UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2018

or

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from _______ to _______

Commission File Number: 1-13245

Pioneer Natural Resources Company

(Exact name of registrant as specified in its charter)

Delaware	**75-2702753**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**
5205 N. O'Connor Blvd., Suite 200, Irving, Texas	**75039**
(Address of principal executive offices)	**(Zip Code)**

Registrant's telephone number, including area code: (972) 444-9001

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Name of each exchange on which registered
Common Stock, par value $.01	**New York Stock Exchange**

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. **Yes** ☒ **No** ☐

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. **Yes** ☐ **No** ☒

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. **Yes** ☒ **No** ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). **Yes** ☒ **No** ☐

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	☒	**Accelerated filer**	☐
Non-accelerated filer	☐ (Do not check if a smaller reporting company)	**Smaller reporting company**	☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). **Yes** ☐ **No** ☒

Aggregate market value of the voting and non-voting common equity held by non-affiliates computed by reference to the price at which the common equity was last sold, or the average bid and asked price of such common equity, as of the last business day of the registrant's most recently completed second fiscal quarter	**$ 32,009,028,564**
Number of shares of Common Stock outstanding as of February 21, 2019	**168,369,523**

DOCUMENTS INCORPORATED BY REFERENCE:

(1) Portions of the Definitive Proxy Statement for the Company's Annual Meeting of Shareholders to be held in May 2019 are incorporated into Part III of this report.

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Definitions of Certain Terms and Conventions Used Herein

Within this Report, the following terms and conventions have specific meanings:

- ***"Bbl"*** means a standard barrel containing 42 United States gallons.
- ***"Bcf"*** means one billion cubic feet and is a measure of gas volume.
- ***"BOE"*** means a barrel of oil equivalent and is a standard convention used to express oil and gas volumes on a comparable oil equivalent basis. Gas equivalents are determined under the relative energy content method by using the ratio of six thousand cubic feet of gas to one Bbl of oil or natural gas liquid.
- ***"BOEPD"*** means BOE per day.
- ***"Brent"*** means Brent oil price, a major trading classification of sweet light oil that serves as a benchmark price for purchases of oil worldwide.
- ***"Btu"*** means British thermal unit, which is a measure of the amount of energy required to raise the temperature of one pound of water one degree Fahrenheit.
- ***"DD&A"*** means depletion, depreciation and amortization.
- ***"Field fuel"*** means gas consumed to operate field equipment (primarily compressors) prior to the gas being delivered to a sales point.
- ***"GAAP"*** means accounting principles generally accepted in the United States of America.
- ***"GHG"*** means green house gases.
- "***HH***" means Henry Hub, a distribution hub in Louisiana that serves as the delivery location for gas futures contracts on the NYMEX.
- ***"LIBOR"*** means London Interbank Offered Rate, which is a market rate of interest.
- ***"MBbl"*** means one thousand Bbls.
- ***"MBOE"*** means one thousand BOEs.
- ***"Mcf"*** means one thousand cubic feet and is a measure of gas volume.
- ***"MMBbl"*** means one million Bbls.
- ***"MMBOE"*** means one million BOEs.
- ***"MMBtu"*** means one million Btus.
- ***"MMcf"*** means one million cubic feet.
- ***"Mont Belvieu"*** means the daily average natural gas liquids components as priced in *OPIS* in the table "U.S. and Canada LP – Gas Weekly Averages" at Mont Belvieu, Texas.
- ***"NGL"*** means natural gas liquid, which are the heavier hydrocarbon liquids that are separated from the gas stream; such liquids include ethane, propane, isobutane, normal butane and natural gasoline.
- ***"NYMEX"*** means the New York Mercantile Exchange.
- ***"NYSE"*** means the New York Stock Exchange.
- ***"Pioneer"*** or the ***"Company"*** means Pioneer Natural Resources Company and its subsidiaries.
- ***"Proved developed reserves"*** mean reserves that can be expected to be recovered through existing wells with existing equipment and operating methods or in which the cost of the required equipment is relatively minor compared to the cost of a new well.
- ***"Proved reserves"*** mean those quantities of oil and gas, which, by analysis of geosciences and engineering data, can be estimated with reasonable certainty to be economically producible – from a given date forward, from known reservoirs, and under existing economic conditions, operating methods, and government regulations – prior to the time at which contracts providing the right to operate expire, unless evidence indicates that renewal is reasonably certain, regardless of whether deterministic or probabilistic methods are used for the estimation. The project to extract the hydrocarbons must have commenced or the operator must be reasonably certain that it will commence the project within a reasonable time.

  (i) The area of the reservoir considered as proved includes: (A) The area identified by drilling and limited by fluid contacts, if any, and (B) Adjacent undrilled portions of the reservoir that can, with reasonable certainty, be judged to be continuous with it and to contain economically producible oil or gas on the basis of available geoscience and engineering data.

  (ii) In the absence of data on fluid contacts, proved quantities in a reservoir are limited by the lowest known hydrocarbons ("LKH") as seen in a well penetration unless geoscience, engineering or performance data and reliable technology establishes a lower contact with reasonable certainty.

(iii) Where direct observation from well penetrations has defined a highest known oil ("HKO") elevation and the potential exists for an associated gas cap, proved oil reserves may be assigned in the structurally higher portions of the reservoir only if geoscience, engineering or performance data and reliable technology establish the higher contact with reasonable certainty.

(iv) Reserves which can be produced economically through application of improved recovery techniques (including, but not limited to, fluid injection) are included in the proved classification when: (A) Successful testing by a pilot project in an area of the reservoir with properties no more favorable than in the reservoir as a whole, the operation of an installed program in the reservoir or an analogous reservoir, or other evidence using reliable technology establishes the reasonable certainty of the engineering analysis on which the project or program was based; and (B) The project has been approved for development by all necessary parties and entities, including governmental entities.

(v) Existing economic conditions include prices and costs at which economic producibility from a reservoir is to be determined. The price shall be the average during the 12-month period prior to the ending date of the period covered by the report, determined as an unweighted arithmetic average of the first-day-of-the-month price for each month within such period, unless prices are defined by contractual arrangements, excluding escalations based upon future conditions.

- ***"Proved undeveloped reserves"*** means reserves that are expected to be recovered from new wells on undrilled acreage, or from existing wells where a relatively major expenditure is required for recompletion.

  (i) Reserves on undrilled acreage shall be limited to those directly offsetting development spacing areas that are reasonably certain of production when drilled, unless evidence using reliable technology exists that establishes reasonable certainty of economic producibility at greater distances.

  (ii) Undrilled locations can be classified as having proved undeveloped reserves only if a development plan has been adopted indicating that they are scheduled to be drilled within five years, unless the specific circumstances, justify a longer time.

  (iii) Under no circumstances shall estimates for proved undeveloped reserves be attributable to any acreage for which an application of fluid injection or other improved recovery technique is contemplated, unless such techniques have been proved effective by actual projects in the same reservoir or an analogous reservoir, or by other evidence using reliable technology establishing reasonable certainty.
- ***"SEC"*** means the United States Securities and Exchange Commission.
- ***"Standardized Measure"*** means the after-tax present value of estimated future net cash flows of proved reserves, determined in accordance with the rules and regulations of the SEC, using prices and costs employed in the determination of proved reserves and a ten percent discount rate.
- ***"U.S."*** means United States.
- ***"WTI"*** means West Texas Intermediate, a light sweet blend of oil produced from fields in western Texas and is a grade of oil used as a benchmark in oil pricing.
- With respect to information on the working interest in wells, drilling locations and acreage, ***"net"*** wells, drilling locations and acres are determined by multiplying ***"gross"*** wells, drilling locations and acres by the Company's working interest in such wells, drilling locations or acres. Unless otherwise specified, wells, drilling locations and acreage statistics quoted herein represent gross wells, drilling locations or acres.
- All currency amounts are expressed in U.S. dollars.

CAUTIONARY STATEMENT CONCERNING FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K (this "Report") contains forward-looking statements that involve risks and uncertainties. When used in this document, the words "believes," "plans," "expects," "anticipates," "forecasts," "intends," "continue," "may," "will," "could," "should," "future," "potential," "estimate," or the negative of such terms and similar expressions as they relate to the Company are intended to identify forward-looking statements, which are generally not historical in nature. The forward-looking statements are based on the Company's current expectations, assumptions, estimates and projections about the Company and the industry in which the Company operates. Although the Company believes that the expectations and assumptions reflected in the forward-looking statements are reasonable as and when made, they involve risks and uncertainties that are difficult to predict and, in many cases, beyond the Company's control. In addition, the Company may be subject to currently unforeseen risks that may have a materially adverse effect on it. Accordingly, no assurances can be given that the actual events and results will not be materially different from the anticipated results described in the forward-looking statements. See "Item 1. Business — Competition, Markets and Regulations," "Item 1A. Risk Factors," "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations" and "Item 7A. Quantitative and Qualitative Disclosures About Market Risk" for a description of various factors that could materially affect the ability of Pioneer to achieve the anticipated results described in the forward-looking statements. Readers are cautioned not to place undue reliance on forward-looking statements, which speak only as of the date hereof. The Company undertakes no duty to publicly update these statements except as required by law.

