGRAMS

CONTACT:
Barry Russell, President & CEO, IPAA
brussell@ipaa.org | 202.857.4735

Anne Ford, Executive Director, IPAA/PESA Energy Education Center | aford@ipaa.org
281.798.2334

VISIT: www.ipaa.org/education

Please join us in our continuing efforts to support this industry-changing partnership with education.

Barry Russell
IPAA President & CEO

INDUSTRY SUPPORT FOR THE PETROLEUM ACADEMIES' KEY PROGRAM COMPONENTS

- **Guest Speaker Lecture Series** Students learn from industry professionals about technical and career insight topics.
- **Industry and College Site Visits** Students discover how engineering, geosciences and technology work together in the energy industry through site visits to energy companies, museums and colleges.
- **Industry-related Competitions** Community-based competitions provide students an opportunity to demonstrate their industry knowledge with other high-achieving high schools and college-age students.

  PetroChallenge Competition Students learn to run their own oil and gas company in this interactive computer simulation competition.

  Public Speaking Competition Students research and debate energy industry technical and current affairs topics.

  Shell STEM Showdown Competition An engineering program that introduces underclassmen and their parents to engineering concepts and careers in an interactive way.

ON THE COVER

Top Right: Galen Cobb, IPAA/PESA Petroleum Academy Education Advisory Board Chairman with Jeff Stear, IPAA/PESA Energy Education Center 2015 Teacher of the Year, and Barry Russell, IPAA President and CEO at the IPAA 2015 Midyear Meeting.

Bottom Left: Anna Eastman, Houston ISD Board of Education Trustee, Lori Lambropoulos, Energy Institute High School Principal, Michael Lunceford, Houston ISD Board of Education Trustee with Barry Russell, IPAA President & CEO at ribbon-cutting ceremony for the new Petroleum Academy at the EIHS.

Engineering/Robotics Competitions Students are challenged to learn engineering concepts in a competitive, fun environment.

- **Student Camps** Financial support for engineering/geoscience camps.
- **Externship Program** The capstone component of students' academy participation where students experience a professional workplace setting in an energy company. The program also includes interview preparation, resume writing, professional workplace conduct training and Dale Carnegie training.
- **Especially for Teachers**

Teacher Training Various opportunities for teachers to enhance their industry knowledge.

Lead Teacher/Administrator Stipends Stipends recognizing each Academy Lead Teacher and Administrator.

IPAA/PESA Teacher of the Year Award Annually recognizes outstanding Academy campus personnel.

- **Curriculum Support** Industry software and textbooks; STEM curriculum; journals; and industry on-line materials.
- **Especially for Students**

Community Service Opportunities provided for students to become actively involved in their community.

Energy Clubs Student formed and led.

Scholarships for College Qualified students apply for scholarships.

Alumni Group Graduates are invited to join the student-led group.

IPAA Emerging Leaders Group Academy graduates are invited to join this IPAA networking group.

IPAA/PESA PETROLEUM ACADEMY EDUCATION ADVISORY BOARD

Sherry Stephens Blanks, former president of PESA with Ms. Julissa Enriquez, 2015 valedictorian from IPAA/PESA Petroleum Academy at Charles H. Milby High School, and Galen Cobb, IPAA/PESA Petroleum Academy Education Advisory Board Chairman and Halliburton Vice President.

THE IPAA/PESA PETROLEUM ACADEMIES

Energy Institute High School | Houston ISD | The first energy high school in the nation where the entire school is devoted to energy studies.

Petroleum Academy at Charles H. Milby High School | Houston ISD | The first of the five high school petroleum academies established by IPAA and PESA.

Petroleum Academy at Southwest High School | Fort Worth ISD | The only high school-based petroleum academy in the Dallas/Fort Worth metroplex.

Petroleum Academy at Westside High School | Houston ISD
The first high-school petroleum academy based in Houston's Energy Corridor.

Petroleum Academy at Young Women's College Preparatory Academy | Houston ISD
The first all girls' engineering/geoscience academy at the high school level in the United States.

IPAA/PESA Energy Education Center

IPAA INDEPENDENT PETROLEUM ASSOCIATION OF AMERICA

PESA PETROLEUM EQUIPMENT & SERVICES ASSOCIATION

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- Houston Museum of Natural Science
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- Quicksilver
- PEC Safety
- Pedernales Energy
- Perot Museum of Nature and Science
- PetroSkills
- Railroad Commission of Texas
- Rice University
- Rockwater Energy Solutions
- Seely Oil
- Sloan Consulting
- Society for Independent Earth Scientists
- Society for Petroleum Engineers
- Texas Christian University Energy Institute
- Texas A&M University, College Station
- University of Texas, Austin
- University of Texas, Tyler
- Weatherford
- Women's Global Leadership Conference in Energy & Technology
- World Affairs Council

FOR MORE INFORMATION, PLEASE CONTACT: Barry Russell, President & CEO, IPAA | brussell@ipaa.org | 202.857.4735

State Education Programs

Participating IPAA/PESA High School Energy Magnet Schools:

Texas

Energy Institute High School
1808 SAMPSON ST
HOUSTON, TX 77003-5434
(713) 802-4620
www.houstonisd.org/energy

Charles H. Milby High School
7414 ST LO RD
HOUSTON, TX 77033
(713) 928-7401
www.milby.org

Southwest High School
4100 ALTAMEDA BLVD
FORT WORTH, TX 76133
(817) 874-8000
http://southwest.fwisd.org

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
1906 CLEBURNE ST
HOUSTON, TX 77004-4131
(713) 942-1441
http://houstonisd.org/YWCPA

University Energy and Geology Programs (Non-affiliated):

Alabama

The University of Alabama
Department of Geological Sciences
(205) 348-5095
geology@geo.ua.edu
www.geo.ua.edu

Alaska

University of Alaska - Fairbanks
Mining & Geological Engineering
(907) 474-7388
uaf-cemmingeo-dept@alaska.edu
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(800) 264-1094
adm@uaccm.edu
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rhaney@coloradomtn.edu
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www.glenville.edu/landresources_department.asp

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www.pnge.cemr.wvu.edu/welcome

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www.haskayne.ucalgary.ca/programs/bcomm/concentrations/plma

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svkurilov@tnk-bp.com

Additional Energy Education & Employment Resources

Alaska

Alaska BLM - Campbell Creek Science Center

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ANCHORAGE, AK 99507-2599
(907) 267-1247
(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 95814-5504
(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) 273-3482
inside.mines.edu/Contact-Economics-Business

District of Columbia

Energy In Depth

1201 15th ST NW STE 300
WASHINGTON, DC 20005
(202) 346-8845
www.energyindepth.org

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) 502-8409
Leemu Kufor:work@ferc.gov
www.ferc.gov/careers/student-rel.asp

Louisiana

LSU Center for Energy Studies

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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 43130-1004
(740) 653-2649 Office
(740) 215-3376 Cell
eeco.wildapricot.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

5321 S SHERIDAN RD STE 24
TULSA, OK 74145
(918) 622-1749
www.addc.org

Committee for Sustaining Oklahoma's Energy Resources

500 NE 4th ST SUITE 100
OKLAHOMA CITY, OK 73104
(405) 601-2098
soerok.com

Domestic Energy Producers Alliance

PO BOX 18359
OKLAHOMA CITY, OK 73154
(405) 424-1699
www.depausa.org

Oklahoma Energy Resources Board (OERB)

500 NE 4th ST SUITE 100
OKLAHOMA CITY, OK 73104
(405) 942-5323
www.oerb.com

University of Oklahoma

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

Pennsylvania

Marcellus Shale Coalition

24 SUMMIT PARK DR
PITTSBURGH, PA 15275
(412) 706-5160
marcelluscoalition.org

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 4119
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)

900 RESERVE ST 403 LRC
UW-STEVENS POINT, WI 54481-3897
(715) 346-4770
KEEP@uwsp.edu
www.uwsp.edu/cnr/wcee/keep

Wyoming

Wyoming State Historical Society

PO BOX 247
WHEATLAND, WY 82201
(307) 322-3014
www.wyshs.org

CANADA

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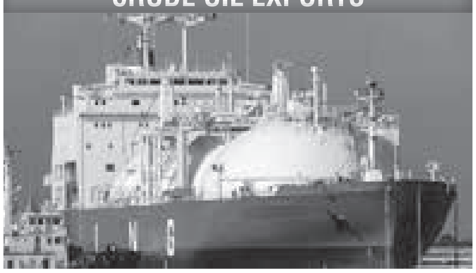
CALGARY AB T2P 2H8 CANADA
(403) 233-1359
www.bp.com/en/global/aplus-for-energy.html

The IPAA 2015 *connection*

With more than **400 corporate members** and **10,000 individual members**, IPAA offers the lowest cost, yet most **efficient** results blending IPAA members' unique strengths with IPAA staff expertise.

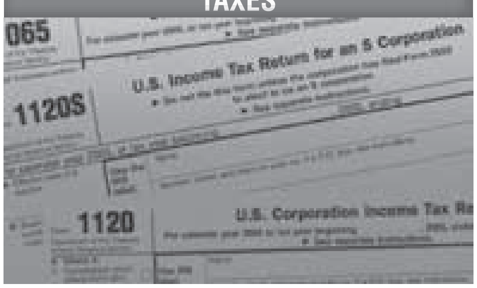
KEY ISSUES

CRUDE OIL EXPORTS



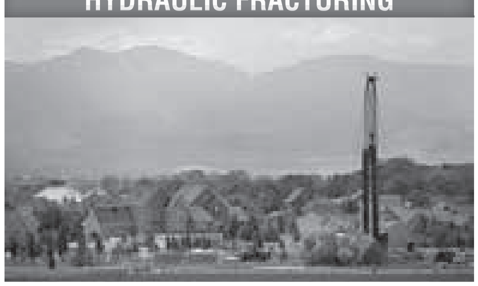
Crude Oil Exports: IPAA is committed to reversing the unnecessary, outdated ban on crude oil exports. This past year, IPAA launched its Crude Oil Exports Working Group with member companies to bring attention to this issue in Washington and press for ending this ban. IPAA will be working with the House and Senate to advance actions that will expand the export of crude oil and condensates. IPAA will continue educating other stakeholders – particularly the Administration.

TAXES



Taxes: Many Republicans in the House and Senate have talked about making tax reform a priority in the 114th Congress. IPAA will continue to educate Congress on the importance of key tax provisions. Intangible drilling costs (IDC), percentage depletion, and the passive loss exclusion are vital to independent producers and energy production in this country, particularly at a time when cash flow is tight due to low oil prices. In the last Congress, IPAA was successful in convincing the House Ways and Means Committee leadership that repeal of the current tax treatment of IDC was counterproductive tax reform. If the new Republican leadership continues to embrace this reality, it will allow for more attention to be devoted to retaining the percentage depletion deduction and the passive loss exclusion. IPAA's Energy Tax Facts (energytaxfacts.org) campaign served the industry well last year when these issues were raised and IPAA will continue to utilize this advocacy tool in 2015.

HYDRAULIC FRACTURING



Bureau of Land Management Hydraulic Fracturing Rule: In March, the Administration released BLM's drilling regulations on federal lands. IPAA is contesting the regulation through litigation in federal court. The regulations are unnecessary, duplicative, and would further drive independent producers from federal lands. The BLM rule will likely be used by environmentalists to attack state regulations as inadequate, thus making this rule the national baseline for all oil and natural gas operations.

ESA

Endangered Species Act: The ESA continues to be a top priority, with hundreds of animal and plant species listings both onshore and offshore threatening development. There are numerous species that IPAA is combatting listing in 2015,

Continued on the inside

MORE INSIDE

- ENERGYINDEPTH®
- Energy Tax Facts
- Endangered Species Watch — Independent Petroleum Association of America
- Declaration of Independents
- DIVESTMENTFACTS.COM

Thank you for your ongoing support of IPAA and our industry. We are proud to note that IPAA membership now exceeds a record **10,000** members, just as the association's activities have reached impressive new levels. Thanks to the dedicated staff and volunteer leadership, IPAA has been able to significantly enhance existing programs and launch new efforts. Following is a look at some of these programs and recent accomplishments:

- **Energy in Depth**
  Since 2009, our rapid-response coalition has fact-checked the claims made against hydraulic fracturing and other industry practices, both at the grassroots level and throughout the national media circuit. In 2012, we launched *Truthland,* a documentary exposing the false claims purported by the film *Gasland*. EID now has staff on the ground in Michigan, Pennsylvania, Ohio, Colorado, California, Illinois, and Texas. EID provides counterbalance to misleading critics—be it legislators, filmmakers, celebrities, academics, the media or professional protesters. Visit energyindepth.org.

- **Defense of Industry's Tax Provisions / Energy Tax Facts**
  IPAA leadership and lobbyists regularly meet with top congressional leaders and tax-writers regarding the industry's tax provisions. IPAA member companies have testified to the House Ways and Means Energy Tax Reform Work Group. IPAA has also authored extensive comments and coordinated advocacy efforts with other trade associations on industry tax provisions. More information on IPAA's efforts is available through our online educational campaign at energytaxfacts.com.

- **Endangered Species Watch**
  Working on Endangered Species Act reform has been and will continue to be a dominant priority for IPAA. The IPAA ESA Task Force is a group of allies and company representatives that IPAA keeps up to date on ESA listings and developments. And the IPAA Endangered Species Watch project monitors and responds to news and information about federal species protection. Please check esawatch.org for the latest.

- **Wildcatters Fund political action committee**
  Our PAC, the largest of any oil and natural gas industry trade group, donated more than $500K and had an 88 percent success record in the 2014 elections (157 of the 179 IPAA Wildcatters Fund candidates were elected to Congress). The

CONNECT WITH IPAA

With much being said about the U.S. energy industry on the internet and in the social media sphere, it is more important than ever to monitor social trends and remain ahead on messaging to the American consumer. IPAA has accepted this challenge by expanding its Internet presence and grassroots, social media footprint. We encourage you to connect with IPAA on social media and help us spread the news about the benefits of American energy:

www.ipaa.org – In 2015, IPAA launched a redesigned homepage with an easy to navigate format. The new website features our most pressing issues upfront: Hydraulic Fracturing, Methane, Offshore, Endangered Species, and the Benefits of American Energy.

Facebook.com/IPAAaccess
IPAA launched its Facebook page in Fall 2014 and we encourage our followers to engage in an open, lively conversation.

Twitter.com/IPAAaccess
IPAA's presence on Twitter is growing daily with over 6,500 followers.

Linkedin.com/companies: IPAA
IPAA also recently enhanced its LinkedIn account and over 800 people have connected with IPAA's company page.

2016 election cycle will provide another challenge to producers. The Wildcatters Fund gives IPAA the ability to develop relationships with future legislators from the beginning and educate them on issues important to independent producers.

- **Regulatory & Litigation Efforts**
Congressional gridlock has resulted in an unprecedented number of regulatory initiatives targeting the oil and natural gas industry. To combat unwarranted regulatory activity, IPAA has enhanced its regulatory response and litigation efforts. IPAA has focused its attention on the Bureau of Land Management's drilling rulemaking, Endangered Species Act abuses, air emissions rules (NSPS Subpart OOOO), expansion of federal jurisdiction through the Clean Water Act, Federal Energy Regulatory Commission initiatives and others.

- **Congressional Call-Up**
Dozens of IPAA member company representatives and cooperating state trade associations join us in Washington every March, meeting with nearly 200 Congressional offices each year, to explain directly how the industry's tax provisions are vital to new investment, how regulatory overreach is hurting their operations, and the industry's record in job creation.

- **GRIT & GASG**
Focusing on industry-wide collaboration and intelligence gathering, Government Relations Industry Team (GRIT) is a meeting of our member companies' government relations representatives. IPAA's Government Affairs Strategy Group (GASG), is a meeting group that includes our member companies' government relations teams and government relations representatives from the national industry trade associations. This kind of collaboration is key to our success in Washington.

- **Declaration of Independents**
Focusing on oil issues, our economic team now produces roughly two dozen reports each year—tracking the global trends in petroleum production, analyzing the geopolitical and economic implications of the shale oil boom, and profiling major U.S. shale plays—just to name a few of the topics. This campaign provides the analytical backbone to IPAA's policy positions that are communicated to the media, policymakers and key coalition allies. For the latest, visit online at oilindependents.org.

- **Emerging Leaders in Energy**
We now offer exclusive memberships and career development opportunities for students and young professionals under the age of 35. Introduced in 2012, the program has already enrolled more than 1,500 members and has hosted events around the country, including Houston, Dallas, Denver, Oklahoma City, and Las Vegas.

- **Divestment Facts**
The costs associated with fossil fuel divestment are likely to be enormous, resulting in the displacement of billions annually from school endowments, hundreds of millions in new compliance and management fees, and new threats to the financial well-being of institutions and future generations of students. Visit our campaign at divestmentfacts.com.

- **Association Council** IPAA's government relations team is coordinating with 25 state trade groups—called the IPAA Association Council—to put together political toolkits, coordinate messages and increase community engagement.

- **Oil and Gas Investment Symposia**
Hundreds of IPAA's member company CEOs gather throughout the year in New York, San Francisco, and Florida to explain to thousands in the financial community the trajectory of their businesses in the year ahead. And in 2013, we expanded this program to include OGIS Toronto, due to our growing partnership with the Canadian oil and natural gas industry and our members' increased activity there. Information on sponsoring and attending is available at ipaa.org/meetings.

- **NAPE**
This industry expo, produced by IPAA, AAPL, AAPG and SEG, is the place to not only network but also to buy and sell prospects. Held twice a year in Houston, NAPE expanded to include NAPE in Denver.

- **Environmental Compliance System**
Because the federal and state governments are becoming more proactive on the regulatory front, we created a tailored compliance system to make sure companies are meeting necessary, updated environmental requirements. This award-winning program is now available in Ohio, West Virginia, Pennsylvania, Louisiana, Arkansas, Texas, Oklahoma, Colorado, Wyoming, and North Dakota.

- **Supply & Demand and International Outreach**
IPAA's *International Survey II—Weighing the Risks and Rewards* was released in 2012, with two international themed receptions held at IPAA's Midyear and Annual meeting—complete with speakers with experience operating in Mexico and Malaysia. Additionally, IPAA has updated the annual *Oil and Gas Producing Industry In Your State* and *US Petroleum Statistics*—available at www.ipaa.org.

- **Environment and Land Access Meetings** IPAA hosts a number of meetings each year to update its members and plan industry strategy on environmental and land access issues. In addition to holding IPAA Committee meetings at the IPAA Midyear and Annual Meetings, IPAA hosts a Strategic Planning Conference on Land Access and Environmental Issues as well other in-person Environment and Safety Committee, Offshore Committee and other regulatory meetings.

Continued from the front cover

including but not limited to the Greater Sage Grouse, the Lesser Prairie Chicken, and the Northern Long-Eared Bat. IPAA has filed formal comments on these species and continues to track listing developments, the opposition's efforts, and the industry's efforts to conserve species through its ESA Watch campaign. IPAA's ESA Watch website, daily news clips, and weekly newsletters are now widely used tools by Capitol Hill and allied organizations. Visit esawatch.org for more information.

METHANE

Methane Regulations: The Environmental Protection Agency (EPA) is moving forward with a number of regulations on the oil and natural gas sector. Among the regulations of greatest concern to the industry is methane emission regulations, which could establish a blanket, national standard for methane emissions. This would affect all new and existing operations for both oil and natural gas. The Department of the Interior (DOI) is also moving forward with Onshore Order No. 9, which will require companies operating on federal lands to cut down on the flaring of natural gas from wells that have been fractured (see below). IPAA and Energy in Depth (energyindepth.org) have highlighted that methane emissions have declined dramatically in recent years, thanks to the industry's commitment to adopting technology to clean the air. IPAA continues to press for reasonable, cost-effective regulation in this area.

OSHA

Safety: IPAA is monitoring the regulations on workplace safety that the Occupational Safety and Health Administration (OSHA) is updating and IPAA will be commenting when these rules affect independent oil and natural gas producers, either directly or through service companies. IPAA filed comments on the silica rule, raising questions about the measures that OSHA could require to limit exposure. This rule is set to be finalized in 2015.

EPA

National Ambient Air Quality Standard for Ozone: The EPA has proposed a revision to the National Ambient Air Quality Standard (NAAQS) for Ozone under a court order that also requires completing its determination by October 2015. The proposal would expand areas subject to new regulations significantly beyond the urban areas that have historically been regulated to areas where substantial oil and natural gas production is underway. Ozone compliance regulations can adversely affect both existing and new operations by not only requiring existing operations to meet regulations that are not cost effective but also requiring emissions from new wells to be offset by reducing unregulated emissions elsewhere. IPAA is working with other oil trade associations and with other industries to challenge the proposed standard.

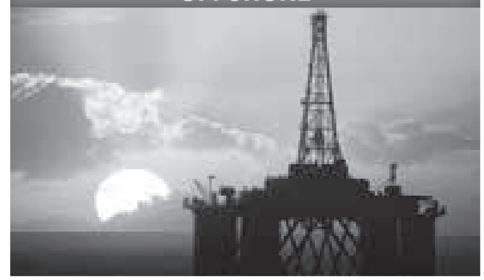
DOT

Crude by Rail: The Department of Transportation (DOT) is another agency that is ramping up regulations on the oil and natural gas industry. In July, DOT released a proposal that toughened the safety regulations for trains carrying crude oil. IPAA has filed comments to recommend these include a phase-in period so that companies can adjust their rail cars and prevent a disruption of the market.

BLM

Onshore Orders: In 2013, the BLM initiated efforts to modify Onshore Orders 3, 4, and 5 which addressed site security, measurement of oil and measurement of natural gas. IPAA submitted comments on BLM's proposal to revise Onshore Orders 3, 4 and 5. Although there may be a need to update equipment standards and reporting procedures involving the Onshore Orders, IPAA is concerned about the sweeping changes discussed by BLM. No final proposal has been issued to date. In 2014, BLM's focus shifted to Onshore Order 9 which addresses venting and flaring. In the first half of 2014, BLM held four listening sessions on its proposal. In response, IPAA submitted comments disagreeing with BLM's approach in May 2014. IPAA argued that this will exacerbate the decline of production on federal land because wells will be shut-in.

OFFSHORE



Offshore: The Interior Department is proposing stricter standards for well control in offshore development set to be released in early 2015. Additionally, the current system for assuring that companies have bonds to remove offshore production facilities has been problematic for a long time for independent producers, that don't have the cash flow to meet the enormous requirements. In November 2014, IPAA submitted comments to the Bureau of Ocean Energy Management's (BOEM) Advance Notice of Proposed Rulemaking (ANPR) designed to update the self-insurance program on risk management for the Outer Continental Shelf (OCS).

EITI

Extractive Industries Transparency Initiative: U.S. implementation of the Extractive Industries Transparency Initiative (EITI) commences in 2015, with the first report to be published using revenues from Calendar Year 2013. EITI is the global coalition of governments, companies, and civil society working together with a goal to improving openness and accountability of revenues from natural resources. DOI is the lead U.S. agency, focusing on royalties, rents and bonuses for production of oil, natural gas, and coal on federal lands, using a multi-stakeholder group (MSG) developing the U.S. implementation plan. In 2015, 45 companies paying $50 million or more have been asked to voluntarily reconcile their payments with those received by DOI's Office of Natural Resources Revenue (ONRR). IPAA, as a member of MSG, will continue to participate in these proceedings and keep members apprised of developments.

Oil And Gas Museums

Alabama

Choctaw Cnty Historical Museum
40 MELVIN RD
GILBERTOWN, AL 26908
(205) 459-3383
www.ohwy.com/al/c/choccohm.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
495 S BREA Blvd
BREA, CA 92821
(714) 256-2283
www.breamuseum.org

California Oil Museum
1001 E MAIN ST
SANTA PAULA, CA 93061
(805) 933-0076
www.caoilmuseum.org

Hathaway Ranch and Oil Museum
11901 E FLORENCE AVE
SANTA FE SPRINGS, CA 90670
(562) 777-3444
www.hathawayranchmuseum.org

Kern County Museum
3801 CHESTER AVE
BAKERSFIELD, CA 93301
(661) 437-3330
www.kcmuseum.org

Olinda Historic Museum & Park
4025 SANTA FE RD
BREA, CA 92823
(714) 671-4447
www.ci.brea.ca.us/index.asp?NID=438

Santa Barbara Maritime Museum
113 HARBOR WAY STE 190
SANTA BARBARA, CA 93109
(805) 962-8404
www.sbmm.org

West Kern Oil Museum
1168 WOOD ST
TAFT, CA 93268
(661) 765-6664
www.seecalifornia.com/museums/west-kern-oil-museum.html

Colorado

Museum of Nature and Science
2001 COLORADO BLVD
DENVER, CO 80205
(303) 370-6000
www.dmns.org

Illinois

Illinois Oil Field Museum
10570 N 150th ST
OBLONG, IL 62449
(618) 592-4664
http://www.illinoisadventuretv.org/index.asp?page=st&site=1024

Museum of Science and Industry
5700 S 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

Kansas

Hill City Oil Museum
801 W MAIN ST
HILL CITY, KS 67642
(785) 421-5621
www.ksmuseums.com/oil-museum/

Independence Historical Museum and Art Center
123 N 8th ST
PO BOX 294
INDEPENDENCE, KS 67301
(620) 331-3515
ihmac.org

Kansas Oil Museum and Hall of Fame
383 E CENTRAL AVE
EL DORADO, KS 67042
(316) 321-9333
www.kansasoilmuseum.org

Norman #1 Museum & RV Park
106 S 1st
NEODESHA, KS 66757
(620) 325-5316
www.travelks.com/listings/Norman-No-1-Oil-Well-and-Museum/1871/

Oil Patch Museum
I-70 AND US 281
RUSSELL, KS 67665
(785) 483-3637
www.russellkshistory.com/html/oil-patch-museum.html

Stevens Cnty Gas & Hist. Museum
905 S ADAMS
HUGOTON, KS 67951
(620) 544-8751
stevenscountyks.com/museum

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/HistoricalResources/VisitMuseums/LouisanaStateOilAndGasMuseum

Michigan

Henry Ford Museum
20900 OAKWOOD BLVD
DEARBORN, MI 48124-4088
(313) 982-6001
www.thehenryford.org/museum/index.aspx

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) 610-2038
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 44676
(330) 567-2501
countylinehistorical.com

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

Ames Astrobleme Museum
109 E MAIN
AMES, OK 73718
(580) 753-4624

Anadarko Basin Museum of Natural History
204 N MAIN ST
ELK CITY, OK 73644
(580) 243-0437

Bartlesville Area History Museum
401 S 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.drumrighthistoricalsociety.org

Frank Phillips Home
1107 CHEROKE AVE
BARTLESVILLE, OK 74003
(918) 336-2491
www.frankphillipshome.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.travelok.com/listings/view.profile/id.3388

Nowata County History 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) 977-6166
www.phillips66museum.com

Sam Noble Museum of Natural History
2401 CHAUTAUQUA AVE
NORMAN, OK 73072-7029
(405) 325-4712
www.snomnh.ou.edu

Tulsa Historical Society
2445 S PEORIA
TULSA, OK 74114
(918) 712-9484
www.tulsahistory.org

Woolaroc Museum
1925 WOOLAROC RANCH RD
BARTLESVILLE, OK 74003
(918) 336-0307
www.woolaroc.org

Pennsylvania

Barbara Morgan Harvey Center for the Study of Oil Heritage
1801 W FIRST ST
OIL CITY, PA 16301
(814) 393-1242
web.clarion.edu/BMHarveyCenter/HCWBuild/Harvey_Center_Web_Site/Home.html

Coolspring Power Musuem
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
(800) 483-6264
www.oilregion.org

Penn-Brad Oil Museum
901 SOUTH AVE
CUSTER CITY, PA 16725
(814) 362-1955
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
1800 N CONGRESS AVE
AUSTIN, TX 78701
(512) 936-8746
www.thestoryoftexas.com

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

Oil and Gas Museums

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
1506 I-45 N FEEDER
CONROE, TX 77305
(936) 539-6873
www.heritagemuseum.us

Houston Museum of Natural Science
5555 HERMANN PARK DR
HOUSTON, TX 77030
(713) 639-4629
www.hmns.org

Hutchinson County Historical Museum
618 N MAIN
BORGER, TX 79007
(806) 273-0130
www.hutchinsoncountymuseum.org

London Museum and Café
10690 S MAIN ST
NEW LONDON, TX 75682
(903) 895-4602
nlsd.net

Luling Oil Museum
421 E DAVIS ST
LULING, TX 78648
(830) 875-1922
www.lulingoilmuseum.org

Million Barrel Museum
400 MUSEUM BLVD
MONAHANS, TX 79756
(432) 943-8401
www.monahans.org/visitor-guide-2

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
1505 W LOOP 254
RANGER, TX 76470-0313
(254) 647-5353
www.txbusiness.com/rhps

Spindletop-Gladys City Boomtown Museum
PO BOX 10070
5550 JIMMY SIMMONS BLVD
BEAUMONT, TX 77710
(409) 880-1750
www.spindletop.org

Square House Museum
503 ELSIE AVE
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
170 W MAIN ST
VAN, TX 75790
(903) 963-5051
vantx.com/venue/van-area-oil-historical-muse-um/

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.hschistory.org

Salt Creek Oil Museum
531 PEAKE ST
MIDWEST, WY 82643
(307) 437-6633
www.wyomingtourism.org/things-to-do/detail/Salt-Creek-Oil-Museum/8498

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.

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

Sources: IHS for wells drilled and EIA for production.

State Rankings

Top Producing Congressional Districts - Crude Oil

Rank	State	District	% of US Prod
1	FOS Gulf &Pacific	7 & 3	29.5415
2	Texas	11	15.1111
3	California	20 & 22	11.3659
4	New Mexico	2	7.6932
5	North Dakota	At Large	3.9122
6	Texas	19	3.6852
7	Texas	15	3.4359
8	Colorado	4	2.6997
9	Oklahoma	3	2.6713
10	Texas	23	2.3453
11	Louisiana	3	2.3361
12	Texas	28	2.2763
13	Wyoming	At Large	2.2602
14	Utah	2	1.9857
15	Texas	13	1.5641
16	Fos Gulf & Pacific	California	1.2153
17	Oklahoma	4	0.9451
18	Texas	25	0.8766
19	Texas	1	0.5219
20	Kansas	1	0.4661
21	Texas	14	0.3787
22	Louisiana	4	0.3502
23	Colorado	3	0.3430
24	Montana	At Large	0.3393
25	Louisiana	7	0.3128
26	Texas	6	0.1996
27	Texas	17	0.1791
28	Texas	22	0.1308
29	New Mexico	3	0.1047
30	Texas	8	0.1045
31	Texas	2 & 8	0.1017
32	Texas	29, 18, 7 & 9	0.0972
33	Texas	2	0.0961
34	Texas	27	0.0809
35	Michigan	1	0.0598
36	Alabama	1	0.0514
37	Louisiana	5	0.0387
38	Texas	23 & 28	0.0264
39	Texas	12	0.0260
40	Oklahoma	2	0.0232
41	Texas	5	0.0182
42	Texas	7 & 3	0.0087
43	Texas	11 & 23	0.0085
44	Texas	17 & 6	0.0067
45	Texas	26	0.0029
46	Mississippi	3	0.0018
47	Mississippi	2 & 3	0.0003
48	Alabama	6 & 7	0.0000
49	Arkansas	2	0.0000
50	Arkansas	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	11.9549
2	Colorado	3	7.7098
3	Louisiana	4	7.6918
4	Texas	1	5.6386
5	Oklahoma	3	5.0601
6	Texas	12, 26, 24 & 6	4.9009
7	New Mexico	3	4.7262
8	Fos Gulf & Pacific	7 & 3	4.5467
9	Texas	13	3.9089
10	Texas	23 & 28	3.7927
11	Texas	17	3.6527
12	Arkansas	2	3.5275
13	Oklahoma	2	2.9251
14	Utah	2	2.4526
15	Texas	12	2.4200
16	Texas	15	2.1783
17	Louisiana	5	2.0489
18	Texas	6	1.5955
19	Texas	26	1.4503
20	Mississippi	3	1.4089
21	Texas	23	1.3620
22	Louisiana	3	1.3577
23	Texas	28	1.3394
24	Colorado	4	1.2846
25	Texas	25	1.0650
26	Kansas	1	1.0192
27	Mississippi	2 & 3	0.8313
28	New Mexico	2	0.7994
29	Texas	11	0.7702
30	Oklahoma	4	0.7640
31	Virginia	9	0.6676
32	Louisiana	7	0.6617
33	Michigan	1	0.4786
34	Alabama	1	0.4709
35	Texas	27	0.4039
36	Texas	17 & 6	0.3903
37	Texas	14	0.3744
38	Alabama	6 & 7	0.3715
39	Arkansas	3	0.3138
40	Texas	8	0.2692
41	Texas	11 & 23	0.2428
42	Texas	2	0.2086
43	Kentucky	5	0.2060
44	Arkansas	4	0.1822
45	Texas	2 & 8	0.1264
46	Texas	29, 18, 7 & 9	0.0943
47	West Virginia	3	0.0779
48	Texas	5	0.0727
49	Texas	22	0.0659
50	Montana	At Large	0.0566

Source: IPAA and IHS.

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

Crude Oil Summary

Year	Production			Imports	Supply		Exports	Demand		Crude Reserves		Price
	Crude Oil	NGL	Total	Total	Other	Total		Domestic	Total	Proved Reserves	New Reserves	Oil Wellhead
					(thous. b/d)					(mill. bbls.)		($/bbl.)
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	6,783	12,915	1,602	21,300	1,802	19,498	21,300	19,121	-524	94.04
2009	5,350	1,910	7,260	11,691	1,844	20,795	2,024	18,771	20,795	20,682	3,312	56.35
2010	5,482	2,074	7,556	11,793	2,184	21,533	2,353	19,180	21,533	23,267	4,352	74.71
2011	5,645	2,216	7,861	11,436	2,571	21,868	2,986	18,882	21,868	26,544	5,111	95.73
2012	6,497	2,408	8,905	10,598	2,192	21,695	3,205	18,490	21,695	30,529	6,097	94.52
2013	**7,458**	**2,606**	**10,064**	**9,859**	**2,659**	**22,582**	**3,261**	**18,961**	**22,582**	**33,371**	**5,260**	**95.99**

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

Year	Production Marketed	Production Dry	Extraction Loss	Imports	Supply Other*	Supply Total	Exports	Consumption	Gas Reserves Proved Reserves	Gas Reserves New Reserves	Price Gas Wellhead ($/Mcf.)
				(Bcf)							
1963	14,747	14,077	670	406	899	15,399	17	13,970	276,151	18,418	.16
1964	15,547	14,824	723	443	866	16,153	20	14,814	281,251	20,447	.15
1965	16,040	15,287	753	456	934	16,703	26	15,280	286,469	21,470	.16
1966	17,207	16,468	739	480	1,116	18,089	25	16,452	289,333	20,355	.16
1967	18,171	17,386	785	564	1,052	19,084	82	17,388	292,908	21,956	.16
1968	19,322	18,494	828	652	1,236	20,476	94	18,632	287,350	13,816	.16
1969	20,698	19,831	867	727	1,329	21,938	51	20,056	275,109	8,482	.17
1970	21,921	21,015	906	821	1,388	23,294	70	21,139	290,746	37,598	.17
1971	22,493	21,610	883	935	1,427	24,052	80	21,793	278,806	10,136	.18
1972	22,532	21,624	908	1,019	1,679	24,400	78	22,101	266,085	9,791	.19
1973	22,648	21,731	917	1,033	1,456	24,297	77	22,049	249,950	6,471	.22
1974	21,601	20,713	887	959	1,624	23,373	77	21,223	237,132	8,501	.30
1975	20,109	19,236	872	953	1,687	21,949	73	19,538	228,200	10,786	.45
1976	19,952	19,098	854	964	1,640	21,767	65	19,946	216,026	7,368	.58
1977	20,025	19,163	863	1,011	1,654	21,884	56	19,521	207,413	12,978	.79
1978	19,974	19,122	852	966	1,817	21,958	53	19,627	208,033	19,425	.91
1979	20,471	19,663	808	1,253	1,620	22,592	56	20,241	200,997	12,221	1.18
1980	20,180	19,403	777	985	1,385	21,822	49	19,877	199,021	16,723	1.59
1981	19,956	19,181	775	904	1,499	21,643	59	19,404	201,730	21,446	1.98
1982	18,582	17,820	762	933	1,647	20,452	52	18,001	201,512	17,288	2.46
1983	16,884	16,094	790	918	1,523	18,590	55	16,835	200,247	14,523	2.59
1984	18,304	17,466	838	843	1,894	20,258	55	17,951	197,463	14,409	2.66
1985	17,270	16,454	816	950	2,005	19,464	55	17,281	193,369	11,891	2.51
1986	16,859	16,059	800	750	1,364	18,234	61	16,221	191,586	13,827	1.94
1987	17,433	16,621	812	993	1,484	19,152	54	17,211	187,211	11,739	1.67
1988	17,918	17,103	816	1,294	1,807	20,278	74	18,030	168,024	-2,517	1.69
1989	18,095	17,311	785	1,382	2,917	21,717	107	19,119	167,116	16,075	1.69
1990	18,594	17,810	784	1,532	2,265	21,693	86	19,174	169,346	19,463	1.71
1991	18,532	17,698	835	1,773	2,699	22,299	129	19,562	167,062	14,918	1.64
1992	18,712	17,840	872	2,138	2,805	22,999	216	20,228	165,015	15,376	1.74
1993	18,982	18,095	886	2,350	3,105	23,690	140	20,790	162,415	15,189	2.04
1994	19,710	18,821	889	2,624	2,598	24,205	162	21,247	163,837	19,744	1.85
1995	19,506	18,599	908	2,841	3,333	24,927	154	22,207	165,146	19,275	1.55
1996	19,812	18,854	958	2,937	3,725	25,669	153	22,610	166,474	21,456	2.17
1997	19,866	18,902	964	2,994	3,641	25,694	157	22,737	167,223	19,960	2.32
1998	19,961	19,024	938	3,152	2,975	25,310	159	22,246	164,041	15,538	1.96
1999	19,805	18,832	973	3,585	2,585	25,166	163	22,405	167,406	22,293	2.19
2000	20,198	19,182	1,016	3,782	3,053	26,261	244	23,333	177,427	29,240	3.68
2001	20,570	19,616	954	3,977	2,110	26,076	373	22,239	183,460	25,812	4.00
2002	19,885	18,928	957	4,015	2,734	26,193	516	23,027	186,946	22,839	2.95
2003	19,974	19,099	876	3,944	2,526	26,249	680	22,277	189,044	21,523	4.88
2004	19,517	18,591	927	4,259	2,703	26,407	854	22,403	192,513	22,637	5.46
2005	18,927	18,051	876	4,341	2,624	25,745	729	22,014	204,385	30,330	7.33
2006	19,410	18,504	906	4,186	1,933	25,347	724	21,699	211,085	25,245	6.39
2007	20,196	19,266	930	4,608	2,363	27,059	822	23,104	247,789	47,691	6.25
2008	21,112	20,159	953	3,984	2,474	27,580	963	23,277	255,035	28,661	7.97
2009	21,648	20,624	1,024	3,751	1,850	27,297	1,072	22,910	283,879	51,381	3.67
2010	22,382	21,316	1,066	3,741	2,321	28,515	1,137	24,087	317,647	56,992	4.48
2011	24,036	22,902	1,134	3,469	1,528	29,405	1,506	24,477	348,809	7,910	5.63
2012	25,283	24,033	1,250	3,138	1,192	29,982	1,619	25,538	322,670	-42	4.73
2013	**25,691**	**24,334**	**1,357**	**2,883**	**2,107**	**30,896**	**1,572**	**26,168**	**353,994**	**57,791**	**4.88**

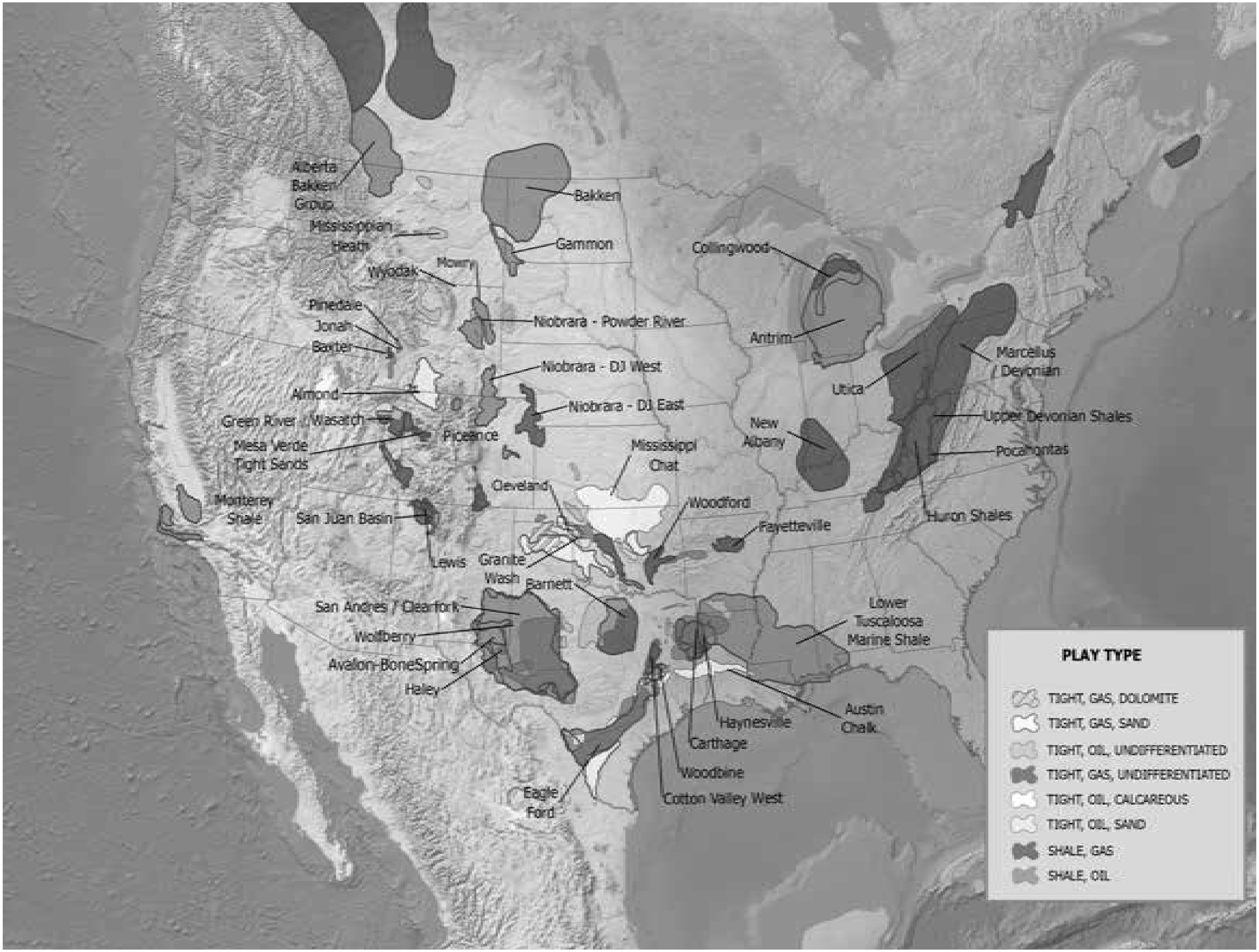
Sources: Energy Information Administration.
Note: Reserves estimated as of December 31 each year.
City Gate price used post-2010 as Wellhead price no longer available.
**Other natural gas supply includes supplemental gaseous fuels, net storage withdrawals, and a statistical balancing item.*

Drilling Summary

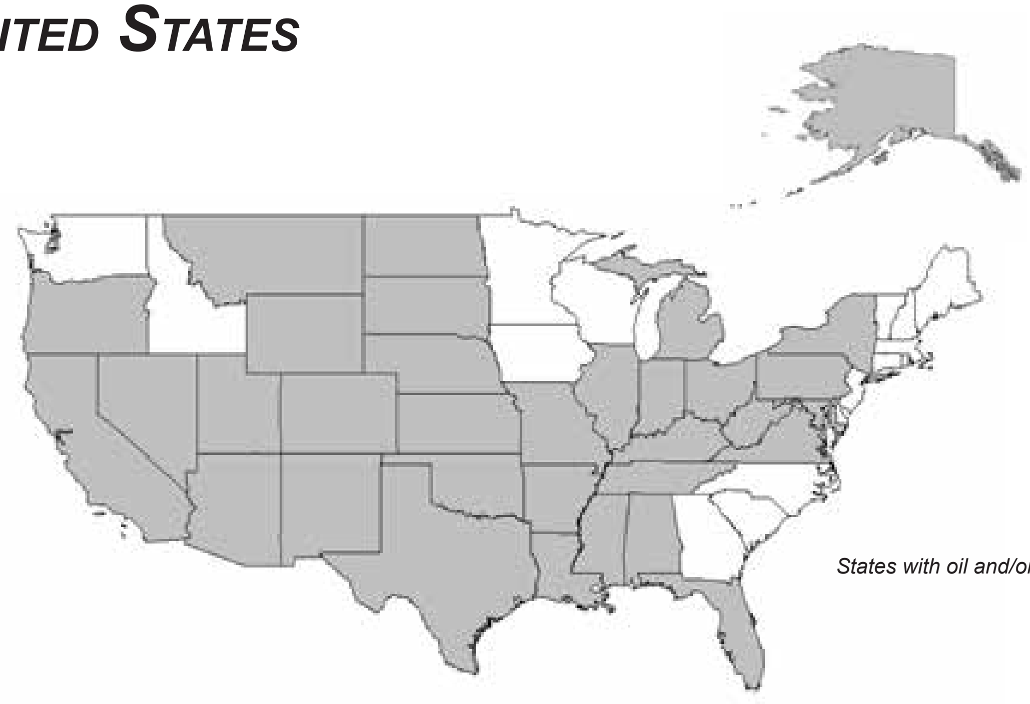
Year	Seismic Crews	Rotary Rigs	Exploratory Wells		Total Well Completions					Footage
	Working	*Active*	*New-Field Wildcats*	*Total Exploratory*	*Oil Wells*	*Gas Wells*	*Dry Wells*	*Service Holes*	*Total Wells*	*Total Drilled (mill. ft.)*
1963	3,966	1,500	6,570	10,664	20,288	4,751	16,347	2,267	43,653	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	8,236	672	27,988	134.5
1990	1,493	1,010	2,685	5,241	12,839	11,246	8,245	802	32,330	156.0
1991	1,251	860	2,195	4,513	12,588	9,793	7,481	1,070	29,862	145.0
1992	847	721	1,762	3,468	9,402	8,163	5,862	989	23,427	119.9
1993	952	755	1,683	3,483	8,856	9,839	6,096	716	24,791	133.5
1994	1,087	775	1,618	3,624	7,348	9,375	5,096	669	21,819	125.0
1995	1,253	723	1,605	3,152	8,248	8,082	4,814	885	21,144	117.2
1996	1,307	779	1,676	3,021	8,836	9,027	4,890	791	22,753	126.4
1997	1,336	943	1,757	3,166	11,206	11,498	5,874	1,017	28,578	161.2
1998	1,566	827	1,478	2,483	7,682	11,639	4,761	838	24,082	137.2
1999	1,125	625	1,244	1,924	4,805	12,027	3,550	478	20,382	102.9
2000	63*	918	1,511	2,286	8,090	17,051	4,146	930	29,287	144.4
2001	61	1,156	1,786	3,142	8,888	22,072	4,598	-	35,558	180.1
2002	54	830	1,455	2,384	6,775	17,342	3,754	-	27,871	145.2
2003	40	1,032	1,738	2,644	8,129	20,722	3,982	-	32,833	177.2
2004	43	1,192	2,015	3,404	8,789	24,186	4,082	-	37,057	204.3
2005	52	1,381	2,185	4,142	10,779	28,590	4,653	-	44,022	240.3
2006	55	1,649	2,469	4,649	13,385	32,838	5,206	-	51,429	282.7
2007	63	1,769	2,496	5,184	13,371	32,719	4,981	-	51,071	301.5
2008	76	1,880	2,347	4,957	16,633	32,264	5,423	-	54,302	334.1
2009	75	1,086	1,383	2,866	11,190	18,088	3,525	-	32,803	231.6
2010	65	1,541	1,420	2,840	15,753	16,696	4,162	-	36,611	239.2
2011	66	1,875	1,281	2,609	19,468	13,220	4,081	-	36,769	280.0
2012	NA	1,919	1,424	2,666	26,713	10,256	4,462	-	41,431	343.9
2013	**NA**	**1,761**	**1,349**	**2,197**	**25,632**	**7,514**	**3,805**	**-**	**36,951**	**325.9**

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 http://www.eia.gov/dnav/pet/pet_crd_seis_s1_m.htm.*

Emerging Shale Plays (2013)



United States



States with oil and/or gas production

Background Information

States

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

First year of production

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

Year and amount of peak production

Crude oil — 3,517,450 thous. bbls.	1970
Natural gas — 25,562,232 MMcf	2013

Deepest producing well (ft.)