PIONEER NATURAL RESOURCES COMPANY

PART I

ITEM 1. BUSINESS

General

Pioneer is a large independent oil and gas exploration and production company that explores for, develops and produces oil, NGLs and gas within the United States, with operations primarily in the Permian Basin in West Texas. The Company is a Delaware corporation, and its common stock has been listed and traded on the NYSE under the ticker symbol "PXD" since its formation in 1997.

The Company's principal executive office is located at 5205 N. O'Connor Blvd., Suite 200, Irving, Texas 75039. The Company also maintains an office in Midland, Texas and field offices in its areas of operation.

At December 31, 2018, Pioneer had 3,177 employees, 1,006 of whom were employed in field and plant operations and 618 of whom were employed in vertical integration activities.

Available Information

Pioneer files or furnishes annual, quarterly and current reports, proxy statements and other documents with the SEC under the Securities Exchange Act of 1934 (the "Exchange Act"). The SEC maintains a website (www.sec.gov) that contains reports, proxy and information statements, and other information regarding issuers, including Pioneer, that file electronically with the SEC.

The Company makes available free of charge through its website (www.pxd.com) its Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and, if applicable, amendments to those reports filed or furnished pursuant to Section 13(a) of the Exchange Act as soon as reasonably practicable after it electronically files such material with, or furnishes it to, the SEC. In addition to the reports filed or furnished with the SEC, Pioneer publicly discloses information from time to time in its press releases, investor presentations posted on its website and in publicly accessible conferences. Such information, including information posted on or connected to the Company's website, is not a part of, or incorporated by reference in, this Report or any other document the Company files with or furnishes to the SEC.

Mission and Strategies

The Company's mission is to be America's leading independent energy company, focused on value, safety, the environment, technology and our greatest asset, our people. The Company's long-term growth strategy is centered around the following strategic objectives:

- maintaining a strong balance sheet to ensure financial flexibility;
- delivering economic production and reserve growth;
- enhancing drilling, completion and production activities by utilizing the Company's scale and technology advancements to reduce costs and improve efficiency;
- developing and training employees and contractors to perform their jobs in a safe manner; and
- stewarding the environment through industry leading sustainable development efforts.

The Company's long-term strategy is primarily anchored by the Company's interests in the long-lived Spraberry/Wolfcamp oil field located in the Permian Basin in West Texas, which has an estimated remaining productive life in excess of 40 years. Underlying the Spraberry/Wolfcamp field is 93 percent of the Company's total proved oil and gas reserves as of December 31, 2018.

In February 2018, the Company announced its intention to divest its properties in the South Texas, Raton Basin and West Panhandle fields and focus its efforts and capital resources on its Permian Basin assets. In 2018, the Company completed the following divestitures:

Field	Completion date
Sinor Nest (Lower Wilcox) oil field (South Texas)	December 2018
West Panhandle gas and liquids field (Texas Panhandle)	August 2018
Raton Basin gas field (southern Colorado)	July 2018
Western portion of Eagle Ford Shale gas and liquids field (South Texas)	April 2018

The Company continues to actively market its remaining South Texas assets (Eagle Ford Shale gas and liquids field and Edwards gas field). No assurance can be given that the remaining planned divestitures will be completed in accordance with the Company's plans or on terms and at prices acceptable to the Company.

Business Activities

Pioneer's purpose is to competitively and profitably explore for, develop and produce oil and gas reserves. In so doing, the Company sells homogeneous oil, NGL and gas units that, except for geographic and relatively minor quality differences, cannot be significantly differentiated from units offered for sale by the Company's competitors. The Company's portfolio of resources and opportunities are primarily located in the Spraberry/Wolfcamp oil field, and provide long-lived, dependable production and lower-risk exploration and development opportunities.

Petroleum industry. Over the past several years, the oil price environment has been characterized by high volatility. During 2018, Brent oil prices rose to a high of $86.29 per barrel in early October 2018, only to fall late in the fourth quarter to a low of $50.47 per barrel due to concerns over a worldwide oversupply of oil, in large part resulting from dramatic increases in U.S. shale oil production. Additionally, concerns about the potential for slower growth in U.S. and global gross domestic products, which would likely be accompanied by lower oil demand, has contributed to the downward pressure. Recently, the Organization of Petroleum Exporting Countries ("OPEC") members and some nonmembers, including Russia, have renewed pledges to reduce planned production in an effort to draw down a global oversupply and to rebalance supply and demand. Geopolitical factors may also be price-supportive, with the United States having issued sanctions against Iran, although the impact of those sanctions has been muted by waivers. The Company expects ongoing oil price volatility as compliance with the output reduction agreements, changes in oil inventories, extensions to Iranian waivers and actual demand growth is reported.

The growth of unconventional shale drilling in the United States has substantially increased the supply of gas and NGLs, resulting in a significant decline in related prices as the supply of these products has grown. While the industry has invested in initiatives designed to increase takeaway capacity, such as the construction of liquefied natural gas ("LNG") and NGL export facilities, the supply of these products has increased at a faster pace than the overall United States and international demand for these commodities. NGL products and gas supplies are expected to continue to increase during 2019 and prices are expected to remain volatile.

Significant factors that are likely to affect 2019 commodity prices include: the effect of U.S. energy, monetary and trade policies; fiscal challenges facing the United States federal government; the pace of economic growth in the U.S. and throughout the world, including the potential for macro weakness; geopolitical and economic developments in the U.S. and globally; the extent to which members of OPEC and other oil exporting nations adhere to and agree to extend the agreed oil production cuts; the supply and demand fundamentals for NGLs in the United States and the pace at which export capacity grows; and overall North American gas supply and demand fundamentals, including incremental LNG export capacity additions. Because the global economic and political outlook and commodity price environment are uncertain, the Company endeavors to maintain a strong financial liquidity position to support its financial flexibility.

Pioneer enters into pipeline capacity commitments in order to secure available oil, NGL and gas transportation capacity from the Company's areas of production with the objective of transporting a portion of the Company's oil and gas sales to higher priced markets. Specifically, the Company has entered into purchase transactions with third parties and separate sale transactions with third parties to diversify a portion of the Company's oil sales to the Gulf Coast refinery or international export markets and to satisfy unused gas pipeline capacity commitments. These marketing activities provided incremental cash flow of $458 million in 2018, compared to cash outlays of $31 million and $64 million in 2017 and 2016, respectively. Additionally the Company uses commodity derivative contracts to mitigate the effect of commodity price volatility on the Company's net cash provided by operating activities and its net asset value. The Company has entered into derivative contracts for only a small portion of its forecasted 2019 production; consequently, if commodity prices decline, the Company could realize lower prices for volumes not protected by the Company's derivative activities and could see a reduction in derivative contract prices available on additional volumes in the future. As a result, the Company's internal cash flows will be negatively impacted by a reduction in commodity prices or to the extent that sales prices do not cover the third-party purchase price and cost of transportation for that portion of volumes transported to other markets. See "Item 7A. Quantitative and Qualitative Disclosures About Market Risk" and Note 5 of Notes to Consolidated Financial Statements included in "Item 8. Financial Statements and Supplementary Data" for additional information.

Liquidity. The Company's primary needs for cash are for (i) capital expenditures, (ii) acquisitions of oil and gas properties, (iii) payments of contractual obligations, including debt maturities, (iv) dividends and share repurchases and (v) working capital obligations. Funding for these cash needs may be provided by any combination of the Company's primary sources of liquidity including: (i) cash and cash equivalents, (ii) net cash provided by operating activities, (iii) sales of short-term and long-term investments, (iv) proceeds from divestitures, (iv) unused borrowing capacity under its credit facility, (v) issuances of debt or equity securities and (vi) other sources, such as sales of nonstrategic assets. Although the Company expects that these sources of funding will be adequate to fund its 2019 capital expenditures, dividend payments and provide adequate liquidity to fund other needs, including stock repurchases, no assurance can be given that such funding sources will be adequate to meet the Company's future needs.

Production. The Company focuses its efforts towards maximizing its average daily production of oil, NGLs and gas through development drilling, production enhancement activities and acquisitions of producing properties, while minimizing controllable costs associated with production activities. For the year ended December 31, 2018, the Company's production of 117 MMBOE, excluding field fuel usage, represented a 17 percent increase compared to production during 2017. See "Item 2. Properties — Selected Oil and Gas Information — Production, price and cost data" for additional information.

Drilling activities. The Company believes that its current property base provides a substantial inventory of prospects for future reserve, production and cash flow growth.