Crude oil (Federal Offshore)	37,165
Natural gas (Louisiana)	36,120

Year and depth of deepest well drilled (ft.)

2010 (Federal Offshore)	37,165

Cumulative number of total wells drilled

(as of 12/31/13 - excluding service wells)

Oil wells	1,909,448	48%
Gas wells	935,592	24%
Dry holes	1,122,452	28%
Total	3,967,492	100%

Cumulative crude oil wellhead value

(as of 12/31/13 - thous. $) $3,241,379,357

Cumulative production & new reserves

(as of 12/31/13)

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	237,318	56,422	293,740	1,562,064
Production	202,802	41,990	244,792	1,225,511

Value of Oil and Gas

Average wellhead/City Gate price

(2013)

Crude oil ($/bbl.)	$95.99
Natural gas ($Mcf)*	$4.88

Wellhead/City Gate value of production

(2013 in thous. $)

Crude oil	$261,167,864
Natural gas*	$124,743,692
Total	$385,911,556

Average natural gas price

(2013 $/Mcf)

Residential consumers	$10.32
Commercial consumers	$8.08
Industrial consumers	$4.64
Electric utilities	$4.49
City Gate	$4.88

Severance taxes paid $16,058,712

(2013 in thous. $)

Top 10 producing counties/fields

(2013 on a BOE basis)

County	State	% US Prod
Sublette	WY	2.68
Green Canyon	FOS	2.41
Beechey Point	AK	2.34
De Soto	LA	2.17
Mississippi Canyon	FOS	2.14
Tarrent	TX	2.07
Bradford	PA	1.91
Susquehanna	PA	1.85
Garfield	CO	1.75
Kern	CA	1.72

*City Gate price used for natural gas.

2013 Industry Statistics

Number of wells drilled

	Exploratory	Development	Total
Oil	889	29,152	30,041
Gas	299	8,683	8,982
Dry	1,122	3,844	4,966
Total	2,310	41,679	43,989

Total footage drilled
(thous. ft.)

	Exploratory	Development	Total
Oil	7,048	237,110	244,158
Gas	2,832	97,316	100,149
Dry	5,946	20,961	26,907
Total	15,826	355,387	371,214

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

New-field wildcats drilled	1,336
Footage (thous. ft.)	9,505

Average rotary rigs active	1,761

Permits	71,012

Worldwide rank

	Crude Oil	Natural Gas
Wells drilled	1st	1st
Production	3rd	1st
Reserves (2013)	9th	1st

Number of operators	15,070

Number of producing wells
(12/31/13)

Crude oil	468,532
Natural gas	488,297
Total	956,829

Average production

Crude oil (thous. b/d)	6,687
NGL (thous. b/d)	748
Natural gas (MMcf/d)	62,337

Total production

Crude oil (YTD bbls, in thous.)	2,440,663
Natural gas (YTD MMcf)	22,753,822

Natural gas marketed production

(MMcf)	25,562,232

Shale gas production	11,415 Bcf

Average output per producing well

Crude oil (bbls.)	5,209
Natural gas (Mcf)	46,597

Coalbed methane (YTD MMcf)	1,269,101
Oil Wells	20
Gas Wells	36,350
Daily Average (MMcf) / Well	3,476.99

Heavy oil (av. bbls/day, in thous.)	400,779
Wells	68,732
Av. bbls per day (in thous.)	1,098
Av. bbls per well	5,831

2013 Latest Available Data

Petroleum reserves
(as of 12/31/13) (mill. bbls.)

	Crude Oil	NGL	Total
New reserves	5,846	NA	5,846
Production	2,729	NA	2,729
Net annual change	3,117	NA	3,117
Proved reserves	36,520	NA	36,520

Natural gas reserves
(as of 12/31/13 Bcf)

	Associated Dissolved	Non-Associated	Total Gas
New reserve	9,449	48,343	57,791
Production	4,114	22,353	26,467
Net annual change	5,334	25,990	31,324
Proved reserves	58,490	295,504	353,994

Marginal oil wells

Producing marginal wells	398,922
Crude oil production in bbls. (thous.)	395,771
Crude oil production b/d (thous.)	1,084

Marginal natural gas wells
(as of 12/31/13)

Producing marginal wells	375,576
Natural gas production (MMcf)	2,959,767

Mineral lease royalties, bonuses & rent

Oil	$7,342,120,520
Natural Gas	$1,508,090,863
Rent, Bonuses & Other	$3,218,210,033
Total Oil and Gas Revenues	$12,068,421,416
Total Federal Reported Revenues	$13,416,352,539
Oil and Gas Percent of Total	90%

Federal lands production shares*

Oil	19%
Natural Gas	14%
Combined on BOE basis	16%

Horizontal wells drilled	18,183
Directional wells drilled	4,736
Vertical wells drilled	20,809

Natural gas vehicle fuel demand & fueling stations

Natural gas vehicle demand	33,624 Mmcf
CNG stations	1,432
LNG stations	105
LPG stations	2,941

Average number of employees

Oil and natural gas extraction	596,640
Refining	99,810
Transportation	118,917
Wholesale	167,794
Retail	861,950
Pipeline construction	131,915
Oilfield machinery	69,110
Total petroleum industry	2,046,136

Source: For specific methodology and source details, please see pages 13 and 140
**NGLs are not included*

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 — 599,484 thous. bbls.	2002
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 (2008)	10,141
Well depth (2013)	37,165

Cumulative number of total wells drilled

(as of 12/31/13 - excluding service wells)

Oil wells	22,890	33%
Gas wells	28,353	40%
Dry holes	19,330	27%
Total	70,573	100%

Cumulative crude oil wellhead value

(as of 12/31/13 - thous. $) $597,811,634

Cumulative production & new reserves

(as of 12/31/13)

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	25,689	4,999	30,688	154,359
Production	18,569	3,248	21,817	76,976

Value of Oil and Gas

Average wellhead/City Gate price

(2013)

Crude oil ($/bbl.)	$102.83
Natural gas ($Mcf)*	$4.88

Wellhead/City Gate value of production

(2013 in thous. $)

Crude oil	$48,991,605
Natural gas*	$6,523,096
Total	$55,514,701

Federal Revenues

(2013, in thousands $)

Bonuses and other revenues	$2,710,190.5
Rents	$257,679.0
Royalties	$6,097,214.3
Total	$9,065,083.8

Top 10 producing fields

(2013 on a BOE basis)

Field	% Production State	% Production US
Green Canyon	25.62	2.41
Mississippi Canyon	22.73	2.14
Alaminos Canyon	5.34	0.50
Garden Banks	4.28	0.40
Viosca Knoll	3.37	0.32
Santa Cruz Area	2.59	0.24
Eugene Island	2.54	0.24
Ship Schoal	2.38	0.22
Main Pass	2.24	0.21
South Timbalier	2.07	0.19
West Delta	1.99	0.19

City Gate price used for natural gas.

2013 Industry Statistics

Number of wells drilled

	Exploratory	Development	Total
Oil	0	131	131
Gas	1	21	22
Dry	45	60	105
Total	46	212	258

Total footage drilled
(thous. ft.)

	Exploratory	Development	Total
Oil	0	1,089	1,089
Gas	0	208	208
Dry	697	453	1,150
Total	697	1,750	2,447

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

New-field wildcats drilled	45
Footage (thous. ft.)	697
Average rotary rigs active	57
Permits	611

Statewide rank

	Crude Oil	Natural Gas
Wells drilled	18th	16th
Production	2nd	7th
Reserves (2013)	3rd	10th

Number of producing wells
(12/31/13)

Crude oil	3,431
Natural gas	1,649
Total	5,080

Average production

Crude oil (thous. b/d)	1,206
NGL (est.)	104
Natural gas (MMcf/day)	2,404

Total production

Crude oil (YTD bbls, in thous.)	440,020
Natural gas (YTD MMcf)	877,507

Natural gas gross withdrawals

(MMcf)	1,354,151

Average output per producing well

Crude oil (bbls.)	128,248
Natural gas (Mcf)	532,145

Producing well depth

	Oil Wells	Gas Wells
Shelf (wd <1,000 ft)	2,866	1,555
Deep (wd 1,000-4,999 ft)	475	78
Ultra Deep (wd >5,000 ft)	90	16
Total	3,431	1,649

Number of operators*

Number of operators*	91
Producing oil**	86
Producing natural gas**	93

2013 Latest Available Data

Petroleum reserves
(as of 12/31/13) (mill. bbls.)

	Crude Oil	NGL	Total
New reserves	483	NA	483
Production	489	NA	489
Net annual change	-6	NA	-6
Proved reserves	5,276	NA	5,276

Natural gas reserves
(as of 12/31/13) (Bcf)

	Associated Dissolved	Non-Associated	Total Gas
New reserves	228	-261	-33
Production	562	691	1,253
Net annual change	-334	-952	-1,286
Proved reserves	5,530	3,037	8,567

2013 Lease Statistics**

G&G permits	49
Platform installations	17
Platform removals	222
Platforms in place	2,329

Lease characteristics

Number of Active Leases	6,421
Gulf of Mexico	5,772
Pacific	43
Alaska	606

Number of producing leases	1,058
Gulf of Mexico	1,012
Pacific	43
Alaska	3

Number of non-producing leases	5,363
Total Offshore blocks	69,780
Total Offshore acres	381,641,990

Mineral lease royalties, bonuses & rent

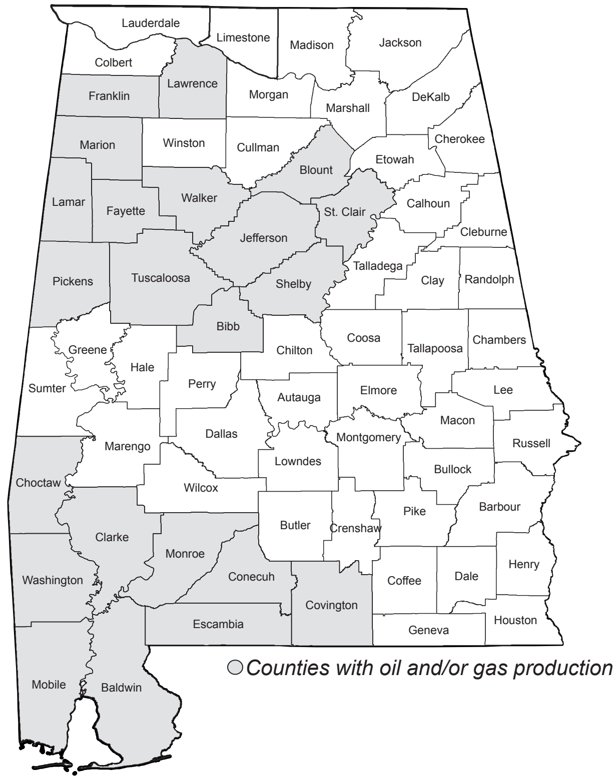
Oil	$5,597,189,763
Natural Gas	$500,024,503
Rent, Bonuses & Other	$2,967,869,546
Total Oil and Gas Revenues	$9,065,083,812
Total Federal Reported Revenues	$9,065,571,948
Oil and Gas Percent of Total	100%

Federal lands production shares

Oil	100%
Natural Gas	100%
Combined on BOE basis	100%

Source: For specific methodology and source details, please see pages 13 and 140
** IHS*
*** BOEM and Quest Offshore*

ALABAMA



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 12/31/13 - excluding service wells)

Oil wells	1,714	11%
Gas wells	9,567	59%
Dry holes	4,938	30%
Total	16,219	100%

Cumulative crude oil wellhead value

(as of 12/31/13 - thous. $)	$16,261,672

Cumulative production & new reserves

(as of 12/31/13)

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	554	459	1,013	7,806
Production	530	404	934	8,517

Value of Oil and Gas

Average wellhead/City Gate price

(2013)

Crude oil ($/bbl.)	$103.10
Natural gas ($Mcf)*	$4.65

Wellhead/City Gate value of production

(2013 in thous. $)

Crude oil	$1,071,312
Natural gas*	$912,916
Total	$1,984,228

Average natural gas price

(2013 $/Mcf)

Residential consumers	$15.47
Commercial consumers	$12.35
Industrial consumers	$4.98
Electric utilities	$4.14
City Gate	$4.65

Severance taxes paid $116,151

(2013 in thous. $)

Top 10 producing counties

(2013 on a BOE basis)

County	% Production State	US
Tuscaloosa	25.53	0.16
Baldwin	17.82	0.11
Mobile	16.20	0.10
Conecuh	12.91	0.08
Escambia	10.73	0.07
Jefferson	8.27	0.05
Walker	1.81	0.01
Pickens	1.35	0.01
Choctaw	1.23	0.01
Monroe	1.00	0.01

City Gate price used for natural gas.

2013 Industry Statistics

Number of wells drilled

	Exploratory	Development	Total
Oil	12	40	52
Gas	0	60	60
Dry	28	20	48
Total	40	120	160

Total footage drilled
(thous. ft.)

	Exploratory	Development	Total
Oil	140.98	327.58	468.56
Gas	0	141.68	141.68
Dry	285.92	150.16	436.08
Total	426.90	619.42	1,046.32

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

New-field wildcats drilled	29
Footage (thous. ft.)	299.80

Average rotary rigs active	5

Permits	222

Statewide rank

	Crude Oil	Natural Gas
Wells drilled	25th	15th
Production	15th	16th
Reserves (2013)	18th - Tied	20th

Number of operators	78

Number of producing wells
(12/31/13)

Crude oil	628
Natural gas	6,196
Total	6,824

Average production

Crude oil (thous. b/d)	23.9
NGL (thous. b/d)	4.6
Natural gas (MMcf/d)	485.5

Total production

Crude oil (YTD bbls, in thous.)	8,720
Natural gas (YTD MMcf)	177,206

Natural gas marketed production

(MMcf)	196,326

Average output per producing well

Crude oil (bbls.)	13,885
Natural gas (Mcf)	28,600

Coalbed methane (YTD MMcf)	84,616
Oil Wells	3
Gas Wells	5,823
Daily Average (MMcf) / Well	231.82

Heavy oil (YTD Bbls, in thous.)	NA
Wells	NA
Av. bbls per day (in thous.)	NA
Av. bbls per well	NA

2013 Latest Available Data

Petroleum reserves
(as of 12/31/13) (mill. bbls.)

	Crude Oil	NGL	Total
New reserves	-1	NA	-1
Production	10	NA	10
Net annual change	-11	NA	-11
Proved reserves	58	NA	58

Natural gas reserves
(as of 12/31/13) (Bcf)

	Associated Dissolved	Non-Associated	Total Gas
New reserves	-45	-406	-451
Production	9	174	183
Net annual change	-54	-580	-634
Proved reserves	46	1,624	1,670

Marginal oil wells

Producing marginal wells	381
Crude oil production in Bbls. (thous.)	807
Crude oil production Bbls./d (thous.)	2

Marginal natural gas wells
(as of 12/31/13)

Producing marginal wells	5,728
Natural gas production (MMcf)	71,042

Mineral lease royalties, bonuses & rent

Oil	$3,572,680
Natural Gas	$10,946,087
Rent, Bonuses & Other	$246,325
Total Oil and Gas Revenues	$14,765,091
Total Federal Reported Revenues	$18,794,015
Oil and Gas Percent of Total	79%

Federal lands production shares

Oil	<1%
Natural Gas	10%
Combined on BOE basis	7%

Horizontal wells drilled	14
Directional wells drilled	48
Vertical wells drilled	98

Natural gas vehicle fuel demand & fueling stations

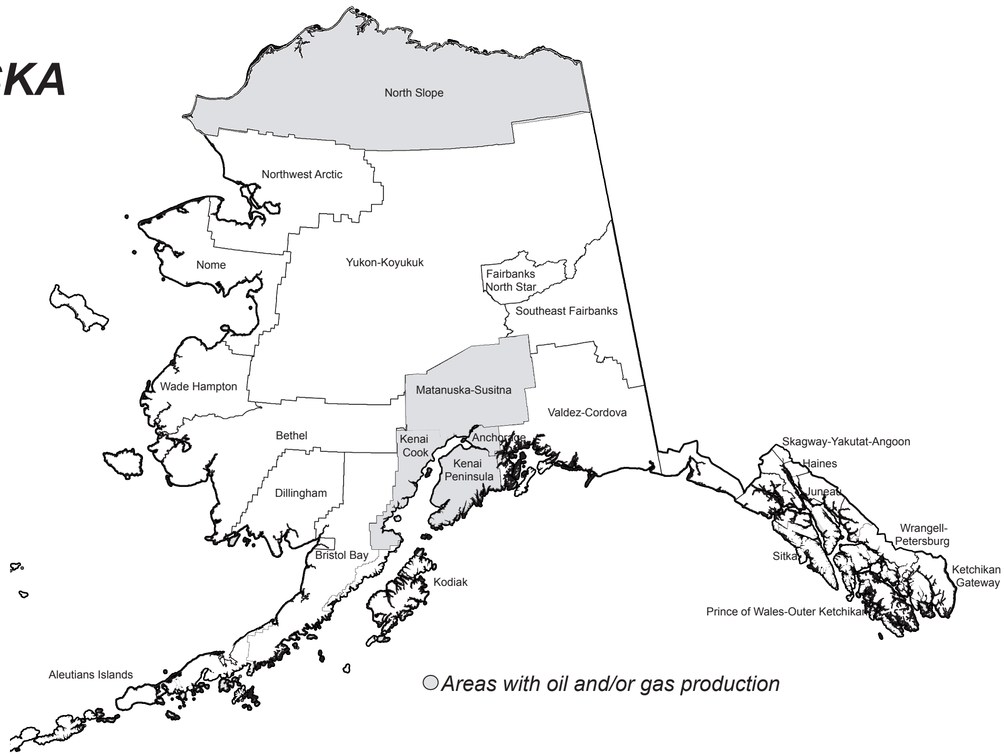
Natural gas vehicle demand	216 Mmcf
CNG stations	24
LNG stations	1
LPG stations	101

Average number of employees

Oil and natural gas extraction	1,831
Refining	1,418
Transportation	2,946
Wholesale	2,744
Retail	17,790
Pipeline construction	1,260
Oilfield machinery	0
Total petroleum industry	27,989

Source: For specific methodology and source details, please see pages 13 and 140.

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	26,350
Natural gas	18,091

Year and depth of deepest well drilled (ft.)

2009	26,350

Cumulative number of total wells drilled

(as of 12/31/13 - excluding service wells)

Oil wells	5,372	78%
Gas wells	382	6%
Dry holes	1,084	16%
Total	6,838	100%

Cumulative crude oil wellhead value

(as of 12/31/13 - thous. $) $366,967,222

Cumulative production & new reserves

(as of 12/31/13)

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	20,458	497	20,955	22,215
Production	17,151	429	17,580	14,067

Value of Oil and Gas

Average wellhead/City Gate price

(2013)

Crude oil ($/bbl.)	$95.79
Natural gas ($Mcf)*	$6.02

Wellhead/City Gate value of production

(2013 in thous. $)

Crude oil	$18,004,114
Natural gas*	$2,035,856
Total	$20,039,969

Average natural gas price

(2013 $/Mcf)

Residential consumers	$8.85
Commercial consumers	$6.02
Industrial consumers	$8.16
Electric utilities	$4.73
City Gate	$6.02

Severance taxes paid $4,050,300

(2013 in thous. $)

Top producing areas

(2013 on a BOE basis)

County	Areas State	% Production US
Beechey Point	71.34	2.33
Harrison Bay	16.25	0.53
Kenai Offshore	3.37	0.11
Kenai	3.00	0.10
Tyonek	2.03	0.07
Harrison Bay Offshore	1.24	0.04
Beechey Point Offshore	1.16	0.04
Tyonek Offshore	0.85	0.03
Seldovia	0.62	0.02
Barrow	0.13	<0.01

City Gate price used for natural gas.

2013 Industry Statistics

Number of wells drilled

	Exploratory	Development	Total
Oil	3	112	115
Gas	2	3	5
Dry	8	7	15
Total	13	122	135

Total footage drilled
(thous. ft.)

	Exploratory	Development	Total
Oil	25.00	639.04	664.03
Gas	15.70	15.87	31.57
Dry	75.48	32.58	108.06
Total	116.18	687.48	803.66

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

New-field wildcats drilled	9
Footage (thous. ft.)	82.00
Average rotary rigs active	9
Permits	208

Statewide rank

	Crude Oil	Natural Gas
Wells drilled	19th	23rd
Production	5th	12th
Reserves (2013)	4th	11th

Number of operators	12

Number of producing wells
(12/31/13)

Crude oil	2,469
Natural gas	207
Total	2,676

Average production

Crude oil (thous. b/d)	512.6
NGL (thous. b/d)	2.2
Natural gas (MMcf/day)	278.0

Total production

Crude oil (YTD bbls, in thous.)	187,102
Natural gas (YTD MMcf)	101,476

Natural gas marketed production

(MMcf)	338,182

Average output per producing well

Crude oil (bbls.)	75,780
Natural gas (Mcf)	490,223

Coalbed methane (YTD MMcf)

Coalbed methane (YTD MMcf)	NA
Oil Wells	NA
Gas Wells	NA
Daily Average (MMcf) / Well	NA

Heavy oil (YTD Bbls, in thous.)

Heavy oil (YTD Bbls, in thous.)	NA
Wells	NA
Av. bbls per day (in thous.)	NA
Av. bbls per well	NA

2013 Latest Available Data

Petroleum reserves
(as of 12/31/13) (mill. bbls.)

	Crude Oil	NGL	Total
New reserves	-268	NA	-268
Production	186	NA	186
Net annual change	-454	NA	-454
Proved reserves	2,898	NA	2,898

Natural gas reserves
(as of 12/31/13) (Bcf)

	Associated Dissolved	Non-Associated	Total Gas
New reserves	-2,063	68	-1,995
Production	181	108	289
Net annual change	-2,244	-40	-2,284
Proved reserves	6,428	955	7,383

Marginal oil wells

Producing marginal wells	214
Crude oil production in Bbls. (thous.)	429
Crude oil production Bbls./d (thous.)	1

Marginal natural gas wells
(as of 12/31/13)

Producing marginal wells	NA
Natural gas production (MMcf)	NA

Mineral lease royalties, bonuses & rent

Oil	$16,311,312
Natural Gas	$9,052,678
Rent, Bonuses & Other	$8,127,722
Total Oil and Gas Revenues	$33,491,711
Total Federal Reported Revenues	$33,569,391
Oil and Gas Percent of Total	100%

Federal lands production shares

Oil	<1%
Natural Gas	4%
Combined on BOE basis	1%

Horizontal wells drilled	109
Directional wells drilled	24
Vertical wells drilled	2

Natural gas vehicle fuel demand & fueling stations

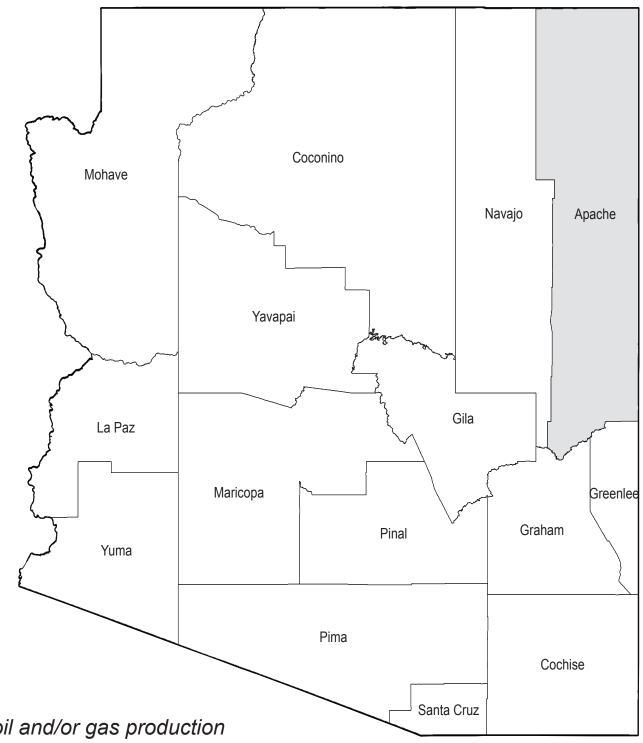
Natural gas vehicle demand	12 Mmcf
CNG stations	1
LNG stations	0
LPG stations	6

Average number of employees

Oil and natural gas extraction	14,221
Refining	0
Transportation	0
Wholesale	509
Retail	1,810
Pipeline construction	653
Oilfield machinery	0
Total petroleum industry	17,193

Source: For specific methodology and source details, please see pages 13 and 140

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	5,411
Natural gas	5,753

Year and depth of deepest well drilled (ft.)

1981	18,013

Cumulative number of total wells drilled

(as of 12/31/13 - excluding service wells)

Oil wells	71	6%
Gas wells	55	5%
Dry holes	992	89%
Total	1,118	100%

Cumulative crude oil wellhead value

(as of 12/31/13 - thous. $)	$70,831,877

Cumulative production & new reserves

(as of 12/31/13)

	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/City Gate price*

(2013)

Crude oil ($/bbl.)	$92.37
Natural gas ($Mcf)*	$4.73

Wellhead/City Gate value of production

(2013 in thous. $)

Crude oil	$5,542
Natural gas*	$341
Total	$5,883

Average natural gas price

(2013 $/Mcf)

Residential consumers	$13.92
Commercial consumers	$8.76
Industrial consumers	$6.29
Electric utilities	$4.60
City Gate	$4.73

Severance taxes paid - FY $3,646

(2013 in thous. $)

Top producing counties

(2013 on a BOE basis)

County	% Production State	% Production US
Apache	100	<0.01

**City Gate price used for natural gas.*

2013 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	NA
Footage (thous. ft.)	NA
Average rotary rigs active	0
Permits	47

Statewide rank

	Crude Oil	Natural Gas
Wells drilled	32nd	31st
Production	31st	31st
Reserves (2013)	26th	25th

Number of operators	2

Number of producing wells
(12/31/13)

Crude oil	27
Natural gas	3
Total	30

Average production

Crude oil (thous. b/d)	0.2
NGL (thous. b/d)	NA
Natural gas (MMcf/day)	0.2

Total production

Crude oil (YTD bbls, in thous.)	59
Natural gas (YTD MMcf)	65

Natural gas marketed production

(MMcf)	72

Average output per producing well

Crude oil (bbls.)	2,180
Natural gas (Mcf)	21,504

Coalbed methane (YTD MMcf)

Coalbed methane (YTD MMcf)	NA
Oil Wells	NA
Gas Wells	NA
Daily Average (MMcf) / Well	NA

Heavy oil (YTD Bbls, in thous.)

Heavy oil (YTD Bbls, in thous.)	NA
Wells	NA
Av. bbls per day (in thous.)	NA
Av. bbls per well	NA

2013 Latest Available Data

Petroleum reserves
(as of 12/31/13) (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 12/31/13) (Bcf)

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

Marginal oil wells

Producing marginal wells	26
Crude oil production in Bbls. (thous.)	52
Crude oil production Bbls./d (thous.)	<1

Marginal natural gas wells
(as of 12/31/13)

Producing marginal wells	3
Natural gas production (MMcf)	65

Mineral lease royalties, bonuses & rent

Oil	$869,268
Natural Gas	--
Rent, Bonuses & Other	$103,301
Total Oil and Gas Revenues	$972,569
Total Federal Reported Revenues	$75,330,260
Oil and Gas Percent of Total	1%

Federal lands production shares

Oil	0%
Natural Gas	0%
Combined on BOE basis	0%

Horizontal wells drilled	0
Directional wells drilled	0
Vertical wells drilled	0

Natural gas vehicle fuel demand & fueling stations

Natural gas vehicle demand	1,915 Mmcf
CNG stations	34
LNG stations	7
LPG stations	66

Average number of employees

Oil and natural gas extraction	497
Refining	189
Transportation	267
Wholesale	1,935
Retail	15,653
Pipeline construction	411
Oilfield machinery	0
Total petroleum industry	18,952

Source: For specific methodology and source details, please see pages 13 and 140

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 — 1,150,708 MMcf	2012

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 12/31/13 - excluding service wells)

Oil wells	17,000	37%
Gas wells	13,148	29%
Dry holes	15,835	34%
Total	45,983	100%

Cumulative crude oil wellhead value

(as of 12/31/13 - thous. $) $14,455,547

Cumulative production & new reserves

(as of 12/31/13)

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	1,868	95	1,963	27,304
Production	1,795	89	1,884	13,504

Value of Oil and Gas

Average wellhead/City Gate price

(2013)

Crude oil ($/bbl.)	$92.98
Natural gas ($Mcf)*	$4.99

Wellhead/City Gate value of production

(2013 in thous. $)

Crude oil	$617,387
Natural gas*	$5,686,873
Total	$6,304,260

Average natural gas price

(2013 $/Mcf)

Residential consumers	$10.46
Commercial consumers	$7.68
Industrial consumers	$6.74
Electric utilities	$4.32
City Gate	$4.99

Severance taxes paid $76,212

(2013 in thous. $)

Top 10 producing counties

(2013 on a BOE basis)

County	% Production State	% Production US
Van Buren	28.01	0.87
Conway	20.07	0.62
White	18.47	0.57
Cleburne	16.40	0.51
Faulkner	5.27	0.16
Sebastian	2.76	0.09
Logan	2.48	0.08
Franklin	1.52	0.05
Columbia	1.11	0.03
Independence	0.65	0.02

*City Gate price used for natural gas.

2013 Industry Statistics

Number of wells drilled

	Exploratory	Development	Total
Oil	2	158	160
Gas	1	578	579
Dry	3	52	55
Total	6	788	794

Total footage drilled
(thous. ft.)

	Exploratory	Development	Total
Oil	23.77	819.74	843.50
Gas	3.92	5,343.48	5,347.39
Dry	15.21	252.37	267.58
Total	42.89	6,415.58	6,458.47

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

New-field wildcats drilled	2
Footage (thous. ft.)	23.77
Average rotary rigs active	14
Permits	1,049

Statewide rank

	Crude Oil	Natural Gas
Wells drilled	16th	6th
Production	20th	9th
Reserves (2013)	21st	9th

Number of operators	309

Number of producing wells
(12/31/13)

Crude oil	1,288
Natural gas	9,001
Total	10,289

Average production

Crude oil (thous. b/d)	12.5
NGL (thous. b/d)	NA
Natural gas (MMcf/day)	3,096.1

Total production

Crude oil (YTD bbls, in thous.)	4,580
Natural gas (YTD MMcf)	1,130,067

Natural gas marketed production

(MMcf)	1,139,654
Shale gas production	1,026 Bcf

Average output per producing well

Crude oil (bbls.)	3,556
Natural gas (Mcf)	125,549

Coalbed methane (YTD MMcf)

Coalbed methane (YTD MMcf)	1,083
Oil Wells	0
Gas Wells	41
Daily Average (MMcf) / Well	2.97

Heavy oil (YTD Bbls, in thous.)

Heavy oil (YTD Bbls, in thous.)	NA
Wells	NA
Av. bbls per day (in thous.)	NA
Av. bbls per well	NA

2013 Latest Available Data

Petroleum reserves
(as of 12/31/13) (mill. bbls.)

	Crude Oil	NGL	Total
New reserves	-10	NA	-10
Production	4	NA	4
Net annual change	-14	NA	-14
Proved reserves	41	NA	41

Natural gas reserves
(as of 12/31/13) (Bcf)

	Associated Dissolved	Non-Associated	Total Gas
New reserves	62	3,564	3,626
Production	9	1,132	1,141
Net annual change	53	2,432	2,485
Proved reserves	135	13,389	13,524

Marginal oil wells

Producing marginal wells	1,074
Crude oil production in Bbls. (thous.)	1,500
Crude oil production Bbls./d (thous.)	4

Marginal natural gas wells
(as of 12/31/13)

Producing marginal wells	3,638
Natural gas production (MMcf)	46,757

Mineral lease royalties, bonuses & rent

Oil	$16
Natural Gas	$4,592,718
Rent, Bonuses & Other	$600,043
Total Oil and Gas Revenues	$5,192,776
Total Federal Reported Revenues	$5,193,890
Oil and Gas Percent of Total	100%

Federal lands production shares

Oil	<1%
Natural Gas	1%
Combined on BOE basis	1%

Horizontal wells drilled	571
Directional wells drilled	27
Vertical wells drilled	196

Natural gas vehicle fuel demand & fueling stations

Natural gas vehicle demand	24 Mmcf
CNG stations	11
LNG stations	1
LPG stations	37

Average number of employees

Oil and natural gas extraction	5,740
Refining	423
Transportation	1,787
Wholesale	2,193
Retail	12,108
Pipeline construction	755
Oilfield machinery	0
Total petroleum industry	23,006

Source: For specific methodology and source details, please see pages 13 and 140

California

○ *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 12/31/13 - excluding service wells)

Oil wells	181,133	81%
Gas wells	7,274	3%
Dry holes	35,771	16%
Total	224,178	100%

Cumulative crude oil wellhead value

(as of 12/31/13 - thous. $)	$331,691,000

Cumulative production & new reserves

(as of 12/31/13)

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	31,957	1,548	33,505	47,042
Production	26,048	1,444	27,492	38,193

*Includes offshore areas

Value of Oil and Gas

Average wellhead/City Gate price

(2013)

Crude oil ($/bbl.)	$102.53
Natural gas ($Mcf)*	$4.18

Wellhead/City Gate value of production

(2013 in thous. $)

Crude oil	$20,396,088
Natural gas*	$1,054,656
Total	$21,450,744

Average natural gas price

(2013 $/Mcf)

Residential consumers	$9.92
Commercial consumers	$7.81
Industrial consumers	$6.57
Electric utilities	$4.53
City Gate	$4.18

Severance taxes paid - Est. $400,000

(2013 in thous. $)

Top 10 producing counties

(2013 on a BOE basis)

County	% Production State	US
Kern	52.34	1.72
Kern	16.42	0.54
Los Angeles	6.93	0.23
Los Angeles Offshore	4.99	0.16
Ventura	4.12	0.14
Monterey	3.61	0.12
Fresno	2.89	0.10
Santa Barbara	2.09	0.07
Orange	1.22	0.04
Orange Offshore	0.93	0.03

*City Gate price used for natural gas.

2013 Industry Statistics

Number of wells drilled

	Exploratory	Development	Total
Oil	5	2,996	3,001
Gas	NA	8	8
Dry	9	35	44
Total	14	3,039	3,053

Total footage drilled
(thous. ft.)

	Exploratory	Development	Total
Oil	42.71	7,214.99	7,257.70
Gas	NA	64.79	64.79
Dry	60.77	98.25	159.02
Total	103.48	7,378.03	7,481.51

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

New-field wildcats drilled	7
Footage (thous. ft.)	42.32
Average rotary rigs active	38
Permits	5,846

Statewide rank

	Crude Oil	Natural Gas
Wells drilled	3rd	20th - Tied
Production	4th	14th
Reserves (2013)	5th	17th

Number of operators	349

Number of producing wells
(12/31/13)

Crude oil	54,301
Natural gas	1,550
Total	55,851

Average production

Crude oil (thous. b/d)	543.9
NGL (thous. b/d)	0.7
Natural gas (MMcf/day)	112.7

Total production

Crude oil (YTD bbls, in thous.)	198,508
Natural gas (YTD MMcf)	41,129

Natural gas marketed production

(MMcf)	252,310
Shale gas production	89 Bcf

Average output per producing well

Crude oil (bbls.)	3,656
Natural gas (Mcf)	26,535

Coalbed methane (YTD MMcf)

Coalbed methane (YTD MMcf)	NA
Oil Wells	NA
Gas Wells	NA
Daily Average (MMcf) / Well	NA

Heavy oil (YTD Bbls, in thous.)

Heavy oil (YTD Bbls, in thous.)	192,743
Wells	49,626
Av. bbls per day (in thous.)	528.06
Av. bbls per well	3,884

2013 Latest Available Data

Petroleum reserves
(as of 12/31/13) (mill. bbls.)