Development activities. The Company seeks to increase its proved oil and gas reserves, production and cash flow through development drilling and by conducting other production enhancement activities, such as well recompletions. The Company's proved reserves as of December 31, 2018 include proved undeveloped reserves and proved developed non-producing reserves of 55 MMBbls of oil, 24 MMBbls of NGL and 142 Bcf of gas. The timing of the development of these proved reserves will be dependent upon commodity prices, drilling and operating costs and the Company's expected operating cash flows and financial condition. During the three years ended December 31, 2018, the Company drilled 801 gross (701 net) exploration and development wells, with 98 percent of the wells (99 percent of net wells) being successfully completed as productive wells, at a total drilling cost (net to the Company's interest) of $8.2 billion, including infrastructure capital.

Exploratory activities. The Company has devoted significant efforts and resources to hiring and developing a highly skilled geoscience, engineering and land staff as well as acquiring a significant portfolio of lower-risk exploration opportunities that are expected to be evaluated and tested over the next decade and beyond. Exploratory and extension drilling involve greater risks of dry holes or failure to find commercial quantities of hydrocarbons than development drilling or enhanced recovery activities.

Acquisition activities. The Company regularly seeks to acquire or trade for properties that complement its operations, provide exploration and development opportunities, increase the lateral length of future horizontal wells and potentially provide superior returns on investment. The Company periodically evaluates and pursues acquisition and acreage trade opportunities (including opportunities to acquire particular oil and gas assets or entities owning oil and gas assets and opportunities to engage in mergers, consolidations or other business combinations with such entities) and at any given time may be in various stages of evaluating such opportunities. Such stages may take the form of internal financial analyses, oil and gas reserve analyses, due diligence, the submission of indications of interest, preliminary negotiations, negotiations of letters of intent or negotiations of definitive agreements. The success of any acquisition or acreage trade is uncertain and depends on a number of factors, some of which are outside the Company's control.

During 2018, 2017 and 2016, the Company spent $65 million, $136 million and $446 million, respectively, primarily to purchase undeveloped acreage for future exploitation and exploration activities in the Spraberry/Wolfcamp field of the Permian Basin. See Note 3 of Notes to Consolidated Financial Statements included in "Item 8. Financial Statements and Supplementary Data" for additional information.

Integrated Services. The Company continues to utilize its integrated services to control well costs and operating costs in addition to supporting the execution of its drilling and production activities. The Company owns field service equipment that supports its drilling and production operations, including pulling units, fracture stimulation tanks, water transport trucks, hot oilers, blowout preventers, construction equipment and fishing tools.

The Company continues to construct a field-wide water distribution system to reduce the cost of water for drilling and completion activities and to secure adequate supplies of water to support the Company's long-term growth plan for the Spraberry/Wolfcamp field. During 2018, the Company expanded its mainline system, subsystems and frac ponds to efficiently deliver water to Pioneer's drilling locations. The Company is purchasing approximately 120 thousand barrels per day of effluent water from the City of Odessa and has signed an agreement with the City of Midland to upgrade the city's wastewater treatment plant in return for a dedicated long-term supply of water from the plant. Once the upgrade to the wastewater treatment plant is complete, the Company expects to receive approximately two billion barrels of low-cost, non-potable water over a 28-year contract period (up to 240 thousand barrels per day) to support its drilling and completion activities.

In November 2018, the Company announced plans to close its sand mine located in Brady, Texas and transition its proppant supply requirements to West Texas sand sources. During 2018, the Company recorded $443 million of accelerated depreciation and $7 million of employee-related charges associated with the pending shutdown.

Asset divestitures. The Company regularly reviews its asset base to identify nonstrategic assets, the disposition of which would increase capital resources available for other activities, create organizational and operational efficiencies and further the Company's objective of maintaining a strong balance sheet to ensure financial flexibility.

Oil and gas activities. In February 2018, the Company announced its intention to divest its properties in the South Texas, Raton Basin and West Panhandle fields and focus its efforts and capital resources on its Permian Basin assets.

In December 2018, the Company completed the sale of approximately 2,900 net acres in the Sinor Nest (Lower Wilcox) oil field in South Texas to an unaffiliated third party for cash proceeds of $105 million, after normal closing adjustments. During 2018, the Company recorded a gain of $54 million associated with the sale.

In August 2018, the Company completed the sale of its assets in the West Panhandle gas and liquids field to an unaffiliated third party for net cash proceeds of $170 million, after normal closing adjustments. The assets sold represent all of the Company's interests in the field, including all of its producing wells and the associated infrastructure. During 2018, the Company recorded a gain of $127 million and employee-related charges of $7 million associated with sale.

In July 2018, the Company completed the sale of its gas field assets in the Raton Basin to an unaffiliated third party for net cash proceeds of $54 million, after normal closing adjustments. The Company recorded a noncash impairment charge of $77 million in June 2018 to reduce the carrying value of its Raton Basin assets to their estimated fair value less costs to sell as the assets were considered held for sale. During 2018, the Company recorded a gain of $2 million associated with this divestiture. The Company also recorded divestiture-related charges of $117 million, including $111 million of deficiency charges related to certain firm transportation contracts retained by the Company and employee-related charges of $6 million.

In April 2018, the Company completed the sale of approximately 10,200 net acres in the West Eagle Ford Shale gas and liquids field to an unaffiliated third party for net cash proceeds of $100 million, after normal closing adjustments. During 2018, the Company recorded a gain of $75 million associated with the sale.

In April 2017, the Company completed the sale of approximately 20,500 acres in the Martin County region of the Permian Basin, with net production of approximately 1,500 BOEPD, to an unaffiliated third party for net cash proceeds of $264 million. The sale resulted in a gain of $194 million.

The Company continues to actively market its remaining South Texas assets (Eagle Ford Shale gas and liquids field and Edwards gas field) and will continue to review its acreage in the Permian Basin and negotiate with other operators in the area to sell or trade nonstrategic properties to achieve operating efficiencies and to improve profitability. No assurance can be given that these divestitures or trades will be completed in accordance with the Company's plans or on terms and at prices acceptable to the Company. See Note 3 and Note 4 of Notes to Consolidated Financial Statements included in "Item 8. Financial Statements and Supplementary Data" for additional information.

Integrated services activities. In December 2018, the Company completed the sale of its pressure pumping assets to ProPetro Holding Corp. ("ProPetro") in exchange for total consideration of $282 million, comprised of $110 million of short-term receivables to be paid by ProPetro during the first quarter of 2019 and 16.6 million shares of ProPetro's common stock. The Company recorded a gain of $30 million, employee-related charges of $19 million, contract termination charges of $13 million and other divestiture-related charges of $6 million associated with the sale.

Marketing of Production

General. Production from the Company's properties is marketed using methods that are consistent with industry practices. Sales prices for oil, NGL and gas production are negotiated based on factors normally considered in the industry, such as an index or spot price, price regulations, distance from the well to the pipeline, commodity quality and prevailing supply and demand conditions. See "Item 7A. Quantitative and Qualitative Disclosures About Market Risk" for additional information.

Seasonal nature of business. Generally, but not always, the demand for gas decreases during the summer months and increases during the winter months. Seasonal anomalies such as mild winters or hot summers may impact general seasonal changes in demand.

Significant purchasers. During 2018, the Company's significant purchasers of oil, NGL and gas produced by the Company were Sunoco Logistics Partners L.P. (28 percent), Occidental Energy Marketing Inc. (17 percent) and Plains Marketing L.P. (15 percent). The loss of a significant purchaser or an inability to secure adequate pipeline, gas plant and NGL fractionation infrastructure for its Permian Basin production could have a material adverse effect on the Company's ability to produce and sell its oil, NGL and gas production.

During 2018, the Company's significant purchaser of oil and gas purchased from third parties was Occidental Energy Marketing Inc. (34 percent). No other purchaser of oil or gas purchased by the Company from third parties exceeded ten percent during 2018. The loss of a significant purchaser of purchased oil and gas would not be expected to have a material adverse effect on the Company's ability to sell commodities it purchases from third parties.

See Note 12 of Notes to Consolidated Financial Statements included in "Item 8. Financial Statements and Supplementary Data" for additional information.

Derivative risk management activities. The Company primarily utilizes commodity swap contracts, collar contracts and collar contracts with short puts that are intended to (i) reduce the effect of price volatility on the commodities the Company produces and sells or consumes, (ii) support the Company's annual capital budgeting and expenditure plans and (iii) reduce commodity price risk associated with certain capital projects. From time to time, the Company also utilizes interest rate derivative contracts intended to reduce the effect of interest rate volatility on the Company's indebtedness.

The Company enters into pipeline capacity commitments in order to secure available oil, NGL and gas transportation capacity from the Company's areas of production. The Company enters into purchase transaction with third parties and separate sale transactions with third parties to diversify a portion of the Company's oil sales to the Gulf Coast refinery or international export markets and to satisfy unused gas pipeline capacity commitments.

See "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations," "Item 7A. Quantitative and Qualitative Disclosures About Market Risk" and Note 5 of Notes to Consolidated Financial Statements included in "Item 8. Financial Statements and Supplementary Data" for additional information.

Competition, Markets and Regulations

Competition. The oil and gas industry is highly competitive in the exploration for and acquisition of reserves, the acquisition of oil and gas leases, marketing of oil, NGL and gas production and the obtaining of equipment and services and the hiring and retention of staff necessary for the identification, evaluation, operation and acquisition and development of such properties. The Company's competitors include a large number of companies, including major integrated oil and gas companies, other independent oil and gas companies, and individuals engaged in the exploration for and development of oil and gas properties. To a lesser extent, the Company also faces competition from companies that supply alternative sources of energy, such as wind and solar power.

Competitive advantage is gained in the oil and gas exploration and development industry by employing well-trained and experienced personnel who make prudent capital investment decisions based on management direction, embrace technological innovation and are focused on price and cost management. The Company has a team of dedicated employees who represent the professional disciplines and sciences that the Company believes are necessary to allow Pioneer to maximize the long-term profitability and net asset value inherent in its physical assets.

See "Item 1A. Risk Factors - The Company faces significant competition and some of its competitors have resources in excess of the Company's available resources" for additional information.

Markets. The Company's ability to produce and market oil, NGL and gas profitably depends on numerous factors beyond the Company's control. The effect of these factors cannot be accurately predicted or anticipated. Although the Company cannot predict the occurrence of events that may affect commodity prices or the degree to which commodity prices will be affected, the prices for any commodity that the Company produces will generally approximate current market prices in the geographic region of the production unless the Company effectively enhances margins through marketing and derivative arrangements.

Securities regulations. Enterprises that sell securities in public markets are subject to regulatory oversight by agencies such as the SEC and the NYSE. This regulatory oversight imposes on the Company many requirements, including the responsibility for establishing and maintaining disclosure controls and procedures and internal controls over financial reporting, and ensuring that the financial statements and other information included in submissions to the SEC do not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made in such submissions not misleading. Failure to comply with the rules and regulations of the SEC could subject the Company to litigation from public or private plaintiffs. Failure to comply with the rules of the NYSE could result in the de-listing of the Company's common stock, which would have an adverse effect on the market price and liquidity of the Company's common stock. Compliance with some of these rules and regulations is costly, and regulations are subject to change or reinterpretation.

Environmental and occupational health and safety matters. The Company's operations are subject to stringent federal, state and local laws and regulations governing worker health and safety, the discharge of materials into the environment and environmental protection. Numerous governmental entities, including the U.S. Environmental Protection Agency (the "EPA"), the U.S. Occupational Safety and Health Administration ("OSHA") and analogous state agencies, have the power to enforce compliance with these laws and regulations and the permits issued under them, which may cause the Company to incur significant capital expenditures or take costly actions to achieve and maintain compliance. Failure to comply with these laws and regulations may result in the assessment of sanctions, including administrative, civil and criminal penalties, imposition of investigatory remedial or corrective action of obligations, the occurrence of delays or restrictions in permitting or the performance of projects and the issuance of orders enjoining the Company from conducting certain operations in a particular area. While the Company's environmental compliance costs have historically not had a material adverse effect on its results of operations, there can be no assurance that such costs will not be material in the future, or that new or more stringently applied laws and regulations will not materially increase the cost of doing business.

The following is a summary of the more significant environmental and worker health and safety laws, as amended from time to time, to which the Company's business operations are or may be subject and with which compliance or the failure to maintain compliance may have a material adverse effect on the Company's capital expenditures, results of operations or financial position.

Hazardous wastes and substances. The federal Resource Conservation and Recovery Act ("RCRA") and comparable state statutes regulate the generation, transportation, treatment, storage, disposal and cleanup of hazardous and non-hazardous wastes. Under the authority delegated by the EPA, the individual states administer some or all of the provisions of RCRA, sometimes in conjunction with their own, more stringent requirements. The Company generates some amounts of ordinary industrial wastes that may be regulated as RCRA hazardous wastes. RCRA currently excludes from the definition of hazardous waste drilling fluids, produced waters and certain other wastes associated with the exploration, development and production of oil or gas. These wastes are instead regulated under RCRA's less stringent non-hazardous waste provisions. There have been efforts from time to time to remove this exclusion, which removal could have a material adverse effect on the Company's results of operations and financial position, and it is possible that certain oil and gas exploration and production wastes now classified as non-hazardous could be classified as hazardous waste in the future.

The federal Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA"), also known as the Superfund law, and analogous state laws impose joint and several liability, without regard to fault or legality of conduct, on classes of persons who are considered to be responsible for the release of a "hazardous substance" into the environment. These persons include the current and past owner or operator of the site where the release occurred, and anyone who disposed or arranged for the disposal of a hazardous substance released at the site. Under CERCLA, such persons may be subject to joint and several liability for the costs of cleaning up the hazardous substances that have been released into the environment, for damages to natural resources and for the costs of certain health studies. CERCLA also authorizes the EPA and, in some instances, third parties to act in response to threats to public health or the environment and to seek to recover from the responsible classes of persons the costs they incur. It is not uncommon for neighboring landowners and other third-parties to file claims for personal injury and property damage allegedly caused by the hazardous substances released into the environment. The Company generates materials in the course of its operations that may be regulated as CERCLA hazardous substances.

See "Item 1A. Risk Factors - The nature of the Company's assets and production operations may impact the environment or cause environmental contamination, which could result in material liabilities to the Company" for additional information.

Water use, surface discharges and discharges into underground formations. The federal Water Pollution Control Act, also known as the Clean Water Act (the "CWA"), and analogous state laws impose restrictions and strict controls with respect to the discharge of pollutants, including spills and leaks of oil and hazardous substances, into waters of the United States and state waters. Spill prevention, control and countermeasure plan requirements imposed under the CWA require appropriate containment berms and similar structures to help prevent the contamination of navigable waters in the event of a petroleum hydrocarbon spill, rupture or leak. Additionally, the CWA and analogous state laws require individual permits or coverage under general permits for discharges of stormwater runoff from certain types of facilities. The CWA also prohibits the discharge of dredge and fill material into regulated waters, including wetlands, unless authorized by an appropriately issued permit. Federal and state regulatory agencies can impose administrative, civil and criminal penalties, as well as require remedial or mitigation measures, for noncompliance with discharge permits or other requirements of the CWA and analogous state laws.

The federal Oil Pollution Act ("OPA") sets minimum standards for prevention, containment and cleanup of oil spills into waters of the United States. Under OPA, responsible parties, including owners and operators of onshore facilities, such as exploration and production facilities, may be held strictly liable for oil spill cleanup costs and natural resource damages as well as a variety of public and private damages that may result from oil spills. OPA amends the CWA and thus noncompliance with OPA could result in civil and criminal penalties under the CWA.

The Company may dispose of produced water from oil and gas activities in underground wells, which are designed and permitted to place the water into non-productive geologic formations that are isolated from fresh water sources. The Underground Injection Control ("UIC") program established under the federal Safe Drinking Water Act ("SDWA") requires issuance of permits from the EPA or an analogous state agency for the construction and operation of disposal wells. Additionally, the UIC program establishes minimum standards for disposal well operations and restricts the types and quantities of fluids that may be disposed. Because some states have become concerned that the disposal of produced water into underground formations could contribute to seismicity, they have adopted or are considering adopting additional regulations governing such disposal. Should future onerous regulations or bans relating to underground wells be placed in effect in areas where the Company has significant operations, there could be an adverse impact on the Company's ability to operate.

See "Item 1A. Risk Factors - The Company's operations are subject to stringent environmental, oil and gas-related and occupational safety and health laws and regulations that could cause it to delay, curtail or cease its operations or expose it to material costs and liabilities" and "Item 1A. Risk Factors - The Company's operations are substantially dependent upon the availability of water and its ability to dispose of produced water gathered from drilling and production activities. Restrictions on the Company's ability to obtain water or dispose of produced water may have a material adverse effect on its financial condition, results of operations and cash flows" for additional information.

Hydraulic fracturing. Hydraulic fracturing is an important and common practice to stimulate production of oil and gas from dense subsurface rock formations. The process involves the injection of water, sand and additives under pressure into targeted subsurface formations to fracture the surrounding rock and stimulate oil and gas production. The Company routinely conducts hydraulic fracturing in its drilling and completion programs. The process is typically regulated by state oil and gas commissions, but, in recent years, several federal, state and local agencies have asserted regulatory authority over certain aspects of the process. Additionally, from time to time, the U.S. Congress has considered legislation that would provide for federal regulation of hydraulic fracturing and disclosure of chemicals used in the fracturing process but, to date, no such federal legislation has been adopted. The Company participates in FracFocus, a national publicly accessible internet-based registry that provides the public access to Company-reported information on the additives it uses in the hydraulic fracturing process on wells the Company operates. In the event federal, state or local restrictions are adopted in areas where the Company is currently conducting operations, or in the future plans to conduct operations, the Company may incur additional costs to comply with such requirements that may be significant in nature, experience delays, curtailment or a cessation in the pursuit of exploration, development or production activities, and be limited or precluded in the drilling of wells or the volume that the Company is ultimately able to produce from its reserves.