	Crude Oil	NGL	Total
New reserves	101	NA	101
Production	199	NA	199
Net annual change	-98	NA	-98
Proved reserves	2,878	NA	2,878

Natural gas reserves
(as of 12/31/13) (Bcf)

	Associated Dissolved	Non-Associated	Total Gas
New reserves	86	21	107
Production	157	46	203
Net annual change	-71	-25	-96
Proved reserves	1,776	247	2,023

Marginal oil wells

Producing marginal wells	42,793
Crude oil production in Bbls. (thous.)	72,725
Crude oil production Bbls./d (thous.)	199

Marginal natural gas wells
(as of 12/31/13)

Producing marginal wells	955
Natural gas production (MMcf)	11,679

Mineral lease royalties, bonuses & rent

Oil	$244,383,458
Natural Gas	$3,469,454
Rent, Bonuses & Other	$901,535
Total Oil and Gas Revenues	$248,754,447
Total Federal Reported Revenues	$267,156,553
Oil and Gas Percent of Total	93%

Federal lands production shares

Oil	10%
Natural Gas	3%
Combined on BOE basis	9%

Horizontal wells drilled	370
Directional wells drilled	1,382
Vertical wells drilled	1,301

Natural gas vehicle fuel demand & fueling stations

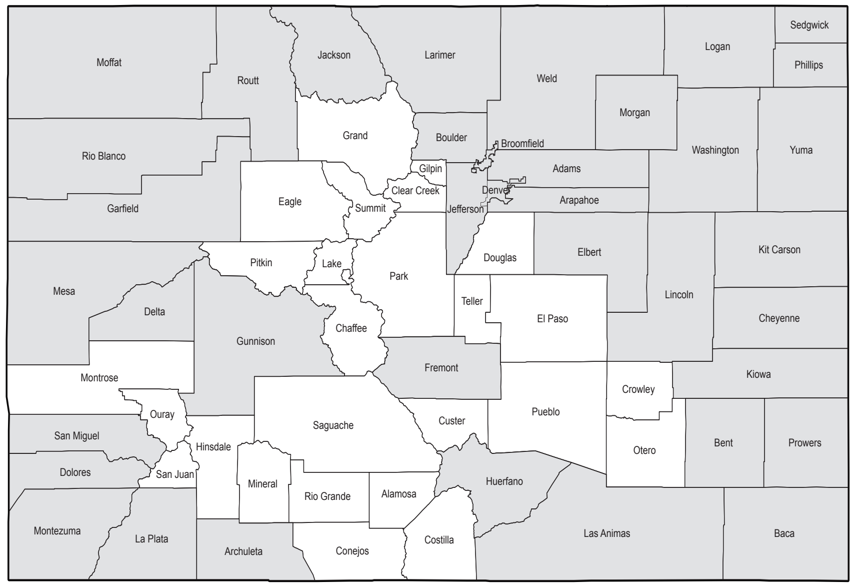
Natural gas vehicle demand	16,460 Mmcf
CNG stations	285
LNG stations	45
LPG stations	235

Average number of employees

Oil and natural gas extraction	23,160
Refining	13,680
Transportation	2,684
Wholesale	10,239
Retail	52,753
Pipeline construction	11,717
Oilfield machinery	2,450
Total petroleum industry	116,683

Source: For specific methodology and source details, please see pages 13 and 140

Colorado



○ *Counties with oil and/or gas production*

Background Information

Counties

Number of counties	63
With oil and/or gas production	38

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 — 1,709,376 MMcf	2012

Deepest producing well (ft.)

Crude oil	17,341
Natural gas	21,926

Year and depth of deepest well drilled (ft.)

1987	22,092

Cumulative number of total wells drilled

(as of 12/31/13 - excluding service wells)

Oil wells	19,197	19%
Gas wells	54,188	54%
Dry holes	27,106	27%
Total	100,491	100%

Cumulative crude oil wellhead value

(as of 12/31/13 - thous. $)	$43,947,232

Cumulative production & new reserves

(as of 12/31/13)

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	3,213	1,726	4,939	50,402
Production	2,204	777	2,981	25,914

Value of Oil and Gas

Average wellhead/City Gate price

(2013)

Crude oil ($/bbl.)	$90.10
Natural gas ($Mcf)*	$4.76

Wellhead/City Gate value of production

(2013 in thous. $)

Crude oil	$5,879,656
Natural gas*	$7,639,134
Total	$13,518,790

Average natural gas price

(2013 $/Mcf)

Residential consumers	$7.85
Commercial consumers	$7.26
Industrial consumers	$5.90
Electric utilities	$4.91
City Gate	$4.76

Severance taxes paid $136,084

(2013 in thous. $)

Top 10 producing counties

(2013 on a BOE basis)

County	% Production State	US
Garfield	37.79	1.75
Weld	21.62	1.00
La Plata	20.72	0.96
Rio Blanco	5.72	0.26
Las Animas	5.46	0.25
Mesa	2.15	0.10
Yuma	1.71	0.08
Moffat	1.03	0.05
Archuleta	0.98	0.05
Cheyenne	0.50	0.02

**City Gate price used for natural gas.*

2013 Industry Statistics

Number of wells drilled

	Exploratory	Development	Total
Oil	92	925	1,017
Gas	8	702	710
Dry	34	111	145
Total	134	1,738	1,872

Total footage drilled
(thous. ft.)

	Exploratory	Development	Total
Oil	902.14	9,843.34	10,745.48
Gas	63.98	6,305.94	6,369.91
Dry	211.76	661.13	872.89
Total	1,177.87	16,810.41	17,988.28

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

New-field wildcats drilled	87
Footage (thous. ft.)	753.86

Average rotary rigs active	63

Permits	3,520

Statewide rank

	Crude Oil	Natural Gas
Wells drilled	7th	3rd
Production	9th	6th
Reserves (2013)	8th	5th

Number of operators	356

Number of producing wells
(12/31/13)

Crude oil	7,895
Natural gas	47,610
Total	55,505

Average production

Crude oil (thous. b/d)	115.7
NGL (thous. b/d)	61.8
Natural gas (MMcf/day)	4,041.2

Total production

Crude oil (YTD bbls, in thous.)	42,216
Natural gas (YTD MMcf)	1,475,051

Natural gas marketed production

(MMcf)	1,604,860

Shale gas production	18 Bcf

Average output per producing well

Crude oil (bbls.)	5,347
Natural gas (Mcf)	30,982

Coalbed methane (YTD MMcf)	445,452
Oil Wells	0
Gas Wells	5,050
Daily Average (MMcf) / Well	1,220.42

Heavy oil (YTD Bbls, in thous.)	16,609
Wells	1,909
Av. bbls per day (in thous.)	45.5
Av. bbls per well	8,700

2013 Latest Available Data

Petroleum reserves
(as of 12/31/13) (mill. bbls.)

	Crude Oil	NGL	Total
New reserves	481	NA	481
Production	70	NA	70
Net annual change	411	NA	411
Proved reserves	1,171	NA	1,171

Natural gas reserves
(as of 12/31/13) (Bcf)

	Associated Dissolved	Non-Associated	Total Gas
New reserves	1,066	2,399	3,465
Production	234	1,372	1,606
Net annual change	832	1,027	1,859
Proved reserves	4,280	19,253	23,533

Marginal oil wells

Producing marginal wells	5,990
Crude oil production in Bbls. (thous.)	6,430
Crude oil production Bbls./d (thous.)	18

Marginal natural gas wells
(as of 12/31/13)

Producing marginal wells	35,947
Natural gas production (MMcf)	331,406

Mineral lease royalties, bonuses & rent

Oil	$93,120,933
Natural Gas	$160,410,360
Rent, Bonuses & Other	$8,236,468
Total Oil and Gas Revenues	$261,767,761
Total Federal Reported Revenues	$351,459,822
Oil and Gas Percent of Total	74%

Federal lands production shares

Oil	7%
Natural Gas	21%
Combined on BOE basis	18%

Horizontal wells drilled	957
Directional wells drilled	737
Vertical wells drilled	178

Natural gas vehicle fuel demand & fueling stations

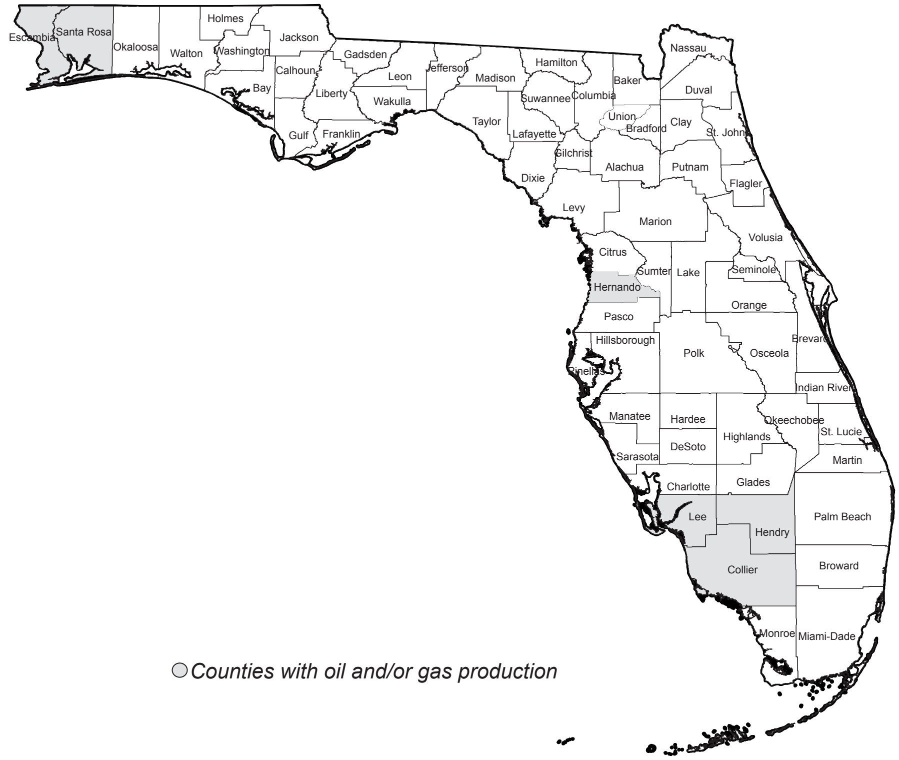
Natural gas vehicle demand	315 Mmcf
CNG stations	37
LNG stations	0
LPG stations	51

Average number of employees

Oil and natural gas extraction	25,937
Refining	0
Transportation	1,832
Wholesale	2,252
Retail	12,844
Pipeline construction	4,099
Oilfield machinery	334
Total petroleum industry	47,298

Source: For specific methodology and source details, please see pages 13 and 140

Florida



Counties with oil and/or gas production

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	16,250
Natural gas	NA

Year and depth of deepest well drilled (ft.)

2008	18,875

Cumulative number of total wells drilled
(as of 12/31/13 - excluding service wells)

Oil wells	336	26%
Gas wells	3	0%
Dry holes	950	74%
Total	1,289	100%

Cumulative crude oil wellhead value

(as of 12/31/13 - thous. $)	$9,352,458

Cumulative production & new reserves
(as of 12/31/13)

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	732	81	813	644
Production	694	86	780	618

Value of Oil and Gas

Average wellhead/City Gate price
(2013)

Crude oil ($/bbl.)	NA
Natural gas ($Mcf)*	$4.44

Wellhead/City Gate value of production
(2013 in thous. $)

Crude oil	NA
Natural gas*	$1,296
Total	$1,296

Average natural gas price
(2013 $/Mcf)

Residential consumers	$18.46
Commercial consumers	$10.87
Industrial consumers	$6.77
Electric utilities	$5.08
City Gate	$4.44

Severance taxes paid - FY $12,299
(2013 in thous. $)

Top producing counties
(2013 on a BOE basis)

County	% Production State	US
Santa Rosa	48.92	0.02
Collier	23.01	0.01
Escambia	13.47	<0.01
Hendry	10.35	<0.01
Hernando	3.38	<0.01
Lee	0.88	<0.01

City Gate price used for natural gas.

2013 Industry Statistics

Number of wells drilled

	Exploratory	Development	Total
Oil	NA	2	2
Gas	NA	NA	NA
Dry	1	4	5
Total	1	6	7

Total footage drilled
(thous. ft.)

	Exploratory	Development	Total
Oil	NA	27.81	27.81
Gas	NA	NA	NA
Dry	16.24	31.52	47.75
Total	16.24	59.33	75.56

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

New-field wildcats drilled	1
Footage (thous. ft.)	16.24

Average rotary rigs active	2

Permits	6

Statewide rank

	Crude Oil	Natural Gas
Wells drilled	29th	33rd
Production	25th	30th
Reserves (2013)	22nd	24th

Number of operators	7

Number of producing wells
(12/31/13)

Crude oil	78
Natural gas	NA
Total	78

Average production

Crude oil (thous. b/d)	6.0
NGL (thous. b/d)	NA
Natural gas (MMcf/day)	NA

Total production

Crude oil (YTD bbls, in thous.)	2,174
Natural gas (YTD MMcf)	NA

Natural gas marketed production

(MMcf)	292

Average output per producing well

Crude oil (bbls.)	27,872
Natural gas (Mcf)	NA

Coalbed methane (YTD MMcf)

Coalbed methane (YTD MMcf)	NA
Oil Wells	NA
Gas Wells	NA
Daily Average (MMcf) / Well	NA

Heavy oil (YTD Bbls, in thous.)

Heavy oil (YTD Bbls, in thous.)	NA
Wells	NA
Av. bbls per day (in thous.)	NA
Av. bbls per well	NA

2013 Latest Available Data

Petroleum reserves
(as of 12/31/13) (mill. bbls.)

	Crude Oil	NGL	Total
New reserves	16	NA	16
Production	2	NA	2
Net annual change	14	NA	14
Proved reserves	38	NA	38

Natural gas reserves
(as of 12/31/13) (Bcf)

	Associated Dissolved	Non-Associated	Total Gas
New reserves	1	-2	-1
Production	0	0	0
Net annual change	1	-2	-1
Proved reserves	1	14	15

Marginal oil wells

Producing marginal wells	14
Crude oil production in Bbls. (thous.)	27
Crude oil production Bbls./d (thous.)	<1

Marginal natural gas wells
(as of 12/31/13)

Producing marginal wells	NA
Natural gas production (MMcf)	NA

Mineral lease royalties, bonuses & rent

Oil	--
Natural Gas	--
Rent, Bonuses & Other	$13,067
Total Oil and Gas Revenues	$13,067
Total Federal Reported Revenues	$1,069,289
Oil and Gas Percent of Total	1%

Federal lands production shares

Oil	0%
Natural Gas	0%
Combined on BOE basis	0%

Horizontal wells drilled	5
Directional wells drilled	0
Vertical wells drilled	2

Natural gas vehicle fuel demand & fueling stations

Natural gas vehicle demand	94 Mmcf
CNG stations	40
LNG stations	1
LPG stations	62

Average number of employees

Oil and natural gas extraction	859
Refining	2,569
Transportation	1,839
Wholesale	5,351
Retail	40,741
Pipeline construction	753
Oilfield machinery	67
Total petroleum industry	52,179

Source: For specific methodology and source details, please see pages 13 and 140

ILLINOIS

○ *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	NA
Natural gas	NA

Year and depth of deepest well drilled (ft.)

1976	14,942

Cumulative number of total wells drilled

(as of 12/31/13 - excluding service wells)

Oil wells	80,895	56%
Gas wells	1,590	1%
Dry holes	61,998	43%
Total	144,483	100%

Cumulative crude oil wellhead value

(as of 12/31/13 - thous. $)	$26,593,901

Cumulative production & new reserves

(as of 12/31/13)

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	3,582	NA	3,582	NA
Production	3,580	NA	3,580	NA

Value of Oil and Gas

Average wellhead/City Gate price

(2013)

Crude oil ($/bbl.)	$92.94
Natural gas ($Mcf)*	$4.43

Wellhead/City Gate value of production

(2013 in thous. $)

Crude oil	$886,555
Natural gas*	$12,789
Total	$899,344

Average natural gas price

(2013 $/Mcf)

Residential consumers	$8.20
Commercial consumers	$7.57
Industrial consumers	$6.00
Electric utilities	NA
City Gate	$4.43

Severance taxes paid --

(2013 in thous. $)

Top 10 producing counties

(2013 on a BOE basis)

County	% Production State	% Production US
White	12.57	0.02
Marion	10.80	0.02
Crawford	10.73	0.02
Fayette	8.13	0.01
Lawrence	7.90	0.01
Wayne	5.18	0.01
Clay	5.16	0.01
Wabash	4.30	0.01
Franklin	3.55	0.01
Richland	3.46	0.01

**City Gate price used for natural gas.*

2013 Industry Statistics

Number of wells drilled

	Exploratory	Development	Total
Oil	11	362	373
Gas	NA	NA	NA
Dry	59	101	160
Total	70	463	533

Total footage drilled
(thous. ft.)

	Exploratory	Development	Total
Oil	29.79	882.97	912.76
Gas	NA	NA	NA
Dry	156.79	244.15	400.94
Total	186.58	1,127.12	1,313.70

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

New-field wildcats drilled — 32

Footage (thous. ft.) — 79.42

Average rotary rigs active — 4

Permits — 943

Statewide rank

	Crude Oil	Natural Gas
Wells drilled	12th	26th
Production	16th	27th
Reserves (2013)	20th	26th

Number of operators — 819

Number of producing wells
(12/31/13)

Crude oil	NA
Natural gas	NA
Total	NA

Average production

Crude oil (thous. b/d)	26.1
NGL (thous. b/d)	NA
Natural gas (MMcf/day)	NA

Total production

Crude oil (YTD bbls, in thous.)	9,539
Natural gas (YTD MMcf)	NA

Natural gas marketed production

(MMcf) — 2,887

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 (YTD Bbls, in thous.) — NA

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

2013 Latest Available Data

Petroleum reserves
(as of 12/31/13) (mill. bbls.)

	Crude Oil	NGL	Total
New reserves	-6	NA	-6
Production	3	NA	3
Net annual change	-9	NA	-9
Proved reserves	42	NA	42

Natural gas reserves
(as of 12/31/13) (Bcf)

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

Marginal oil wells

Producing marginal wells	7,286
Crude oil production in Bbls. (thous.)	5,895
Crude oil production Bbls./d (thous.)	16

Marginal natural gas wells
(as of 12/31/13)

Producing marginal wells	NA
Natural gas production (MMcf)	NA

Mineral lease royalties, bonuses & rent

Oil	$297,987
Natural Gas	--
Rent, Bonuses & Other	--
Total Oil and Gas Revenues	$297,987
Total Federal Reported Revenues	$297,987
Oil and Gas Percent of Total	100%

Federal lands production shares

Oil	<1%
Natural Gas	0%
Combined on BOE basis	<1%

Horizontal wells drilled — 5

Directional wells drilled — 4

Vertical wells drilled — 524

Natural gas vehicle fuel demand & fueling stations

Natural gas vehicle demand	294 Mmcf
CNG stations	45
LNG stations	1
LPG stations	106

Average number of employees

Oil and natural gas extraction	2,723
Refining	5,399
Transportation	5,312
Wholesale	4,317
Retail	27,733
Pipeline construction	1,598
Oilfield machinery	6
Total petroleum industry	47,088

Source: For specific methodology and source details, please see pages 13 and 140

INDIANA

○ *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 — 9,075 MMcf	2011

Deepest producing well (ft.)

Crude oil	NA
Natural gas	NA

Year and depth of deepest well drilled (ft.)

2008	10,064

Cumulative number of total wells drilled

(as of 12/31/13 - excluding service wells)

Oil wells	21,674	35%
Gas wells	10,279	17%
Dry holes	29,540	48%
Total	61,493	100%

Cumulative crude oil wellhead value

(as of 12/31/13 - thous. $)	$4,674,212

Cumulative production & new reserves

(as of 12/31/13)

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	557	NA	557	NA
Production	555	NA	555	NA

Value of Oil and Gas

Average wellhead/City Gate price

(2013)

Crude oil ($/bbl.)	$93.04
Natural gas ($Mcf)*	$4.38

Wellhead/City Gate value of production

(2013 in thous. $)

Crude oil	$223,203
Natural gas*	$34,768
Total	$257,971

Average natural gas price

(2013 $/Mcf)

Residential consumers	$8.43
Commercial consumers	$7.59
Industrial consumers	$6.54
Electric utilities	NA
City Gate	$4.38

Severance taxes paid

(2013 in thous. $)	$2,518

Top 10 producing counties

(2013 on a BOE basis)

County	% Production State	US
Gibson	35.23	0.01
Posey	22.28	0.01
Vigo	15.84	0.01
Pike	7.65	<0.01
Knox	3.45	<0.01
Daviess	3.41	<0.01
Greene	3.40	<0.01
Vanderburgh	3.27	<0.01
Spencer	2.94	<0.01
Sullivan	1.67	<0.01

*City Gate price used for natural gas.

2013 Industry Statistics

Number of wells drilled

	Exploratory	Development	Total
Oil	8	91	99
Gas	0	9	9
Dry	15	12	27
Total	23	112	135

Total footage drilled
(thous. ft.)

	Exploratory	Development	Total
Oil	22.89	267.46	290.35
Gas	0.00	8.46	8.46
Dry	35.51	19.03	54.54
Total	58.40	294.95	353.35

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

New-field wildcats drilled	11
Footage (thous. ft.)	26.18
Average rotary rigs active	1
Permits	315

Statewide rank

	Crude Oil	Natural Gas
Wells drilled	20th	19th
Production	24th	25th
Reserves (2013)	25th	27th

Number of operators	219

Number of producing wells
(12/31/13)

Crude oil	NA
Natural gas	NA
Total	NA

Average production

Crude oil (thous. b/d)	6.5
NGL (thous. b/d)	NA
Natural gas (MMcf/day)	NA

Total production

Crude oil (YTD bbls, in thous.)	2,372
Natural gas (YTD MMcf)	NA

Natural gas marketed production

(MMcf)	7,938

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

2013 Latest Available Data

Petroleum reserves
(as of 12/31/13) (mill. bbls.)

	Crude Oil	NGL	Total
New reserves	-4	NA	-4
Production	1	NA	1
Net annual change	-5	NA	-5
Proved reserves	8	NA	8

Natural gas reserves
(as of 12/31/13) (Bcf)

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

Marginal oil wells

Producing marginal wells	1,803
Crude oil production in Bbls. (thous.)	1,260
Crude oil production Bbls./d (thous.)	3

Marginal natural gas wells
(as of 12/31/13)

Producing marginal wells	NA
Natural gas production (MMcf)	NA

Mineral lease royalties, bonuses & rent

Oil	$26,915
Natural Gas	--
Rent, Bonuses & Other	$18,788
Total Oil and Gas Revenues	$45,703
Total Federal Reported Revenues	$45,703
Oil and Gas Percent of Total	100%

Federal lands production shares

Oil	<1%
Natural Gas	0%
Combined on BOE basis	<1%

Horizontal wells drilled	9
Directional wells drilled	0
Vertical wells drilled	126

Natural gas vehicle fuel demand & fueling stations

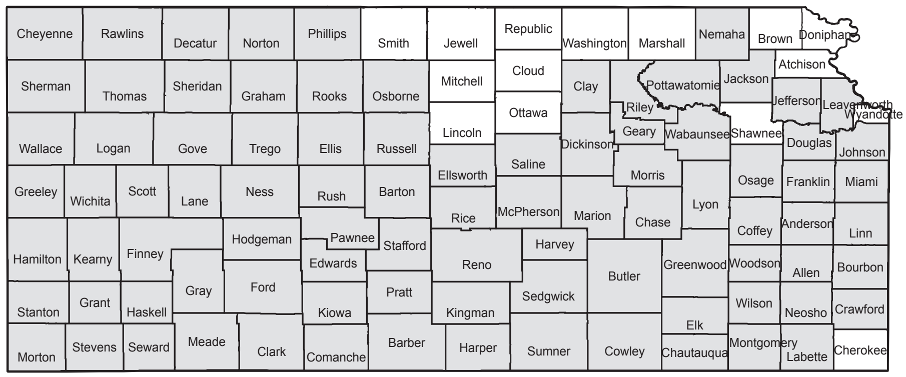
Natural gas vehicle demand	19 Mmcf
CNG stations	28
LNG stations	2
LPG stations	174

Average number of employees

Oil and natural gas extraction	685
Refining	1,207
Transportation	2,315
Wholesale	3,391
Retail	22,497
Pipeline construction	1,661
Oilfield machinery	136
Total petroleum industry	31,892

Source: For specific methodology and source details, please see pages 13 and 140

Kansas



○ *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	12,642
Natural gas	12,642

Year and depth of deepest well drilled (ft.)

1986	14,100

Cumulative number of total wells drilled

(as of 12/31/13 - excluding service wells)

Oil wells	146,000	49%
Gas wells	39,050	13%
Dry holes	115,057	38%
Total	300,107	100%

Cumulative crude oil wellhead value

(as of 12/31/13 - thous. $)	$71,745,913

Cumulative production & new reserves

(as of 12/31/13)

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	6,752	1,499	8,251	46,372
Production	6,433	1,391	7,824	42,632

Value of Oil and Gas

Average wellhead/City Gate price

(2013)

Crude oil ($/bbl.)	$91.85
Natural gas ($Mcf)*	$4.98

Wellhead/City Gate value of production

(2013 in thous. $)

Crude oil	$4,302,713
Natural gas*	$1,456,486
Total	$5,759,199

Average natural gas price

(2013 $/Mcf)

Residential consumers	$10.19
Commercial consumers	$9.07
Industrial consumers	$4.86
Electric utilities	$4.57
City Gate	$4.98

Severance taxes paid - FY

(2013 in thous. $)	$396,000

Top 10 producing counties

(2013 on a BOE basis)

County	% Production State	% Production US
Barber	7.36	0.11
Stevens	7.20	0.11
Grant	5.46	0.08
Haskell	5.30	0.08
Kearny	5.04	0.08
Finney	4.76	0.07
Harper	4.13	0.06
Ellis	3.76	0.06
Morton	3.29	0.05
Comanche	2.97	0.05

City Gate price used for natural gas.

2013 Industry Statistics

Number of wells drilled

	Exploratory	Development	Total
Oil	326	2,763	3,089
Gas	28	136	164
Dry	434	697	1,131
Total	788	3,596	4,384

Total footage drilled
(thous. ft.)

	Exploratory	Development	Total
Oil	1,596.55	6,720.37	8,316.92
Gas	164.56	629.83	794.39
Dry	1,811.23	2,325.76	4,136.99
Total	3,572.33	9,675.96	13,248.30

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

New-field wildcats drilled	374
Footage (thous. ft.)	1,675.34

Average rotary rigs active	27

Permits	6,419

Statewide rank

	Crude Oil	Natural Gas
Wells drilled	2nd	11th
Production	11th	13th
Reserves (2013)	13th	14th

Number of operators	1,840

Number of producing wells
(12/31/13)

Crude oil	44,900
Natural gas	21,628
Total	66,528

Average production

Crude oil (thous. b/d)	127.9
NGL (thous. b/d)	NA
Natural gas (MMcf/day)	820.6

Total production

Crude oil (YTD bbls, in thous.)	46,692
Natural gas (YTD MMcf)	299,526

Natural gas marketed production

(MMcf)	292,467

Shale gas production	3 Bcf

Average output per producing well

Crude oil (bbls.)	1,040
Natural gas (Mcf)	13,849

Coalbed methane (YTD MMcf)

Coalbed methane (YTD MMcf)	27,832
Oil Wells	11
Gas Wells	3,761
Daily Average (MMcf) / Well	76.25

Heavy oil (YTD Bbls, in thous.)

Heavy oil (YTD Bbls, in thous.)	NA
Wells	NA
Av. bbls per day (in thous.)	NA
Av. bbls per well	NA

2013 Latest Available Data

Petroleum reserves
(as of 12/31/13) (mill. bbls.)

	Crude Oil	NGL	Total
New reserves	54	NA	54
Production	46	NA	46
Net annual change	8	NA	8
Proved reserves	390	NA	390

Natural gas reserves
(as of 12/31/13) (Bcf)

	Associated Dissolved	Non-Associated	Total Gas
New reserves	139	374	513
Production	32	266	298
Net annual change	107	108	215
Proved reserves	433	3,339	3,772

Marginal oil wells

Producing marginal wells	43,360
Crude oil production in Bbls. (thous.)	28,281
Crude oil production Bbls./d (thous.)	77

Marginal natural gas wells
(as of 12/31/13)

Producing marginal wells	20,723
Natural gas production (MMcf)	229,732

Mineral lease royalties, bonuses & rent

Oil	$3,319,447
Natural Gas	$2,350,423
Rent, Bonuses & Other	$45,598
Total Oil and Gas Revenues	$5,715,468
Total Federal Reported Revenues	$5,715,466
Oil and Gas Percent of Total	100%

Federal lands production shares

Oil	1%
Natural Gas	2%
Combined on BOE basis	1%

Horizontal wells drilled	223
Directional wells drilled	4
Vertical wells drilled	4,157

Natural gas vehicle fuel demand & fueling stations

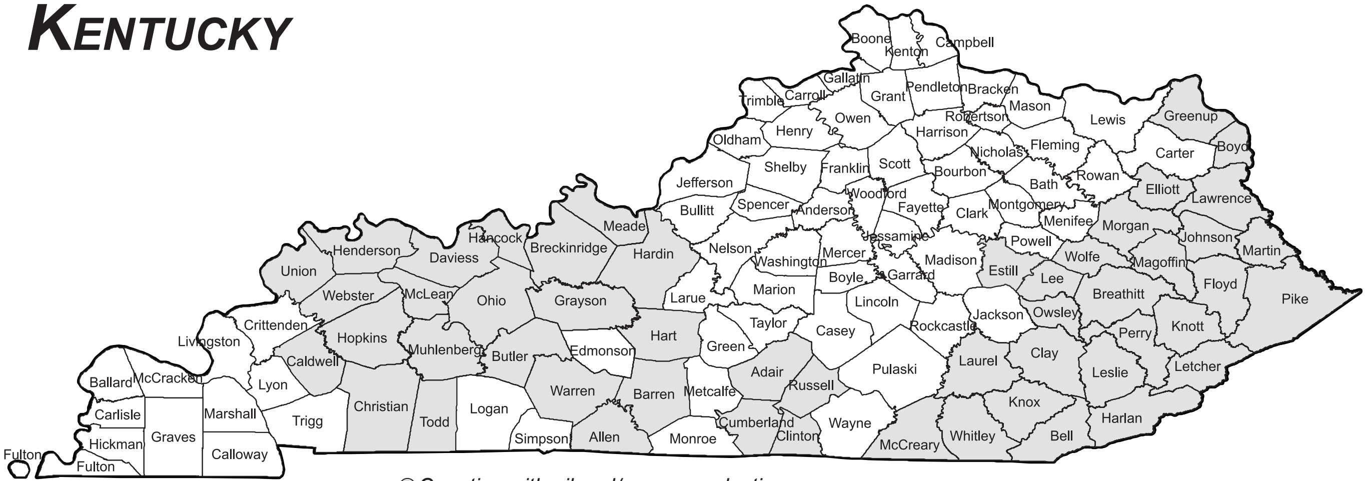
Natural gas vehicle demand	8 Mmcf
CNG stations	10
LNG stations	0
LPG stations	35

Average number of employees

Oil and natural gas extraction	9,530
Refining	2,147
Transportation	2,654
Wholesale	1,789
Retail	9,921
Pipeline construction	1,985
Oilfield machinery	0
Total petroleum industry	28,026

Source: For specific methodology and source details, please see pages 13 and 140

KENTUCKY



Counties with oil and/or gas production

Background Information

Counties

Number of counties	120
With oil and/or gas production	52

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 — 135,330 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 12/31/13 - excluding service wells)

Oil wells	34,655	33%
Gas wells	27,013	25%
Dry holes	44,151	42%
Total	105,819	100%

Cumulative crude oil wellhead value

(as of 12/31/13 - thous. $) $19,029,360

Cumulative production & new reserves

(as of 12/31/13)

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	774	267	1,041	7,429
Production	767	277	1,044	5,932

Value of Oil and Gas

Average wellhead/City Gate price

(2013)

Crude oil ($/bbl.)	$91.17
Natural gas ($Mcf)*	$4.47

Wellhead/City Gate value of production

(2013 in thous. $)

Crude oil	$263,755
Natural gas*	$423,153
Total	$686,908

Average natural gas price

(2013 $/Mcf)

Residential consumers	$9.80
Commercial consumers	$8.32
Industrial consumers	$4.84
Electric utilities	NA
City Gate	$4.47

Severance taxes paid $29,948

(2013 in thous. $)

Top 10 producing counties

(2013 on a BOE basis)

County	% Production State	% Production US
Pike	30.30	0.09
Letcher	14.62	0.04
Knott	12.27	0.04
Floyd	10.08	0.03
Perry	8.58	0.02
Martin	4.21	0.01
Harlan	2.38	0.01
Leslie	2.12	0.01
Bell	1.72	<0.01
Union	1.59	<0.01

City Gate price used for natural gas.

2013 Industry Statistics

Number of wells drilled

	Exploratory	Development	Total
Oil	2	294	296
Gas	11	65	76
Dry	23	161	184
Total	36	520	556

Total footage drilled
(thous. ft.)

	Exploratory	Development	Total
Oil	6.91	584.88	591.78
Gas	36.61	331.83	368.44
Dry	34.86	246.71	281.57
Total	78.38	1,163.42	1,241.80

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

New-field wildcats drilled	15
Footage (thous. ft.)	22.03

Average rotary rigs active	1

Permits	875

Statewide rank

	Crude Oil	Natural Gas
Wells drilled	13th	14th
Production	22nd	20th
Reserves (2013)	23rd	19th

Number of operators	541

Number of producing wells
(12/31/13)

Crude oil	NA
Natural gas	14,902
Total	14,902

Average production

Crude oil (thous. b/d)	2.8
NGL (thous. b/d)	NA
Natural gas (MMcf/day)	277.4

Total production

Crude oil (YTD bbls, in thous.)	1,005
Natural gas (YTD MMcf)	101,242

Natural gas marketed production

(MMcf)	94,665

Shale gas production	4 Bcf

Average output per producing well

Crude oil (bbls.)	NA
Natural gas (Mcf)	6,794

Coalbed methane (YTD MMcf)	122
Oil Wells	0
Gas Wells	19
Daily Average (MMcf) / Well	0.33

Heavy oil (YTD Bbls, in thous.)	NA
Wells	NA
Av. bbls per day (in thous.)	NA
Av. bbls per well	NA

2013 Latest Available Data

Petroleum reserves
(as of 12/31/13) (mill. bbls.)

	Crude Oil	NGL	Total
New reserves	10	NA	10
Production	1	NA	1
Net annual change	9	NA	9
Proved reserves	22	NA	22

Natural gas reserves
(as of 12/31/13) (Bcf)

	Associated Dissolved	Non-Associated	Total Gas
New reserves	-48	415	367
Production	1	87	88
Net annual change	-49	328	279
Proved reserves	44	1,750	1,794

Marginal oil wells

Producing marginal wells	1,213
Crude oil production in Bbls. (thous.)	615
Crude oil production Bbls./d (thous.)	2

Marginal natural gas wells
(as of 12/31/13)

Producing marginal wells	14,563
Natural gas production (MMcf)	84,105

Mineral lease royalties, bonuses & rent

Oil	$153,487
Natural Gas	$49,960
Rent, Bonuses & Other	$44,309
Total Oil and Gas Revenues	$247,756
Total Federal Reported Revenues	$2,041,734
Oil and Gas Percent of Total	12%

Federal lands production shares

Oil	<1%
Natural Gas	<1%
Combined on BOE basis	<1%

Horizontal wells drilled	91
Directional wells drilled	0
Vertical wells drilled	465

Natural gas vehicle fuel demand & fueling stations

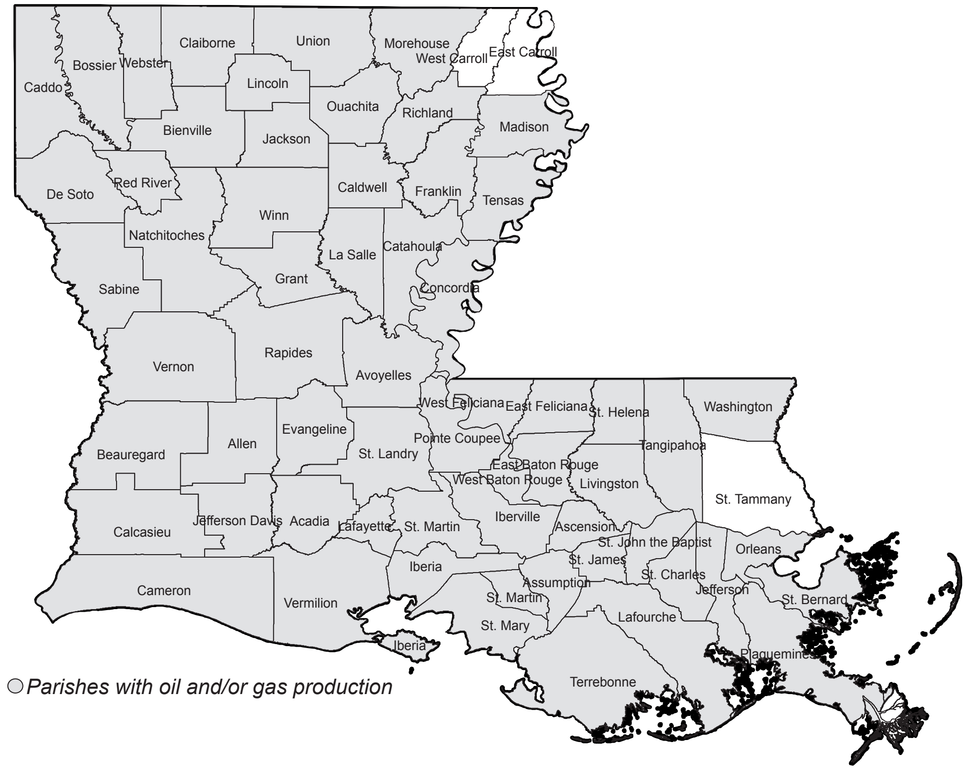
Natural gas vehicle demand	1 Mmcf
CNG stations	4
LNG stations	1
LPG stations	47

Average number of employees

Oil and natural gas extraction	1,572
Refining	1,489
Transportation	1,786
Wholesale	2,757
Retail	16,496
Pipeline construction	820
Oilfield machinery	0
Total petroleum industry	24,920

Source: For specific methodology and source details, please see pages 13 and 140

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	36,120

Year and depth of deepest well drilled (ft.)

2013	36,120

Cumulative number of total wells drilled

(as of 12/31/13 - excluding service wells)

Oil wells	91,305	40%
Gas wells	55,710	25%
Dry holes	80,316	35%
Total	227,331	100%

Cumulative crude oil wellhead value

(as of 12/31/13 - thous. $)	$304,956,969

Cumulative production & new reserves

(as of 12/31/13)

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	28,245	6,477	34,722	291,777
Production	19,073	4,758	23,831	161,101

Value of Oil and Gas

Average wellhead/City Gate price

(2013)

Crude oil ($/bbl.)	$105.18
Natural gas ($Mcf)*	$4.12

Wellhead/City Gate value of production

(2013 in thous. $)

Crude oil	$7,553,502
Natural gas*	$9,916,156
Total	$17,469,658

Average natural gas price

(2013 $/Mcf)

Residential consumers	$10.80
Commercial consumers	$8.59
Industrial consumers	$3.86
Electric utilities	$3.95
City Gate	$4.12

Severance taxes paid - FY $820,711

(2013 in thous. $)

Top 10 producing parishes

(2013 on a BOE basis)

Parish	% Production State	% Production US
De Soto	31.28	2.17
Red River	10.88	0.75
Caddo	8.44	0.59
Bossier	6.38	0.44
Sabine	5.42	0.38
Plaquemines	4.54	0.31
Bienville	4.05	0.28
St Mary	3.73	0.26
Vermillion	2.74	0.19
Lafourche	2.63	0.18

*City Gate price used for natural gas.

2013 Industry Statistics

Number of wells drilled

	Exploratory	Development	Total
Oil	1	652	653
Gas	3	300	303
Dry	29	231	260
Total	33	1,183	1,216

Total footage drilled
(thous. ft.)

	Exploratory	Development	Total
Oil	0.00	2,610.19	2,610.19
Gas	38.77	4,216.05	4,254.82
Dry	203.97	1,749.71	1,953.69
Total	242.74	8,575.95	8,818.69

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

New-field wildcats drilled	23
Footage (thous. ft.)	182.98
Average rotary rigs active	108
Permits	2,551

Statewide rank

	Crude Oil	Natural Gas
Wells drilled	10th	8th
Production	8th	3rd
Reserves (2013)	11th	7th

Number of operators	898

Number of producing wells
(12/31/13)

Crude oil	18,604
Natural gas	13,769
Total	32,373

Average production

Crude oil (thous. b/d)	154.7
NGL (thous. b/d)	43.4
Natural gas (MMcf/day)	6,174.2

Total production

Crude oil (YTD bbls, in thous.)	56,448
Natural gas (YTD MMcf)	2,253,574

Natural gas marketed production

(MMcf)	2,406,834
Shale gas production	1,510 Bcf

Average output per producing well

Crude oil (bbls.)	3,034
Natural gas (Mcf)	163,670

Coalbed methane (YTD MMcf)	NA
Oil Wells	NA
Gas Wells	NA
Daily Average (MMcf) / Well	NA

Heavy oil (YTD Bbls, in thous.)	25,969
Wells	13,004
Av. bbls per day (in thous.)	71.15
Av. bbls per well	1,997

2013 Latest Available Data

Petroleum reserves
(as of 12/31/13)(mill. bbls.)

	Crude Oil	NGL	Total
New reserves	109	NA	109
Production	71	NA	71
Net annual change	38	NA	38
Proved reserves	622	NA	622

Natural gas reserves
(as of 12/31/13) (Bcf)

	Associated Dissolved	Non-Associated	Total Gas
New reserves	202	425	627
Production	105	2,268	2,373
Net annual change	97	-1,843	-1,746
Proved reserves	870	19,519	20,389

Marginal oil wells

Producing marginal wells	16,267
Crude oil production in Bbls. (thous.)	10,188
Crude oil production Bbls./d (thous.)	28

Marginal natural gas wells
(as of 12/31/13)

Producing marginal wells	6,179
Natural gas production (MMcf)	67,713

Mineral lease royalties, bonuses & rent

Oil	$129,590,013
Natural Gas	$35,276,656
Rent, Bonuses & Other	$21,730,583
Total Oil and Gas Revenues	$186,597,252
Total Federal Reported Revenues	$186,597,252
Oil and Gas Percent of Total	100%

Federal lands production shares

Oil	9%
Natural Gas	3%
Combined on BOE basis	4%

Horizontal wells drilled	238
Directional wells drilled	309
Vertical wells drilled	669

Natural gas vehicle fuel demand & fueling stations

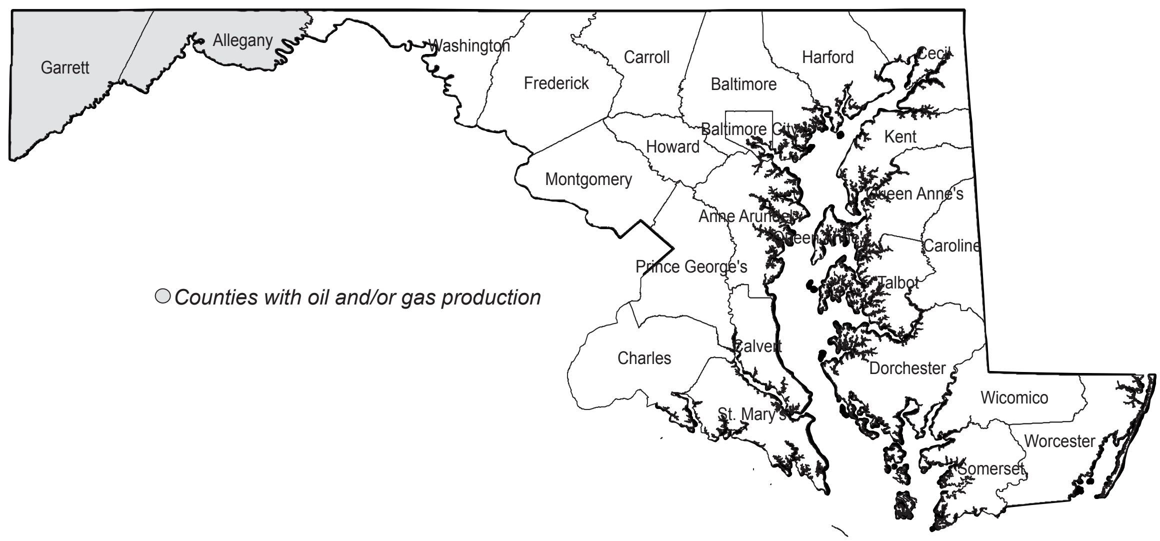
Natural gas vehicle demand	13 Mmcf
CNG stations	23
LNG stations	1
LPG stations	33

Average number of employees

Oil and natural gas extraction	50,599
Refining	11,576
Transportation	4,572
Wholesale	3,247
Retail	19,098
Pipeline construction	15,528
Oilfield machinery	0
Total petroleum industry	104,620

Source: For specific methodology and source details, please see pages 13 and 140

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 12/31/13 - 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 12/31/13 - thous. $) NA

Cumulative production & new reserves

(as of 12/31/13)

	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/City Gate price

(2013)

Crude oil ($/bbl.)	NA
Natural gas ($Mcf)*	$5.37

Wellhead/City Gate value of production

(2013 in thous. $)

Crude oil	NA
Natural gas*	$172
Total	$172

Average natural gas price

(2013 $/Mcf)

Residential consumers	$11.67
Commercial consumers	$10.06
Industrial consumers	$8.47
Electric utilities	NA
City Gate	$5.37

Severance taxes paid $5

(2013 in thous. $)

Top producing counties

(2013 on a BOE basis)

County	% Production State	% Production US
NA	NA	NA

City Gate price used for natural gas.