See "Item 1A. Risk Factors - Laws and regulations regarding hydraulic fracturing, as well as governmental reviews of such activities, could result in increased costs and additional operating restrictions, delays or cancellations and have a material adverse effect on the Company's production" and "Item 1A. Risk Factors - The Company's sand mining operations and hydraulic fracturing may result in silica-related health issues and litigation that could have a material adverse effect on the Company" for additional information.

Air emissions. The federal Clean Air Act (the "CAA") and comparable state laws regulate emissions of various air pollutants through air emissions permitting programs and the imposition of other compliance requirements. Such laws and regulations could require a facility to obtain pre-approval for construction or modification projects expected to produce new air pollutant emissions or result in the increase of existing air pollutant emissions. Additionally, these legal requirements could impose stringent air permit conditions or utilize specific emission control technologies to limit emissions of certain air pollutants. Federal and state regulatory agencies can also impose administrative, civil and criminal penalties for noncompliance with air permits or other requirements of the CAA and associated state laws and regulations.

See "Item 1A. Risk Factors - The Company's operations are subject to stringent environmental, oil and gas-related and occupational safety and health laws and regulations that could cause it to delay, curtail or cease its operations or expose it to material costs and liabilities" for additional information.

Climate change. Climate change continues to attract considerable public, political and scientific attention. As a result, numerous proposals have been made, and are likely to continue to be made, at the international, national, regional and state levels of government to monitor and limit emissions of GHGs. These efforts have included consideration of cap-and-trade programs, carbon taxes, GHG reporting and tracking programs, and regulations that directly limit GHG emissions from certain sources. The adoption and implementation of any federal or state legislation or regulations that require reporting of GHGs or otherwise restrict emissions of GHGs from the Company's equipment and operations could require the Company to incur increased operating costs, such as costs to purchase and operate emissions control systems, acquire emissions allowances or comply with new regulatory or reporting requirements.

See "Item 1A. Risk Factors - Climate change legislation and regulatory initiatives restricting emissions of GHGs could result in increased operating costs and reduced demand for the oil, NGL and gas the Company produces, while the potential physical effects of climate change could disrupt the Company's production and cause it to incur significant costs" for additional information.

Endangered species. The federal Endangered Species Act (the "ESA") and analogous state laws regulate activities that could have an adverse effect on species listed as threatened or endangered under the ESA. Some of the Company's operations are conducted in areas where protected species or their habitats are known to exist. In these areas, the Company may be obligated to develop and implement plans to avoid potential adverse effects to protected species and their habitats, and the Company may be delayed, restricted or prohibited from conducting operations in certain locations or during certain seasons, such as breeding and nesting seasons, when the Company's operations could have an adverse effect on the species. It is also possible that a federal or state agency could order a complete halt to drilling activities in certain locations if it is determined that such activities may have a serious adverse effect on a protected species.

See "Item 1A. Risk Factors - Laws and regulations pertaining to protection of threatened and endangered species or to critical habitat, wetlands and natural resources could delay, restrict or prohibit the Company's operations and cause it to incur substantial costs that may have a material adverse effect on the Company's development and production of reserves" for additional information.

Activities on federal lands. Oil and gas exploration, development and production activities on federal lands are subject to the National Environmental Policy Act ("NEPA"). NEPA requires federal agencies, including the federal Bureau of Land Management (the "BLM"), to evaluate major agency actions having the potential to significantly impact the environment. In the course of such evaluations, an agency will prepare an Environmental Assessment that assesses the potential direct, indirect and cumulative impacts of a proposed project and, if necessary, will prepare a more detailed Environmental Impact Statement that may be made available for public review and comment. Currently, the Company has minimal exploration and production activities on federal lands. However, for those current activities, as well as for future or proposed exploration and development plans on federal lands, governmental permits or authorizations that are subject to the requirements of NEPA are required. This process has the potential to delay or limit, or increase the cost of, the development of some of the Company's oil and gas projects. Authorizations under NEPA are also subject to protest, appeal or litigation, any or all of which may delay or halt projects. Moreover, depending on the mitigation strategies recommended in the Environmental Assessments, the Company could incur added costs, which could be substantial.

Occupational health and safety. The Company's operations are subject to the requirements of the federal Occupational Safety and Health Act and comparable state statutes. These laws and the implementing regulations issued by OSHA strictly govern the protection of the health and safety of employees. The OSHA hazard communication standard, the EPA community right-to-know regulations under Title III of CERCLA and similar state statutes require that the Company organize or disclose information about hazardous materials used or produced in the Company's operations.

Additionally, the Company's sand mining operations are subject to mining safety regulation. The U.S. Mining Safety and Health Administration (the "MSHA") is the primary regulatory organization that regulates quarries, surface mines, underground mines and the industrial mineral processing facilities associated with and located at quarries and mines. The Company's sand mining operations are subject to the Federal Mine Safety and Health Act of 1977, as amended by the Mine Improvement and New Emergency Response Act of 2006, which imposes stringent health and safety standards on numerous aspects of mineral extraction and processing operations, including the training of personnel, operating procedures, operating equipment and other matters.

OSHA amended its legal requirements in 2016, publishing a final rule that established a more stringent permissible exposure to respirable crystalline silica and provides other provisions to protect employees. This final rule required compliance with most applicable requirements by various industry sectors, including the hydraulic fracturing sector, by June 2018. Respirable silica is a known health hazard for workers exposed over long periods. The MSHA has considered the adoption of similar rules, but thus far no such rulemaking has been issued. If any new rule were issued by the MSHA that significantly lowered the workplace exposure limit to respirable crystalline silica, the Company could experience significantly higher costs for sand and pressure pumping services.

See "Item 1A. Risk Factors - The Company's operations are subject to stringent environmental, oil and gas-related and occupational safety and health laws and regulations that could cause it to delay, curtail or cease its operations or expose it to material costs and liabilities" and "Item 1A. Risk Factors - The Company's sand mining operations and hydraulic fracturing may result in silica-related health issues and litigation that could have a material adverse effect on the Company" for additional information.

Other regulation of the oil and gas industry. The oil and gas industry is regulated by numerous federal, state and local authorities. Legislation affecting the oil and gas industry is under constant review for amendment or expansion, frequently increasing the regulatory burden. Also, numerous federal and state departments and agencies are authorized by statute to issue rules and regulations that are binding on the oil and gas industry and its individual members, some of which carry substantial penalties for failure to comply. Although the regulatory burden on the oil and gas industry may increase the Company's cost of doing business by increasing the cost of production, the Company believes that these burdens generally do not affect the Company any differently or to any greater or lesser extent than they affect other companies in the industry with similar types, quantities and locations of production.

Development and production. Development and production operations are subject to various types of regulation at the federal, state and local levels. These types of regulation include requiring permits for the drilling of wells, the posting of bonds in connection with various types of activities and filing reports concerning operations. Most states, and some counties and municipalities, in which the Company operates also regulate one or more of the following:

- the location of wells;
- the method of drilling and casing wells;
- the method and ability to fracture stimulate wells;
- the surface use and restoration of properties upon which wells are drilled;
- the plugging and abandoning of wells; and
- notice to surface owners and other third parties.

State laws regulate the size and shape of drilling and spacing units or proration units governing the pooling of oil and gas properties. Some states allow forced pooling or integration of tracts to facilitate development, while other states rely on voluntary pooling of lands and leases. In some instances, forced pooling or unitization may be implemented by third parties and may reduce the Company's interest in the unitized properties. In addition, state conservation laws establish maximum rates of production from oil and gas wells, generally prohibit the venting or flaring of gas and impose requirements regarding production rates. These laws and regulations may limit the amount of oil and gas the Company can produce from the Company's wells or limit the number of wells or the locations that the Company can drill. Moreover, each state generally imposes a production or severance tax with respect to the production and sale of oil, NGL and gas within its jurisdiction. States do not regulate wellhead prices or engage in other similar direct regulation, but there can be no assurance that they will not do so in the future. The effect of such future regulations may limit the amounts of oil and gas that may be produced from the Company's wells, negatively affect the economics of production from these wells or limit the number of locations the Company can drill.

Regulation of transportation and sale of gas. The availability, terms and cost of transportation significantly affect sales of gas. Federal and state regulations govern the price and terms for access to gas pipeline transportation. Intrastate gas pipeline transportation activities are subject to various state laws and regulations, as well as orders of state regulatory bodies. The interstate transportation and sale of gas is subject to federal regulation, including regulation of the terms, conditions and rates for interstate transportation, storage and various other matters, primarily by the Federal Energy Regulatory Commission ("FERC"). FERC endeavors to make gas transportation more accessible to gas buyers and sellers on an open-access and non-discriminatory basis.

Pursuant to the Energy Policy Act of 2005 ("EPAct 2005") it is unlawful for any entity, such as the Company, to use any deceptive or manipulative device or contrivance in connection with the purchase or sale of gas or transportation services subject to regulation by FERC, in contravention of rules prescribed by FERC. The EPAct 2005 also gives FERC authority to impose civil penalties of up to $1 million per day, subject to annual inflation adjustment, for each violation of the Natural Gas Act ("NGA"), the Natural Gas Policy Act of 1978 and related regulations.

Under FERC Order 704, which regulates annual gas transaction reporting requirements, any market participant, including a producer such as the Company, that engages in wholesale sales or purchases of gas that equal or exceed 2.2 million MMBtus of physical gas in the previous calendar year must annually report such sales and purchases to FERC on Form No. 552 by May 1 of the year following the calendar year when such sales and purchases occurred. Form No. 552 contains aggregate volumes of wholesale gas purchased or sold in the prior calendar year to the extent such transactions utilize, contribute to or may contribute to the formation of price indices. Order 704 is intended to increase the transparency of the wholesale gas markets and to assist FERC in monitoring those markets and in detecting market manipulation.

Intrastate gas pipeline transportation rates are subject to regulation by state regulatory commissions. The basis for intrastate gas pipeline regulation, and the degree of regulatory oversight and scrutiny given to intrastate gas pipeline rates, vary from state to state. Additional proposals and proceedings that might affect the gas industry are considered from time to time by the U.S. Congress, FERC, state legislatures, state regulatory bodies and the courts. The Company cannot predict when or if any such proposals might become effective or their effect, if any, on its operations. The Company believes that the regulation of intrastate gas pipeline transportation rates will not affect its operations in any way that is materially different from the effects on its similarly situated competitors.

See additional information in "Item 1A. Risk Factors - The Company may not be able to obtain access on commercially reasonable terms or otherwise to pipelines and storage facilities, gathering systems and other transportation, processing, fractionation, refining and export facilities to market its oil, NGL and gas production; the Company relies on a limited number of purchasers for a majority of its products" and "Item 1A. Risk Factors - The Company's transportation of gas, sales and purchases of oil, NGL, gas or other energy commodities, and any derivative activities related to such energy commodities, expose the Company to potential regulatory risks."

Gas processing. The Company's gas processing operations are generally not subject to FERC or state regulation with respect to rates or terms and conditions of service.

See "Item 1A. Risk Factors - The Company's gas processing operations are subject to operational and regulatory risks, which could result in significant damages and the loss of revenue" for additional information.

Gas gathering. Section 1(b) of the NGA exempts gas gathering facilities from FERC jurisdiction. While the Company owns or operates some gas gathering facilities, the Company also depends on gathering facilities owned and operated by third parties to gather production from its properties, and therefore the Company is affected by the rates charged by these third parties for gathering services. To the extent that changes in federal or state regulation affect the rates charged for gathering services, the Company also may be affected by these changes. The Company does not anticipate that the Company would be affected any differently than similarly situated gas producers.

See "Item 1A. Risk Factors - The Company may not be able to obtain access on commercially reasonable terms or otherwise to pipelines and storage facilities, gathering systems and other transportation, processing, fractionation, refining and export facilities to market its oil, NGL and gas production; the Company relies on a limited number of purchasers for a majority of its products" for additional information.

Regulation of transportation and sale of oil and NGL. Intrastate liquids pipeline transportation rates, terms and conditions are subject to regulation by numerous federal, state and local authorities and, in a number of instances, the ability to transport and sell such products on interstate pipelines is dependent on pipelines that are also subject to FERC jurisdiction under the Interstate Commerce Act (the "ICA"). The Company does not believe these regulations affect it any differently than other producers.

The ICA requires that pipelines maintain a tariff on file with the FERC. The tariff sets forth the established rates as well as the rules and regulations governing the service. The ICA requires, among other things, that rates and terms and conditions of service on interstate common carrier pipelines be "just and reasonable." Such pipelines must also provide jurisdictional service in a manner that is not unduly discriminatory or unduly preferential. Shippers have the power to challenge new and existing rates and terms and conditions of service before the FERC.

Rates of interstate liquids pipelines are currently regulated by the FERC, primarily through an annual indexing methodology, under which pipelines increase or decrease their rates in accordance with an index adjustment specified by the FERC. For the five-year period beginning in July 2016, the FERC established an annual index adjustment equal to the change in the producer price index for finished goods plus 1.23 percent. This adjustment is subject to review every five years. Under the FERC's regulations, a liquids pipeline can request a rate increase that exceeds the rate obtained through application of the indexing methodology by using a cost-of-service approach, but only after the pipeline establishes that a substantial divergence exists between the actual costs experienced by the pipeline and the rates resulting from application of the indexing methodology. Increases in liquids transportation rates may result in lower revenue and cash flows for the Company.

In addition, due to common carrier regulatory obligations of liquids pipelines, capacity must be prorated among shippers in an equitable manner in the event there are nominations in excess of capacity by current shippers or capacity requests are received from a new shipper. Therefore, new shippers or increased volume by existing shippers may reduce the capacity available to the Company. Any prolonged interruption in the operation or curtailment of available capacity of the pipelines that the Company relies upon for liquids transportation could have a material adverse effect on its business, financial condition, results of operations and cash flows. However, the Company believes that access to liquids pipeline transportation services generally will be available to it to the same extent, if not better given the Company's firm transportation contracts, as to its similarly situated competitors.

In November 2009, the Federal Trade Commission (the "FTC") issued regulations pursuant to the Energy Independence and Security Act of 2007 intended to prohibit market manipulation in the petroleum industry. Violators of the regulations face civil penalties of up to $1 million per violation per day, subject to annual inflation adjustment. The Commodity Futures Trading Commission (the "CFTC") has also issued anti-manipulation rules that subject violators to a civil penalty of up to the greater of $1 million per violation, subject to annual inflation adjustment, or triple the monetary gain to the person for each violation.

See "Items 1A. Risk Factors - The Company's transportation of gas, sales and purchases of oil, NGL, gas or other energy commodities, and any derivative activities related to such energy commodities, expose the Company to potential regulatory risks."

Energy commodity prices. Sales prices of oil, condensate, NGL and gas are not currently regulated and sales are made at market prices. Although prices of these energy commodities are currently unregulated, the U.S. Congress historically has been active in their regulation. The Company cannot predict whether new legislation to regulate oil and gas might actually be enacted by the U.S. Congress or the various state legislatures, and what effect, if any, the proposals might have on the Company's operations.

Transportation of hazardous materials. The federal Department of Transportation has adopted regulations requiring that certain entities transporting designated hazardous materials develop plans to address security risks related to the transportation of hazardous materials. The Company does not believe that these requirements will have an adverse effect on the Company or its operations. The Company cannot provide any assurance that the security plans required under these regulations would protect against all security risks and prevent an attack or other incident related to the Company's transportation of hazardous materials.

ITEM 1A. RISK FACTORS

The nature of the business activities conducted by the Company subjects it to certain hazards and risks. The following is a summary of some of the material risks relating to the Company's business activities. Other risks are described in "Item 1. Business — Competition, Markets and Regulations," "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations" and "Item 7A. Quantitative and Qualitative Disclosures About Market Risk." These risks are not the only risks facing the Company. The Company's business could also be affected by additional risks and uncertainties not currently known to the Company or that it currently deems to be immaterial. If any of these risks actually occurs, it could materially harm the Company's business, financial condition or results of operations or impair the Company's ability to implement business plans or complete development activities as scheduled. In that case, the market price of the Company's common stock could decline.

The prices of oil, NGL and gas are highly volatile and have declined significantly in recent years. A sustained decline in these commodity prices could materially and adversely affect the Company's business, financial condition and results of operations.

The Company's revenues, profitability, cash flow and future rate of growth are highly dependent on commodity prices. Commodity prices may fluctuate widely in response to relatively minor changes in the supply of and demand for oil, NGL and gas, market uncertainty and a variety of additional factors that are beyond the Company's control, such as:

- domestic and worldwide supply of and demand for oil, NGL and gas;
- worldwide oil, NGL and gas inventory levels, including at Cushing, Oklahoma, the benchmark location for WTI oil prices, and the U.S. Gulf Coast, where the majority of the U.S. refinery capacity exists;
- volatility and trading patterns in the commodity-futures markets;
- the capacity of U.S. and international refiners to utilize U.S. supplies of oil and condensate;
- weather conditions;
- overall domestic and global political and economic conditions;
- actions of OPEC, its members and other state-controlled oil companies relating to oil price and production controls;
- the price and quantity of oil, NGL and LNG imports to and exports from the U.S.;
- technological advances or social attitudes or policies affecting energy consumption and energy supply;
- domestic and foreign governmental regulations, including environmental regulations, climate change regulations and taxation;
- the effect of energy conservation efforts;
- stockholder activism or activities by non-governmental organizations to limit certain sources of capital for the energy sector or restrict the exploration, development and production of oil and gas;
- the proximity, capacity, cost and availability of pipelines and other transportation facilities; and
- the price, availability and acceptance of alternative fuels.