2013 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	NA
Footage (thous. ft.)	NA

Average rotary rigs active	0

Permits	0

Statewide rank

	Crude Oil	Natural Gas
Wells drilled	33rd	30th
Production	NA	32nd
Reserves (2013)	27th	28th

Number of operators	NA

Number of producing wells
(12/31/13)

Crude oil	NA
Natural gas	NA
Total	NA

Average production

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

Total production

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

Natural gas marketed production

(MMcf)	32

Average output per producing well

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

Coalbed methane (YTD MMcf)

Coalbed methane (YTD MMcf)	NA
Oil Wells	NA
Gas Wells	NA
Daily Average (MMcf) / Well	NA

Heavy oil (YTD Bbls, in thous.)

Heavy oil (YTD Bbls, in thous.)	NA
Wells	NA
Av. bbls per day (in thous.)	NA
Av. bbls per well	NA

2013 Latest Available Data

Petroleum reserves
(as of 12/31/13) (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 12/31/13) (Bcf)

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

Marginal oil wells

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

Marginal natural gas wells
(as of 12/31/13)

Producing marginal wells	NA
Natural gas production (MMcf)	NA

Mineral lease royalties, bonuses & rent

Oil	--
Natural Gas	--
Rent, Bonuses & Other	$7,532
Total Oil and Gas Revenues	$7,532
Total Federal Reported Revenues	$7,532
Oil and Gas Percent of Total	100%

Federal lands production shares

Oil	0%
Natural Gas	0%
Combined on BOE basis	0%

Horizontal wells drilled	0
Directional wells drilled	0
Vertical wells drilled	0

Natural gas vehicle fuel demand & fueling stations

Natural gas vehicle demand	247 Mmcf
CNG stations	9
LNG stations	0
LPG stations	20

Average number of employees

Oil and natural gas extraction	362
Refining	886
Transportation	496
Wholesale	2,887
Retail	11,390
Pipeline construction	723
Oilfield machinery	0
Total petroleum industry	16,744

Source: For specific methodology and source details, please see pages 13 and 140

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	11,882
Natural gas	15,224

Year and depth of deepest well drilled (ft.)

2012	19,972

Cumulative number of total wells drilled
(as of 12/31/13 - excluding service wells)

Oil wells	16,064	27%
Gas wells	14,939	26%
Dry holes	27,475	47%
Total	58,478	100%

Cumulative crude oil wellhead value

(as of 12/31/13 - thous. $)	$18,647,369

Cumulative production & new reserves
(as of 12/31/13)

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	1,319	314	1,633	11,004
Production	1,278	250	1,528	6,622

Value of Oil and Gas

Average wellhead/City Gate price
(2013)

Crude oil ($/bbl.)	$96.50
Natural gas ($Mcf)*	$4.91

Wellhead/City Gate value of production
(2013 in thous. $)

Crude oil	$743,629
Natural gas*	$606,984
Total	$1,350,613

Average natural gas price
(2013 $/Mcf)

Residential consumers	$9.09
Commercial consumers	$7.82
Industrial consumers	$6.97
Electric utilities	$4.58
City Gate	$4.91

Severance taxes paid

(2013 in thous. $)	$68,752

Top 10 producing counties
(2013 on a BOE basis)

County	% Production State	% Production US
Otsego	19.91	0.08
Montmorency	17.44	0.07
Antrim	12.86	0.05
Jackson	7.57	0.03
Alpena	6.11	0.03
Manistee	4.25	0.02
Kalkaska	4.02	0.02
Oscoda	3.14	0.01
Alcona	2.89	0.01
Crawford	2.44	0.01

City Gate price used for natural gas.

2013 Industry Statistics

Number of wells drilled

	Exploratory	Development	Total
Oil	13	54	67
Gas	2	4	6
Dry	56	23	79
Total	71	81	152

Total footage drilled
(thous. ft.)

	Exploratory	Development	Total
Oil	45.90	161.02	206.93
Gas	24.13	5.87	30.01
Dry	187.15	67.30	254.45
Total	257.19	234.20	491.39

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

New-field wildcats drilled — 47

Footage (thous. ft.) — 179.08

Average rotary rigs active — 0

Permits — 216

Statewide rank

	Crude Oil	Natural Gas
Wells drilled	23rd	22nd
Production	17th	19th
Reserves (2013)	17th	18th

Number of operators — 153

Number of producing wells
(12/31/13)

Crude oil	4,128
Natural gas	10,206
Total	14,334

Average production

Crude oil (thous. b/d)	21.3
NGL (thous. b/d)	2.2
Natural gas (MMcf/day)	308.4

Total production

Crude oil (YTD bbls, in thous.)	7,770
Natural gas (YTD MMcf)	112,580

Natural gas marketed production

(MMcf) — 123,622

Shale gas production — 101 Bcf

Average output per producing well

Crude oil (bbls.)	1,882
Natural gas (Mcf)	11,031

Coalbed methane (YTD MMcf) — NA

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

Heavy oil (YTD Bbls, in thous.) — NA

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

2013 Latest Available Data

Petroleum reserves
(as of 12/31/13) (mill. bbls.)

	Crude Oil	NGL	Total
New reserves	3	NA	3
Production	7	NA	7
Net annual change	-4	NA	-4
Proved reserves	67	NA	67

Natural gas reserves
(as of 12/31/13) (Bcf)

	Associated Dissolved	Non-Associated	Total Gas
New reserves	46	147	193
Production	15	120	135
Net annual change	31	27	58
Proved reserves	125	1,714	1,839

Marginal oil wells

Producing marginal wells	3,912
Crude oil production in Bbls. (thous.)	3,281
Crude oil production Bbls./d (thous.)	9

Marginal natural gas wells
(as of 12/31/13)

Producing marginal wells	9,975
Natural gas production (MMcf)	97,573

Mineral lease royalties, bonuses & rent

Oil	$416,207
Natural Gas	$656,848
Rent, Bonuses & Other	$401,909
Total Oil and Gas Revenues	$1,474,964
Total Federal Reported Revenues	$1,478,018
Oil and Gas Percent of Total	100%

Federal lands production shares

Oil	<1%
Natural Gas	1%
Combined on BOE basis	1%

Horizontal wells drilled — 54

Directional wells drilled — 51

Vertical wells drilled — 47

Natural gas vehicle fuel demand & fueling stations

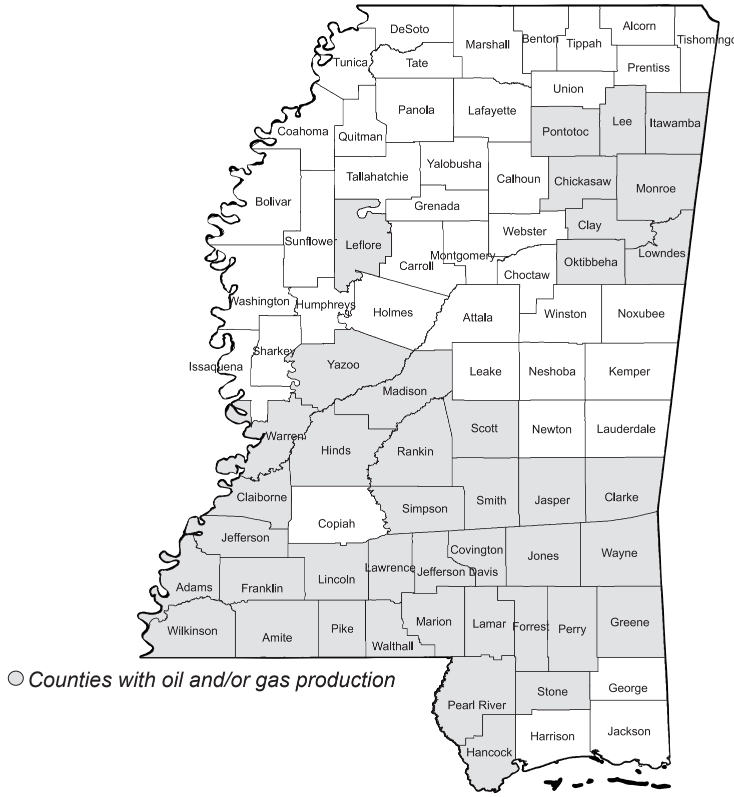
Natural gas vehicle demand	372 Mmcf
CNG stations	18
LNG stations	0
LPG stations	81

Average number of employees

Oil and natural gas extraction	2,909
Refining	767
Transportation	3,280
Wholesale	4,357
Retail	24,534
Pipeline construction	2,277
Oilfield machinery	0
Total petroleum industry	38,124

Source: For specific methodology and source details, please see pages 13 and 140

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 12/31/13 - excluding service wells)

Oil wells	12,555	35%
Gas wells	4,611	13%
Dry holes	18,591	52%
Total	35,757	100%

Cumulative crude oil wellhead value

(as of 12/31/13 - thous. $)	$34,983,782

Cumulative production & new reserves
(as of 12/31/13)

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	2,908	139	3,047	10,089
Production	2,705	154	2,859	9,562

Value of Oil and Gas

Average wellhead/City Gate price
(2013)

Crude oil ($/bbl.)	$100.40
Natural gas ($Mcf)*	$4.44

Wellhead/City Gate value of production
(2013 in thous. $)

Crude oil	$2,444,238
Natural gas*	$263,168
Total	$2,707,406

Average natural gas price
(2013 $/Mcf)

Residential consumers	$9.00
Commercial consumers	$7.61
Industrial consumers	$5.82
Electric utilities	NA
City Gate	$4.44

Severance taxes paid $103,170
(2013 in thous. $)

Top 10 producing counties
(2013 on a BOE basis)

County	% Production State	% Production US
Rankin	41.50	0.59
Madison	24.48	0.35
Jasper	4.98	0.07
Yazoo	4.83	0.07
Wayne	4.59	0.07
Jones	2.77	0.04
Lincoln	2.26	0.03
Jefferson Davis	2.03	0.03
Lamar	1.76	0.03
Smith	1.20	0.02

City Gate price used for natural gas.

2013 Industry Statistics

Number of wells drilled

	Exploratory	Development	Total
Oil	5	87	92
Gas	NA	10	10
Dry	20	41	61
Total	25	138	163

Total footage drilled
(thous. ft.)

	Exploratory	Development	Total
Oil	82.78	728.64	811.42
Gas	NA	114.57	114.57
Dry	185.06	308.59	493.64
Total	267.84	1,151.80	1,419.64

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

New-field wildcats drilled	14
Footage (thous. ft.)	154.40

Average rotary rigs active	11

Permits	570

Statewide rank

	Crude Oil	Natural Gas
Wells drilled	21st	17th - Tied
Production	14th	22nd
Reserves (2013)	14th	21st

Number of operators	170

Number of producing wells
(12/31/13)

Crude oil	2,543
Natural gas	1,671
Total	4,214

Average production

Crude oil (thous. b/d)	62.3
NGL (thous. b/d)	3.8
Natural gas (MMcf/day)	1,094.0

Total production

Crude oil (YTD bbls, in thous.)	22,754
Natural gas (YTD MMcf)	399,324

Natural gas marketed production

(MMcf)	59,272

Shale gas production	5 Bcf

Average output per producing well

Crude oil (bbls.)	8,948
Natural gas (Mcf)	238,973

Coalbed methane (YTD MMcf)	NA
Oil Wells	NA
Gas Wells	NA
Daily Average (MMcf) / Well	NA

Heavy oil (YTD Bbls, in thous.)	1,640
Wells	241
Av. bbls per day (in thous.)	4.49
Av. bbls per well	6,804

2013 Latest Available Data

Petroleum reserves
(as of 12/31/13) (mill. bbls.)

	Crude Oil	NGL	Total
New reserves	-17	NA	-17
Production	24	NA	24
Net annual change	-41	NA	-41
Proved reserves	235	NA	235

Natural gas reserves
(as of 12/31/13) (Bcf)

	Associated Dissolved	Non-Associated	Total Gas
New reserves	-13	63	50
Production	6	56	62
Net annual change	-19	7	-12
Proved reserves	43	557	600

Marginal oil wells

Producing marginal wells	1,371
Crude oil production in Bbls. (thous.)	2,812
Crude oil production Bbls./d (thous.)	8

Marginal natural gas wells
(as of 12/31/13)

Producing marginal wells	1,327
Natural gas production (MMcf)	12,151

Mineral lease royalties, bonuses & rent

Oil	$4,723,058
Natural Gas	$5,326,563
Rent, Bonuses & Other	$1,146,506
Total Oil and Gas Revenues	$11,196,127
Total Federal Reported Revenues	$11,227,660
Oil and Gas Percent of Total	100%

Federal lands production shares

Oil	2%
Natural Gas	15%
Combined on BOE basis	6%

Horizontal wells drilled	17
Directional wells drilled	45
Vertical wells drilled	101

Natural gas vehicle fuel demand & fueling stations

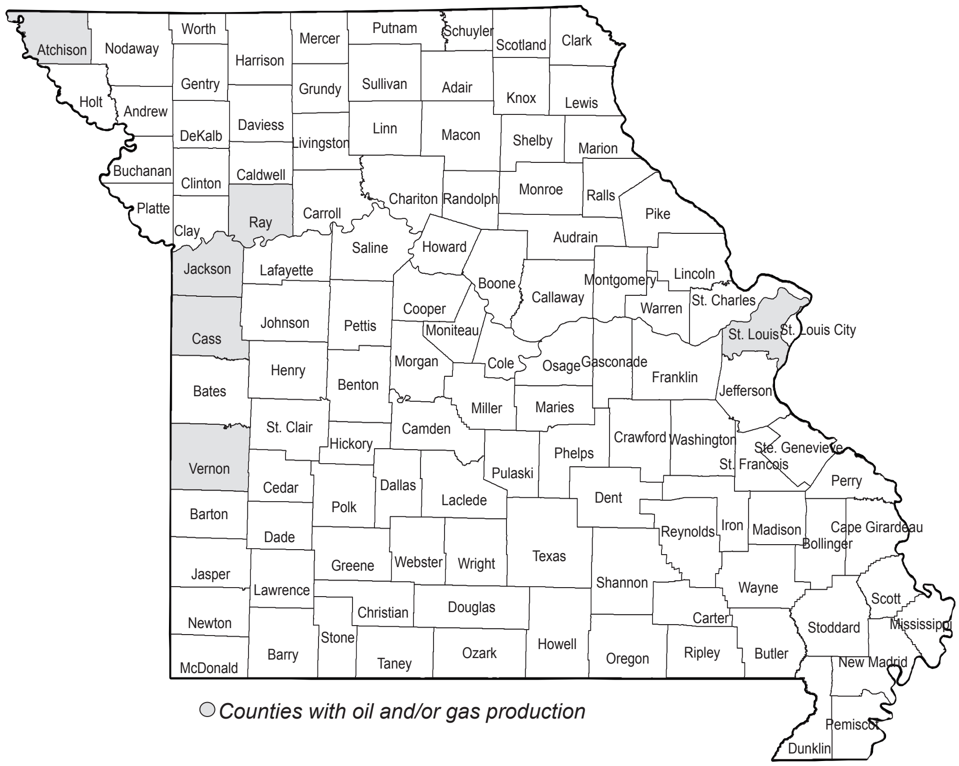
Natural gas vehicle demand	1 Mmcf
CNG stations	8
LNG stations	0
LPG stations	111

Average number of employees

Oil and natural gas extraction	5,432
Refining	466
Transportation	1,616
Wholesale	1,859
Retail	14,259
Pipeline construction	2,964
Oilfield machinery	206
Total petroleum industry	26,802

Source: For specific methodology and source details, please see pages 13 and 140

MISSOURI



Counties with oil and/or gas production

Background Information

Counties

Number of counties	114
With oil and/or gas production	6

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 12/31/13 - excluding service wells)

Oil wells	2,499	28%
Gas wells	1,671	19%
Dry holes	4,814	53%
Total	8,984	100%

Cumulative crude oil wellhead value

(as of 12/31/13 - thous. $)	$175,314

Cumulative production & new reserves

(as of 12/31/13)

	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/City Gate price

(2013)

Crude oil ($/bbl.)	$86.82
Natural gas ($Mcf)*	$4.99

Wellhead/City Gate value of production

(2013 in thous. $)

Crude oil	$17,277
Natural gas*	$45
Total	$17,322

Average natural gas price

(2013 $/Mcf)

Residential consumers	$10.88
Commercial consumers	$9.00
Industrial consumers	$8.19
Electric utilities	NA
City Gate	$4.99

Severance taxes paid — NA

(2013 in thous. $)

Top producing counties

(2013 on a BOE basis)

County	% Production State	% Production US
NA	NA	NA

City Gate price used for natural gas.

2013 Industry Statistics

Number of wells drilled

	Exploratory	Development	Total
Oil	NA	9	9
Gas	NA	NA	NA
Dry	NA	6	6
Total	NA	15	15

Total footage drilled
(thous. ft.)

	Exploratory	Development	Total
Oil	NA	7.37	7.37
Gas	NA	NA	NA
Dry	NA	2.32	2.32
Total	NA	9.69	9.69

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

New-field wildcats drilled NA
Footage (thous. ft.) NA

Average rotary rigs active 0

Permits 616

Statewide rank

	Crude Oil	Natural Gas
Wells drilled	28th	29th
Production	30th	NA
Reserves (2013)	28th	29th

Number of operators* 25

Number of producing wells*
(12/31/13)

Crude oil	601
Natural gas	7
Total	608

Average production

Crude oil (thous. b/d)	201
NGL (thous. b/d)	NA
Natural gas (MMcf/day)	9

Total production*

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

Natural gas marketed production
(MMcf) 9

Average output per producing well

Crude oil (bbls.)	334
Natural gas (Mcf)	1,286

Coalbed methane (YTD MMcf) NA

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

Heavy oil (YTD Bbls, in thous.) NA

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

2013 Latest Available Data

Petroleum reserves
(as of 12/31/13) (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 12/31/13) (Bcf)

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

Marginal oil wells

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

Marginal natural gas wells
(as of 12/31/13)

Producing marginal wells	NA
Natural gas production (MMcf)	NA

Mineral lease royalties, bonuses & rent

Oil	--
Natural Gas	--
Rent, Bonuses & Other	--
Total Oil and Gas Revenues	--
Total Federal Reported Revenues	$9,374,830
Oil and Gas Percent of Total	0%

Federal lands production shares

Oil	0%
Natural Gas	0%
Combined on BOE basis	0%

Horizontal wells drilled 0

Directional wells drilled 0

Vertical wells drilled 15

Natural gas vehicle fuel demand & fueling stations

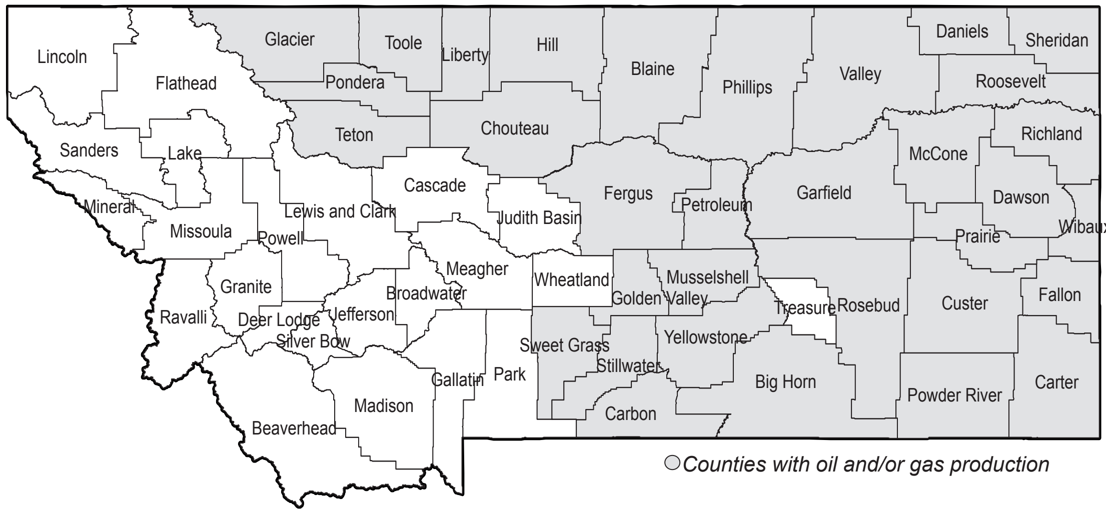
Natural gas vehicle demand	7 Mmcf
CNG stations	19
LNG stations	0
LPG stations	62

Average number of employees

Oil and natural gas extraction	212
Refining	1,204
Transportation	3,131
Wholesale	2,903
Retail	25,482
Pipeline construction	916
Oilfield machinery	0
Total petroleum industry	33,848

Source: For specific methodology and source details, please see pages 13 and 140
** State data*

MONTANA



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	24,822
Natural gas	20,787

Year and depth of deepest well drilled (ft.)

2012	24,822

Cumulative number of total wells drilled
(as of 12/31/13 - excluding service wells)

Oil wells	16,284	36%
Gas wells	11,388	25%
Dry holes	17,676	39%
Total	45,358	100%

Cumulative crude oil wellhead value

(as of 12/31/13 - thous. $)	$34,972,097

Cumulative production & new reserves
(as of 12/31/13)

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	2,216	59	2,275	4,620
Production	1,815	50	1,865	3,980

Value of Oil and Gas

Average wellhead/City Gate price
(2013)

Crude oil ($/bbl.)	$88.73
Natural gas ($Mcf)*	$4.21

Wellhead/City Gate value of production
(2013 in thous. $)

Crude oil	$2,598,724
Natural gas*	$266,249
Total	$2,864,973

Average natural gas price
(2013 $/Mcf)

Residential consumers	$8.19
Commercial consumers	$8.09
Industrial consumers	$7.33
Electric utilities	NA
City Gate	$4.21

Severance taxes paid — $213,229
(2013 in thous. $)

Top 10 producing counties
(2013 on a BOE basis)

County	% Production State	% Production US
Richland	41.96	0.24
Fallon	15.97	0.09
Roosevelt	12.06	0.07
Phillips	4.40	0.03
Sheridan	4.08	0.02
Blaine	3.38	0.02
Dawson	2.37	0.01
Hill	2.30	0.01
Toole	2.15	0.01
Wibaux	1.84	0.01

City Gate price used for natural gas.

2013 Industry Statistics

Number of wells drilled

	Exploratory	Development	Total
Oil	51	166	217
Gas	NA	10	10
Dry	21	16	37
Total	72	192	264

Total footage drilled
(thous. ft.)

	Exploratory	Development	Total
Oil	689.91	2,172.45	2,862.36
Gas	NA	17.56	17.56
Dry	126.49	93.38	219.87
Total	816.39	2,283.39	3,099.79

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

New-field wildcats drilled	54
Footage (thous. ft.)	582.15
Average rotary rigs active	12
Permits	475

Statewide rank

	Crude Oil	Natural Gas
Wells drilled	15th	17th - Tied
Production	13th	21st
Reserves (2013)	12th	22nd

Number of operators	235

Number of producing wells
(12/31/13)

Crude oil	4,950
Natural gas	5,822
Total	10,772

Average production

Crude oil (thous. b/d)	80.0
NGL (thous. b/d)	0.3
Natural gas (MMcf/day)	106.1

Total production

Crude oil (YTD bbls, in thous.)	29,182
Natural gas (YTD MMcf)	38,718

Natural gas marketed production

(MMcf)	63,242
Shale gas production	19 Bcf

Average output per producing well

Crude oil (bbls.)	5,895
Natural gas (Mcf)	6,650

Coalbed methane (YTD MMcf)	1,395
Oil Wells	1
Gas Wells	353
Daily Average (MMcf) / Well	3.82

Heavy oil (YTD Bbls, in thous.)	305
Wells	84
Av. bbls per day (in thous.)	0.84
Av. bbls per well	3,630

2013 Latest Available Data

Petroleum reserves
(as of 12/31/13) (mill. bbls.)

	Crude Oil	NGL	Total
New reserves	55	NA	55
Production	30	NA	30
Net annual change	25	NA	25
Proved reserves	413	NA	413

Natural gas reserves
(as of 12/31/13) (Bcf)

	Associated Dissolved	Non-Associated	Total Gas
New reserves	40	-2	38
Production	25	39	64
Net annual change	15	-41	-26
Proved reserves	304	286	590

Marginal oil wells

Producing marginal wells	3,390
Crude oil production in Bbls. (thous.)	4,286
Crude oil production Bbls./d (thous.)	12

Marginal natural gas wells
(as of 12/31/13)

Producing marginal wells	5,693
Natural gas production (MMcf)	35,380

Mineral lease royalties, bonuses & rent

Oil	$31,401,146
Natural Gas	$5,747,429
Rent, Bonuses & Other	$6,103,226
Total Oil and Gas Revenues	$43,251,801
Total Federal Reported Revenues	$95,413,595
Oil and Gas Percent of Total	45%

Federal lands production shares

Oil	9%
Natural Gas	20%
Combined on BOE basis	12%

Horizontal wells drilled	196
Directional wells drilled	3
Vertical wells drilled	65

Natural gas vehicle fuel demand & fueling stations

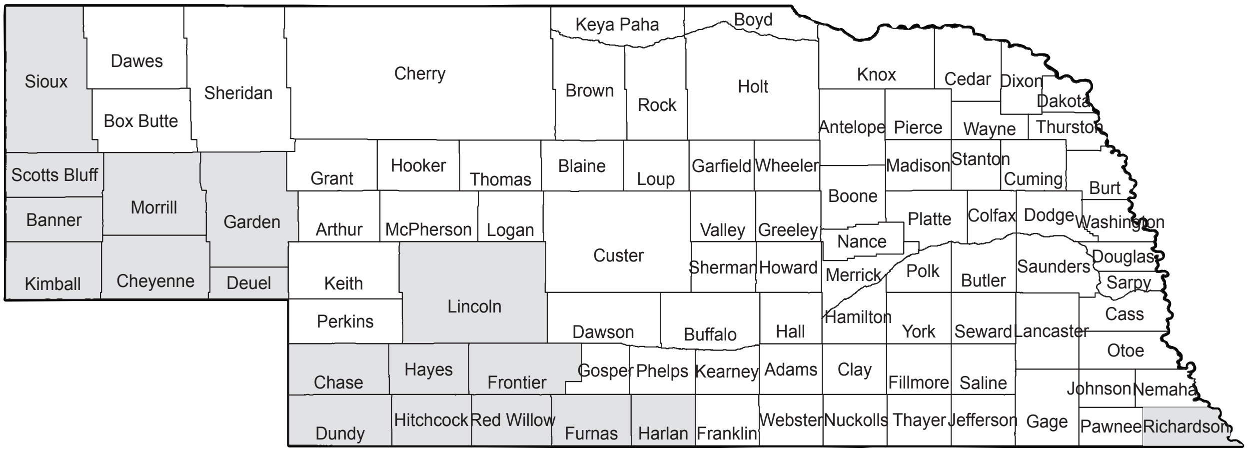
Natural gas vehicle demand	1 Mmcf
CNG stations	2
LNG stations	0
LPG stations	50

Average number of employees

Oil and natural gas extraction	3,898
Refining	1,046
Transportation	767
Wholesale	906
Retail	5,191
Pipeline construction	862
Oilfield machinery	0
Total petroleum industry	12,670

Source: For specific methodology and source details, please see pages 13 and 140

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	12,952
Natural gas	5,832

Year and depth of deepest well drilled (ft.)

1997	13,128

Cumulative number of total wells drilled

(as of 12/31/13 - excluding service wells)

Oil wells	6,485	31%
Gas wells	580	3%
Dry holes	13,830	66%
Total	20,895	100%

Cumulative crude oil wellhead value

(as of 12/31/13 - thous. $)	$5,723,142

Cumulative production & new reserves

(as of 12/31/13)

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	528	NA	528	NA
Production	519	NA	519	NA

Value of Oil and Gas

Average wellhead/City Gate price

(2013)

Crude oil ($/bbl.)	$87.44
Natural gas ($Mcf)*	$4.61

Wellhead/City Gate value of production

(2013 in thous. $)

Crude oil	$245,532
Natural gas*	$4,758
Total	$250,290

Average natural gas price

(2013 $/Mcf)

Residential consumers	$8.39
Commercial consumers	$6.49
Industrial consumers	$4.72
Electric utilities	$4.96
City Gate	$4.61

Severance taxes paid

(2013 in thous. $)	$5,647

Top 10 producing counties

(2013 on a BOE basis)

County	% Production State	% Production US
Hitchcock	34.68	0.02
Kimball	16.07	0.01
Dundy	14.62	0.01
Cheyenne	8.86	<0.01
Red Willow	8.78	<0.01
Banner	5.84	<0.01
Richardson	2.86	<0.01
Chase	1.87	<0.01
Hayes	1.59	<0.01
Morrill	1.53	<0.01

*City Gate price used for natural gas.

2013 Industry Statistics

Number of wells drilled

	Exploratory	Development	Total
Oil	29	47	76
Gas	NA	NA	NA
Dry	43	26	69
Total	72	73	145

Total footage drilled
(thous. ft.)

	Exploratory	Development	Total
Oil	140.53	217.09	357.61
Gas	NA	NA	NA
Dry	205.87	102.92	308.79
Total	346.39	320.01	666.40

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

New-field wildcats drilled	54
Footage (thous. ft.)	255.33
Average rotary rigs active	1
Permits	191

Statewide rank

	Crude Oil	Natural Gas
Wells drilled	22nd	27th
Production	23rd	28th
Reserves (2013)	24th	30th

Number of operators	104

Number of producing wells
(12/31/13)

Crude oil	1,406
Natural gas	235
Total	1,641

Average production

Crude oil (thous. b/d)	7.5
NGL (thous. b/d)	NA
Natural gas (MMcf/day)	2.4

Total production

Crude oil (YTD bbls, in thous.)	2,751
Natural gas (YTD MMcf)	868

Natural gas marketed production

(MMcf)	1,032

Average output per producing well

Crude oil (bbls.)	1,957
Natural gas (Mcf)	3,693

Coalbed methane (YTD MMcf)	NA
Oil Wells	NA
Gas Wells	NA
Daily Average (MMcf) / Well	NA

Heavy oil (YTD Bbls, in thous.)	NA
Wells	NA
Av. bbls per day (in thous.)	NA
Av. bbls per well	NA

2013 Latest Available Data

Petroleum reserves
(as of 12/31/13) (mill. bbls.)

	Crude Oil	NGL	Total
New reserves	1	NA	1
Production	3	NA	3
Net annual change	-2	NA	-2
Proved reserves	18	NA	18

Natural gas reserves
(as of 12/31/13) (Bcf)

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

Marginal oil wells

Producing marginal wells	1,309
Crude oil production in Bbls. (thous.)	1,627
Crude oil production Bbls./d (thous.)	4

Marginal natural gas wells
(as of 12/31/13)

Producing marginal wells	232
Natural gas production (MMcf)	868

Mineral lease royalties, bonuses & rent

Oil	$284,188
Natural Gas	$12,265
Rent, Bonuses & Other	$51,703
Total Oil and Gas Revenues	$348,155
Total Federal Reported Revenues	$348,155
Oil and Gas Percent of Total	100%

Federal lands production shares

Oil	1%
Natural Gas	<1%
Combined on BOE basis	1%

Horizontal wells drilled	3
Directional wells drilled	0
Vertical wells drilled	142

Natural gas vehicle fuel demand & fueling stations

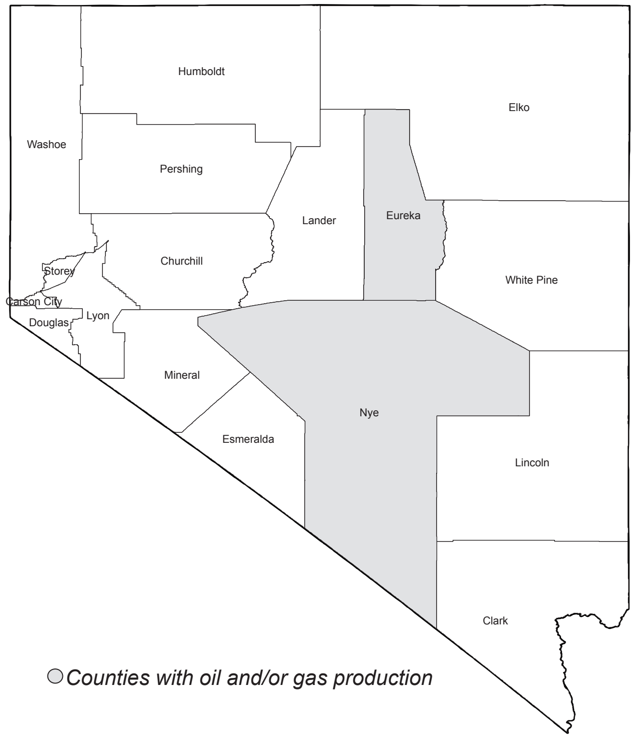
Natural gas vehicle demand	41 Mmcf
CNG stations	10
LNG stations	0
LPG stations	21

Average number of employees

Oil and natural gas extraction	198
Refining	0
Transportation	1,229
Wholesale	978
Retail	9,100
Pipeline construction	172
Oilfield machinery	0
Total petroleum industry	11,677

Source: For specific methodology and source details, please see pages 13 and 140

NEVADA



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 12/31/13 - excluding service wells)

Oil wells	125	14%
Gas wells	2	0%
Dry holes	774	86%
Total	901	100%

Cumulative crude oil wellhead value

(as of 12/31/13 - thous. $)	$1,031,421

Cumulative production & new reserves
(as of 12/31/13)

	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/City Gate price
(2013)

Crude oil ($/bbl.)	$93.69
Natural gas ($Mcf)*	$5.16

Wellhead/City Gate value of production
(2013 in thous. $)

Crude oil	$31,292
Natural gas*	$15,480
Total	$46,772

Average natural gas price
(2013 $/Mcf)

Residential consumers	$9.42
Commercial consumers	$6.61
Industrial consumers	$6.66
Electric utilities	NA
City Gate	$5.16

Severance taxes paid $875
(2013 in thous. $)

Top producing counties
(2013 on a BOE basis)

County	% Production State	US
Nye	86.85	<0.01
Eureka	13.51	<0.01

*City Gate price used for natural gas.

2013 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	14.39	NA	14.39
Total	14.39	NA	14.39

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

New-field wildcats drilled	3
Footage (thous. ft.)	14.39
Average rotary rigs active	3
Permits	36

Statewide rank

	Crude Oil	Natural Gas
Wells drilled	31st	34th
Production	28th	33rd
Reserves (2013)	29th	31st

Number of operators	6

Number of producing wells
(12/31/13)

Crude oil	73
Natural gas	NA
Total	73

Average production

Crude oil (thous. b/d)	0.9
NGL (thous. b/d)	NA
Natural gas (MMcf/day)	NA

Total production

Crude oil (YTD bbls, in thous.)	336
Natural gas (YTD MMcf)	NA

Natural gas marketed production

(MMcf)	3

Average output per producing well

Crude oil (bbls.)	4,598
Natural gas (Mcf)	NA

Coalbed methane (YTD MMcf)

Coalbed methane (YTD MMcf)	NA
Oil Wells	NA
Gas Wells	NA
Daily Average (MMcf) / Well	NA

Heavy oil (YTD Bbls, in thous.)

Heavy oil (YTD Bbls, in thous.)	NA
Wells	NA
Av. bbls per day (in thous.)	NA
Av. bbls per well	NA

2013 Latest Available Data

Petroleum reserves
(as of 12/31/13) (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 12/31/13) (Bcf)

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

Marginal oil wells

Producing marginal wells	46
Crude oil production in Bbls. (thous.)	81
Crude oil production Bbls./d (thous.)	<1

Marginal natural gas wells
(as of 12/31/13)

Producing marginal wells	NA
Natural gas production (MMcf)	NA

Mineral lease royalties, bonuses & rent

Oil	$3,661,957
Natural Gas	--
Rent, Bonuses & Other	$8,617,363
Total Oil and Gas Revenues	$12,279,320
Total Federal Reported Revenues	$17,304,928
Oil and Gas Percent of Total	71%

Federal lands production shares

Oil	100%
Natural Gas	0%
Combined on BOE basis	100%

Horizontal wells drilled	0
Directional wells drilled	0
Vertical wells drilled	3

Natural gas vehicle fuel demand & fueling stations

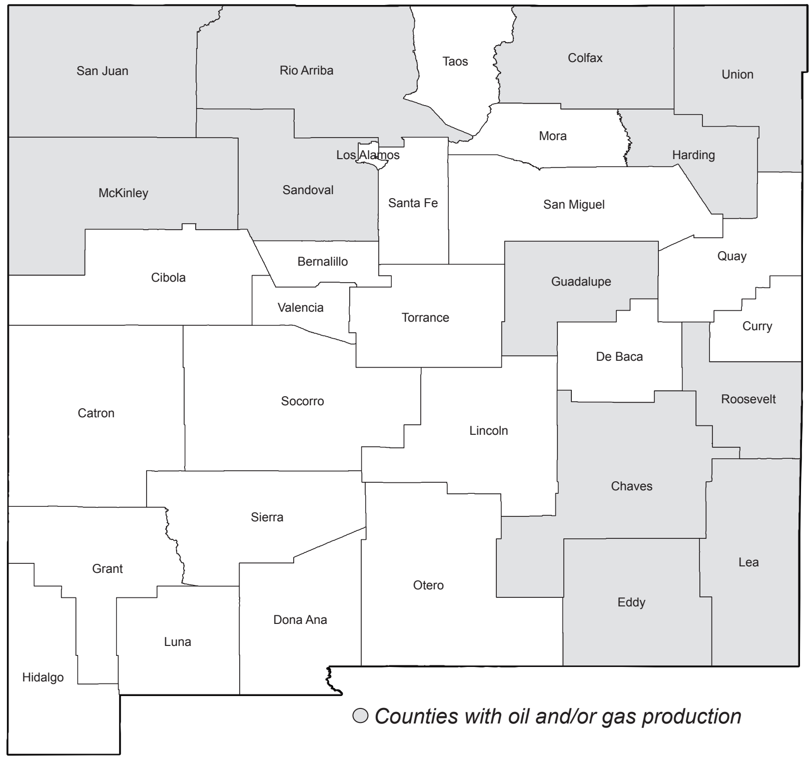
Natural gas vehicle demand	661 Mmcf
CNG stations	8
LNG stations	4
LPG stations	32

Average number of employees

Oil and natural gas extraction	250
Refining	110
Transportation	31
Wholesale	673
Retail	7,789
Pipeline construction	612
Oilfield machinery	0
Total petroleum industry	9,465

Source: For specific methodology and source details, please see pages 13 and 140

NEW MEXICO



Background Information

Counties

Number of counties	33
With oil and/or gas production	12

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	22,593
Natural gas	26,579

Year and depth of deepest well drilled (ft.)

1969	22,926

Cumulative number of total wells drilled

(as of 12/31/13 - excluding service wells)

Oil wells	57,069	48%
Gas wells	42,590	36%
Dry holes	18,998	16%
Total	118,657	100%

Cumulative crude oil wellhead value

(as of 12/31/13 - thous. $) $99,228,622

Cumulative production & new reserves

(as of 12/31/13)

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	8,075	3,506	11,581	86,258
Production	6,965	2,653	9,618	72,821

Value of Oil and Gas

Average wellhead/City Gate price

(2013)

Crude oil ($/bbl.)	$92.13
Natural gas ($Mcf)*	$4.08

Wellhead/City Gate value of production

(2013 in thous. $)

Crude oil	$9,346,681
Natural gas*	$4,877,358
Total	$14,224,039

Average natural gas price

(2013 $/Mcf)

Residential consumers	$8.92
Commercial consumers	$6.77
Industrial consumers	$5.58
Electric utilities	$4.35
City Gate	$4.08

Severance taxes paid $1,100,000

(2013 in thous. $)

Top producing counties

(2013 on a BOE basis)

County	% Production State	US
San Juan	29.37	1.15
Eddy	25.95	1.01
Rio Arriba	20.50	0.80
Lea	20.30	0.79
Colfax	1.74	0.07
Chaves	1.55	0.06
Sandoval	0.42	0.02
Roosevelt	0.14	0.01
McKinley	0.03	<0.01
Harding	0.00	<0.01

*City Gate price used for natural gas.

2013 Industry Statistics

Number of wells drilled

	Exploratory	Development	Total
Oil	89	1,026	1,115
Gas	11	83	94
Dry	7	42	49
Total	107	1,151	1,258

Total footage drilled
(thous. ft.)

	Exploratory	Development	Total
Oil	899.32	8,970.94	9,870.25
Gas	19.05	520.99	540.04
Dry	33.80	313.64	347.44
Total	952.16	9,805.56	10,757.73

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

New-field wildcats drilled	104
Footage (thous. ft.)	920.97
Average rotary rigs active	77
Permits	2,458

Statewide rank

	Crude Oil	Natural Gas
Wells drilled	6th	13th
Production	7th	8th
Reserves (2013)	7th	8th

Number of operators	475

Number of producing wells
(12/31/13)

Crude oil	25,414
Natural gas	33,978
Total	59,392

Average production

Crude oil (thous. b/d)	267.3
NGL (thous. b/d)	11.4
Natural gas (MMcf/day)	2,395.3

Total production

Crude oil (YTD bbls, in thous.)	97,578
Natural gas (YTD MMcf)	874,277

Natural gas marketed production

(MMcf)	1,195,431
Shale gas production	16 Bcf

Average output per producing well

Crude oil (bbls.)	3,840
Natural gas (Mcf)	25,731

Coalbed methane (YTD MMcf)	315,633
Oil Wells	1
Gas Wells	5,897
Daily Average (MMcf) / Well	864.75

Heavy oil (YTD Bbls, in thous.)	14
Wells	24
Av. bbls per day (in thous.)	0.04
Av. bbls per well	576

2013 Latest Available Data

Petroleum reserves
(as of 12/31/13) (mill. bbls.)

	Crude Oil	NGL	Total
New reserves	310	NA	310
Production	102	NA	102
Net annual change	208	NA	208
Proved reserves	1,277	NA	1,277

Natural gas reserves
(as of 12/31/13) (Bcf)

	Associated Dissolved	Non-Associated	Total Gas
New reserves	878	378	1,256
Production	284	958	1,242
Net annual change	594	-580	14
Proved reserves	3,413	11,154	14,567

Marginal oil wells

Producing marginal wells	20,392
Crude oil production in Bbls. (thous.)	25,104
Crude oil production Bbls./d (thous.)	69

Marginal natural gas wells
(as of 12/31/13)

Producing marginal wells	25,555
Natural gas production (MMcf)	312,046

Mineral lease royalties, bonuses & rent

Oil	$641,751,142
Natural Gas	$320,100,205
Rent, Bonuses & Other	$81,118,844
Total Oil and Gas Revenues	$1,042,970,190
Total Federal Reported Revenues	$1,116,383,744
Oil and Gas Percent of Total	93%

Federal lands production shares

Oil	50%
Natural Gas	55%
Combined on BOE basis	53%

Horizontal wells drilled	654
Directional wells drilled	100
Vertical wells drilled	504

Natural gas vehicle fuel demand & fueling stations

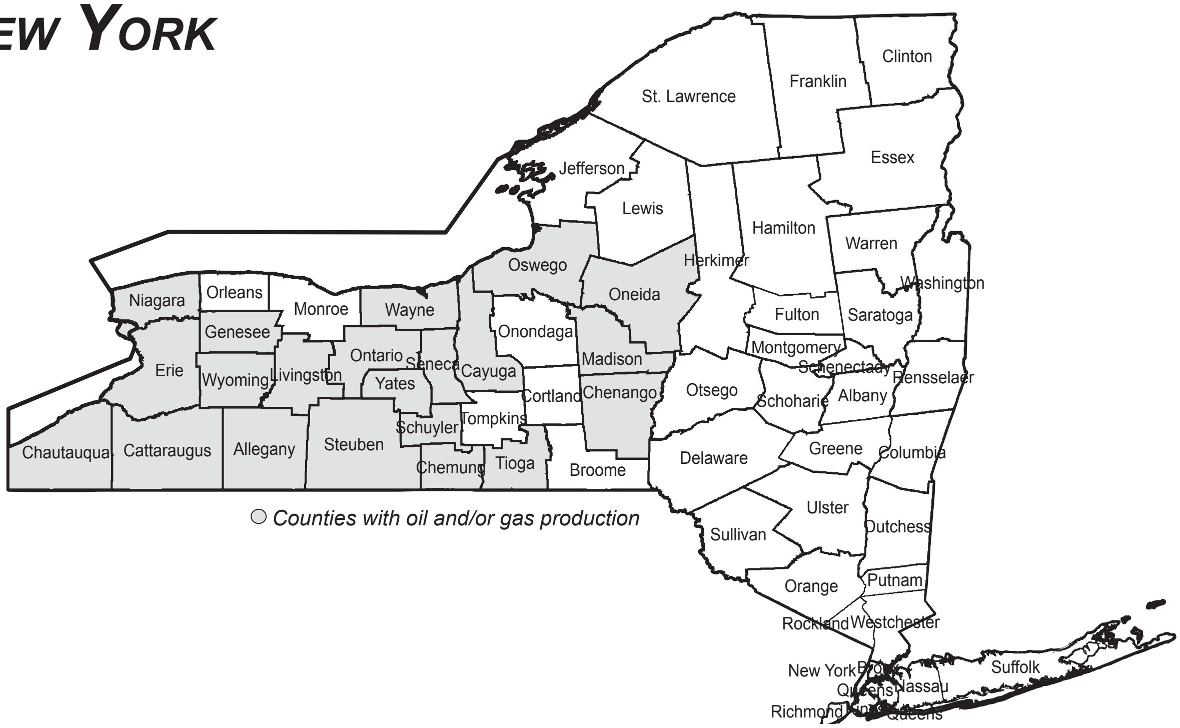
Natural gas vehicle demand	281 Mmcf
CNG stations	14
LNG stations	1
LPG stations	45

Average number of employees

Oil and natural gas extraction	20,452
Refining	30
Transportation	1,279
Wholesale	1,519
Retail	7,669
Pipeline construction	2,488
Oilfield machinery	0
Total petroleum industry	33,437

Source: For specific methodology and source details, please see pages 13 and 140

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	3,540
Natural gas	14,920

Year and depth of deepest well drilled (ft.)

2002	15,079

Cumulative number of total wells drilled

(as of 12/31/13 - excluding service wells)

Oil wells	16,662	53%
Gas wells	10,873	34%
Dry holes	4,049	13%
Total	31,584	100%

Cumulative crude oil wellhead value

(as of 12/31/13 - thous. $)	$1,299,041

Cumulative production & new reserves

(as of 12/31/13)

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	NA	NA	NA	1,581
Production	NA	NA	NA	1,451

Value of Oil and Gas

Average wellhead/City Gate price

(2013)

Crude oil ($/bbl.)	NA
Natural gas ($Mcf)*	$5.02

Wellhead/City Gate value of production

(2013 in thous. $)

Crude oil	NA
Natural gas*	$117,759
Total	$117,759

Average natural gas price

(2013 $/Mcf)

Residential consumers	$12.49
Commercial consumers	$8.00
Industrial consumers	$7.44
Electric utilities	$5.26
City Gate	$5.02

Severance taxes paid --

(2013 in thous. $)

Top 10 producing counties

(2013 on a BOE basis)

County	% Production State	% Production US
Chemung	23.74	0.01
Chautauqua	22.72	0.01
Steuben	18.33	0.01
Cattaraugus	9.43	0.01
Erie	7.66	<0.01
Chenango	3.16	<0.01
Seneca	3.02	<0.01
Cayuga	3.00	<0.01
Genesee	2.60	<0.01
Madison	1.94	<0.01

City Gate price used for natural gas.

2013 Industry Statistics

Number of wells drilled

	Exploratory	Development	Total
Oil	NA	145	145
Gas	2	2	4
Dry	1	NA	1
Total	3	147	150

Total footage drilled
(thous. ft.)

	Exploratory	Development	Total
Oil	NA	219.58	219.58
Gas	9.53	6.65	16.18
Dry	5.81	NA	5.81
Total	15.34	226.23	241.57

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

New-field wildcats drilled	1
Footage (thous. ft.)	4.60
Average rotary rigs active	0
Permits	168

Statewide rank

	Crude Oil	Natural Gas
Wells drilled	17th	24th
Production	29th	23rd
Reserves (2013)	30th	23rd

Number of operators	642

Number of producing wells
(12/31/13)

Crude oil	2,723
Natural gas	7,571
Total	10,294

Average production

Crude oil (thous. b/d)	0.7
NGL (thous. b/d)	0.1
Natural gas (MMcf/day)	58.2

Total production

Crude oil (YTD bbls, in thous.)	259
Natural gas (YTD MMcf)	21,247

Natural gas marketed production

(MMcf)	23,458

Average output per producing well

Crude oil (bbls.)	95
Natural gas (Mcf)	2,806

Coalbed methane (YTD MMcf)	NA
Oil Wells	NA
Gas Wells	NA
Daily Average (MMcf) / Well	NA

Heavy oil (YTD Bbls, in thous.)	NA
Wells	NA
Av. bbls per day (in thous.)	NA
Av. bbls per well	NA

2013 Latest Available Data

Petroleum reserves
(as of 12/31/13) (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 12/31/13) (Bcf)

	Associated Dissolved	Non-Associated	Total Gas
New reserves	1	-18	-17
Production	1	22	23
Net annual change	0	-40	-40
Proved reserves	6	138	144

Marginal oil wells

Producing marginal wells	2,394
Crude oil production in Bbls. (thous.)	259
Crude oil production Bbls./d (thous.)	1

Marginal natural gas wells
(as of 12/31/13)

Producing marginal wells	6,784
Natural gas production (MMcf)	10,610

Mineral lease royalties, bonuses & rent

Oil	--
Natural Gas	$5,053
Rent, Bonuses & Other	--
Total Oil and Gas Revenues	$5,053
Total Federal Reported Revenues	$5,053
Oil and Gas Percent of Total	100%

Federal lands production shares

Oil	0%
Natural Gas	<1%
Combined on BOE basis	<1%

Horizontal wells drilled	4
Directional wells drilled	0
Vertical wells drilled	146

Natural gas vehicle fuel demand & fueling stations

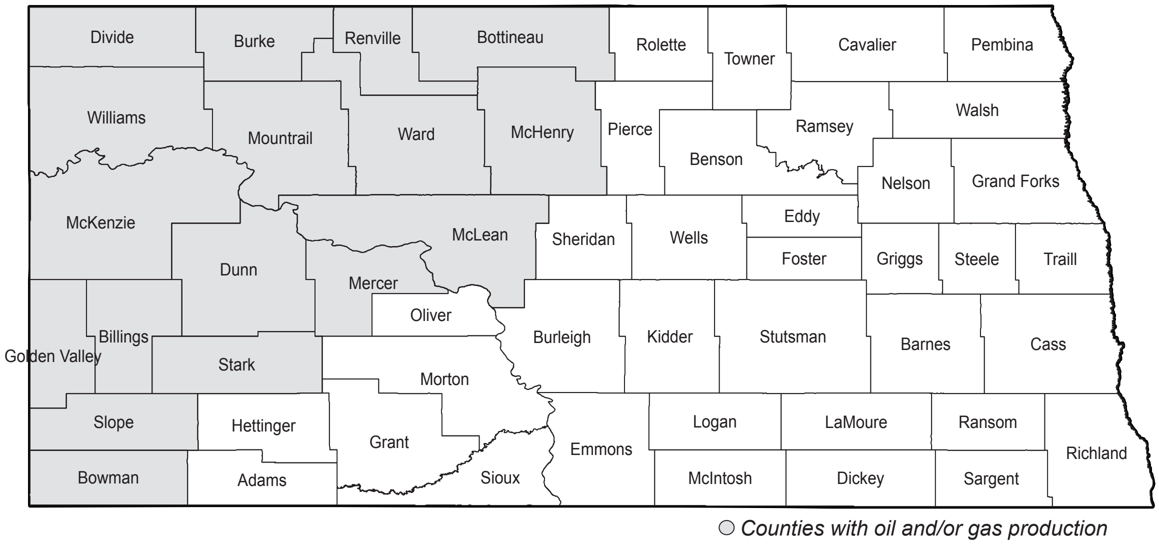
Natural gas vehicle demand	4,324 Mmcf
CNG stations	113
LNG stations	0
LPG stations	58

Average number of employees

Oil and natural gas extraction	1,140
Refining	1,831
Transportation	6,441
Wholesale	11,460
Retail	28,420
Pipeline construction	1,857
Oilfield machinery	0
Total petroleum industry	51,149

Source: For specific methodology and source details, please see pages 13 and 140

North Dakota



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 — 308,527 thous. bbls.	2013
Natural gas — 258,479 MMcf	2012

Deepest producing well (ft.)

Crude oil—(25,828 MD horizontal)	26,908
Natural gas—(21,070 MD horizontal)	21,525

Year and depth of deepest well drilled (ft.)

2013	26,908

Cumulative number of total wells drilled

(as of 12/31/13 - excluding service wells)

Oil wells	18,774	71%
Gas wells	340	1%
Dry holes	7,409	28%
Total	26,523	100%

Cumulative crude oil wellhead value

(as of 12/31/13 - thous. $)	$110,513,212

Cumulative production & new reserves

(as of 12/31/13)

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	8,157	485	8,642	9,125
Production	2,558	216	2,774	3,331

Value of Oil and Gas

Average wellhead/City Gate price

(2013)

Crude oil ($/bbl.)	$90.22
Natural gas ($Mcf)*	$4.99

Wellhead/City Gate value of production

(2013 in thous. $)

Crude oil	$28,313,111
Natural gas*	$1,176,198
Total	$29,489,309

Average natural gas price

(2013 $/Mcf)

Residential consumers	$7.43
Commercial consumers	$6.32
Industrial consumers	$4.14
Electric utilities	NA
City Gate	$4.99

Severance taxes paid

(2013 in thous. $)	$2,407,740

Top 10 producing counties

(2013 on a BOE basis)

County	% Production State	US
McKenzie	27.96	1.39
Mountrail	25.50	1.27
Dunn	16.31	0.81
Williams	15.75	0.78
Divide	4.31	0.21
Bowman	2.40	0.12
Stark	2.30	0.11
Burke	1.80	0.09
Billings	1.69	0.08
Bottineau	0.77	0.04

City Gate price used for natural gas.

2013 Industry Statistics

Number of wells drilled

	Exploratory	Development	Total
Oil	28	2,312	2,340
Gas	NA	NA	NA
Dry	14	129	143
Total	42	2,441	2,483

Total footage drilled
(thous. ft.)

	Exploratory	Development	Total
Oil	431.49	40,441.45	40,872.94
Gas	NA	NA	NA
Dry	108.02	1,171.12	1,279.14
Total	539.50	41,612.58	42,152.08

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

New-field wildcats drilled	26
Footage (thous. ft.)	263.86
Average rotary rigs active	173
Permits	3,142

Statewide rank

	Crude Oil	Natural Gas
Wells drilled	5th	25th
Production	3rd	15th
Reserves (2013)	2nd	13th

Number of operators	147

Number of producing wells
(12/31/13)

Crude oil	10,287
Natural gas	306
Total	10,593

Average production

Crude oil (thous. b/d)	845.3
NGL (thous. b/d)	9.9
Natural gas (MMcf/day)	31.9

Total production

Crude oil (YTD bbls, in thous.)	308,527
Natural gas (YTD MMcf)	11,641

Natural gas marketed production

(MMcf)	235,711
Shale gas production	268 Bcf

Average output per producing well

Crude oil (bbls.)	29,992
Natural gas (Mcf)	38,042

Coalbed methane (YTD MMcf)	NA
Oil Wells	NA
Gas Wells	NA
Daily Average (MMcf) / Well	NA

Heavy oil (YTD Bbls, in thous.)	NA
Wells	NA
Av. bbls per day (in thous.)	NA
Av. bbls per well	NA

2013 Latest Available Data

Petroleum reserves
(as of 12/31/13) (mill. bbls.)

	Crude Oil	NGL	Total
New reserves	2,224	NA	2,224
Production	314	NA	314
Net annual change	1,910	NA	1,910
Proved reserves	5,683	NA	5,683

Natural gas reserves
(as of 12/31/13) (Bcf)

	Associated Dissolved	Non-Associated	Total Gas
New reserves	2,453	-7	2,446
Production	332	7	339
Net annual change	2,121	-14	2,107
Proved reserves	5,990	91	6,081

Marginal oil wells

Producing marginal wells	2,594
Crude oil production in Bbls. (thous.)	5,722
Crude oil production Bbls./d (thous.)	16

Marginal natural gas wells
(as of 12/31/13)

Producing marginal wells	255
Natural gas production (MMcf)	2,089

Mineral lease royalties, bonuses & rent

Oil	$668,761,323
Natural Gas	$14,833,669
Rent, Bonuses & Other	$83,024,665
Total Oil and Gas Revenues	$766,619,657
Total Federal Reported Revenues	$768,476,638
Oil and Gas Percent of Total	100%

Federal lands production shares

Oil	5%
Natural Gas	5%
Combined on BOE basis	5%

Horizontal wells drilled	2,398
Directional wells drilled	25
Vertical wells drilled	60

Natural gas vehicle fuel demand & fueling stations

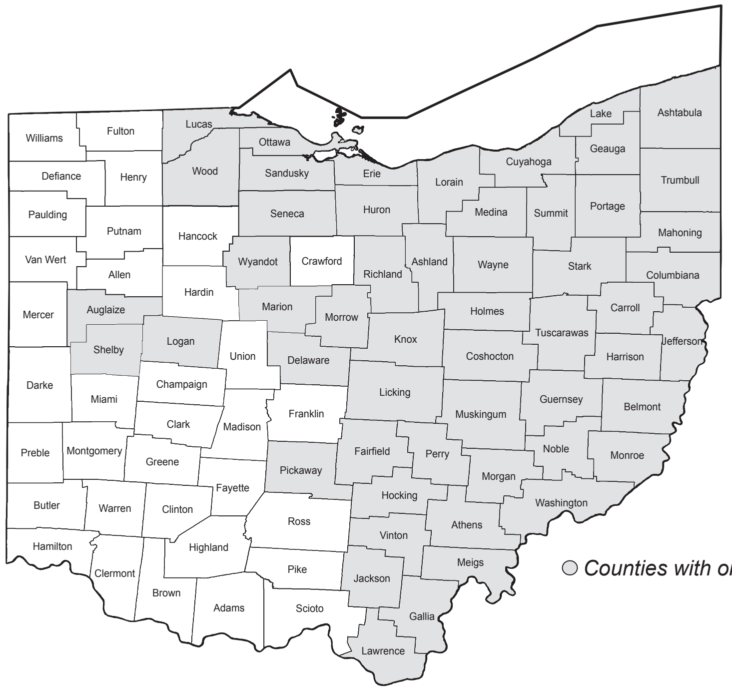
Natural gas vehicle demand	1 Mmcf
CNG stations	1
LNG stations	0
LPG stations	19

Average number of employees

Oil and natural gas extraction	17,779
Refining	0
Transportation	1,484
Wholesale	2,282
Retail	5,541
Pipeline construction	3,405
Oilfield machinery	0
Total petroleum industry	30,491

Source: For specific methodology and source details, please see pages 13 and 140

Ohio



○ *Counties with oil and/or gas production*

Background Information

Counties

Number of counties	88
With oil and/or gas production	54

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	17,862
Natural gas	18,645

Year and depth of deepest well drilled (ft.)

2013	18,645

Cumulative number of total wells drilled

(as of 12/31/13 - excluding service wells)

Oil wells	105,491	53%
Gas wells	57,382	29%
Dry holes	35,848	18%
Total	198,721	100%

Cumulative crude oil wellhead value

(as of 12/31/13 - thous. $)	$11,964,172

Cumulative production & new reserves

(as of 12/31/13)

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	1,185	NA	1,185	12,363
Production	1,123	NA	1,123	9,522

Value of Oil and Gas

Average wellhead/City Gate price

(2013)

Crude oil ($/bbl.)	$94.89
Natural gas ($Mcf)*	$4.51

Wellhead/City Gate value of production

(2013 in thous. $)

Crude oil	$755,514
Natural gas*	$839,676
Total	$1,595,190

Average natural gas price

(2013 $/Mcf)

Residential consumers	$9.46
Commercial consumers	$6.21
Industrial consumers	$6.03
Electric utilities	$3.95
City Gate	$4.51

Severance taxes paid

(2013 in thous. $)	$2,838

Top 10 producing counties

(2013 on a BOE basis)

County	% Production State	% Production US
Carroll	29.34	0.13
Harrison	8.03	0.03
Monroe	6.03	0.03
Belmont	4.83	0.02
Mahoning	4.34	0.02
Stark	4.27	0.02
Trumbull	4.06	0.02
Noble	3.32	0.01
Tuscarawas	3.09	0.01
Guernsey	2.80	0.01

City Gate price used for natural gas.

2013 Industry Statistics

Number of wells drilled

	Exploratory	Development	Total
Oil	6	238	244
Gas	21	258	279
Dry	16	18	34
Total	43	514	557

Total footage drilled
(thous. ft.)

	Exploratory	Development	Total
Oil	51.01	1,755.71	1,806.71
Gas	214.73	2,547.97	2,762.70
Dry	79.40	69.86	149.26
Total	345.14	4,373.53	4,718.67

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

New-field wildcats drilled	8
Footage (thous. ft.)	28.23

Average rotary rigs active	32

Permits	1,163

Statewide rank

	Crude Oil	Natural Gas
Wells drilled	14th	10th
Production	18th	17th
Reserves (2013)	16th	15th

Number of operators	726

Number of producing wells
(12/31/13)

Crude oil	19,626
Natural gas	24,723
Total	44,349

Average production

Crude oil (thous. b/d)	16.3
NGL (thous. b/d)	5.5
Natural gas (MMcf/day)	340.7

Total production

Crude oil (YTD bbls, in thous.)	5,944
Natural gas (YTD MMcf)	124,347

Natural gas marketed production

(MMcf)	186,181

Shale gas production	101 Bcf

Average output per producing well

Crude oil (bbls.)	303
Natural gas (Mcf)	5,030

Coalbed methane (YTD MMcf)	NA
Oil Wells	NA
Gas Wells	NA
Daily Average (MMcf) / Well	NA

Heavy oil (YTD Bbls, in thous.)	NA
Wells	NA
Av. bbls per day (in thous.)	NA
Av. bbls per well	NA

2013 Latest Available Data

Petroleum reserves
(as of 12/31/13) (mill. bbls.)

	Crude Oil	NGL	Total
New reserves	30	NA	30
Production	7	NA	7
Net annual change	23	NA	23
Proved reserves	87	NA	87

Natural gas reserves
(as of 12/31/13) (Bcf)

	Associated Dissolved	Non-Associated	Total Gas
New reserves	115	2,019	2,134
Production	24	114	138
Net annual change	91	144	235
Proved reserves	314	2,887	3,201

Marginal oil wells

Producing marginal wells	16,916
Crude oil production in Bbls. (thous.)	3,473
Crude oil production Bbls./d (thous.)	10

Marginal natural gas wells
(as of 12/31/13)

Producing marginal wells	23,966
Natural gas production (MMcf)	44,450

Mineral lease royalties, bonuses & rent

Oil	$211,507
Natural Gas	$194,403
Rent, Bonuses & Other	$55,655
Total Oil and Gas Revenues	$461,565
Total Federal Reported Revenues	$461,565
Oil and Gas Percent of Total	100%

Federal lands production shares

Oil	<1%
Natural Gas	<1%
Combined on BOE basis	<1%

Horizontal wells drilled	293
Directional wells drilled	13
Vertical wells drilled	251

Natural gas vehicle fuel demand & fueling stations

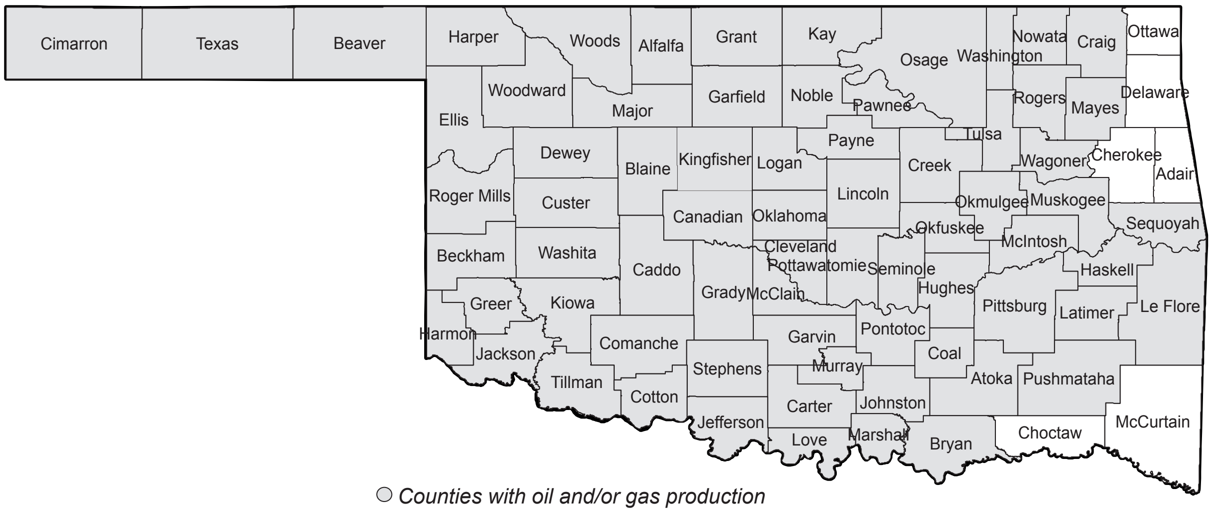
Natural gas vehicle demand	99 Mmcf
CNG stations	39
LNG stations	2
LPG stations	68

Average number of employees

Oil and natural gas extraction	5,846
Refining	4,870
Transportation	5,138
Wholesale	4,816
Retail	34,538
Pipeline construction	5,241
Oilfield machinery	357
Total petroleum industry	60,806

Source: For specific methodology and source details, please see pages 13 and 140

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 — 2,258,471 MMcf	1990

Deepest producing well (ft.)

Crude oil	25,105
Natural gas	27,400

Year and depth of deepest well drilled (ft.)

1974	31,441

Cumulative number of total wells drilled

(as of 12/31/13 - excluding service wells)

Oil wells	254,385	52%
Gas wells	92,650	19%
Dry holes	138,101	29%
Total	485,136	100%

Cumulative crude oil wellhead value

(as of 12/31/13 - thous. $)	$152,338,528

Cumulative production & new reserves

(as of 12/31/13)

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	16,048	6,434	22,482	135,267
Production	14,943	4,803	19,746	123,248

Value of Oil and Gas

Average wellhead/City Gate price

(2013)

Crude oil ($/bbl.)	$94.25
Natural gas ($Mcf)*	$4.75

Wellhead/City Gate value of production

(2013 in thous. $)

Crude oil	$10,790,306
Natural gas*	$10,183,995
Total	$20,974,301

Average natural gas price

(2013 $/Mcf)

Residential consumers	$9.71
Commercial consumers	$8.05
Industrial consumers	$7.16
Electric utilities	$4.13
City Gate	$4.75

Severance taxes paid

(2013 in thous. $)	$715,073

Top 10 producing counties

(2013 on a BOE basis)

County	% Production State	% Production US
Pittsburg	9.74	0.55
Canadian	8.10	0.46
Roger Mills	6.34	0.36
Washita	4.45	0.25
Coal	4.43	0.25
Grady	4.29	0.24
Caddo	3.84	0.22
Alfalfa	3.77	0.21
Woods	3.37	0.19
Carter	3.34	0.19

**City Gate price used for natural gas.*

2013 Industry Statistics

Number of wells drilled

	Exploratory	Development	Total
Oil	30	2,376	2,406
Gas	10	584	594
Dry	15	208	223
Total	55	3,168	3,223

Total footage drilled
(thous. ft.)

	Exploratory	Development	Total
Oil	215.96	20,987.98	21,203.94
Gas	76.84	7,166.28	7,243.12
Dry	64.24	1,250.65	1,314.88
Total	357.04	29,404.91	29,761.94

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

New-field wildcats drilled	17
Footage (thous. ft.)	151.45
Average rotary rigs active	179
Permits	4,788

Statewide rank

	Crude Oil	Natural Gas
Wells drilled	4th	5th
Production	6th	4th
Reserves (2013)	6th	4th

Number of operators	2,857

Number of producing wells
(12/31/13)

Crude oil	42,532
Natural gas	37,791
Total	80,323

Average production

Crude oil (thous. b/d)	258.1
NGL (thous. b/d)	48.0
Natural gas (MMcf/day)	4,274.5

Total production

Crude oil (YTD bbls, in thous.)	94,196
Natural gas (YTD MMcf)	1,560,199

Natural gas marketed production

(MMcf)	2,143,999
Shale gas production	698 Bcf

Average output per producing well

Crude oil (bbls.)	2,215
Natural gas (Mcf)	41,285

Coalbed methane (YTD MMcf)	23,159
Oil Wells	0
Gas Wells	2,872
Daily Average (MMcf) / Well	63.45

Heavy oil (YTD Bbls, in thous.)	NA
Wells	NA
Av. bbls per day (in thous.)	NA
Av. bbls per well	NA

2013 Latest Available Data

Petroleum reserves
(as of 12/31/13) (mill. bbls.)

	Crude Oil	NGL	Total
New reserves	302	NA	302
Production	113	NA	113
Net annual change	189	NA	189
Proved reserves	1,469	NA	1,469

Natural gas reserves
(as of 12/31/13) (Bcf)

	Associated Dissolved	Non-Associated	Total Gas
New reserves	1,158	1,060	2,218
Production	324	1,708	2,032
Net annual change	834	-648	186
Proved reserves	4,530	24,370	28,900

Marginal oil wells

Producing marginal wells	34,161
Crude oil production in Bbls. (thous.)	21,346
Crude oil production Bbls./d (thous.)	58

Marginal natural gas wells
(as of 12/31/13)

Producing marginal wells	28,154
Natural gas production (MMcf)	302,956

Mineral lease royalties, bonuses & rent

Oil	$23,763,755
Natural Gas	$25,843,677
Rent, Bonuses & Other	$2,367,123
Total Oil and Gas Revenues	$51,974,555
Total Federal Reported Revenues	$52,981,184
Oil and Gas Percent of Total	98%

Federal lands production shares

Oil	<1%
Natural Gas	1%
Combined on BOE basis	1%

Horizontal wells drilled	2,194
Directional wells drilled	64
Vertical wells drilled	965

Natural gas vehicle fuel demand & fueling stations

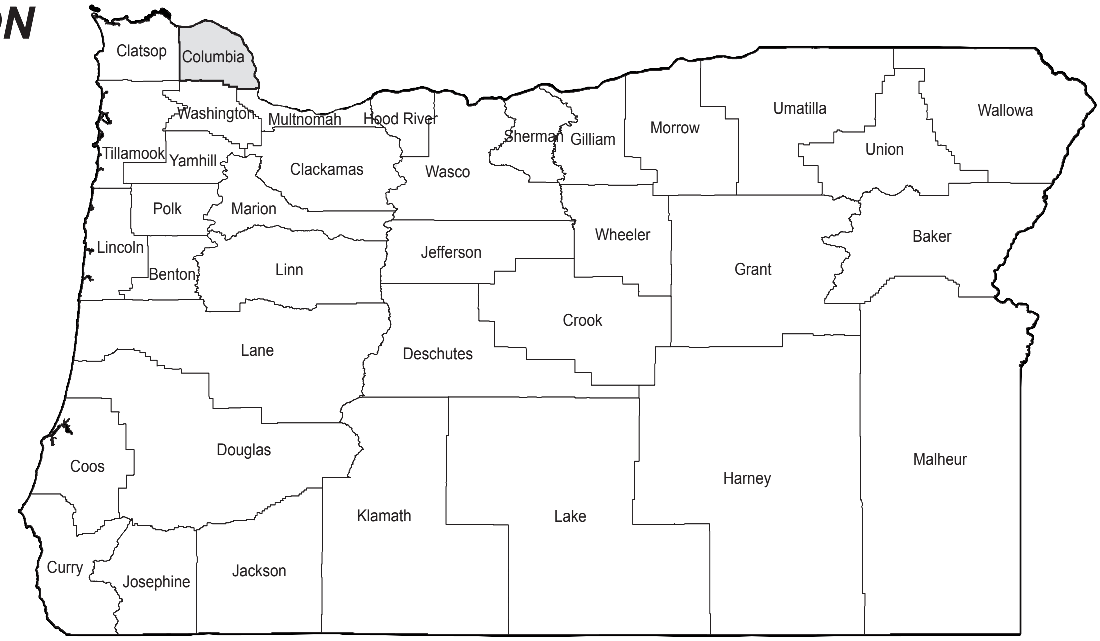
Natural gas vehicle demand	288 Mmcf
CNG stations	102
LNG stations	1
LPG stations	144

Average number of employees

Oil and natural gas extraction	58,239
Refining	2,289
Transportation	7,065
Wholesale	3,076
Retail	16,196
Pipeline construction	4,789
Oilfield machinery	9,942
Total petroleum industry	101,596

Source: For specific methodology and source details, please see pages 13 and 140

OREGON



○ *Counties with oil and/or gas production*

Background Information

Counties

Number of counties	36
With oil and/or gas production	1

First year of production

Crude oil	NA
Natural gas	1979

Year and amount of peak production

Crude oil —	NA
Natural gas — 5,000 MMcf	1980/81

Deepest producing well (ft.)

Crude oil	NA
Natural gas	NA

Year and depth of deepest well drilled (ft.)

1979	13,177

Cumulative number of total wells drilled

(as of 12/31/13 - excluding service wells)

Oil wells	NA	NA
Gas wells	85	21%
Dry holes	325	79%
Total	410	100%

Cumulative crude oil wellhead value

(as of 12/31/13 - thous. $)	NA

Cumulative production & new reserves

(as of 12/31/13)

	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/City Gate price

(2013)

Crude oil ($/bbl.)	NA
Natural gas ($Mcf)*	$4.82

Wellhead/City Gate value of production

(2013 in thous. $)

Crude oil	NA
Natural gas*	$3,711
Total	$3,711

Average natural gas price

(2013 $/Mcf)

Residential consumers	$10.84
Commercial consumers	$8.60
Industrial consumers	$5.79
Electric utilities	NA
City Gate	$4.82

Severance taxes paid $83

(2013 in thous. $)

Top producing counties

(2013 on a BOE basis)

County	% Production State	% Production US
NA	NA	NA

City Gate price used for natural gas.

2013 Industry Statistics

Number of wells drilled

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

Total footage drilled
(thous. ft.)

	Exploratory	Development	Total
Oil	NA	NA	NA
Gas	NA	3	3
Dry	NA	NA	NA
Total	NA	3	3

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

New-field wildcats drilled	NA
Footage (thous. ft.)	NA

Average rotary rigs active	0

Permits	0

Statewide rank

	Crude Oil	Natural Gas
Wells drilled	NA	28th
Production	NA	29th
Reserves (2013)	31st	32nd

Number of operators	NA

Number of producing wells
(12/31/13)

Crude oil	NA
Natural gas	28
Total	28

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)	770

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

2013 Latest Available Data

Petroleum reserves
(as of 12/31/13) (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 12/31/13) (Bcf)

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

Marginal oil wells

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

Marginal natural gas wells
(as of 12/31/13)

Producing marginal wells	NA
Natural gas production (MMcf)	NA

Mineral lease royalties, bonuses & rent

Oil	--
Natural Gas	--
Rent, Bonuses & Other	$367,384
Total Oil and Gas Revenues	$367,384
Total Federal Reported Revenues	$620,809
Oil and Gas Percent of Total	59%

Federal lands production shares

Oil	0%
Natural Gas	0%
Combined on BOE basis	0%

Horizontal wells drilled	0
Directional wells drilled	0
Vertical wells drilled	1

Natural gas vehicle fuel demand & fueling stations

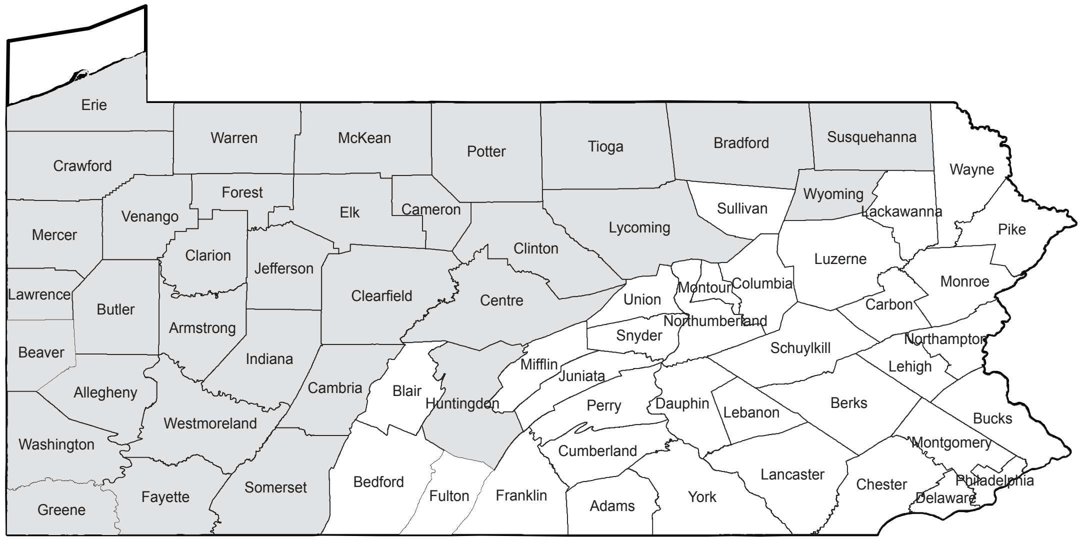
Natural gas vehicle demand	161 Mmcf
CNG stations	14
LNG stations	1
LPG stations	31

Average number of employees

Oil and natural gas extraction	36
Refining	380
Transportation	0
Wholesale	1,469
Retail	10,405
Pipeline construction	247
Oilfield machinery	0
Total petroleum industry	12,537

Source: For specific methodology and source details, please see pages 13 and 140

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 — 3,259,042 MMcf	2013

Deepest producing well (ft.)

Crude oil	21,296
Natural gas	27,696

Year and depth of deepest well drilled (ft.)

2013	27,696

Cumulative number of total wells drilled

(as of 12/31/13 - excluding service wells)

Oil wells	63,864	42%
Gas wells	81,587	53%
Dry holes	7,477	5%
Total	152,928	100%

Cumulative crude oil wellhead value

(as of 12/31/13 - thous. $)	$7,466,014

Cumulative production & new reserves

(as of 12/31/13)

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	1,415	143	1,558	70,855
Production	1,378	8	1,386	21,157

Value of Oil and Gas

Average wellhead/City Gate price

(2013)

Crude oil ($/bbl.)	$89.84
Natural gas ($Mcf)*	$5.26

Wellhead/City Gate value of production

(2013 in thous. $)

Crude oil	$471,301
Natural gas*	$17,142,561
Total	$17,613,862

Average natural gas price

(2013 $/Mcf)

Residential consumers	$11.63
Commercial consumers	$10.11
Industrial consumers	$9.13
Electric utilities	$4.17
City Gate	$5.26

Severance taxes paid --

(2013 in thous. $)

Top producing counties

(2013 on a BOE basis)

County	% Production State	US
Bradford	21.66	1.91
Susquehanna	21.01	1.85
Lycoming	12.54	1.11
Greene	10.01	0.88
Washington	8.03	0.71
Tioga	6.67	0.59
Wyoming	4.58	0.40
Westmoreland	2.48	0.22
Fayette	1.78	0.16
McKean	1.66	0.15

*City Gate price used for natural gas.

2013 Industry Statistics

Number of wells drilled

	Exploratory	Development	Total
Oil	3	833	836
Gas	132	1,430	1,562
Dry	56	72	128
Total	191	2,335	2,526

Total footage drilled
(thous. ft.)

	Exploratory	Development	Total
Oil	5.39	1,305.99	1,311.37
Gas	1,571.15	15,750.61	17,321.76
Dry	60.64	327.74	388.38
Total	1,637.18	17,384.33	19,021.51

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

New-field wildcats drilled	110
Footage (thous. ft.)	833.81

Average rotary rigs active	59

Permits	4,326

Statewide rank

	Crude Oil	Natural Gas
Wells drilled	8th	2nd
Production	21st	2nd
Reserves (2013)	18th - Tied	2nd

Number of operators	398

Number of producing wells
(12/31/13)

Crude oil	12,136
Natural gas	49,858
Total	61,994

Average production

Crude oil (thous. b/d)	3.6
NGL (thous. b/d)	9.4
Natural gas (MMcf/day)	9,006.8

Total production

Crude oil (YTD bbls, in thous.)	1,299
Natural gas (YTD MMcf	3,287,492

Natural gas marketed production

(MMcf)	3,259,042

Shale gas production	3,076 Bcf

Average output per producing well

Crude oil (bbls.)	107
Natural gas (Mcf)	65,937

Coalbed methane (YTD MMcf)

Coalbed methane (YTD MMcf)	NA
Oil Wells	NA
Gas Wells	NA
Daily Average (MMcf) / Well	NA

Heavy oil (YTD Bbls, in thous.)

Heavy oil (YTD Bbls, in thous.)	NA
Wells	NA
Av. bbls per day (in thous.)	NA
Av. bbls per well	NA

2013 Latest Available Data

Petroleum reserves
(as of 12/31/13) (mill. bbls.)

	Crude Oil	NGL	Total
New reserves	-3	NA	-3
Production	6	NA	6
Net annual change	-9	NA	-9
Proved reserves	58	NA	58

Natural gas reserves
(as of 12/31/13) (Bcf)

	Associated Dissolved	Non-Associated	Total Gas
New reserves	168	16,676	16,844
Production	24	3,285	3,309
Net annual change	144	13,391	13,535
Proved reserves	144	49,809	50,078

Marginal oil wells

Producing marginal wells	10,786
Crude oil production in Bbls. (thous.)	1,039
Crude oil production Bbls./d (thous.)	3

Marginal natural gas wells
(as of 12/31/13)

Producing marginal wells	44,422
Natural gas production (MMcf)	111,586

Mineral lease royalties, bonuses & rent

Oil	$18,398
Natural Gas	$45,043
Rent, Bonuses & Other	$47,114
Total Oil and Gas Revenues	$110,556
Total Federal Reported Revenues	$110,556
Oil and Gas Percent of Total	100%

Federal lands production shares

Oil	<1%
Natural Gas	<1%
Combined on BOE basis	<1%

Horizontal wells drilled	1,423
Directional wells drilled	31
Vertical wells drilled	1,070

Natural gas vehicle fuel demand & fueling stations

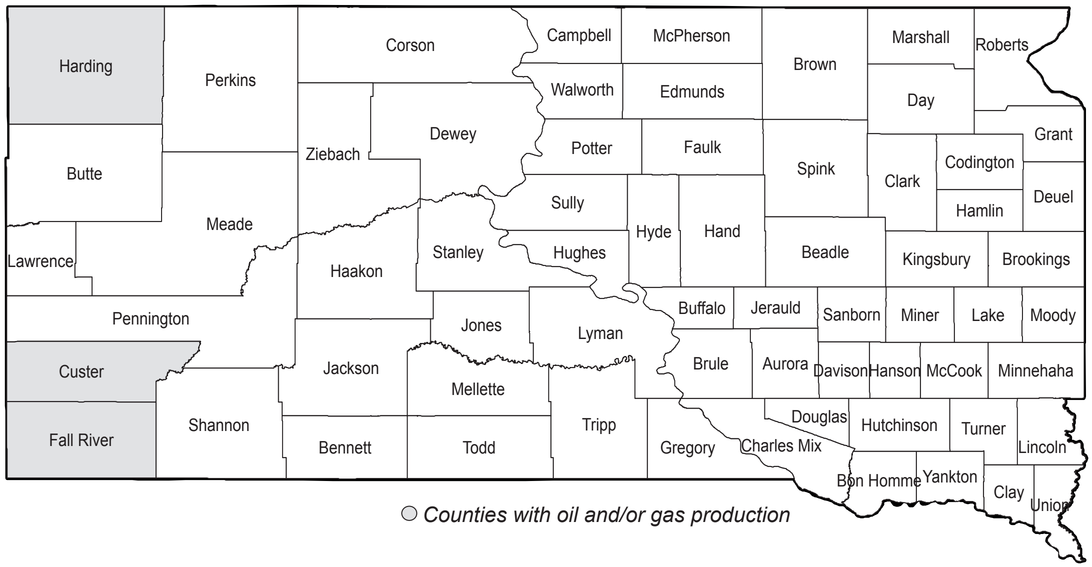
Natural gas vehicle demand	333 Mmcf
CNG stations	39
LNG stations	0
LPG stations	71

Average number of employees

Oil and natural gas extraction	21,327
Refining	5,849
Transportation	6,399
Wholesale	9,431
Retail	38,560
Pipeline construction	6,287
Oilfield machinery	571
Total petroleum industry	88,424

Source: For specific methodology and source details, please see pages 13 and 140

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 — 1,841 thous. bbls.	2013
Natural gas — 16,205 MMcf	2013

Deepest producing well (ft.)

Crude oil	18,392
Natural gas	7,337

Year and depth of deepest well drilled (ft.)