Commodity prices have historically been, and continue to be, extremely volatile. For example, the NYMEX oil prices in 2018 ranged from a high of $76.41 to a low of $42.53 per Bbl and the NYMEX gas prices in 2018 ranged from a high of $4.84 to a low of $2.55 per MMBtu. The Company expects this volatility to continue. A further or extended decline in commodity prices could materially and adversely affect the Company's future business, financial condition, results of operations, liquidity or ability to finance planned capital expenditures. The Company makes price assumptions that are used for planning purposes, and a significant portion of the Company's cash outlays, including rent, salaries and noncancelable capital commitments, are largely fixed in nature. Accordingly, if commodity prices are below the expectations on which these commitments were based, the Company's financial results are likely to be adversely and disproportionately affected because these cash outlays are not variable in the short term and cannot be quickly reduced to respond to unanticipated decreases in commodity prices.

Significant or extended price declines could also materially and adversely affect the amount of oil, NGL and gas that the Company can produce economically, which may result in the Company having to make significant downward adjustments to its estimated proved reserves. A reduction in production could also result in a shortfall in expected cash flows and require the Company to reduce capital spending or borrow funds to cover any such shortfall. Any of these factors could negatively affect the Company's ability to replace its production and its future rate of growth.

The Company could experience periods of higher costs if commodity prices rise. These increases could reduce the Company's profitability, cash flow and ability to complete development activities as planned.

Historically, the Company's capital and operating costs have risen during periods of increasing oil, NGL and gas prices. These cost increases result from a variety of factors beyond the Company's control, such as increases in the cost of electricity, steel and other raw materials that the Company and its vendors rely upon; increased demand for labor, services and materials as drilling activity increases; and increased production and ad valorem taxes. Decreased levels of drilling activity in the oil and gas industry have historically led to cost reductions for some drilling equipment, materials and supplies. However, such costs may rise faster than increases in the Company's revenue if commodity prices rise, thereby negatively impacting the Company's profitability, cash flow and ability to complete development activities as scheduled and on budget. This impact may be magnified to the extent that the Company's ability to participate in the commodity price increases is limited by its derivative risk management activities.

Declining general economic, business or industry conditions could have a material adverse effect on the Company's results of operations.

The economies in the United States and certain countries in Europe and Asia have been growing, with resulting improvements in industrial demand and consumer confidence. However, other economies, such as those of certain South American nations, continue to face economic struggles or slowing economic growth. If these conditions worsen, combined with a decline in economic growth in other parts of the world, there could be a significant adverse effect on global financial markets and commodity prices. In addition, continued hostilities in the Middle East and the occurrence or threat of terrorist attacks in the United States or other countries could adversely affect the global economy. If the economic climate in the United States or abroad were to deteriorate, demand for petroleum products could diminish or stagnate, which could depress the prices at which the Company could sell its oil, NGLs and gas, affect the ability of the Company's vendors, suppliers and customers to continue operations and ultimately decrease the Company's cash flows and profitability.

The refining industry may be unable to absorb rising U.S. oil and condensate production; in such a case, the resulting surplus could depress prices and restrict the availability of markets, which could materially and adversely affect the Company's results of operations.

Absent an expansion of U.S. refining and export capacity, rising U.S. production of oil and condensates could result in a surplus of these products in the U.S., which would likely cause prices for these commodities to fall and markets to constrict. Although U.S. law was changed in 2015 to permit the export of oil, exports may not occur if demand is lacking in foreign markets or the price that can be obtained in foreign markets does not support associated export capacity expansions, transportation and other costs. In such circumstances, the rate of return on the Company's capital projects would decline, possibly to levels that would make execution of the Company's drilling plans uneconomical, and a lack of market for the Company's products could require that the Company shut in some portion of its production. If this were to occur, the Company's production and cash flow could decrease, or could increase less than forecasted, which could have a material adverse effect on the Company's cash flow and profitability.

The Company faces significant competition and some of its competitors have resources in excess of the Company's available resources.

The oil and gas industry is highly competitive. The Company competes with a large number of companies, producers and operators in a number of areas such as:

- seeking to acquire oil and gas properties suitable for development or exploration;
- marketing oil, NGL and gas production; and
- seeking to acquire the equipment, services and expertise, including trained personnel, necessary to identify, evaluate, operate and develop its properties.

Some of the Company's competitors are larger and have substantially greater financial and other resources than the Company, and as such, the Company may be at a competitive disadvantage in the identification, acquisition and development of properties that complement the Company's operations. To a lesser extent, the Company also faces competition from companies that supply alternative sources of energy, such as wind or solar power.

The Company's operations involve many operational risks, some of which could result in unforeseen interruptions to the Company's operations and substantial losses to the Company for which the Company may not be adequately insured.

The Company's operations, including drilling and completion activities and water distribution, collection and disposal activities, are subject to all the risks incident to the oil and gas development and production business, including:

- blowouts, cratering, explosions and fires;
- adverse weather effects;
- environmental hazards, such as NGL and gas leaks, oil and produced water spills, pipeline and vessel ruptures, encountering naturally occurring radioactive materials ("NORM"), and unauthorized discharges of toxic chemicals, gases, brine, well stimulation and completion fluids or other pollutants onto the surface or into the subsurface environment;
- high costs, shortages or delivery delays of equipment, labor or other services or water and sand for hydraulic fracturing;
- facility or equipment malfunctions, failures or accidents;
- title problems;
- pipe or cement failures or casing collapses;
- uncontrollable flows of oil, gas or water;
- compliance with environmental and other governmental requirements;
- lost or damaged oilfield workover and service tools;
- surface access restrictions;
- unusual or unexpected geological formations or pressure or irregularities in formations;
- terrorism, vandalism and physical, electronic and cyber security breaches; and
- natural disasters.

The Company's overall exposure to operational risks may increase as its drilling activity expands and as it increases internally-provided well services, water distribution, water collection or disposal and other services. Any of these risks could result in substantial losses to the Company due to injury or loss of life, damage to or destruction of wells, production facilities or other property and natural resources, clean-up responsibilities, regulatory investigations and penalties and suspension of operations.

The Company may not be insured or is not fully insured against certain of the risks described above, either because such insurance is not available or because of the high premium costs and deductibles associated with obtaining such insurance. Additionally, the Company relies to a large extent on facilities owned and operated by third-parties, and damage to or destruction of those third-party facilities could adversely affect the ability of the Company to produce, transport and sell its hydrocarbons.

The Company's operations and drilling activity are concentrated in the Permian Basin of West Texas, an area of high industry activity, which may affect its ability to obtain the personnel, equipment, services, resources and facilities access needed to complete its development activities as planned or result in increased costs; such concentration also makes the Company vulnerable to risks associated with operating in a limited geographic area.

The Company's producing properties are geographically concentrated in the Permian Basin of West Texas. At December 31, 2018, 93 percent of the Company's total estimated proved reserves were attributable to properties located in this area. In addition, the Company's operations and drilling activity are concentrated in this area where industry activity is high. As a result, demand for personnel, equipment, power, services and resources has increased, as well as the costs for these items. Any delay or inability to secure the personnel, equipment, power, services and resources could result in oil, NGL and gas production volumes being below the Company's forecasted volumes. In addition, any such negative effect on production volumes, or significant increases in costs, could have a material adverse effect on the Company's results of operations, cash flow and profitability.

As a result of this concentration, the Company may be disproportionately exposed to the impact of delays or interruptions of operations or production in this area caused by external factors such as governmental regulation, state politics, market limitations, water or sand shortages or extreme weather related conditions.

The Company's actual production could differ materially from its forecasts.

From time to time, the Company provides forecasts of expected quantities of future oil and gas production and other financial and operating results. These forecasts are based on a number of estimates and assumptions, including that none of the risks associated with the Company's oil and gas operations summarized in this "Item 1A. Risk Factors" occur. Production forecasts, specifically, are based on assumptions such as:

- expectations of production from existing wells and future drilling activity;
- the absence of facility or equipment malfunctions;
- the absence of adverse weather effects;

- expectations of commodity prices, which could experience significant volatility;
- expected well costs; and
- the assumed effects of regulation by governmental agencies, which could make certain drilling activities or production uneconomical.

Should any of these assumptions prove inaccurate, or should the Company's development plans change, actual production could be materially and adversely affected.

Exploration and development drilling involve substantial costs and risks and may not result in commercially productive reserves.