2012	18,392

Cumulative number of total wells drilled
(as of 12/31/13 - excluding service wells)

Oil wells	529	27%
Gas wells	164	8%
Dry holes	1,286	65%
Total	1,979	100%

Cumulative crude oil wellhead value

(as of 12/31/13 - thous. $)	$1,851,175

Cumulative production & new reserves
(as of 12/31/13)

	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/City Gate price
(2013)

Crude oil ($/bbl.)	$89.28
Natural gas ($Mcf)*	$4.83

Wellhead/City Gate value of production
(2013 in thous. $)

Crude oil	$163,293
Natural gas*	$78,270
Total	$241,563

Average natural gas price
(2013 $/Mcf)

Residential consumers	$8.23
Commercial consumers	$6.59
Industrial consumers	$5.67
Electric utilities	$4.35
City Gate	$4.83

Severance taxes paid
(2013 in thous. $)

$6,584

Top producing counties
(2013 on a BOE basis)

County	% Production State	US
Harding	98.94	0.03
Fall River	1.00	<0.01
Custer	0.06	<0.01

City Gate price used for natural gas.

2013 Industry Statistics

Number of wells drilled

	Exploratory	Development	Total
Oil	NA	19	19
Gas	NA	NA	NA
Dry	7	NA	7
Total	7	19	26

Total footage drilled
(thous. ft.)

	Exploratory	Development	Total
Oil	NA	221.29	221.29
Gas	NA	NA	NA
Dry	38.38	NA	38.38
Total	38.38	221.29	259.68

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

New-field wildcats drilled	7
Footage (thous. ft.)	38.38
Average rotary rigs active	1
Permits	25

Statewide rank

	Crude Oil	Natural Gas
Wells drilled	27th	NA
Production	26th	24th
Reserves (2013)	32nd	33rd

Number of operators	15

Number of producing wells
(12/31/13)

Crude oil	180
Natural gas	65
Total	245

Average production

Crude oil (thous. b/d)	5.0
NGL (thous. b/d)	NA
Natural gas (MMcf/day)	0.8

Total production

Crude oil (YTD bbls, in thous.)	1,841
Natural gas (YTD MMcf)	296

Natural gas marketed production

(MMcf)	16,205

Average output per producing well

Crude oil (bbls.)	10,230
Natural gas (Mcf)	4,546

Coalbed methane (YTD MMcf)

Coalbed methane (YTD MMcf)	NA
Oil Wells	NA
Gas Wells	NA
Daily Average (MMcf) / Well	NA

Heavy oil (YTD Bbls, in thous.)

Heavy oil (YTD Bbls, in thous.)	NA
Wells	NA
Av. bbls per day (in thous.)	NA
Av. bbls per well	NA

2013 Latest Available Data

Petroleum reserves
(as of 12/31/13) (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 12/31/13) (Bcf)

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

Marginal oil wells

Producing marginal wells	64
Crude oil production in Bbls. (thous.)	158
Crude oil production Bbls./d (thous.)	<1

Marginal natural gas wells
(as of 12/31/13)

Producing marginal wells	65
Natural gas production (MMcf)	296

Mineral lease royalties, bonuses & rent

Oil	$2,121,861
Natural Gas	$46,491
Rent, Bonuses & Other	$258,005
Total Oil and Gas Revenues	$2,426,357
Total Federal Reported Revenues	$2,426,357
Oil and Gas Percent of Total	100%

Federal lands production shares

Oil	13%
Natural Gas	1%
Combined on BOE basis	6%

Horizontal wells drilled	21
Directional wells drilled	0
Vertical wells drilled	5

Natural gas vehicle fuel demand & fueling stations

Natural gas vehicle demand	0 Mmcf
CNG stations	0
LNG stations	0
LPG stations	17

Average number of employees

Oil and natural gas extraction	168
Refining	0
Transportation	268
Wholesale	1,162
Retail	6,107
Pipeline construction	35
Oilfield machinery	0
Total petroleum industry	7,740

Source: For specific methodology and source details, please see pages 13 and 140

TENNESSEE

○ *Counties with oil and/or gas production*

Background Information

Counties

Number of counties	95
With oil and/or gas production	12

First year of production

Crude oil	1860
Natural gas	1889

Year and amount of peak production

Crude oil — 1,132 thous. bbls.	1982
Natural gas — 5,825 MMcf	2012

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 12/31/13 - excluding service wells)

Oil wells	3,184	23%
Gas wells	4,131	29%
Dry holes	6,753	48%
Total	14,068	100%

Cumulative crude oil wellhead value

(as of 12/31/13 - thous. $) $562,771

Cumulative production & new reserves

(as of 12/31/13)

	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/City Gate price*

(2013)

Crude oil ($/bbl.)	$93.08
Natural gas ($Mcf)*	$4.73

Wellhead/City Gate value of production

(2013 in thous. $)

Crude oil	$31,089
Natural gas*	$25,542
Total	$56,631

Average natural gas price

(2013 $/Mcf)

Residential consumers	$9.44
Commercial consumers	$8.41
Industrial consumers	$5.62
Electric utilities	$3.83
City Gate	$4.73

Severance taxes paid - FY $1,555

(2013 in thous. $)

Top producing counties

(2013 on a BOE basis)

County	% Production State	% Production US
NA	NA	NA

City Gate price used for natural gas.

2013 Industry Statistics

Number of wells drilled

	Exploratory	Development	Total
Oil	2	51	53
Gas	4	4	8
Dry	6	73	79
Total	12	128	140

Total footage drilled
(thous. ft.)

	Exploratory	Development	Total
Oil	3.75	107.82	111.57
Gas	30.29	11.44	41.73
Dry	13.66	126.28	139.94
Total	47.70	245.54	293.24

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

New-field wildcats drilled	2
Footage (thous. ft.)	3.05
Average rotary rigs active	0
Permits	148

Statewide rank

	Crude Oil	Natural Gas
Wells drilled	24th	21st
Production	27th - Tied	26th
Reserves (2013)	33rd	34th

Number of operators	NA

Number of producing wells
(12/31/13)

Crude oil	NA
Natural gas	NA
Total	NA

Average production

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

Total production

Crude oil (YTD bbls, in thous.)**	334
Natural gas (YTD MMcf)***	5,400

Natural gas marketed production

(MMcf)	5,400

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

2013 Latest Available Data

Petroleum reserves
(as of 12/31/13) (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 12/31/13) (Bcf)

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

Marginal oil wells

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

Marginal natural gas wells
(as of 12/31/13)

Producing marginal wells	NA
Natural gas production (MMcf)	NA

Mineral lease royalties, bonuses & rent

Oil	--
Natural Gas	--
Rent, Bonuses & Other	--
Total Oil and Gas Revenues	--
Total Federal Reported Revenues	--
Oil and Gas Percent of Total	--

Federal lands production shares

Oil	0%
Natural Gas	0%
Combined on BOE basis	0%

Horizontal wells drilled	11
Directional wells drilled	0
Vertical wells drilled	129

Natural gas vehicle fuel demand & fueling stations

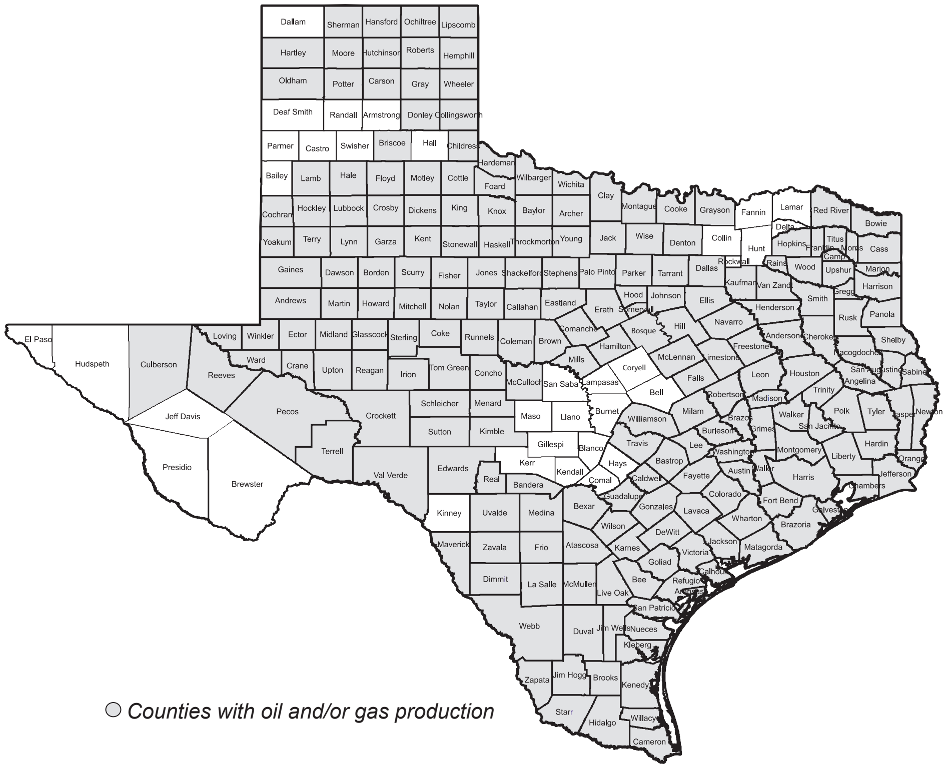
Natural gas vehicle demand	20 Mmcf
CNG stations	16
LNG stations	2
LPG stations	91

Average number of employees

Oil and natural gas extraction	294
Refining	593
Transportation	2,356
Wholesale	3,051
Retail	20,988
Pipeline construction	725
Oilfield machinery	0
Total petroleum industry	28,007

Source: For specific methodology and source details, please see pages 13 and 140
*** EIA data*
**** State data*

TEXAS



○ *Counties with oil and/or gas production*

Background Information

Counties

Number of counties	254
With oil and/or gas production	220

First year of production

Crude oil	1889
Natural gas	1889

Year and amount of peak production

Crude oil — 1,301,685 thous. bbls.	1972
Natural gas — 8,657,840 MMcf	1972

Deepest producing well (ft.)

Crude oil	27,011
Natural gas	30,712

Year and depth of deepest well drilled (ft.)

2013	30,712

Cumulative number of total wells drilled

(as of 12/31/13-excluding service wells)

Oil wells	647,593	54%
Gas wells	224,095	18%
Dry holes	335,230	28%
Total	1,206,918	100%

Cumulative crude oil wellhead value

(as of 12/31/13) -thous. $)	$907,459,042

Cumulative production & new reserves

(as of 12/31/13)

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	82,701	23,635	106,336	511,947
Production	72,202	18,549	90,751	470,606

Value of Oil and Gas

Average wellhead/City Gate price

(2013)

Crude oil ($/bbl.)	$95.80
Natural gas ($Mcf)*	$4.89

Wellhead/City Gate value of production

(2013 in thous. $)

Crude oil	$88,477,144
Natural gas*	$36,897,011
Total	$125,374,155

Average natural gas price

(2013 $/Mcf)

Residential consumers	$10.50
Commercial consumers	$7.25
Industrial consumers	$3.92
Electric utilities	$3.94
City Gate	$4.89

Severance taxes paid - FY $4,618,125

(2013 in thous. $)

Top 10 producing counties

(2013 on a BOE basis)

County	% Production State	US
Tarrant	6.78	2.07
Webb	5.26	1.61
Karnes	4.16	1.27
La Salle	3.53	1.08
Johnson	3.43	1.05
Panola	2.95	0.90
Dewitt	2.92	0.89
Dimmit	2.73	0.83
Wheeler	2.54	0.77
Wise	2.36	0.72

City Gate price used for natural gas.

2013 Industry Statistics

Number of wells drilled

	Exploratory	Development	Total
Oil	45	12,266	12,311
Gas	22	3,026	3,048
Dry	129	1,465	1,594
Total	196	16,757	16,953

Total footage drilled
(thous. ft.)

	Exploratory	Development	Total
Oil	275.52	121,522.12	121,797.63
Gas	116.16	39,975.77	40,091.93
Dry	999.81	10,139.12	11,138.93
Total	1,391.49	171,637.01	173,028.49

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

New-field wildcats drilled	117
Footage (thous. ft.)	828.66

Average rotary rigs active	835

Permits	24,382

Statewide rank

	Crude Oil	Natural Gas
Wells drilled	1st	1st
Production	1st	1st
Reserves (2013)	1st	1st

Number of operators	4,647

Number of producing wells
(12/31/13)

Crude oil	189,014
Natural gas	106,380
Total	295,394

Average production

Crude oil (thous. b/d)	2,141.7
NGL (thous. b/d)	390.9
Natural gas (MMcf/day)	18,406.8

Total production

Crude oil (YTD bbls, in thous.)	781,725
Natural gas (YTD MMcf)	6,718,469

Natural gas marketed production

(MMcf)	7,545,401

Shale gas production	3,876 Bcf

Average output per producing well

Crude oil (bbls.)	4,136
Natural gas (Mcf)	63,155

Coalbed methane (YTD MMcf)	72
Oil Wells	0
Gas Wells	6
Daily Average (MMcf) / Well	0.20

Heavy oil (YTD Bbls, in thous.)	NA
Wells	NA
Av. bbls per day (in thous.)	NA
Av. bbls per well	NA

2013 Latest Available Data

Petroleum reserves
(as of 12/31/13) (mill. bbls.)

	Crude Oil	NGL	Total
New reserves	1,834	NA	1,834
Production	931	NA	931
Net annual change	903	NA	903
Proved reserves	12,004	NA	12,004

Natural gas reserves
(as of 12/31/13) (Bcf)

	Associated Dissolved	Non-Associated	Total Gas
New reserves	4,790	7,897	12,687
Production	1,656	6,585	8,241
Net annual change	3,134	1,312	4,446
Proved reserves	22,167	75,754	97,921

Marginal oil wells

Producing marginal wells	165,363
Crude oil production in Bbls. (thous.)	176,172
Crude oil production Bbls./d (thous.)	483

Marginal natural gas wells
(as of 12/31/13)

Producing marginal wells	66,972
Natural gas production (MMcf)	713,950

Mineral lease royalties, bonuses & rent

Oil	$7,315,786
Natural Gas	$31,148,036
Rent, Bonuses & Other	$9,869,780
Total Oil and Gas Revenues	$48,333,602
Total Federal Reported Revenues	$48,333,602
Oil and Gas Percent of Total	100%

Federal lands production shares

Oil	<1%
Natural Gas	1%
Combined on BOE basis	<1%

Horizontal wells drilled	7,657
Directional wells drilled	680
Vertical wells drilled	8,616

Natural gas vehicle fuel demand & fueling stations

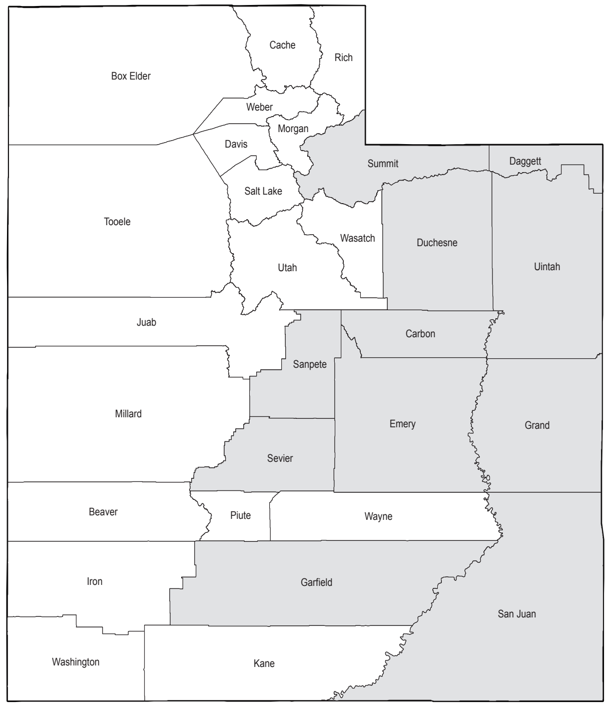
Natural gas vehicle demand	2,476 Mmcf
CNG stations	91
LNG stations	13
LPG stations	479

Average number of employees

Oil and natural gas extraction	287,091
Refining	25,031
Transportation	24,687
Wholesale	19,235
Retail	78,804
Pipeline construction	39,290
Oilfield machinery	54,676
Total petroleum industry	528,814

Source: For specific methodology and source details, please see pages 13 and 140

UTAH



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 — 490,393 MMcf	2012

Deepest producing well (ft.)

Crude oil	20,600
Natural gas	18,510

Year and depth of deepest well drilled (ft.)

1982	21,874

Cumulative number of total wells drilled

(as of 12/31/13 - excluding service wells)

Oil wells	11,269	42%
Gas wells	10,079	38%
Dry holes	5,339	20%
Total	26,687	100%

Cumulative crude oil wellhead value

(as of 12/31/13 - thous. $)	$32,050,178

Cumulative production & new reserves

(as of 12/31/13)

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	1,918	1,981	3,899	16,216
Production	1,364	491	1,855	9,350

Value of Oil and Gas

Average wellhead/City Gate price

(2013)

Crude oil ($/bbl.)	$84.79
Natural gas ($Mcf)*	$5.70

Wellhead/City Gate value of production

(2013 in thous. $)

Crude oil	$2,960,188
Natural gas*	$2,683,919
Total	$5,644,108

Average natural gas price

(2013 $/Mcf)

Residential consumers	$8.55
Commercial consumers	$7.13
Industrial consumers	$5.22
Electric utilities	$4.10
City Gate	$5.70

Severance taxes paid

(2013 in thous. $)	$59,035

Top 10 producing counties

(2013 on a BOE basis)

County	% Production State	% Production US
Uintah	60.34	0.97
Duchesne	16.53	0.27
Carbon	11.88	0.19
San Juan	4.99	0.08
Sevier	1.88	0.03
Grand	1.71	0.03
Emery	1.70	0.03
Summit	0.75	0.01
Garfield	0.15	<0.01
Daggett	0.06	<0.01

*City Gate price used for natural gas.

2013 Industry Statistics

Number of wells drilled

	Exploratory	Development	Total
Oil	54	638	692
Gas	1	283	284
Dry	10	24	34
Total	65	945	1,010

Total footage drilled
(thous. ft.)

	Exploratory	Development	Total
Oil	481.36	4,824.55	5,305.92
Gas	8.87	2,615.78	2,624.65
Dry	63.44	83.77	147.21
Total	553.68	7,524.10	8,077.78

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

New-field wildcats drilled	47
Footage (thous. ft.)	404.86

Average rotary rigs active	29

Permits	2,023

Statewide rank

	Crude Oil	Natural Gas
Wells drilled	9th	9th
Production	12th	11th
Reserves (2013)	10th	12th

Number of operators	117

Number of producing wells
(12/31/13)

Crude oil	5,148
Natural gas	7,464
Total	12,612

Average production

Crude oil (thous. b/d)	88.9
NGL (thous. b/d)	7.0
Natural gas (MMcf/day)	1,116.8

Total production

Crude oil (YTD bbls, in thous.)	32,435
Natural gas (YTD MMcf)	407,634

Natural gas marketed production

(MMcf)	470,863

Average output per producing well

Crude oil (bbls.)	6,301
Natural gas (Mcf)	54,613

Coalbed methane (YTD MMcf)	43,454
Oil Wells	1
Gas Wells	866
Daily Average (MMcf) / Well	119.05

Heavy oil (YTD Bbls, in thous.)	152
Wells	19
Av. bbls per day (in thous.)	0.42
Av. bbls per well	8,012

2013 Latest Available Data

Petroleum reserves
(as of 12/31/13) (mill. bbls.)

	Crude Oil	NGL	Total
New reserves	6	NA	6
Production	36	NA	36
Net annual change	-30	NA	-30
Proved reserves	670	NA	670

Natural gas reserves
(as of 12/31/13) (Bcf)

	Associated Dissolved	Non-Associated	Total Gas
New reserves	-48	-198	-246
Production	58	414	472
Net annual change	-106	-612	-718
Proved reserves	895	6,162	7,057

Marginal oil wells

Producing marginal wells	3,560
Crude oil production in Bbls. (thous.)	7,146
Crude oil production Bbls./d (thous.)	20

Marginal natural gas wells
(as of 12/31/13)

Producing marginal wells	4,002
Natural gas production (MMcf)	58,352

Mineral lease royalties, bonuses & rent

Oil	$291,361,651
Natural Gas	$117,819,122
Rent, Bonuses & Other	$16,133,555
Total Oil and Gas Revenues	$425,314,328
Total Federal Reported Revenues	$465,436,483
Oil and Gas Percent of Total	91%

Federal lands production shares

Oil	33%
Natural Gas	57%
Combined on BOE basis	50%

Horizontal wells drilled	57
Directional wells drilled	653
Vertical wells drilled	300

Natural gas vehicle fuel demand & fueling stations

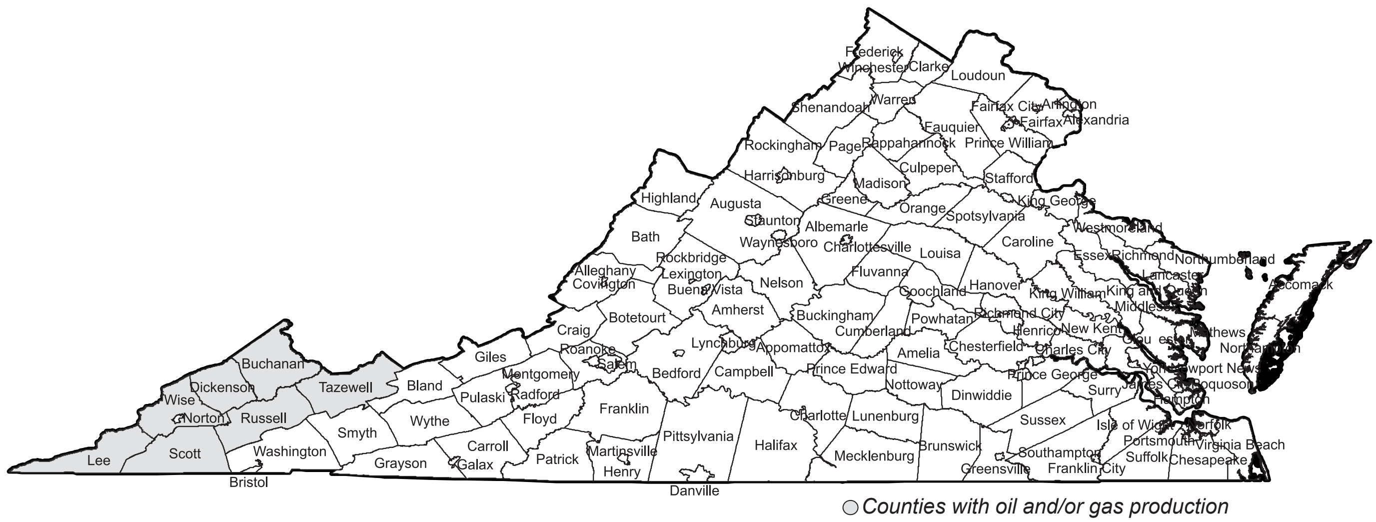
Natural gas vehicle demand	324 Mmcf
CNG stations	87
LNG stations	7
LPG stations	24

Average number of employees

Oil and natural gas extraction	6,446
Refining	1,412
Transportation	1,054
Wholesale	974
Retail	9,245
Pipeline construction	1,101
Oilfield machinery	365
Total petroleum industry	20,597

Source: For specific methodology and source details, please see pages 13 and 140

VIRGINIA



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 — 151,094 MMcf	2011

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 12/31/13 - excluding service wells)

Oil wells	156	2%
Gas wells	9,000	95%
Dry holes	340	3%
Total	9,496	100%

Cumulative crude oil wellhead value

(as of 12/31/13 - thous. $)	$11,097

Cumulative production & new reserves

(as of 12/31/13)

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	NA	NA	NA	3,991
Production	NA	NA	NA	2,226

Value of Oil and Gas

Average wellhead/City Gate price

(2013)

Crude oil ($/bbl.)	NA
Natural gas ($Mcf)*	$5.54

Wellhead/City Gate value of production

(2013 in thous. $)

Crude oil	NA
Natural gas*	$772,176
Total	$772,176

Average natural gas price

(2013 $/Mcf)

Residential consumers	$11.68
Commercial consumers	$8.83
Industrial consumers	$6.02
Electric utilities	$4.29
City Gate	$5.54

Severance taxes paid --

(2013 in thous. $)

Top producing counties

(2013 on a BOE basis)

County	% Production State	% Production US
Buchanan	54.01	0.20
Dickenson	21.57	0.08
Tazewell	10.61	0.04
Russell	8.02	0.03
Wise	5.60	0.02
Lee	0.11	<0.01
Scott	0.07	<0.01

*City Gate price used for natural gas.

2013 Industry Statistics

Number of wells drilled

	Exploratory	Development	Total
Oil	NA	NA	NA
Gas	NA	107	107
Dry	NA	NA	NA
Total	NA	107	107

Total footage drilled
(thous. ft.)

	Exploratory	Development	Total
Oil	NA	NA	NA
Gas	NA	301.95	301.95
Dry	NA	NA	NA
Total	NA	301.95	301.95

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

New-field wildcats drilled	NA
Footage (thous. ft.)	NA
Average rotary rigs active	1
Permits	160

Statewide rank

	Crude Oil	Natural Gas
Wells drilled	30th	12th
Production	32nd	18th
Reserves (2013)	34th	16th

Number of operators*	22

Number of producing wells
(12/31/13)

Crude oil	NA
Natural gas	7,949
Total	7,949

Average production

Crude oil (thous. b/d)	NA
NGL (thous. b/d)	NA
Natural gas (MMcf/day)	381.8

Total production

Crude oil (YTD bbls, in thous.)	NA
Natural gas (YTD MMcf)	139,347

Natural gas marketed production

(MMcf)	139,382
Shale gas production	3 Bcf

Average output per producing well

Crude oil (bbls.)	NA
Natural gas (Mcf)	17,530

Coalbed methane (YTD MMcf)	NA
Oil Wells	NA
Gas Wells	NA
Daily Average (MMcf) / Well	NA

Heavy oil (YTD Bbls, in thous.)	NA
Wells	NA
Av. bbls per day (in thous.)	NA
Av. bbls per well	NA

2013 Latest Available Data

Petroleum reserves
(as of 12/31/13) (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 12/31/13) (Bcf)

	Associated Dissolved	Non-Associated	Total Gas
New reserves	NA	-64	-64
Production	NA	142	142
Net annual change	NA	-206	-206
Proved reserves	NA	2,373	2,373

Marginal oil wells

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

Marginal natural gas wells
(as of 12/31/13)

Producing marginal wells	6,936
Natural gas production (MMcf)	88,626

Mineral lease royalties, bonuses & rent

Oil	--
Natural Gas	$51,978
Rent, Bonuses & Other	$38,149
Total Oil and Gas Revenues	$90,127
Total Federal Reported Revenues	$151,944
Oil and Gas Percent of Total	59%

Federal lands production shares

Oil	0%
Natural Gas	<1%
Combined on BOE basis	<1%

Horizontal wells drilled	9
Directional wells drilled	0
Vertical wells drilled	98

Natural gas vehicle fuel demand & fueling stations

Natural gas vehicle demand	298 Mmcf
CNG stations	21
LNG stations	0
LPG stations	64

Average number of employees

Oil and natural gas extraction	1,317
Refining	546
Transportation	1,775
Wholesale	4,159
Retail	28,898
Pipeline construction	2,011
Oilfield machinery	0
Total petroleum industry	38,706

Source: For specific methodology and source details, please see pages 13 and 140
see pages 13 and 140

** State data*

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 — 741,853 MMcf	2013

Deepest producing well (ft.)

Crude oil	15,853
Natural gas	18,629

Year and depth of deepest well drilled (ft.)

1974	20,222

Cumulative number of total wells drilled

(as of 12/31/13 - excluding service wells)

Oil wells	17,847	18%
Gas wells	71,249	73%
Dry holes	8,242	9%
Total	97,338	100%

Cumulative crude oil wellhead value

(as of 12/31/13 - thous. $)	$4,395,955

Cumulative production & new reserves

(as of 12/31/13)

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	692	541	1,233	45,708
Production	632	437	1,069	22,840

Value of Oil and Gas

Average wellhead/City Gate price

(2013)

Crude oil ($/bbl.)	$91.26
Natural gas* ($Mcf)	$4.65

Wellhead/City Gate value of production

(2013 in thous. $)

Crude oil	$690,291
Natural gas*	$3,338,198
Total	$4,028,489

Average natural gas price

(2013 $/Mcf)

Residential consumers	$9.98
Commercial consumers	$8.61
Industrial consumers	$4.30
Electric utilities	$4.29
City Gate	$4.65

Severance taxes paid — $115,015

(2013 in thous. $)

Top 10 producing counties

(2013 on a BOE basis)

County	% Production State	% Production US
Harrison	22.17	0.43
Wetzel	15.05	0.29
Doddridge	13.91	0.27
Marshall	9.38	0.18
Ritchie	3.33	0.06
Marion	3.20	0.06
Tyler	2.92	0.06
Taylor	2.56	0.05
Upshur	2.51	0.05
Ohio	2.34	0.05

City Gate price used for natural gas.

2013 Industry Statistics

Number of wells drilled

	Exploratory	Development	Total
Oil	NA	41	41
Gas	31	410	441
Dry	4	6	10
Total	35	457	492

Total footage drilled
(thous. ft.)

	Exploratory	Development	Total
Oil	NA	136.05	136.05
Gas	329.48	4,629.20	4,958.68
Dry	3.93	33.36	37.29
Total	333.40	4,798.61	5,132.01

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

New-field wildcats drilled	10
Footage (thous. ft.)	82.51
Average rotary rigs active	28
Permits	961

Statewide rank

	Crude Oil	Natural Gas
Wells drilled	26th	7th
Production	19th	10th
Reserves (2013)	15th	6th

Number of operators	606

Number of producing wells
(12/31/13)

Crude oil	2,714
Natural gas	51,450
Total	54,164

Average production

Crude oil (thous. b/d)	8.0
NGL (thous. b/d)	11.0
Natural gas (MMcf/day)	1,936.4

Total production

Crude oil (YTD bbls, in thous.)	2,937
Natural gas (YTD MMcf)	706,795

Natural gas marketed production

(MMcf)	741,853
Shale gas production	498 Bcf

Average output per producing well

Crude oil (bbls.)	1,082
Natural gas (Mcf)	13,738

Coalbed methane (YTD MMcf)	1,591
Oil Wells	0
Gas Wells	95
Daily Average (MMcf) / Well	4.36

Heavy oil (YTD Bbls, in thous.)	NA
Wells	NA
Av. bbls per day (in thous.)	NA
Av. bbls per well	NA

2013 Latest Available Data

Petroleum reserves
(as of 12/31/13) (mill. bbls.)

	Crude Oil	NGL	Total
New reserves	44	NA	44
Production	7	NA	7
Net annual change	37	NA	37
Proved reserves	94	NA	94

Natural gas reserves
(as of 12/31/13) (Bcf)

	Associated Dissolved	Non-Associated	Total Gas
New reserves	57	9,013	9,070
Production	8	734	742
Net annual change	49	8,279	8,328
Proved reserves	70	23,139	23,209

Marginal oil wells

Producing marginal wells	2,186
Crude oil production in Bbls. (thous.)	653
Crude oil production Bbls./d (thous.)	2

Marginal natural gas wells
(as of 12/31/13)

Producing marginal wells	49,454
Natural gas production (MMcf)	167,369

Mineral lease royalties, bonuses & rent

Oil	--
Natural Gas	$87,213
Rent, Bonuses & Other	$465,939
Total Oil and Gas Revenues	$553,152
Total Federal Reported Revenues	$553,152
Oil and Gas Percent of Total	100%

Federal lands production shares

Oil	0%
Natural Gas	<1%
Combined on BOE basis	<1%

Horizontal wells drilled	360
Directional wells drilled	13
Vertical wells drilled	118

Natural gas vehicle fuel demand & fueling stations

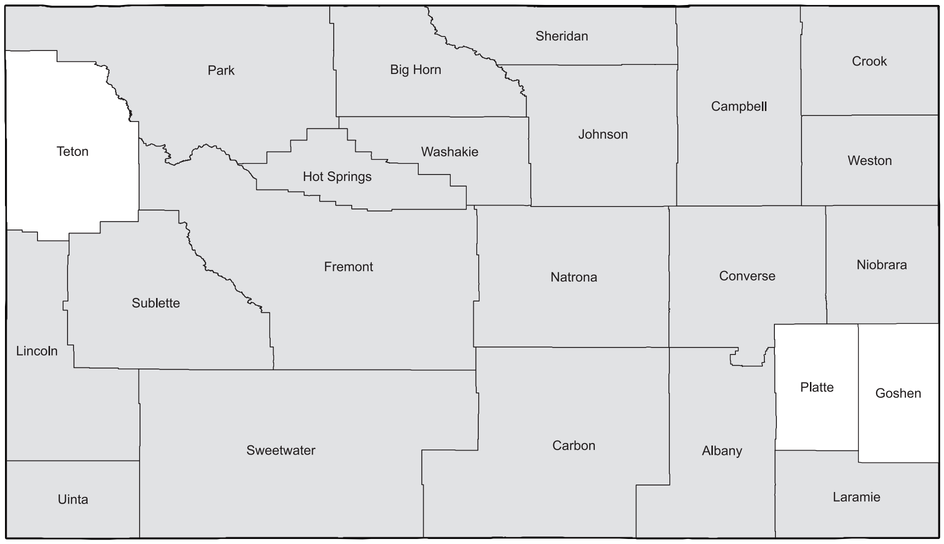
Natural gas vehicle demand	0 Mmcf
CNG stations	4
LNG stations	0
LPG stations	12

Average number of employees

Oil and natural gas extraction	6,971
Refining	317
Transportation	2,021
Wholesale	925
Retail	9,771
Pipeline construction	3,247
Oilfield machinery	0
Total petroleum industry	23,252

Source: For specific methodology and source details, please see pages 13 and 140

WYOMING



○ *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	22,534
Natural gas	25,175

Year and depth of deepest well drilled (ft.)

2001	25,830

Cumulative number of total wells drilled

(as of 12/31/13 - excluding service wells)

Oil wells	36,347	31%
Gas wells	51,460	43%
Dry holes	31,282	26%
Total	119,089	100%

Cumulative crude oil wellhead value

(as of 12/31/13 - thous. $)	$98,740,892

Cumulative production & new reserves

(as of 12/31/13)

	Crude Oil	NGL (mill. bbls.)	Total	Natural Gas (Bcf)
Reserves	7,628	2,782	10,410	76,975
Production	7,070	1,620	8,690	46,175

Value of Oil and Gas

Average wellhead/City Gate price

(2013)

Crude oil ($/bbl.)	$85.30
Natural gas ($Mcf)*	$4.51

Wellhead/City Gate value of production

(2013 in thous. $)

Crude oil	$5,398,211
Natural gas*	$8,380,514
Total	$13,778,725

Average natural gas price

(2013 $/Mcf)

Residential consumers	$8.27
Commercial consumers	$6.81
Industrial consumers	$4.62
Electric utilities	NA
City Gate	$4.51

Severance taxes paid $597,120

(2013 in thous. $)

Top 10 producing counties

(2013 on a BOE basis)

County	% Production State	% Production US
Sublette	45.48	2.68
Sweetwater	10.85	0.64
Johnson	9.86	0.58
Fremont	7.48	0.44
Campbell	7.17	0.42
Carbon	4.35	0.26
Lincoln	2.52	0.15
Uinta	2.34	0.14
Converse	2.17	0.13
Natrona	1.96	0.12

**City Gate price used for natural gas.*

2013 Industry Statistics

Number of wells drilled

	Exploratory	Development	Total
Oil	72	318	390
Gas	9	589	598
Dry	26	204	230
Total	107	1,111	1,218

Total footage drilled
(thous. ft.)

	Exploratory	Development	Total
Oil	934.53	2,302.17	3,236.71
Gas	108.61	6,382.92	6,491.53
Dry	151.37	607.05	758.42
Total	1,194.51	9,292.14	10,486.65

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

New-field wildcats drilled	80
Footage (thous. ft.)	858.76
Average rotary rigs active	48
Permits	2,548

Statewide rank

	Crude Oil	Natural Gas
Wells drilled	11th	4th
Production	10th	5th
Reserves (2013)	9th	3rd

Number of operators	400

Number of producing wells
(12/31/13)

Crude oil	12,037
Natural gas	26,313
Total	38,350

Average production

Crude oil (thous. b/d)	141.6
NGL (thous. b/d)	31.9
Natural gas (MMcf/day)	5,186.2

Total production

Crude oil (YTD bbls, in thous.)	51,692
Natural gas (YTD MMcf)	1,892,975

Natural gas marketed production

(MMcf)	1,858,207
Shale gas production	102 Bcf

Average output per producing well

Crude oil (bbls.)	4,295
Natural gas (Mcf)	71,941

Coalbed methane (YTD MMcf)	324,692
Oil Wells	3
Gas Wells	11,567
Daily Average (MMcf) / Well	889.57

Heavy oil (YTD Bbls, in thous.)	9,167
Wells	2,028
Av. bbls per day (in thous.)	25.11
Av. bbls per well	4,520

2013 Latest Available Data

Petroleum reserves
(as of 12/31/13) (mill. bbls.)

	Crude Oil	NGL	Total
New reserves	87	NA	87
Production	64	NA	64
Net annual change	23	NA	23
Proved reserves	955	NA	955

Natural gas reserves
(as of 12/31/13) (Bcf)

	Associated Dissolved	Non-Associated	Total Gas
New reserves	161	4,828	4,989
Production	65	1,984	2,049
Net annual change	96	2,844	2,940
Proved reserves	802	33,774	34,576

Marginal oil wells

Producing marginal wells	9,446
Crude oil production in Bbls. (thous.)	12,901
Crude oil production Bbls./d (thous.)	35

Marginal natural gas wells
(as of 12/31/13)

Producing marginal wells	13,593
Natural gas production (MMcf)	153,692

Mineral lease royalties, bonuses & rent

Oil	$472,650,121
Natural Gas	$439,950,694
Rent, Bonuses & Other	$50,369,179
Total Oil and Gas Revenues	$962,969,993
Total Federal Reported Revenues	$2,041,025,998
Oil and Gas Percent of Total	47%

Federal lands production shares

Oil	54%
Natural Gas	66%
Combined on BOE basis	64%

Horizontal wells drilled	240
Directional wells drilled	523
Vertical wells drilled	455

Natural gas vehicle fuel demand & fueling stations

Natural gas vehicle demand	22 Mmcf
CNG stations	11
LNG stations	0
LPG stations	18

Average number of employees

Oil and natural gas extraction	16,565
Refining	1,214
Transportation	963
Wholesale	711
Retail	3,695
Pipeline construction	2,762
Oilfield machinery	0
Total petroleum industry	25,910

Source: For specific methodology and source details, please see pages 13 and 140

ROTARY RIGS OPERATING

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Alabama	3	4	5	5	5	4	5	7	5	5
Alaska	10	9	8	8	8	8	8	7	7	9
Arizona	0	0	0	0	0	0	0	0	0	0
Arkansas	6	9	24	45	51	44	39	35	21	14
California	24	27	33	35	42	23	32	45	44	38
Colorado	54	74	89	107	114	50	58	72	65	63
Florida	1	2	0	0	1	0	1	1	1	2
Hawaii	NA	1	0	0	0	1	1	0	0	0
Illinois	0	0	0	0	0	1	2	1	1	4
Indiana	0	0	0	0	2	2	3	1	1	1
Iowa	0	0	0	2	0	0	0	0	0	0
Kansas	7	7	10	14	11	20	20	28	30	27
Kentucky	5	5	7	9	10	10	6	5	3	1
Louisiana	167	182	188	177	167	150	192	165	124	108
Maryland	0	0	0	1	0	0	0	0	0	0
Michigan	3	3	2	2	1	0	0	2	2	0
Mississippi	10	10	10	14	13	10	11	9	11	11
Montana	20	24	22	17	11	3	7	9	20	12
Nebraska	1	0	0	0	0	0	2	1	1	1
Nevada	2	2	1	2	3	3	6	3	1	3
New Mexico	67	83	94	78	78	44	62	79	84	77
New York	5	4	6	6	6	2	1	0	0	0
North Dakota	15	21	32	39	68	50	114	168	188	173
Ohio	7	9	8	13	12	8	7	11	18	32
Oklahoma	159	152	179	188	200	94	128	180	196	179
Oregon	0	0	0	0	1	0	0	1	0	0
Pennsylvania	9	13	16	16	23	42	85	110	84	59
South Dakota	1	2	1	2	2	0	1	1	1	1
Tennessee	0	0	1	5	4	2	0	0	0	0
Texas	506	614	746	834	898	432	659	838	899	835
Utah	22	28	40	42	42	18	27	28	37	29
Virginia	1	2	1	3	5	4	2	1	1	1
Washington	0	0	1	0	1	1	0	0	0	0
West Virginia	15	17	27	32	27	22	23	21	26	28
Wyoming	74	78	99	74	74	40	40	48	47	48
TOTAL U.S.	**1,192**	**1,381**	**1,649**	**1,769**	**1,880**	**1,086**	**1,541**	**1,875**	**1,919**	**1,761**
ONSHORE	**1,095**	**1,290**	**1,559**	**1,695**	**1,814**	**1,045**	**1,515**	**1,847**	**1,871**	**1,704**
OFFSHORE	**97**	**94**	**90**	**73**	**66**	**45**	**32**	**33**	**48**	**57**

Source: Baker Hughes.
Note: Averages may not add up to total due to rounding.

NEW-FIELD WILDCAT WELLS DRILLED

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Alabama	22	17	26	35	24	32	50	43	47	29
Alaska	8	15	8	10	13	9	2	3	6	9
Arizona	1	4	1	1	0	0	0	0	0	0
Arkansas	14	10	34	39	30	11	11	0	3	2
California	30	29	18	17	18	8	7	2	10	7
Colorado	68	136	102	132	86	43	46	59	128	87
Florida	0	2	0	0	0	0	0	0	0	1
Georgia	0	0	0	0	0	0	0	0	0	0
Idaho	0	0	0	0	1	0	2	0	0	0
Illinois	31	34	31	22	20	12	12	17	24	32
Indiana	19	19	39	33	30	34	26	10	12	11
Iowa	0	0	0	0	0	0	0	0	0	0
Kansas	169	225	275	249	305	208	306	317	386	374
Kentucky	176	242	313	227	168	95	39	15	19	15
Louisiana	60	58	52	52	30	19	25	26	23	23
Michigan	23	18	28	21	34	15	33	34	32	47
Mississippi	30	33	30	42	25	17	12	18	12	14
Missouri	0	0	0	0	0	0	0	0	0	0
Montana	148	160	140	107	81	30	28	59	69	54
Nebraska	16	19	21	22	55	17	23	23	33	54
Nevada	6	6	1	5	5	2	3	0	2	3
New Mexico	76	46	67	46	44	38	52	68	90	104
New York	54	30	30	45	50	32	29	6	1	1
North Dakota	26	44	101	98	87	83	58	86	64	26
Ohio	2	16	21	41	34	12	7	7	7	8
Oklahoma	104	108	181	256	273	102	62	74	35	17
Oregon	1	0	0	0	0	0	0	0	0	0
Pennsylvania	126	188	224	349	293	185	374	145	85	110
South Dakota	1	7	4	13	16	6	1	5	2	7
Tennessee	27	37	82	62	28	12	8	2	2	2
Texas	473	468	392	315	383	233	244	189	139	117
Utah	22	32	50	49	49	27	33	39	66	47
Virginia	3	2	10	28	8	0	0	0	0	0
Washington	0	0	0	2	0	0	0	0	0	0
West Virginia	29	27	43	56	53	25	21	20	25	10
Wyoming	90	80	77	62	52	36	34	78	84	80
Federal Offshore	82	72	62	58	52	70	33	28	49	45
TOTAL U.S.	**1,937**	**2,184**	**2,463**	**2,494**	**2,346**	**1,383**	**1,581**	**1,373**	**1,455**	**1,336**

Source: IHS.
Note: Data include oil wells, gas wells, and dry holes and may not total due to Federal Offshore data duplication.

Exploratory Wells Drilled

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Alabama	36	27	35	49	36	40	52	51	53	40
Alaska	13	19	14	18	14	10	3	3	8	13
Arizona	1	4	1	1	0	0	0	0	0	0
Arkansas	19	18	45	47	45	19	11	1	11	6
California	69	74	44	36	26	20	12	6	31	14
Colorado	104	206	159	177	124	56	62	97	153	134
Florida	0	2	0	0	0	0	0	0	2	1
Georgia	0	0	0	0	0	0	0	0	0	0
Idaho	NA	NA	NA	NA	1	NA	2	0	0	0
Illinois	47	50	72	84	61	51	54	48	72	70
Indiana	24	40	58	69	79	80	57	18	24	23
Iowa	0	0	0	0	0	0	0	0	0	0
Kansas	341	418	457	479	608	423	557	587	841	788
Kentucky	302	448	598	464	353	286	101	26	42	36
Louisiana	73	70	65	67	56	33	30	35	30	33
Michigan	27	24	34	31	52	24	55	45	44	71
Mississippi	34	44	40	53	32	19	15	23	18	25
Missouri	0	0	0	0	0	0	0	0	0	0
Montana	237	278	254	188	145	48	43	76	92	72
Nebraska	18	30	32	34	71	25	39	40	45	72
Nevada	6	6	1	4	4	2	3	0	2	3
New Mexico	103	98	118	75	69	48	58	74	95	107
New York	57	41	30	78	49	40	45	12	2	3
North Dakota	54	72	165	236	217	135	182	163	146	42
Ohio	28	56	66	147	116	80	42	76	88	43
Oklahoma	253	278	334	601	672	302	217	226	116	55
Pennsylvania	307	513	657	993	765	402	513	254	152	191
South Dakota	4	9	4	13	19	7	1	5	2	7
Tennessee	58	75	120	143	105	45	21	11	4	12
Texas	774	743	696	618	702	385	333	261	227	196
Utah	47	68	123	83	86	44	56	71	109	65
Virginia	2	7	20	53	14	0	0	0	0	0
Washington	0	0	0	2	0	0	0	0	0	0
West Virginia	146	200	215	285	250	134	69	29	40	35
Wyoming	130	132	119	86	79	45	49	89	117	107
Federal Offshore	84	77	59	67	118	87	36	32	51	46
TOTAL U.S.	**3,404**	**4,136**	**4,623**	**5,187**	**4,974**	**3,065**	**2,718**	**2,359**	**2,617**	**2,310**

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

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Alabama	405	416	407	505	131	250	201	165	111	120
Alaska	193	155	121	133	25	135	129	109	121	122
Arizona	0	0	0	1	0	0	0	0	0	0
Arkansas	278	299	417	470	1,048	1,107	1,120	1,029	919	788
California	2,161	2,234	2,464	2,343	2,640	1,603	1,965	2,447	2,714	3,039
Colorado	1,892	2,506	2,845	3,269	3,790	2,431	2,624	2,978	2,644	1,738
Florida	0	1	0	0	1	1	1	6	1	6
Illinois	277	379	411	353	434	232	334	421	500	463
Indiana	125	128	72	80	134	93	111	104	112	112
Kansas	1,542	1,867	2,709	2,770	3,634	2,011	2,382	3,071	3,641	3,596
Kentucky	573	680	805	850	885	712	694	674	623	520
Louisiana	1,188	1,381	1,569	1,565	1,714	1,138	1,342	1,655	1,533	1,183
Michigan	403	505	524	450	450	194	116	45	106	81
Mississippi	237	255	253	280	241	144	168	148	134	138
Missouri	0	0	0	0	0	0	35	0	11	15
Montana	504	682	863	672	427	209	230	148	250	192
Nebraska	32	46	34	132	163	49	60	95	66	73
Nevada	0	0	0	0	1	1	0	0	2	0
New Mexico	1,686	1,812	1,914	1,763	1,619	1,014	1,022	1,328	1,280	1,151
New York	77	133	227	288	339	203	281	216	167	147
North Dakota	168	227	322	278	500	473	997	1,572	2,188	2,441
Ohio	525	539	637	684	890	521	408	341	363	514
Oklahoma	2,884	3,248	3,671	2,992	3,507	1,813	2,068	2,360	2,990	3,168
Oregon	0	0	0	0	1	4	4	0	0	1
Pennsylvania	2,290	2,908	3,611	3,210	3,425	2,327	2,448	2,346	2,241	2,335
South Dakota	8	34	21	36	25	17	24	0	21	19
Tennessee	146	163	168	32	137	73	71	85	129	128
Texas	9,522	10,800	12,272	13,784	16,033	9,351	11,694	14,626	16,804	16,757
Utah	554	709	880	877	1,116	597	883	822	980	945
Virginia	361	318	531	654	621	522	414	389	164	107
Washington	2	0	0	0	0	0	0	0	0	0
West Virginia	1,081	1,212	1,584	1,562	1,576	860	582	468	477	457
Wyoming	3,717	4,330	4,024	2,977	2,941	1,841	1,837	1,477	971	1,111
Federal Offshore	615	551	483	415	370	253	46	177	199	212
TOTAL U.S.	**33,653**	**39,880**	**46,499**	**45,946**	**50,376**	**31,347**	**34,291**	**39,422**	**42,462**	**41,679**

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

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Alabama	441	443	440	554	348	290	253	216	164	160
Alaska	206	173	132	148	145	145	132	112	129	135
Arizona	1	4	1	2	0	0	0	0	0	0
Arkansas	304	334	495	830	1,093	1,126	1,131	1,030	930	794
California	2,221	2,296	2,494	2,367	2,666	1,623	1,977	2,453	2,745	3,053
Colorado	1,992	2,710	3,003	3,440	3,914	2,487	2,686	3,075	2,797	1,872
Florida	0	3	0	0	1	1	1	6	3	7
Georgia	0	0	0	0	0	0	0	0	0	0
Idaho	0	0	0	0	2	0	1	0	0	0
Illinois	324	424	478	437	495	283	388	469	572	533
Indiana	149	163	117	113	213	173	168	122	136	135
Iowa	0	0	0	0	0	0	0	0	0	0
Kansas	1,887	2,283	3,161	3,249	4,242	2,434	2,939	3,658	4,482	4,384
Kentucky	842	949	1,294	1,269	1,238	998	795	700	665	556
Louisiana	1,261	1,451	1,633	1,630	1,770	1,171	1,372	1,690	1,563	1,216
Michigan	430	528	558	482	502	218	171	195	150	152
Mississippi	270	299	293	332	273	163	183	171	152	163
Missouri	0	0	0	0	0	0	35	0	11	15
Montana	752	969	1,118	862	572	257	273	224	342	264
Nebraska	50	75	65	165	234	74	99	135	111	145
Nevada	3	5	1	2	5	3	3	0	4	3
New Mexico	1,789	1,906	2,028	1,838	1,688	1,062	1,080	1,402	1,375	1,258
New York	136	160	242	350	388	243	326	228	169	150
North Dakota	221	300	487	519	717	608	1,179	1,735	2,334	2,483
Ohio	549	577	684	806	1,006	601	450	417	451	557
Oklahoma	3,135	3,524	3,995	3,588	4,179	2,115	2,285	2,586	3,106	3,223
Oregon	0	0	0	0	1	4	4	0	0	1
Pennsylvania	2,496	3,344	4,260	4,169	4,190	2,729	2,961	2,600	2,393	2,526
South Dakota	12	41	25	48	44	24	25	20	23	26
Tennessee	202	234	285	71	242	118	92	96	133	140
Texas	10,284	11,532	13,409	14,392	16,735	9,736	12,027	14,887	17,031	16,953
Utah	601	777	1,005	961	1,202	641	939	893	1,089	1,010
Virginia	363	324	545	705	635	522	414	389	164	107
Washington	2	0	0	2	0	0	0	0	0	0
West Virginia	1,225	1,408	1,791	1,824	1,826	994	651	497	517	492
Wyoming	3,843	4,460	4,134	3,061	3,020	1,886	1,886	1,566	1,088	1,218
Federal Offshore	786	716	638	555	488	340	248	209	250	258
TOTAL U.S.	**37,057**	**44,016**	**51,122**	**51,133**	**55,350**	**34,412**	**37,175**	**41,781**	**45,079**	**43,989**

Source: IHS.
Note: Data include oil wells, gas wells, and dry holes and may not total due to Federal Offshore data duplication.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Alabama	502	557	493	488	506	507	528	554	597	628
Alaska	2,384	2,505	2,465	2,402	2,479	2,518	2,498	2,477	2,420	2,469
Arizona	21	23	25	22	24	23	22	21	24	27
Arkansas	2,143	2,138	2,505	2,487	1,494	1,488	1,415	1,195	1,238	1,288
California	47,666	48,239	49,705	50,591	52,268	51,866	51,327	52,082	53,392	54,301
Colorado	5,140	5,088	5,049	4,999	5,038	4,942	5,029	5,727	7,085	7,895
Florida	67	76	65	64	66	59	73	79	75	78
Kansas	40,167	40,024	40,349	40,782	41,661	41,792	42,272	42,743	43,844	44,900
Louisiana	17,569	17,463	17,999	17,751	18,156	17,315	17,388	17,393	17,550	18,604
Michigan	3,761	3,887	3,847	3,875	3,755	3,774	3,885	4,092	4,097	4,128
Mississippi	1,685	1,647	1,788	1,937	2,082	3,872	2,418	2,442	2,459	2,543
Montana	3,918	4,052	4,272	4,873	5,033	4,535	4,563	4,624	4,838	4,950
Nebraska	1,224	1,211	1,229	1,211	1,234	1,199	1,202	1,289	1,323	1,406
Nevada	68	71	68	74	75	71	71	72	76	73
New Mexico	20,034	20,553	21,219	21,644	22,134	22,563	23,017	23,863	24,978	25,414
New York	3,095	3,270	2,767	3,190	2,816	2,632	2,890	3,011	2,857	2,723
North Dakota	3,779	3,506	3,512	4,841	4,198	4,565	5,315	6,522	8,336	10,287
Ohio	17,147	17,436	17,867	16,192	17,742	17,015	19,181	19,682	19,985	19,626
Oklahoma	52,326	51,869	54,408	51,160	41,382	38,502	38,325	40,134	40,153	42,532
Pennsylvania	NA	NA	NA	NA	NA	5,390	11,018	8,590	13,382	12,136
South Dakota	145	162	153	163	151	145	147	156	161	180
Texas	152,693	152,045	153,455	154,569	158,433	160,173	162,417	169,174	178,530	189,014
Utah	2,433	2,685	2,953	3,107	3,351	3,548	3,885	4,146	4,692	5,148
West Virginia	2,099	2,115	2,107	2,613	2,485	2,284	2,633	2,671	3,071	2,714
Wyoming	11,743	12,147	12,813	12,094	12,011	11,798	11,533	11,479	11,711	12,037
Federal Offshore	3,840	3,631	3,146	3,554	3,574	3,289	3,358	3,417	3,439	3,431
TOTAL U.S.	**395,649**	**396,400**	**404,259**	**404,683**	**402,148**	**405,865**	**416,427**	**427,635**	**450,673**	**468,532**

Source: IHS. Total includes onshore and offshore counts.

Producing Natural Gas Wells

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Alabama	4,784	5,122	5,523	5,728	6,070	6,214	6,297	6,289	6,247	6,196
Alaska	NA	NA	NA	NA	190	203	196	191	189	207
Arizona	7	4	5	5	5	4	4	3	3	3
Arkansas	3,959	4,298	4,481	4,955	5,913	6,652	7,412	8,124	8,699	9,001
California	1,497	1,579	1,715	1,806	1,840	1,841	1,748	1,745	1,645	1,550
Colorado	22,693	25,570	28,407	31,920	36,805	39,296	42,927	45,690	47,182	47,610
Kansas	17,740	18,417	19,891	20,978	21,908	22,140	21,849	21,910	21,800	21,628
Kentucky	12,298	11,754	12,771	16,140	13,727	13,622	12,941	12,941	13,029	14,902
Louisiana	8,734	9,385	10,679	11,245	11,879	12,859	13,288	13,701	14,277	13,769
Michigan	8,524	9,009	9,444	9,792	10,050	10,349	10,253	10,310	10,210	10,206
Mississippi	1,284	1,469	1,574	1,714	1,786	2,112	1,762	1,742	1,716	1,671
Montana	5,299	5,716	6,200	6,206	6,277	6,705	6,722	6,542	6,286	5,822
Nebraska	112	115	117	195	328	356	295	299	324	235
New Mexico	28,160	29,723	31,246	32,535	33,625	34,163	34,306	34,402	34,435	33,978
New York	6,707	6,661	6,764	7,138	7,391	7,401	7,509	7,544	7,838	7,571
North Dakota	133	208	371	303	347	350	350	343	336	306
Ohio	22,212	22,151	23,123	20,507	23,384	22,631	24,701	25,243	25,065	24,723
Oklahoma	32,214	34,081	36,358	38,164	39,800	39,817	39,443	39,339	38,842	37,791
Oregon	16	14	13	12	21	23	26	27	26	28
Pennsylvania	NA	NA	NA	NA	NA	32,076	55,215	45,646	50,192	49,858
South Dakota	60	60	62	64	84	87	100	98	95	65
Texas	74,550	79,879	86,272	93,126	100,631	102,471	103,697	104,986	105,977	106,380
Utah	3,715	4,171	4,781	5,257	6,040	6,323	7,037	6,893	7,306	7,464
Virginia	3,856	4,238	5,007	5,748	6,322	7,068	7,454	7,747	7,857	7,949
West Virginia	41,309	44,172	41,364	47,476	44,974	47,569	50,765	49,682	52,888	51,450
Wyoming	23,749	26,475	29,875	31,747	33,628	33,294	31,253	30,595	29,026	26,313
Federal Offshore	4,137	3,878	3,367	3,487	3,255	2,756	2,635	2,350	1,967	1,649
TOTAL U.S.	**327,749**	**348,333**	**369,410**	**396,248**	**402,553**	**444,760**	**490,185**	**484,383**	**493,457**	**488,325**

Source: IHS. Data not available for certain states.

(thous. Bbls.)	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Alabama	4,662	5,197	5,276	4,951	5,560	5,054	5,275	6,552	7,781	8,720
Alaska	335,740	335,740	269,150	262,427	248,800	236,522	217,932	203,981	191,633	187,102
Arizona	50	48	53	41	50	45	38	36	51	59
Arkansas	5,845	5,388	5,292	5,249	5,791	5,202	4,246	3,926	4,508	4,580
California	239,485	228,811	222,874	217,986	214,120	206,195	198,675	193,113	196,885	198,508
Colorado	12,014	11,764	11,357	10,756	10,875	10,192	11,174	16,203	26,198	42,216
Florida	2,875	2,585	2,349	2,080	1,985	696	1,750	2,026	2,133	2,174
Illinois	10,699	8,899	10,324	9,609	9,430	9,099	9,067	9,158	9,733	9,539
Indiana	1,729	1,595	1,714	1,723	1,855	1,803	1,837	1,972	2,343	2,372
Kansas	33,802	33,897	35,621	36,434	39,575	39,448	40,320	41,355	43,596	46,692
Kentucky	1,210	1,215	1,181	2,618	1,034	1,004	936	920	1,031	1,005
Louisiana	56,983	50,835	49,443	52,528	48,626	47,487	49,388	52,127	55,011	56,448
Michigan	5,763	5,744	5,686	5,394	6,023	5,846	6,420	6,720	7,342	7,770
Mississippi	15,635	16,402	16,103	19,034	20,859	21,915	22,958	23,184	22,982	22,754
Montana	24,674	32,655	36,027	34,815	31,480	27,771	25,226	24,070	26,389	29,182
Nebraska	2,520	2,405	2,297	2,333	2,389	2,234	2,197	2,415	2,509	2,751
Nevada	463	446	426	410	436	455	425	408	368	336
New Mexico	56,723	54,530	53,661	53,300	54,648	56,133	60,917	67,308	81,503	97,578
New York	110	92	188	267	294	228	227	306	288	259
North Dakota	30,142	34,092	36,763	42,249	58,384	75,200	107,205	148,383	238,633	308,527
Ohio	4,264	4,250	4,372	3,958	4,175	3,572	4,078	3,894	4,242	5,944
Oklahoma	54,899	52,288	53,947	51,093	53,234	48,999	54,071	58,284	69,706	94,196
Oregon	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pennsylvania	NA	NA	NA	NA	NA	783	1,575	979	1,528	1,299
South Dakota	1,356	1,415	1,394	1,653	1,642	1,646	1,575	1,617	1,730	1,841
Texas	351,459	347,614	346,079	341,763	352,904	349,087	367,312	446,532	610,129	781,725
Utah	13,718	15,298	15,965	16,957	18,438	19,646	21,743	23,359	27,373	32,435
West Virginia	586	676	788	1,030	987	446	881	916	1,079	2,937
Wyoming	41,689	41,452	42,287	41,992	40,054	38,489	42,057	41,767	45,488	51,692
Federal Offshore	476,795	427,167	431,321	427,571	395,233	543,395	537,735	456,297	441,755	440,020
TOTAL U.S.	1,785,890	1,722,500	1,661,939	1,650,220	1,628,881	1,758,592	1,797,329	1,837,808	2,123,907	2,440,661
DAILY AVG.	4,879	4,719	4,553	4,521	4,450	4,818	4,924	5,035	5,819	6,687

Source: IHS.
Notes: Daily Average derived from IHS data.

Natural Gas Production

(MMcf)	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Alabama	324,437	301,634	290,530	264,468	252,449	230,405	223,853	201,860	195,149	177,206
Alaska	NA	NA	NA	NA	NA	149,289	139,299	126,570	116,854	101,476
Arizona	218	154	522	590	457	626	122	105	87	65
Arkansas	170,222	182,452	192,991	262,629	442,536	674,387	920,787	1,067,730	1,139,278	1,130,067
California	75,362	81,952	90,504	89,845	84,317	80,584	70,406	62,339	53,709	41,129
Colorado	1,062,396	1,120,614	1,217,865	1,273,254	1,476,152	1,536,385	1,620,565	1,656,713	1,616,953	1,475,051
Kansas	405,594	386,067	378,032	371,782	379,647	362,162	335,570	314,526	301,235	299,526
Kentucky	85,668	79,419	85,840	95,247	95,013	107,449	104,733	104,733	102,078	101,242
Louisiana	1,266,290	1,219,382	1,290,156	1,279,855	1,302,007	1,471,968	2,111,650	2,918,796	2,900,409	2,253,574
Michigan	170,023	161,614	159,295	151,701	145,875	137,571	132,173	126,172	118,972	112,580
Mississippi	170,157	183,103	206,269	268,328	331,699	336,382	389,751	458,783	438,112	399,324
Montana	87,046	91,456	93,199	88,833	78,197	78,366	69,893	59,104	44,970	38,718
Nebraska	1,217	939	898	1,282	2,814	2,713	2,093	1,819	1,221	868
New Mexico	1,372,580	1,358,029	1,352,226	1,294,420	1,243,420	1,176,047	1,081,223	1,013,359	958,442	874,277
New York	45,785	53,535	39,741	54,586	46,221	40,309	31,895	28,267	24,120	21,247
North Dakota	13,329	13,150	17,216	18,546	21,099	18,338	16,519	11,474	9,594	11,641
Ohio	66,562	60,451	62,021	55,657	61,208	57,949	61,602	64,020	65,318	124,347
Oklahoma	1,446,878	1,486,872	1,557,944	1,595,177	1,670,055	1,671,430	1,563,328	1,469,052	1,583,802	1,560,199
Oregon	468	457	624	371	663	818	1,459	1,343	809	770
Pennsylvania	NA	NA	NA	NA	NA	226,017	535,986	1,213,565	2,226,666	3,287,492
South Dakota	509	428	438	453	1,222	1,752	1,536	1,035	747	296
Texas	5,072,699	5,319,815	5,647,050	6,214,058	7,075,389	6,913,702	6,715,482	6,856,592	6,873,426	6,718,469
Utah	264,789	281,368	321,626	348,601	403,310	408,665	393,587	411,516	434,145	407,634
Virginia	85,752	89,217	102,798	112,224	127,373	140,700	147,156	150,404	146,307	139,347
West Virginia	195,084	215,145	205,051	234,103	237,956	252,895	282,126	387,479	532,031	706,795
Wyoming	1,735,410	1,839,625	1,948,640	2,091,822	2,325,182	2,399,101	2,370,892	2,219,664	2,076,703	1,892,975
Fed. Offshore	3,355,752	2,594,879	2,376,086	2,292,279	1,905,309	1,914,239	1,731,131	1,373,902	1,083,891	877,507
TOTAL U.S.	17,474,227	17,121,757	17,637,562	18,460,111	19,709,570	20,282,800	21,054,798	22,300,922	23,045,028	22,753,822

Source: IHS. Data not available for certain states. Data is dry natural gas production.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Alabama	319	388	321	310	318	325	345	353	379	381
Alaska	132	143	153	163	177	161	182	198	168	214
Arizona	19	22	24	21	21	22	21	20	23	26
Arkansas	1,907	1,913	2,257	2,265	1,274	1,278	1,252	1,036	1,034	1,074
California	33,030	34,343	36,113	37,415	39,505	39,603	39,639	40,794	41,813	42,793
Colorado	4,417	4,362	4,376	4,356	4,373	4,314	4,314	4,798	5,715	5,990
Florida	11	15	8	12	12	38	17	16	11	14
Illinois	5,149	4,964	5,269	7,060	7,109	7,092	7,129	7,106	7,187	7,286
Indiana	1,050	995	1,061	1,790	1,792	1,796	1,825	1,806	1,825	1,803
Kansas	39,506	39,330	39,601	39,920	40,591	40,661	41,224	41,581	42,538	43,360
Kentucky	966	947	994	1,375	1,415	1,424	1,329	1,328	1,302	1,213
Louisiana	14,610	14,627	14,549	14,623	15,010	14,558	14,726	15,068	15,202	16,267
Michigan	3,602	3,718	3,661	3,715	3,697	3,878	3,915	3,901	3,876	3,912
Mississippi	855	882	964	1,032	1,125	1,139	1,334	1,401	1,450	1,371
Montana	2,828	2,852	2,930	2,939	3,062	3,078	3,122	3,214	3,314	3,390
Nebraska	1,177	1,157	1,182	1,152	1,179	1,131	1,142	1,210	1,241	1,309
Nevada	40	45	45	49	49	45	42	47	49	46
New Mexico	16,734	17,141	17,793	18,304	18,625	18,832	19,066	19,602	20,314	20,392
New York	2,186	2,070	2,276	2,270	2,513	2,340	2,563	2,715	2,455	2,394
North Dakota	2,414	2,139	2,182	2,250	2,326	2,351	2,477	2,597	2,579	2,594
Ohio	15,634	15,742	15,914	16,361	16,473	15,383	16,986	17,155	17,328	16,916
Oklahoma	48,934	48,555	48,281	46,958	35,118	34,294	34,213	33,993	35,011	34,161
Pennsylvania	7,055	8,398	7,589	668	9,319	4,828	9,965	7,869	12,119	10,786
South Dakota	61	78	71	73	54	49	54	60	60	64
Texas	137,957	137,853	140,306	142,083	145,386	146,476	148,948	155,195	158,841	165,363
Utah	1,580	1,759	1,977	2,114	2,387	2,550	2,778	2,955	3,324	3,560
West Virginia	1,722	1,480	1,689	1,974	2,122	1,945	2,192	2,242	2,478	2,186
Wyoming	9,982	9,884	10,542	9,741	9,675	9,399	9,259	9,103	9,278	9,446
Federal Offshore	654	757	623	611	675	586	574	582	600	611
TOTAL U.S.	**354,531**	**356,559**	**362,751**	**361,604**	**365,382**	**359,576**	**370,633**	**377,945**	**391,514**	**398,922**

Source: IHS.
Notes: A marginal oil well is defined as a well producing 15 barrels/day or less.

Marginal Oil Well Production

(thous. Bbls.)	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Alabama	738	810	702	694	707	700	756	767	839	807
Alaska	246	191	322	287	364	350	348	398	315	429
Arizona	24	37	40	27	37	32	25	27	42	52
Arkansas	3,045	3,048	2,882	2,898	1,904	1,868	1,709	1,401	1,442	1,500
California	65,024	66,764	69,592	70,941	73,153	71,357	69,806	70,855	71,748	72,725
Colorado	4,234	4,053	4,028	3,750	3,883	3,771	3,680	4,400	6,687	6,430
Florida	27	25	20	37	28	26	34	34	29	27
Illinois	5,110	4,249	5,153	5,780	5,732	5,702	5,564	5,653	5,804	5,895
Indiana	1,020	916	1,085	1,372	1,272	1,308	1,355	1,304	1,312	1,260
Kansas	24,769	24,576	25,270	24,784	25,679	25,712	26,036	26,495	28,195	28,281
Kentucky	707	677	671	773	740	761	679	668	690	615
Louisiana	9,515	9,668	8,930	9,740	9,678	9,248	9,605	9,771	10,074	10,188
Michigan	3,496	3,475	3,429	3,289	3,491	3,493	3,421	3,354	3,275	3,281
Mississippi	2,027	2,121	2,202	2,323	2,520	2,514	2,830	2,861	2,947	2,812
Montana	3,371	3,510	3,520	3,535	3,672	3,669	3,868	3,960	4,299	4,286
Nebraska	1,840	1,711	1,676	1,575	1,620	1,568	1,564	1,592	1,676	1,627
Nevada	91	103	117	123	114	110	95	111	88	81
New Mexico	21,261	21,839	22,301	22,678	22,904	22,782	22,944	23,552	25,006	25,104
New York	111	94	193	270	294	228	277	306	288	259
North Dakota	4,555	4,566	4,803	4,945	5,226	5,139	5,393	5,484	5,617	5,722
Ohio	3,716	3,753	3,735	3,745	3,849	3,216	3,600	3,551	3,580	3,473
Oklahoma	36,699	35,722	34,904	34,275	24,305	22,471	23,097	21,743	21,590	21,346
Pennsylvania	1,105	1,083	1,121	314	1,538	783	1,439	944	1,491	1,039
South Dakota	206	240	210	179	141	140	154	161	171	158
Texas	142,746	142,891	145,630	147,437	151,431	151,242	154,419	159,106	167,898	176,172
Utah	3,401	3,912	4,157	4,809	5,344	5,533	5,878	6,255	6,700	7,146
West Virginia	384	422	463	581	581	421	633	623	632	653
Wyoming	13,439	13,466	13,325	13,374	13,382	12,725	12,785	12,725	13,053	12,901
Fed. Offshore	1,553	1,892	1,381	1,429	1,682	1,306	1,350	1,378	1,499	1,502
TOTAL U.S.	**354,460**	**355,814**	**361,862**	**365,964**	**365,271**	**358,175**	**363,344**	**369,479**	**386,987**	**395,771**

Source: IHS.
Notes: A marginal oil well is defined as a well producing 15 barrels/day or less.

Producing Marginal Natural Gas Wells

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Alabama	3,194	3,642	4,164	4,567	5,024	5,282	5,475	5,567	5,646	5,728
Arizona	2	2	2	2	2	1	2	1	1	3
Arkansas	2,519	2,728	2,890	2,992	3,353	3,413	3,455	3,515	3,659	3,638
California	720	778	839	906	996	1,024	964	992	973	955
Colorado	16,172	18,653	20,773	23,629	26,446	28,066	30,777	33,057	34,903	35,947
Kansas	13,584	15,096	17,205	18,787	20,008	20,543	20,600	20,878	20,887	20,723
Kentucky	12,130	11,616	12,617	8,444	13,496	13,505	12,480	12,579	13,142	14,563
Louisiana	4,396	4,760	4,967	5,302	5,597	5,677	6,018	6,198	6,320	6,179
Michigan	7,648	8,373	8,845	9,438	9,811	10,068	9,986	10,048	9,975	9,975
Mississippi	808	933	1,062	1,194	1,286	1,299	1,344	1,352	1,357	1,327
Montana	4,540	4,797	5,282	5,723	5,911	6,175	6,363	6,279	6,126	5,693
Nebraska	108	111	114	194	325	353	292	297	320	232
New Mexico	17,656	19,194	20,456	21,982	23,088	23,559	24,347	24,832	25,298	25,555
New York	6,420	6,429	6,646	6,977	7,077	7,086	7,178	7,229	7,194	6,784
North Dakota	77	101	151	176	198	206	227	248	274	255
Ohio	22,040	22,527	23,113	23,323	24,017	22,839	24,441	24,800	24,573	23,966
Oklahoma	21,765	23,418	25,012	26,733	28,190	28,745	29,297	29,883	29,051	28,154
Oregon	11	11	10	9	14	15	20	18	20	NA
Pennsylvania	35,827	40,005	42,860	37,627	50,174	31,198	53,688	43,299	46,574	44,422
South Dakota	60	61	63	64	72	68	88	89	92	65
Texas	44,590	47,331	50,950	54,379	58,167	60,464	62,627	64,912	66,508	66,972
Utah	1,800	2,103	2,396	2,658	2,951	3,026	3,190	3,487	3,691	4,002
Virginia	3,096	3,444	4,123	4,808	5,257	5,912	6,274	6,552	6,744	6,936
West Virginia	40,462	43,251	40,551	46,513	43,861	46,235	49,530	48,403	51,401	49,454
Wyoming	13,530	15,680	18,251	19,665	20,555	19,781	17,244	16,662	15,396	13,593
Federal Offshore	792	885	718	721	884	700	640	638	568	455
TOTAL U.S.*	**273,947**	**295,929**	**314,064**	**326,813**	**357,320**	**345,240**	**376,547**	**371,815**	**380,683**	**375,576**

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.*

Marginal Natural Gas Production

(Mmcf)	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Alabama	48,107	53,491	60,280	66,360	71,331	73,087	72,983	72,308	72,386	71,042
Arizona	28	30	26	21	17	17	23	21	17	65
Arkansas	33,526	36,049	38,042	39,698	43,457	42,440	43,836	44,948	45,427	46,757
California	9,084	9,744	10,148	11,502	12,074	12,235	12,134	11,815	11,562	11,679
Colorado	196,626	220,557	248,592	270,912	300,693	311,101	334,529	352,747	348,505	331,406
Kansas	202,769	222,557	240,091	251,074	264,336	261,974	256,089	249,273	239,501	229,732
Kentucky	78,838	73,076	78,304	43,211	83,881	88,829	77,950	75,885	78,688	84,105
Louisiana	41,864	45,671	48,227	52,617	57,231	57,998	63,136	66,793	66,731	67,713
Michigan	119,301	125,410	124,899	129,108	126,809	120,191	114,548	109,645	103,813	97,573
Mississippi	12,821	13,051	14,679	16,053	16,358	15,122	14,643	13,472	12,531	12,151
Montana	38,097	40,735	43,645	46,763	51,651	53,046	52,161	47,661	39,414	35,380
Nebraska	833	745	809	1,282	2,740	2,713	2,093	1,819	1,221	868
New Mexico	230,046	247,406	261,804	274,936	287,968	293,079	300,895	306,803	309,528	312,046
New York	10,891	10,885	11,583	12,846	13,606	13,959	13,676	12,744	11,499	10,610
North Dakota	671	954	1,687	2,161	2,265	2,383	2,628	2,523	2,264	2,089
Ohio	54,228	50,934	52,569	51,736	53,886	49,052	52,410	50,962	47,157	44,450
Oklahoma	271,817	288,341	304,359	320,651	332,607	333,992	333,646	334,373	319,568	302,956
Oregon	117	138	158	134	257	233	305	214	188	NA
Pennsylvania	137,904	149,794	153,643	141,584	174,015	101,862	159,015	129,937	123,604	111,586
South Dakota	473	432	440	410	471	405	612	511	542	296
Texas	510,045	539,449	584,419	623,848	664,936	682,089	699,491	718,046	724,007	713,950
Utah	27,694	30,932	35,253	36,918	41,505	44,127	47,371	51,308	55,169	58,352
Virginia	40,321	44,011	53,288	61,605	70,138	78,646	84,473	86,291	88,552	88,626
West Virginia	161,381	175,204	167,498	189,736	185,870	188,526	190,109	176,330	178,948	167,369
Wyoming	158,861	175,128	188,665	195,870	191,322	167,610	158,407	156,934	152,174	153,692
Federal Offshore	9,716	10,964	8,786	8,980	10,072	7,521	7,591	7,322	6,395	5,274
TOTAL U.S.*	2,396,059	2,565,697	2,731,894	2,850,016	3,059,496	3,002,237	3,094,754	3,080,685	3,039,391	2,959,767

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.*

Crude Oil Revenues

(thous. $)	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Alabama	288,714	418,677	475,658	510,000	729,774	397,192	536,485	887,560	998,315	1,071,312
Alaska	11,027,864	14,890,978	15,425,817	16,819,997	22,536,136	12,813,555	15,879,039	20,235,057	18,986,722	18,004,114
Arizona	1,917	2,605	3,383	2,892	4,692	2,620	2,989	3,332	4,621	5,542
Arkansas	246,862	322,656	358,122	387,492	552,642	306,798	407,100	514,884	584,253	617,387
California	8,243,870	11,113,988	12,240,536	14,032,040	19,354,014	11,620,044	15,005,196	19,853,328	20,529,665	20,396,088
Colorado	909,842	1,285,105	1,561,888	1,737,878	2,659,532	1,588,216	2,399,004	3,480,092	4,240,534	5,879,656
Florida	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Illinois	425,520	522,598	616,283	630,927	880,862	504,444	663,523	819,333	790,496	886,555
Indiana	67,006	88,112	102,666	113,067	170,787	100,393	133,625	175,154	208,257	223,203
Kansas	1,326,556	1,806,486	2,165,442	2,439,357	3,644,711	2,147,236	2,931,025	3,673,846	3,842,823	4,302,713
Kentucky	93,817	125,356	136,492	169,558	240,351	144,121	177,917	200,036	278,290	263,755
Louisiana	3,343,113	4,043,624	4,719,199	5,456,018	7,355,128	4,067,498	5,264,660	7,3224,083	7,486,039	7,553,502
Michigan	232,922	307,636	354,684	376,879	599,682	350,915	520,100	647,909	675,098	743,629
Mississippi	660,171	920,601	1,081,120	1,434,785	2,165,489	1,354,193	1,839,953	2,435,026	2,478,974	2,444,238
Missouri	3,269	4,239	4,989	4,862	8,312	5,001	10,290	9,963	14,564	17,277
Montana	952,616	1,730,144	2,055,693	2,251,347	2,837,788	1,474,142	1,779,320	2,140,375	2,198,555	2,598,724
Nebraska	96,242	126,550	133,564	146,591	210,648	114,032	162,354	217,461	256,974	245,532
Nevada	14,807	19,078	24,836	26,194	39,885	23,442	26,591	28,854	33,495	31,292
New Mexico	2,532,292	3,222,025	3,670,813	4,080,972	5,788,812	3,490,784	4,944,814	6,478,672	7,510,245	9,346,681
New York*	6,698	10,764	20,260	26,395	42,375	17,806	28,956	33,413	NA	NA
North Dakota*	1,224,352	1,867,871	2,262,555	2,942,287	5,566,976	4,285,380	7,943,877	13,578,551	20,446,418	28,313,111
Ohio*	221,392	302,212	340,990	371,431	551,097	274,819	351,380	422,537	474,473	755,514
Oklahoma	2,496,955	3,384,253	3,965,896	4,224,583	6,159,850	3,790,538	5,091,941	6,973,370	8,366,130	10,790,306
Pennsylvania	94,634	134,242	165,748	195,160	289,796	176,715	225,873	301,835	380,517	471,301
South Dakota*	52,109	74,405	72,279	104,529	148,352	85,057	110,740	141,505	145,924	163,293
Tennessee	13,162	14,765	10,956	18,565	31,655	14,207	18,514	25,699	32,596	31,089
Texas	15,233,492	20,653,108	24,059,332	26,713,037	39,300,858	22,922,346	32,524,749	48,648,360	66,797,025	88,477,144
Utah	580,176	900,170	1,070,242	1,220,547	1,908,310	1,152,197	1,6780,053	2,197,322	2,504,072	2,960,188
Virginia	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
West Virginia	66,589	91,160	108,859	134,002	202,119	83,711	130,303	185,758	224,263	690,291
Wyoming	1,827,236	2,362,448	2,820,972	3,157,769	4,567,132	2,695,176	3,669,977	4,562,212	4,666,881	5,398,211
TOTAL U.S.	73,145,201	95,169,783	110,863,550	123,267,281	172,069,387	110,121,480	149,314,136	196,974,814	224,023,175	261,167,864
Federal Offshore	20,726,267	24,807,599	30,083,818	33,000,716	43,996,966	34,400,894	45,178,168	52,689,530	50,814,627	48,991,605

*Source: * EIA price and production data used in addition to state data when EIA not available. Total does not include Federal Offshore.*
Note: U.S. data is based on national production and cost data.

Natural Gas Revenues

(thous. $)	2004	2005	2006	2007	2008	2009	2010	2011*	2012*	2013*
Alabama	2,160,750	2,751,780	2,166,685	2,011,828	2,488,581	1,019,645	994,277	1,134,370	1,117,378	912,916
Alaska***	1,613,895	2,314,590	2,574,952	2,440,521	2,944,486	1,163,436	1,186,296	2,326,149	2,156,730	2,035,856
Arizona	1,695	1,596	3,593	3,917	3,708	2,271	752	993	548	341
Arkansas	1,062,552	1,383,270	1,737,984	1,867,611	3,893,925	2,332,235	3,558,294	6,722,769	6,143,460	5,686,873
California	1,807,542	2,366,396	2,039,402	2,033,399	2,484,410	1,095,237	1,396,916	1,118,291	854,004	1,054,656
Colorado	5,622,814	8,418,829	7,361,265	5,678,549	2,702,429	4,812,015	6,250,381	8,089,625	7,281,942	7,639,134
Florida	NA	NA	NA	NA	NA	NA	NA	76,684	3038	1,296
Illinois	NA	NA	NA	NA	NA	NA	NA	10,796	8,734	12,789
Indiana	21,426	28,560	17,555	20,843	35,634	19,954	28,092	45,103	37,283	34,768
Kansas	1,961,778	2,455761	2,081,557	2,081,840	2,564,024	1,120,030	1,373,566	1,709,456	1,404,457	1,456,486
Kentucky	495,802	634,718	841,676	701,462	960,857	NA	604,925	643,579	442,529	423,153
Louisiana	8,065,364	11,301,539	9,432,555	9,572,037	12,024,667	5,915,679	9,348,719	17,175,598	10,284,921	9,916,156
Maryland	213	342	366	NA	NA	NA	199	213	249	172
Michigan	999,772	1,383,894	NA	2,241,113	1,532,255	602,645	496,937	853,841	711,332	606,984
Mississippi	369,348	451,962	414,032	492,182	850,441	328,826	307,417	431,066	253,457	263,168
Missouri	NA	NA	NA	NA	NA	NA	NA	NA	NA	45
Montana	436,397	709,021	624,033	668,371	843,968	310,454	318,642	381,329	283,215	266,249
Nebraska	4,753	4,922	NA	7,557	19,170	8,637	8,879	10,010	5,724	4,758
New Mexico	8,113,719	11,368,097	9,944,998	10,628,430	12,148,114	5,767,127	6,874,424	5,592,610	4,498,360	4,877,358
New York**	321,429	429,300	399,137	486,237	449,861	188,814	166,530	187,989	141,368	117,759
North Dakota	315,202	441,479	360,380	365,149	525,286	222,040	320,801	491,336	763,032	1,176,198
Ohio**	601,665	754,213	668,941	668,641	668,681	387,273	361,705	434,508	377,635	839,676
Oklahoma	9,139,845	11,819,425	10,674,385	10,885,012	14,462,499	6,557,953	8,606,715	10,709,893	10,117,305	10,183,995
Oregon	1,817	1,930	2,745	2,155	4,147	3,284	6,922	7,849	4,012	3,711
Pennsylvania	NA	NA	NA	NA	NA	NA	NA	8,230,518	12,456,962	17,142,561
South Dakota	6,001	7,380	6,163	7,184	13,053	NA	NA	9,628	70,447	78,270
Tennessee	14,490	21,010	18,055	26,135	41,595	20,981	22,376	25,371	25,339	25,542
Texas	29,542,446	39,836,828	36,616,945	42,520,234	58,897,676	25,980,287	31,561,882	38,338,332	32,144,629	36,897,011
Utah	1,456,558	2,156,757	1,912,277	1,452,939	2,666,431	1,501,268	1,827,550	2,598,742	2,697,162	2,683,919
Virginia**	NA	NA	NA	NA	NA	NA	NA	1,003,264	825,724	772,176
West Virginia	928,892	1,563,234	1,617,050	1,585,922	1,822,189	1,163,518	1,034,179	2,329,279	2,693,901	3,449,616
Wyoming	7,897,327	11,245,715	10,624,776	8,942,992	15,605,471	7,940,115	9,913,758	10,041,312	8,149,768	8,380,514
TOTAL U.S.	106,565,501	138,735,606	124,027,817	127,523,075	169,066,547	79,287,260	100,270,791	135,324,662	119,589,905	124,743,692
Federal Offshore	21,890,964	23,223,588	20,652,221	20,354,037	21,222,830	9,121,165	10,305,541	10,513,980	7,145,853	6,523,096

Source: EIA wellhead price and marketed production data. Total does not include Federal Offshore.
**Post 2010, City Gate prices used due to the unavailability of wellhead prices*
***State data used when EIA not available.*
**** Alaska natural gas is reinjected.*
Note: U.S. data is based on national production and cost data.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Alabama	9	16	15	2	12	19	22	19	13	14
Alaska	140	133	114	106	101	100	101	89	94	109
Arkansas	6	17	123	465	691	963	910	826	723	571
California	140	139	165	220	263	151	207	309	346	370
Colorado	3	21	29	44	49	64	83	281	584	957
Georgia	0	0	0	0	0	0	0	0	0	0
Florida	0	1	0	0	1	1	1	5	0	5
Illinois	2	2	1	0	9	2	10	6	11	5
Indiana	4	16	23	48	40	46	70	8	5	9
Iowa	0	0	0	0	0	0	0	0	0	0
Kansas	4	2	25	29	5	7	7	20	163	223
Kentucky	5	11	9	44	229	268	225	142	47	91
Louisiana	60	34	37	36	96	390	738	901	465	238
Michigan	39	79	121	90	136	42	47	56	45	54
Mississippi	1	2	8	23	48	14	25	7	8	17
Missouri	0	0	0	0	0	0	0	0	0	0
Montana	290	348	358	312	130	31	76	129	251	196
Nebraska	0	0	0	1	0	0	0	0	2	3
Nevada	0	0	0	0	0	0	0	0	0	0
New Mexico	49	95	163	218	230	145	275	417	529	654
New York	4	7	5	16	27	19	9	14	0	4
North Dakota	152	248	397	469	724	609	1,121	1,661	2,239	2,398
Ohio	3	1	6	5	12	4	4	21	91	293
Oklahoma	383	526	673	761	1, 073	671	833	1,369	1,912	2,194
Oregon	0	0	0	0	0	0	0	0	0	0
Pennsylvania	0	0	6	9	55	310	978	1,240	1,381	1,423
South Dakota	10	35	23	50	24	11	9	14	21	21
Tennessee	0	1	0	0	9	32	27	22	10	11
Texas	1,243	1,641	2,254	3,392	4,237	2,771	3,703	5,376	6,581	7,657
Utah	5	11	6	18	28	13	22	27	53	57
Virginia	2	2	0	1	8	31	21	25	9	9
Washington	0	0	0	0	0	0	0	0	0	0
West Virginia	1	4	5	26	184	185	228	247	330	360
Wyoming	15	59	64	47	52	22	38	145	214	240
TOTAL U.S.	**2,570**	**3,451**	**4,630**	**5,432**	**8,473**	**6,921**	**9,752**	**13,376**	**16,127**	**18,183**

Source: IHS.

Directional Wells

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Alabama	8	11	12	17	23	5	18	22	20	48
Alaska	58	26	20	30	36	33	29	22	26	24
Arizona	0	0	0	0	0	0	0	0	0	0
Arkansas	22	25	29	27	18	9	20	20	30	27
California	1,073	1,022	979	1,112	1,090	495	1,036	1,149	1,355	1,382
Colorado	609	833	1,205	1,649	2,395	1,729	1,800	2,169	1,740	737
Florida	0	2	0	0	0	1	0	1	2	0
Georgia	0	0	0	0	0	0	0	0	0	0
Illinois	6	1	2	1	3	0	1	1	3	4
Indiana	1	4	1	1	0	0	0	4	5	0
Iowa	0	0	0	0	0	0	0	0	0	0
Kansas	0	1	3	0	3	0	0	2	4	4
Kentucky	1	0	2	4	4	0	0	0	0	0
Louisiana	420	483	510	499	403	209	242	289	382	309
Michigan	52	64	71	59	60	28	46	40	37	51
Mississippi	47	53	37	44	48	24	59	50	48	45
Missouri	0	0	0	0	0	0	0	0	0	0
Montana	19	24	23	40	27	2	22	4	7	3
Nebraska	0	1	0	0	0	0	0	0	0	0
Nevada	0	0	0	0	0	0	1	0	0	0
New Mexico	108	130	163	128	166	167	175	186	529	100
New York	31	19	12	29	23	1	0	0	0	0
North Dakota	7	4	10	13	2	4	21	38	41	25
Ohio	18	29	22	35	30	21	31	25	5	13
Oklahoma	187	248	272	217	217	111	77	108	99	64
Oregon	0	0	0	1	1	2	2	0	0	0
Pennsylvania	2	6	5	26	37	3	7	9	7	31
South Dakota	0	0	1	0	0	0	0	0	0	0
Tennessee	0	0	0	0	0	0	0	0	0	0
Texas	893	899	877	946	1,031	612	683	611	733	680
Utah	24	34	105	150	250	214	404	566	720	653
Virginia	0	1	0	0	0	0	0	0	0	0
Washington	0	0	0	0	0	0	0	0	0	0
West Virginia	6	3	5	10	10	1	1	0	14	13
Wyoming	252	368	444	500	642	588	689	703	490	523
TOTAL U.S.	**3,844**	**4,291**	**4,810**	**5,538**	**6,519**	**4,259**	**5,364**	**6,019**	**5,894**	**4,736**

Source: IHS.

Vertical Wells

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Alabama	452	436	437	541	312	271	218	175	131	98
Alaska	8	9	8	12	8	12	2	1	9	2
Arizona	1	5	1	2	1	0	0	0	0	0
Arkansas	283	308	399	382	423	191	202	184	177	196
California	1,052	1,219	1,524	1,317	1,471	1,021	756	995	1,044	1,301
Colorado	1,389	1,897	1,858	2,032	1,674	792	843	625	503	178
Florida	0	2	0	0	0	0	0	0	1	2
Georgia	0	0	0	0	0	0	0	0	0	0
Idaho	0	0	0	0	1	0	2	0	0	0
Illinois	329	443	514	468	504	301	378	462	558	524
Indiana	155	168	190	150	192	142	97	110	126	126
Iowa	0	0	0	0	0	0	0	0	0	0
Kansas	2,119	2,730	3,960	3,875	4,343	2,427	2,930	3,636	4,314	4,157
Kentucky	938	1,330	1,561	1,454	1,352	757	586	558	618	465
Louisiana	790	947	1,116	1,247	1,279	582	395	500	716	669
Michigan	376	413	435	375	387	165	104	99	68	47
Mississippi	227	251	258	272	182	125	100	114	96	101
Missouri	31	17	28	22	208	56	35	0	11	15
Montana	449	600	755	525	425	226	175	91	84	65
Nebraska	50	75	68	165	235	74	99	135	109	142
Nevada	6	8	1	5	8	4	2	0	4	3
New Mexico	1,634	1,708	1,742	1,521	1,330	766	639	799	680	504
New York	125	199	403	464	417	236	328	214	169	146
North Dakota	65	53	104	65	39	19	39	36	54	60
Ohio	564	721	949	1,025	1,002	590	421	371	355	251
Oklahoma	2,642	2,822	3,173	2,703	3,025	1,371	1,374	1,109	1,095	965
Oregon	1	0	0	0	1	2	2	0	0	1
Pennsylvania	3,103	3,952	4,689	4,847	4,696	2,729	2,033	1,346	1,005	1,070
South Dakota	4	7	7	12	23	16	16	6	2	5
Tennessee	216	254	332	324	243	93	66	74	123	129
Texas	8,318	9,361	10,620	10,472	11,632	6,453	7,683	8,900	9,717	8,616
Utah	574	730	900	793	936	421	514	300	316	300
Virginia	411	439	626	764	631	572	393	363	155	98
Washington	2	0	0	2	0	0	0	0	0	0
West Virginia	1,320	1,496	1,978	2,033	1,749	853	465	249	173	118
Wyoming	3,554	4,009	3,693	2,516	2,339	1,269	1,165	718	384	455
TOTAL U.S.	**31,188**	**36,609**	**42,329**	**40,385**	**41,068**	**22,536**	**22,062**	**22,170**	**22,797**	**20,809**

Source: IHS.

Well Summary*

Year	Horizontal Wells	Directional Wells	Vertical Wells
2004	2,606	4,511	31,376
2005	3,492	4,832	36,808
2006	4,683	5,376	42,511
2007	6,512	6,022	40,532
2008	8,622	6,960	41,446
2009	6,957	4,605	22,875
2010	9,667	5,660	22,496
2011	13,421	6,375	22,968
2012	16,191	6,223	23,250
2013	**18,189**	**4,938**	**20,857**

Data in state and national tables may differ due to date tabulated. Source: IHS.

Severance and Production Taxes

(thous. $)	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Alabama	101,184	132,300	177,280	139,380	192,752	111,005	90,613	106,500	111,482	116,151
Alaska	651,900	863,000	1,199,500	2,208,400	6,879,000	3,112,000	2,871,000	4,552,901	6,146,113	4,050,300
Arkansas	9,802	15,078	15,078	14,928	21,427	28,209	70,455	79,968	75,022	76,212
Arizona	8,993	9,899	10,022	6,761	5,488	3,214	3,016	3,300	3,618	3,646
California	188,753	268,796	328,876	471,185	467,130	400,000*	400,000*	400,000*	400,000*	400,000*
Colorado	107,145	134,050	196,668	126,244	139,551	273,028	63,702	137,589	163,046	136,084
Florida	6,084	8,278	9,527	9,288	13,386	7,995	3,928	10,055	12,206	12,299
Indiana	845	1,119	1,215	1,350	2,082	1,213	1,629	2,102	2,362	2,518
Kansas	116,677	148,855	148,855	131,217	421,100	388,600	330,700	385,900	381,500	396,000
Kentucky	22,170	28,630	42,586	38,538	55,036	30,878	35,001	35,162	28,343	29,948
Louisiana	677,320	714,729	885,402	981,229	1,017,654	895,855	744,867	722,828	873,022	820,711
Maryland	1	4	4	3	1	5	4	2	2	5
Michigan	56,186	66,749	88,143	67,796	103,928	62,369	61,385	68,843	64,628	68,752
Mississippi	62,631	84,409	6,809	8,364	129,821	109,514	93,463	113,491	113,044	103,170
Montana	114,218	180,077	204,129	242,776	327,932	172,189	206,024	213,770	210,644	213,229
Nebraska	2,191	2,926	2,796	2,894	5,855	2,874	3,660	5,149	5,350	5,647
Nevada	356	527	577	576	907	538	418	797	875	875
New Mexico	737,200	926,884	1,169,271	987,921	1,282,483	1,361,237	1,431,086	922,600	971,900	1,100,000
North Dakota	73,914	157,500	166,147	185,970	534,700	403,100	749,100	1,296,100	1,660,803	2,407,740
Ohio	2,691	2,615	2,554	2,452	2,501	2,569	2,555	2,590	2,516	2,838
Oklahoma	701,156	875,653	1,168,598	1,001,328	1,266,655	1,174,211	869,129	978,167	896,683	715,073
Oregon	72	79	90	117	364	305	390	370	126	83
South Dakota	1,658	2,507	3,256	3,153	5,527	5,894	4,746	5,558	6,988	6,584
Tennessee	592	813	1,041	1,838	1,952	1,342	1,532	1,495	1,531	1,555
Texas	1,887,879	2,338,380	3,200,807	2,730,513	4,121,527	2,292,249	1,775,739	2,677,552	3,778,160	4,618,125
Utah	39,356	57,116	77,074	70,178	70,919	77,831	60,392	65,640	71,974	59,035
West Virginia	41,544	53,557	84,947	80,294	87,606	91,505	70,507	72,947	99,234	115,015
Wyoming	504,731	713,456	660,461	595,031	947,880	488,568	635,511	657,802	522,039	597,120
TOTAL U.S.	6,117,250	7,787,983	9,851,714	10,109,721	18,105,161	11,543,172	10,576,894	13,513,421	16,603,211	16,058,712

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.
**California data estimated post-2008*

Crude Oil Wellhead Prices

($/bbl.)	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Alabama	38.79	53.26	63.16	71.10	96.71	55.25	75.54	105.99	104.81	103.10
Alaska	33.17	47.21	57.03	63.81	90.19	54.41	72.33	98.79	98.70	95.79
Arizona	36.86	52.09	61.51	67.26	90.24	56.96	74.72	90.06	88.87	92.37
Arkansas	36.67	50.86	58.67	64.25	90.91	53.07	71.01	87.51	89.39	92.98
California	34.32	48.26	54.78	64.73	90.21	56.11	74.51	102.50	104.10	102.53
Colorado	40.38	55.34	63.80	67.04	90.80	52.33	72.75	88.26	85.78	90.10
Florida	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Illinois	38.74	51.20	59.70	65.66	93.48	55.47	73.18	88.73	88.74	92.94
Indiana	38.18	51.02	59.31	65.47	91.92	55.65	72.82	88.15	88.62	93.04
Kansas	39.18	53.41	60.74	66.85	92.08	54.41	72.43	88.52	87.85	91.85
Kentucky	36.82	49.45	58.33	63.60	90.87	55.24	70.63	86.00	87.02	91.17
Louisiana	40.08	53.57	63.88	71.18	100.74	59.10	78.25	106.20	105.97	105.18
Michigan	39.14	53.67	60.89	66.87	95.75	56.39	74.91	92.40	90.91	96.50
Mississippi	37.03	49.58	59.35	68.65	94.60	58.29	76.41	100.43	100.80	100.40
Missouri	37.15	49.87	57.34	60.77	83.96	53.20	70.48	84.43	83.22	86.82
Montana	38.53	52.66	56.69	64.64	89.96	52.96	70.24	88.61	82.98	88.73
Nebraska	38.42	52.38	57.77	62.78	87.99	50.93	69.65	85.48	84.95	87.44
Nevada	31.98	42.68	58.30	64.20	91.48	53.52	62.42	70.72	91.02	93.69
New Mexico	39.25	52.84	61.74	68.94	96.23	57.08	75.64	90.93	88.01	92.13
New York	39.40	54.64	63.51	69.46	109.78	53.47	76.00	89.10	NA	NA
North Dakota	39.30	52.38	56.69	65.30	88.68	53.75	70.26	88.74	84.06	90.22
Ohio	38.27	53.47	62.89	68.09	96.43	56.35	73.68	90.79	92.87	94.89
Oklahoma	39.95	54.46	63.11	69.31	96.15	56.56	75.18	90.94	89.97	94.25
Pennsylvania	39.48	54.57	64.02	70.00	96.76	56.56	69.80	87.16	88.41	89.84
South Dakota	38.40	50.65	51.85	62.78	87.42	50.75	69.04	87.08	83.10	89.28
Tennessee	36.46	45.57	57.06	65.37	92.02	53.01	72.04	86.82	87.86	93.08
Texas	38.79	52.61	61.31	68.30	96.85	57.40	76.23	91.99	92.50	95.80
Utah	39.35	53.98	59.70	62.48	86.58	50.22	68.09	83.45	82.73	84.79
Virginia	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
West Virginia	38.38	53.75	63.07	67.27	95.07	55.77	70.74	86.56	87.16	91.26
Wyoming	35.10	45.63	53.25	58.34	86.07	52.30	68.10	83.45	80.70	85.30
TOTAL U.S.	**36.77**	**50.28**	**59.69**	**66.52**	**94.04**	**56.35**	**74.71**	**95.73**	**94.52**	**95.99**

Source: EIA.

Natural Gas Wellhead/City Gate Prices

($/Mcf)	2004	2005	2006	2007	2008	2009	2010	2011*	2012*	2013*
Alabama	6.66	9.28	7.57	7.44	9.65	4.32	4.46	5.80	5.18	4.65
Alaska	3.42	4.75	5.79	5.63	7.39	2.93	3.17	6.53	6.14	6.02
Arizona	5.12	6.86	5.70	5.98	7.09	3.19	4.11	5.91	4.68	4.73
Arkansas	5.68	7.26	6.43	6.61	8.72	3.43	3.84	6.27	5.36	4.99
California	5.65	7.45	6.47	6.62	8.38	3.96	4.87	4.47	3.46	4.18
Colorado	5.21	7.43	6.12	4.57	6.94	3.21	3.96	4.94	4.26	4.76
Florida	NA	NA	NA	NA	NA	NA	NA	5.07	3.93	4.44
Illinois	NA	NA	NA	NA	NA	NA	NA	5.09	4.11	4.43
Indiana	6.30	9.11	6.01	5.78	7.58	4.05	4.13	4.97	4.23	4.38
Kansas	4.94	6.51	5.61	5.69	6.85	3.16	4.23	5.53	4.74	4.98
Kentucky	5.26	6.84	8.83	7.35	8.42	NA	4.47	5.18	4.17	4.47
Louisiana	5.96	8.72	6.93	7.02	8.73	3.82	4.23	5.67	3.48	4.12
Maryland	6.25	7.43	7.63	NA	NA	NA	4.63	6.26	5.67	5.37
Michigan	3.85	5.30	NA	8.46	5.63	3.92	3.79	6.18	5.50	4.91
Mississippi	5.83	8.54	6.84	6.70	8.80	3.73	4.17	5.29	3.97	4.44
Missouri	6.99	8.67	8.53	NA	NA	NA	NA	5.85	5.27	4.99
Montana	4.51	6.57	5.53	5.72	7.50	3.16	3.64	5.11	4.23	4.21
Nebraska	3.22	4.29	NA	4.86	6.22	2.97	3.98	5.11	4.31	4.61
Nevada	6.77	8.5	8.64	8.72	9.44	7.93	7.19	6.77	5.13	5.16
New Mexico	4.97	6.91	6.18	6.88	8.40	4.17	5.32	4.52	3.70	4.08
New York	6.98	7.78	7.13	8.85	8.94	4.21	4.65	6.04	5.35	5.02
North Dakota	5.73	8.40	6.52	6.67	8.55	3.74	3.92	5.06	4.43	4.99
Ohio	6.65	9.03	7.75	7.59	7.88	4.36	4.63	5.51	4.47	4.51
Oklahoma	5.52	7.21	6.32	6.24	7.56	3.53	4.71	5.67	5.00	4.75
Oregon	3.89	4.25	4.42	5.27	5.33	4.00	4.92	5.84	5.21	4.82
Pennsylvania	NA	NA	NA	NA	NA	NA	NA	6.28	5.52	5.26
South Dakota	5.49	7.44	6.40	7.22	7.94	NA	NA	5.21	4.67	4.83
Tennessee	6.90	9.55	6.78	6.63	8.85	3.83	4.35	5.23	4.35	4.73
Texas	5.83	7.55	6.60	6.98	8.51	3.81	4.70	5.39	4.30	4.89
Utah	5.24	7.16	5.49	3.86	6.15	3.38	4.23	5.68	5.50	5.70
Virginia	NA	NA	NA	NA	NA	NA	NA	6.64	5.64	5.54
West Virginia	4.71	7.07	7.17	6.86	NA	4.40	3.90	5.91	4.99	4.65
Wyoming	4.96	6.86	5.85	4.65	6.86	3.40	4.30	4.65	4.03	4.51
TOTAL U.S.	**5.46**	**7.33**	**6.39**	**6.25**	**7.97**	**3.67**	**4.48**	**5.63**	**4.73**	**4.88**

Source: Energy Information Administration.
**City Gate price used for natural gas post 2010.*

Refiner Acquisition Cost of Crude Oil

($/bbl.)	Domestic	Imported	Composite
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	78.01	75.86	76.69
2011	100.71	102.63	101.87
2012	100.72	101.09	100.93
2013	**102.91**	**98.11**	**100.49**

Source: Energy Information Administration.

Retail Gasoline Prices

(¢/gal.)	Excluding Taxes	Taxes	Pump Price
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	44.4	257.2
2007	234.5	45.1	279.6
2008	277.5	47.1	324.6
2009	188.8	46.5	235.3
2010	230.1	48.1	278.2
2011	305.0	47.1	352.7
2012	315.4	49.0	364.4
2013	**304.9**	**47.7**	**352.6**

Source: Energy Information Administration. Pump price quoted for unleaded regular.

World Crude Oil Reserves

(mill. bbls.)	United States	Canada	Latin America	Middle East	Africa	Asia Pacific	Western Europe	Eastern Europe & FSU	Total World
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
2011	20,682	173,625	249,176	799,607	124,209	45,360	10,704	100,059	1,523,225
2012	28,950	173,105	336,193	797,157	127,739	45,356	10,875	120,030	1,639,405
2013	**33,403**	**173,200**	**338,330**	**798,604**	**126,729**	**46,011**	**11,145**	**120,023**	**1,647,444**

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.

	Motor Gasoline	Kerosene	Jet Fuel *Distillate*	Fuel Oil *Residual*	Average *Of Four Products* (¢/gal.)	Average *Of Four Products* ($/bbl.)	Crude Oil ($/bbl.)
		(¢/gal.)					
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	82.87	66.52
2008	259.00	302.00	297.00	186.60	261.15	109.68	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	206.38	86.68	74.71
2011	286.70	301.40	302.50	233.60	281.05	118.04	95.73
2012	292.90	308.00	310.30	245.70	289.23	121.47	94.52
2013	**281.2**	**295.3**	**302.5**	**227.8**	**276.70**	**116.21**	**95.99**

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.

(mill. bbls.)	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Alabama	112.4	111.0	112.2	111.6	106.6	101.0	104.5	104.0	102.3	99.8
Alaska	58.9	58.7	60.3	57.0	49.4	45.4	48.8	47.6	45.3	43.1
Arizona	103.2	108.3	110.4	109.5	105.4	97.4	97.2	97.6	95.4	97.2
Arkansas	66.8	66.2	66.3	66.9	66.8	63.7	65.2	63.7	61.2	61.9
California	685.6	698.3	706.7	711.1	672.6	652.0	654.9	639.2	619.2	628.7
Colorado	93.3	92.2	95.8	97.4	94.2	89.9	92.3	90.6	90.4	90.7
Connecticut	85.0	81.8	74.2	72.4	66.0	65.1	63.6	61.4	58.6	60.7
Delaware	22.9	24.5	22.8	22.5	21.2	17.1	17.2	19.3	18.8	18.5
Dist. of Columbia	5.6	5.3	4.3	4.2	3.6	3.6	4.0	3.7	3.1	3.0
Florida	379.3	387.1	370.3	358.4	328.7	307.0	323.1	305.9	294.2	300.9
Georgia	199.6	207.2	201.7	197.0	182.7	192.5	197.1	190.3	176.1	174.1
Hawaii	49.1	51.3	51.6	52.9	42.4	41.9	42.1	43.8	42.4	41.6
Idaho	28.8	29.5	30.6	30.6	28.9	28.0	30.4	30.4	29.9	30.8
Illinois	245.4	266.7	256.3	255.4	246.4	233.7	234.4	231.2	225.6	234.9
Indiana	160.7	159.6	160.1	157.4	149.0	146.0	1445.2	144.5	138.8	146.2
Iowa	84.1	86.1	87.8	84.3	82.0	82.9	83.4	83.7	80.9	85.2
Kansas	79.3	62.5	64.4	80.5	77.9	79.1	71.4	79.7	79.6	82.6
Kentucky	131.3	131.0	131.5	130.8	124.0	123.0	120.5	117.0	118.7	111.4
Louisiana	384.7	366.6	396.2	396.2	374.5	339.5	364.9	357.5	329.4	330.4
Maine	46.6	47.6	42.9	43.0	38.2	38.2	36.5	36.3	32.9	35.8
Maryland	108.5	111.9	102.8	102.5	98.5	100.7	96.3	93.0	90.6	93.4
Massachusetts	133.5	135.0	122.6	124.1	119.5	109.6	111.5	109.8	103.0	108.0
Michigan	189.8	191.4	180.0	180.8	166.7	162.2	160.7	157.4	154.6	166.5
Minnesota	132.3	133.4	129.7	130.7	124.8	117.2	117.1	115.7	116.5	115.5
Mississippi	87.1	83.0	85.7	84.4	78.7	76.3	78.7	76.8	78.9	80.5
Missouri	141.4	141.0	139.6	140.8	133.2	128.5	128.9	124.0	120.1	121.0
Montana	32.2	33.5	35.4	38.1	35.9	33.3	31.1	32.0	31.3	31.8
Nebraska	44.2	43.0	43.1	43.5	42.3	41.7	46.0	44.2	44.3	45.0
Nevada	48.3	51.2	54.0	53.6	49.5	45.6	43.9	40.4	41.0	42.9
New Hampshire	37.7	35.4	32.1	32.0	31.6	30.3	29.1	29.1	27.5	23.9
New Jersey	210.5	222.2	216.6	230.2	225.0	196.4	198.1	204.4	183.5	185.0
New Mexico	47.2	47.1	49.6	53.2	49.1	47.3	47.7	49.0	49.3	49.9
New York	330.8	325.3	286.9	289.9	278.4	261.8	255.3	238.9	241.5	239.0
North Carolina	175.8	178.3	173.9	175.4	174.2	160.7	162.3	154.9	150.1	158.1
North Dakota	25.0	25.7	25.4	26.5	26.1	24.4	27.9	33.8	37.0	40.7
Ohio	242.6	240.3	242.1	242.2	235.2	221.5	222.7	219.3	214.5	218.2
Oklahoma	97.4	104.8	111.0	103.9	101.3	95.3	99.5	98.5	98.9	98.1
Oregon	67.5	69.0	70.3	69.8	67.8	67.9	66.5	64.9	63.2	63.4
Pennsylvania	269.7	273.5	264.0	261.4	261.9	239.9	240.4	232.9	224.1	227.5
Rhode Island	18.1	17.9	17.2	16.9	17.1	17.0	16.4	15.5	14.8	15.2
South Carolina	104.9	101.3	102.5	100.0	97.4	100.0	96.5	93.4	91.9	95.6
South Dakota	21.6	22.4	22.1	22.7	22.0	22.6	22.0	22.1	22.6	22.2
Tennessee	140.6	145.5	146.7	145.9	135.7	129.1	133.4	132.0	127.7	128.9
Texas	1,285.0	1,239.4	1,265.5	1,249.3	1,141.1	1,142.6	1,231.8	1,243.0	1,279.3	1,343.1
Utah	50.4	52.8	56.9	55.5	52.1	49.8	49.4	53.1	51.8	53.7
Vermont	17.9	17.2	17.0	16.7	15.4	16.3	15.6	15.3	14.6	15.3
Virginia	183.3	184.0	179.4	181.2	167.1	158.0	156.8	147.7	153.0	154.8
Washington	136.1	140.3	145.4	150.4	144.0	139.3	137.4	135.9	139.2	134.7
West Virginia	42.5	42.3	43.4	43.3	41.4	36.3	37.0	35.9	35.1	35.8
Wisconsin	115.4	114.8	113.2	113.7	109.7	103.4	104.3	101.4	99.0	101.0
Wyoming	27.3	27.9	30.0	30.7	30.9	29.3	39.6	29.9	30.6	29.3
Total U.S.	**7,587.6**	**7,592.8**	**7,550.9**	**7,548.3**	**7,136.3**	**6,851.6**	**7,000.7**	**6,892.0**	**6,767.4**	**6,920.8**

Source: Energy Information Administration.

Natural Gas Consumption

(MMcf.)	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Alabama	382,663	353,193	391,103	420,399	410,269	462,414	541,134	604,495	666,712	615,184
Alaska	406,319	432,972	373,849	369,966	341,887	342,259	333,312	335,458	343,110	332,107
Arizona	349,622	321,584	358,068	392,954	399,188	369,739	330,913	288,802	332,068	315,699
Arkansas	215,124	213,609	233,869	226,440	234,900	244,192	271,515	284,077	296,132	282,834
California	2,406,889	2,248,256	2,315,720	2,395,674	2,405,264	2,328,504	2,273,129	2,153,188	2,403,494	2,414,518
Colorado	440,378	470,321	450,832	504,775	504,784	523,726	501,351	466,680	443,750	468,221
Connecticut	162,642	168,067	172,682	180,181	166,800	185,055	199,426	230,035	229,156	234,299
Delaware	48,057	46,904	43,190	48,155	48,162	50,148	54,826	79,717	101,676	94,423
Dist. of Columbia	32,227	32,085	29,049	32,966	31,881	33,178	33,251	32,863	28,561	32,859
Florida	734,178	778,209	891,611	917,245	942,700	1,055,341	1,158,451	1,217,688	1,328,463	1,224,863
Georgia	394,986	412,560	420,469	441,107	425,042	462,798	530,031	522,898	615,771	626,094
Hawaii	2,774	2,795	2,783	2,850	2,701	2,608	2,627	2,618	2,689	2,845
Idaho	75,335	74,540	75,709	81,937	88,515	85,198	83,326	82,544	89,004	104,534
Illinois	953,207	969,642	893,998	965,591	1,000,501	956,066	966,679	986,866	940,367	1,057,377
Indiana	526,701	531,111	496,303	535,795	551,423	506,943	573,866	630,669	649,921	671,421
Iowa	226,819	241,340	238,454	293,274	325,772	315,186	311,075	306,909	295,183	327,810
Kansas	256,779	255,123	264,253	286,538	282,904	286,972	275,184	279,724	262,316	285,124
Kentucky	225,470	234,080	211,048	229,798	225,295	206,833	232,099	223,034	225,924	230,373
Louisiana	1,346,429	1,309,728	1,292,761	1,376,700	1,313,717	1,265,911	1,436,835	1,496,694	1,482,343	1,400,075
Maine	86,136	61,673	64,035	63,183	70,145	70,333	77,575	71,691	68,266	64,073
Maryland	194,725	202,509	182,294	201,053	196,069	196,510	212,019	193,986	208,946	200,292
Massachusetts	372,532	378,068	370,664	408,704	406,719	395,852	432,298	449,195	416,350	441,392
Michigan	916,629	913,827	803,336	798,126	779,603	735,341	746,749	776,466	790,642	813,300
Minnesota	359,898	367,825	352,570	388,335	425,351	394,134	422,968	420,770	422,263	469,606
Mississippi	282,051	301,663	307,305	364,068	355,007	364,323	438,733	433,538	494,016	422,029
Missouri	263,945	268,040	252,697	272,536	296,059	264,867	280,180	272,583	255,875	276,937
Montana	66,829	68,355	73,879	73,822	76,422	75,801	72,024	78,218	73,399	77,303
Nebraska	115,011	119,070	129,885	150,809	171,005	163,474	168,944	171,777	158,757	173,846
Nevada	214,984	227,149	249,608	254,406	264,596	275,468	259,252	249,971	273,502	273,065
New Hampshire	61,172	70,484	62,549	62,132	71,178	59,951	60,378	69,979	72,032	54,013
New Jersey	620,806	602,388	547,206	618,965	614,908	620,789	654,458	660,743	652,060	688,077
New Mexico	223,575	220,717	223,635	234,236	246,665	241,194	241,137	246,417	243,961	245,678
New York	1,098,056	1,080,215	1,097,160	1,187,060	1,180,357	1,142,625	1,198,127	1,217,324	1,223,036	1,271,854
North Carolina	224,796	229,715	223,032	237,354	243,091	247,047	304,148	307,803	363,945	439,681
North Dakota	59,986	53,050	53,336	59,453	63,096	54,564	66,394	72,462	72,740	82,647
Ohio	825,753	825,961	742,360	806,350	792,246	740,925	784,293	823,546	842,959	911,697
Oklahoma	538,576	582,536	624,400	658,379	687,988	659,305	675,727	655,920	691,661	660,215
Oregon	234,997	232,562	222,608	251,927	268,484	248,864	239,324	199,419	215,830	240,224
Pennsylvania	696,175	691,591	659,754	752,401	749,883	809,706	879,365	965,743	1,037,979	1,090,866
Rhode Island	72,609	80,764	77,204	87,972	89,256	92,744	94,110	100,455	95,476	85,992
South Carolina	163,787	172,032	174,806	175,701	170,076	190,927	220,235	229,498	244,850	233,769
South Dakota	41,679	42,555	40,739	53,938	65,257	66,185	72,563	73,605	70,238	82,825
Tennessee	231,133	230,338	221,626	221,118	229,934	216,944	257,443	264,230	277,127	279,688
Texas	3,932,971	3,526,380	3,459,579	3,543,067	3,568,024	3,407,195	3,594,337	3,712,710	3,850,331	4,015,755
Utah	155,891	160,275	187,400	219,701	224,187	214,220	219,214	222,227	223,039	246,723
Vermont	8,685	8,372	8,056	8,867	8,624	8,638	8,443	8,610	8,191	9,602
Virginia	277,434	299,746	274,175	319,913	299,364	319,136	375,420	373,444	410,106	418,686
Washington	262,485	264,754	263,395	272,613	298,140	310,426	285,727	264,588	264,540	314,124
West Virginia	122,267	117,136	113,085	115,973	111,479	109,652	113,179	115,360	129,753	140,614
Wisconsin	383,316	410,250	372,462	398,370	409,378	387,066	372,898	393,734	402,656	440,234
Wyoming	107,060	108,314	108,481	140,912	142,705	142,794	150,106	156,457	153,333	149,356
Total U.S.	22,402,546	22,014,435	21,699,071	23,103,793	23,277,001	22,910,072	24,086,798	24,477,430	25,538,487	26,130,666

Source: Energy Information Administration. Total Consumption - includes Lease & Plant Fuel and Pipeline and Distribution Use.

Energy Consumption By State 2013

(Trillion BTU)	Petroleum	Natural Gas	Coal	Nuclear	Renewable Energy	Other*	Total	% Petroleum and Natural Gas
Alabama	508.0	628.5	565.1	426.5	317.7	-514.4	1,931.4	58.84
Alaska	240.7	333.0	14.8	NA	20.4	0.0	609.0	94.20
Arizona	493.8	340.6	454.9	328.4	122.9	-325.8	1,414.8	58.98
Arkansas	317.8	288.2	327.1	124.8	121.8	-86.8	1,093.0	55.4
California	3,246.6	2,483.5	38.2	187.2	872.6	856.2	7,684.1	74.57
Colorado	459.2	481.9	363.5	NA	123.1	44.0	1,471.8	63.94
Connecticut	307.4	240.1	7.7	178.5	40.9	-26.4	748.1	73.19
Delaware	95.2	100.7	18.3	NA	7.5	52.8	274.5	71.37
Dist. of Columbia	14.8	33.8	NA	NA	1.2	121.1	170.9	28.44
Florida	1,527.3	1,245.2	505.2	277.2	315.5	207.6	4,077.9	67.99
Georgia	888.0	634.8	426.2	343.8	270.4	240.1	2,795.4	54.19
Hawaii	233.0	0.2	15.3	NA	28.6	NA	277.1	84.16
Idaho	158.7	107.1	8.0	NA	139.6	116.2	529.5	50.20
Illinois	1,195.0	1,063.7	1,026.9	1,014.9	234.6	-523.7	4,011.5	56.31
Indiana	759.1	680.3	1,198.6	NA	150.0	112.1	2,900.0	49.63
Iowa	414.2	306.5	402.4	55.6	384.7	-46.8	1,516.5	47.52
Kansas	405.8	289.0	326.8	74.9	131.9	-65.4	1,163.1	59.74
Kentucky	570.8	236.0	914.8	NA	89.5	11.6	1,822.7	44.26
Louisiana	1,695.3	1,500.5	228.1	177.2	138.4	95.6	3,835.0	83.33
Maine	182.7	65.9	1.7	NA	161.4	-4.5	407.1	61.07
Maryland	463.8	209.3	183.2	149.0	78.0	320.5	1,403.8	47.95
Massachusetts	547.7	454.5	42.2	45.3	81.0	271.9	1,442.6	69.47
Michigan	823.4	832.1	658.2	302.2	195.5	31.9	2,843.2	58.23
Minnesota	583.4	478.8	267.7	111.9	233.7	184.2	1,859.8	57.11
Mississippi	420.5	428.4	97.8	113.5	70.2	11.4	1,141.8	74.35
Missouri	610.7	281.5	806.5	87.4	94.5	-23.7	1,857.0	48.05
Montana	169.0	82.3	166.1	NA	117.7	-134.0	401.2	62.64
Nebraska	233.4	179.6	293.0	71.7	136.3	-42.2	871.8	47.37
Nevada	219.7	282.3	64.8	NA	75.6	14.6	657.1	76.40
New Hampshire	141.2	55.6	16.8	114.2	58.0	-83.0	302.8	64.99
New Jersey	968.9	713.1	25.9	348.8	89.0	168.8	2,314.5	72.67
New Mexico	250.2	253.0	256.4	NA	45.3	-116.4	688.5	73.09
New York	1,235.9	1,321.6	68.7	467.7	410.2	121.3	3,625.3	70.55
North Carolina	789.3	445.0	493.8	420.5	220.3	155.3	2,524.1	48.90
North Dakota	217.8	83.8	393.2	NA	97.4	-203.7	588.6	51.24
Ohio	1,126.0	946.0	1,104.5	168.5	148.0	252.5	3,745.4	55.32
Oklahoma	520.5	683.1	335.9	NA	170.0	-86.8	1,622.8	74.17
Oregon	329.6	244.3	38.9	NA	464.5	-80.6	996.7	57.58
Pennsylvania	1,168.0	1,146.6	1,126.1	822.5	216.6	-684.8	3,795.0	60.99
Rhode Island	77.8	88.6	NA	NA	5.7	21.5	193.6	85.95
South Carolina	482.6	236.9	257.3	566.9	144.8	-97.1	1,591.4	45.21
South Dakota	113.6	84.5	34.2	NA	127.7	30.2	390.4	50.74
Tennessee	661.8	286.1	399.8	297.7	218.3	272.2	2,135.9	44.38
Texas	6,163.9	4,137.4	1,597.4	400.4	552.2	92.9	12,944.1	79.58
Utah	282.5	258.9	355.2	NA	24.7	-90.8	830.6	65.18
Vermont	75.2	9.7	NA	50.6	36.1	-38.0	133.6	63.55
Virginia	784.4	433.5	290.5	306.4	146.9	448.9	2,410.7	50.52
Washington	713.2	328.0	75.0	88.4	933.1	-98.4	2,039.3	51.06
West Virginia	184.8	151.3	771.2	NA	60.0	-429.5	737.8	45.55
Wisconsin	504.9	450.0	454.6	122.0	169.0	103.4	1,804.0	52.94
Wyoming	159.1	156.2	520.7	NA	54.5	-355.0	535.5	58.88
Total U.S.	**34,728.2**	**26,801.8**	**18,038.8**	**8,244.4**	**9,147.6**	**201.3**	**97,144.7**	**63.34**

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.*

Industry Employment—2013

	Mining	Refining		Transportation			Wholesale	Retail	Total
	Oil & Gas Extraction	*Petroleum Refining*	*Oils & Greases*	*Pipelines, Except Gas*	*Pipeline Construction*	*Gas Distribution*	*Petroleum Products*	*Gasoline Stations*	*Industry*
Alabama	1,831	0	1,418	543	1,260	2,403	2,744	17,790	27,989
Alaska	14,221	0	0	0	653	0	509	1,810	17,193
Arizona	497	0	189	267	411	0	1,935	15,653	18,952
Arkansas	5,740	423	0	456	755	1,331	2,193	12,108	23,006
California	23,160	11,428	2,252	2,684	11,717	0	12,689	52,753	116,683
Colorado	25,937	0	0	1,001	4,099	831	2,586	12,844	47,298
Connecticut	26	0	245	170	339	1,098	4,793	6,033	12,704
Delaware	12	0	102	0	161	0	825	2,351	3,451
Dist. of Columbia	0	0	0	0	0	0	0	419	419
Florida	859	44	2,525	239	753	1,600	5,418	40,741	52,179
Georgia	286	0	900	357	1,090	1,907	3,684	27,387	35,611
Hawaii	0	0	0	0	152	0	565	2,216	2,933
Idaho	109	0	0	0	186	0	688	6,126	7,109
Illinois	2,723	2,916	2,483	1,118	1,598	4,194	4,323	27,733	47,088
Indiana	685	0	1,207	488	1,661	1,827	3,527	22,497	31,892
Iowa	15	56	346	383	245	592	1,667	19,333	22,637
Kansas	9,530	1,416	731	888	1,985	1,766	1,789	9,921	28,026
Kentucky	1,572	698	791	902	820	884	2,757	16,496	24,920
Louisiana	50,599	9,311	2,265	2,898	15,528	1,674	3,247	19,098	104,620
Maine	10	0	0	93	172	116	3,243	7,247	10,881
Maryland	362	303	583	0	723	496	2,887	11,390	16,744
Massachusetts	169	0	798	148	384	2,707	6,384	12,207	22,797
Michigan	2,909	0	767	957	2,277	2,323	4,357	24,534	38,124
Minnesota	99	1,525	0	525	1,396	1,590	3,204	23,238	31,577
Mississippi	5,432	0	466	956	2,964	660	2,065	14,259	26,802
Missouri	212	27	1,177	304	916	2,827	2,903	25,482	33,848
Montana	3,898	1,046	0	430	862	337	906	5,191	12,670
Nebraska	198	0	0	149	172	1,080	978	9,100	11,677
Nevada	250	0	110	31	612	0	673	7,789	9,465
New Hampshire	33	0	90	0	0	258	2,542	4,494	7,417
New Jersey	348	1,540	1,530	399	1,206	3,966	4,947	17,001	30,937
New Mexico	20,452	0	30	138	2,488	1,141	1,519	7,669	33,437
New York	1,140	31	1,800	338	1,857	6,103	11,460	28,420	51,149
North Carolina	579	0	672	236	1,359	2,078	5,444	28,312	38,680
North Dakota	17,779	0	0	654	3,405	830	2,282	5,541	30,491
Ohio	5,846	2,191	2,679	1,074	5,241	4,064	5,173	34,538	60,806
Oklahoma	58,239	1,345	944	2,308	4,789	4,757	13,018	16,196	101,596
Oregon	36	0	380	0	247	0	1,469	10,405	12,537
Pennsylvania	21,327	2,133	3,716	2,039	6,287	4,360	10,002	38,560	88,424
Rhode Island	18	0	0	0	0	0	947	1,778	2,743
South Carolina	226	38	305	79	157	891	2,080	17,428	21,204
South Dakota	168	0	0	75	35	193	1,162	6,107	7,740
Tennessee	294	0	593	575	725	1,781	3,051	20,988	28,007
Texas	287,091	21,848	3,183	16,252	39,290	8,435	73,911	78,804	528,814
Utah	6,446	1,091	321	265	1,101	789	1,339	9,245	20,597
Vermont	0	0	0	0	50	0	1,432	3,804	5,286
Virginia	1,317	73	473	381	2,011	1,394	4,159	28,898	38,706
Washington	331	1,911	555	0	956	1,155	2,839	13,306	21,053
West Virginia	6,971	0	317	1,279	3,247	742	925	9,771	23,252
Wisconsin	93	0	259	0	811	695	2,953	23,244	28,055
Wyoming	16,565	1,164	50	731	2,762	232	711	3,695	25,910
Total U.S.	**596,640**	**62,558**	**37,252**	**42,810**	**131,915**	**76,107**	**236,904**	**861,950**	**2,046,136**

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.

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.

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 (wet after lease separation)	Energy Information Administration (EIA)
Cumulative wells drilled	IHS & State Data
Cumulative wellhead value	Energy Information Administration (EIA)
Coalbed methane and Heavy oil	IHS
Deepest wells drilled	IHS & State Data
End-use natural gas prices	Energy Information Administration (EIA)
Federal (Offshore) lease data	Bureau of Ocean Energy Management
Federal leases & royalties	Department of Interior and Minerals Management Service
Federal production shares	Office of Natural Resources Revenue, Department of Interior
First and peak production years	EIA and IHS
Marginal wells	IHS
Mineral lease revenues, bonuses & rent	Office of Natural Resources Revenue, Department of Interior
Natural gas marketed production	Energy Information Administration (EIA)
Natural gas vehicle production and station data	Energy Information Administration (EIA) and National Renewable Energy Laboratory
Number of employees	IPAA survey & Bureau of Labor Statistics
Operator	IHS. Defined as a company or individual who last reported.
Petroleum reserve position	Energy Information Administration (EIA)
Permits and Horizontal wells	IHS
Producing wells	IHS & State Data
Rotary drilling rigs	Baker Hughes, Inc.
State maps	State data and IHS data for producing entities by county.
Severance and production taxes	IPAA survey
Shale Gas	Energy Information Administration (EIA)
Statewide rankings	Energy Information Administration (EIA) for production and reserves. IHS data for wells drilled.
Total Production (dry)	IHS
Wellhead and City Gate prices and value	Energy Information Administration (EIA) and IPAA, State Data
Wells and footage drilled	IHS & State Data
Well summary and wells by type	IHS
Worldwide rank	BP Statistical Energy review and Oil and Gas Journal

Abbreviations

bbl. = 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

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