Drilling involves numerous risks, including the risk that no commercially productive oil or gas reservoirs will be encountered. The cost of drilling, completing and operating wells is often uncertain and drilling operations may be curtailed, delayed or canceled, or become costlier, as a result of a variety of factors, including:

- unexpected drilling conditions;
- unexpected pressure or irregularities in formations;
- equipment failures or accidents;
- construction delays;
- fracture stimulation accidents or failures;
- adverse weather conditions;
- restricted access to land for drilling or laying pipelines;
- title defects;
- lack of available gathering, transportation, processing, fractionation, storage, refining or export facilities;
- lack of available capacity on interconnecting transmission pipelines;
- access to, and the cost and availability of, the equipment, services, resources and personnel required to complete the Company's drilling, completion and operating activities; and
- delays imposed by or resulting from compliance with or changes in environmental and other governmental, regulatory or contractual requirements.

The Company's future drilling activities may not be successful and, if unsuccessful, the Company's proved reserves and production would decline, which could have an adverse effect on the Company's future results of operations and financial condition. While all drilling, whether developmental, extension or exploratory, involves these risks, exploratory and extension drilling involves greater risks of dry holes or failure to find commercial quantities of hydrocarbons. The Company expects that it will continue to experience exploration and abandonment expense in 2019.

Part of the Company's strategy involves using some of the latest available horizontal drilling and completion techniques, which involve risks and uncertainties in their application.

The Company's operations involve utilizing some of the latest drilling and completion techniques as developed by it and its service providers. Risks that the Company faces while drilling horizontal wells include, but are not limited to, the following:

- landing the wellbore in the desired drilling zone;
- staying in the desired drilling zone while drilling horizontally through the formation;
- running casing the entire length of the wellbore; and
- being able to run tools and other equipment consistently through the horizontal wellbore.

Risks that the Company faces while completing wells include, but are not limited to, the following:

- the ability to fracture stimulate the planned number of stages;
- the ability to run tools the entire length of the wellbore during completion operations; and
- the ability to successfully clean out the wellbore after completion of the final fracture stimulation stage.

Drilling in emerging areas is more uncertain than drilling in areas that are more developed and have a longer history of established drilling operations. New discoveries and emerging formations have limited or no production history and, consequently, the Company is more limited in assessing future drilling results in these areas. If the Company's drilling results are worse than anticipated, the return on investment for a particular project may not be as attractive as anticipated and the Company may recognize noncash charges to reduce the carrying value of its unproved properties in those areas.

Multi-well pad drilling may result in volatility in the Company's operating results.

The Company utilizes multi-well pad drilling where practicable, and wells drilled on a pad are not placed on production until all wells on the pad are drilled and completed. In addition, problems affecting a single well could adversely affect production from all of the wells on the pad. As a result, multi-well pad drilling can cause delays in the scheduled commencement of production, or interruptions in ongoing production. These delays or interruptions may cause volatility in the Company's operating results. Further, any delay, reduction or curtailment of the Company's development and producing operations due to operational delays caused by multi-well pad drilling could result in the loss of acreage through lease expirations.

The Company's use of seismic data is subject to interpretation and may not accurately identify the presence of oil and gas, which could materially and adversely affect the results of its drilling operations.

Even when properly used and interpreted, seismic data and visualization techniques are only tools used to assist geoscientists in identifying subsurface structures and hydrocarbon indicators and do not enable the interpreter to know whether hydrocarbons are, in fact, present in those structures. As a result, the Company's drilling activities may not be successful or economic. In addition, the use of advanced technologies, such as 3-D seismic data, requires greater pre-drilling expenditures than traditional drilling strategies, and the Company could incur losses as a result of such expenditures.

The Company's expectations for future drilling activities will be realized over several years, making them susceptible to uncertainties that could materially alter the occurrence or timing of such activities.

The Company has identified drilling locations and prospects for future drilling opportunities, including development, exploratory and infill drilling activities. These drilling locations and prospects represent a significant part of the Company's future drilling plans. For example, the Company's proved reserves as of December 31, 2018 include proved undeveloped reserves and proved developed non-producing reserves of 55 MMBbls of oil, 24 MMBbls of NGL and 142 Bcf of gas. The Company's ability to drill and develop these locations depends on a number of factors, including the availability and cost of capital, regulatory approvals, negotiation of agreements with third parties, commodity prices, costs, access to and availability of equipment, services, resources and personnel, and drilling results. There can be no assurance that the Company will drill these locations or that the Company will be able to produce oil or gas reserves from these locations or any other potential drilling locations. Well results vary by formation and geographic area, and the Company's drilling activities are generally focused on remaining locations that are believed to offer the highest return. Changes in the laws or regulations on which the Company relies in planning and executing its drilling programs could materially and adversely impact the Company's ability to successfully complete those programs. For example, under current Texas laws and regulations, the Company may receive permits to drill, and may drill and complete, certain horizontal wells that traverse one or more units and/or leases; a change in those laws or regulations could materially and adversely impact the Company's ability to drill those wells. Because of these uncertainties, the Company cannot give any assurance as to the timing of these activities or that they will ultimately result in the realization of proved reserves or meet the Company's expectations for success. As such, the Company's actual drilling activities may materially differ from the Company's current expectations, which could have a material adverse effect on the Company's proved reserves, financial condition and results of operations.

The Company's operations are substantially dependent upon the availability of water and its ability to dispose of produced water gathered from drilling and production activities. Restrictions on the Company's ability to obtain water or dispose of produced water may have a material adverse effect on its financial condition, results of operations and cash flows.

Water is an essential component of the Company's drilling and hydraulic fracturing processes. Limitations or restrictions on the Company's ability to secure sufficient amounts of water (including limitations resulting from natural causes such as drought), could materially and adversely impact its operations. Severe drought conditions can result in local water districts taking steps to restrict the use of water in their jurisdiction for drilling and hydraulic fracturing in order to protect the local water supply. If the Company is unable to obtain water to use in its operations from local sources, it may need to be obtained from new sources and transported to drilling sites, resulting in increased costs, which could have a material adverse effect on its financial condition, results of operations and cash flows.

In addition, the Company must dispose of the fluids produced from oil and gas production operations, including produced water, which it does directly or through the use of third party vendors. The legal requirements related to the disposal of produced water into a non-producing geologic formation by means of underground injection wells are subject to change based on concerns of the public or governmental authorities regarding such disposal activities. One such concern arises from seismic events near underground disposal wells that are used for the disposal by injection of produced water resulting from oil and gas activities. In 2016, the United States Geological Survey identified Texas as being among the states with areas of increased rates of induced seismicity that could be attributed to fluid injection or oil and gas extraction. In response to concerns regarding induced seismicity, regulators in some states have imposed, or are considering imposing, additional requirements in the permitting of produced water disposal wells to assess any relationship between seismicity and the use of such wells. For example, in Texas, the Texas Railroad Commission has adopted rules governing the permitting or re-permitting of wells used to dispose of produced water and other fluids resulting from the production of oil and gas in order to address these seismic activity concerns within the state. Among other things, these rules require companies seeking permits for disposal wells to provide seismic activity data in permit applications, provide for more frequent monitoring and reporting for certain wells and allow the state to modify, suspend or terminate permits on grounds that a disposal well is likely to be, or determined to be, causing seismic activity.

States may issue orders to temporarily shut down or to curtail the injection depth of existing wells in the vicinity of seismic events. Another consequence of seismic events may be lawsuits alleging that disposal well operations have caused damage to neighboring properties or otherwise violated state and federal rules regulating waste disposal. These developments could result in additional regulation and restrictions on the use of injection wells by the Company or by commercial disposal well vendors whom the Company may use from time to time to dispose of produced water. Increased regulation and attention given to induced seismicity could also lead to greater opposition, including litigation to limit or prohibit oil and gas activities utilizing injection wells for produced water disposal. Any one or more of these developments may result in the Company or its vendors having to limit disposal well volumes, disposal rates and pressures or locations, or require the Company or its vendors to shut down or curtail the injection of produced water into disposal wells, which events could have a material adverse effect on the Company's business, financial condition and results of operations.

The Company's gas processing operations are subject to operational and regulatory risks, which could result in significant damages and the loss of revenue.

As of December 31, 2018, the Company owned interests in 11 gas processing plants, including the related gathering systems, and two treating facilities. The Company is the operator of the two treating facilities and none of the gas processing plants. Two of the gas processing facilities are under construction and one of the treating facilities is not currently being used. There are significant risks associated with the operation of gas processing plants and the associated gathering systems. Gas and NGLs are volatile and explosive and may include carcinogens. Damage to or improper operation of gas processing plants, gathering systems or treating facilities could result in an explosion or the discharge of toxic gases, which could result in significant damage claims in addition to interrupting a revenue source.

Moreover, while the Company's gas processing operations are generally not subject to FERC or state regulation with respect to rates or terms and conditions of service, there can be no assurance that such processing operations will continue to be unregulated in the future. Although the processing facilities may not be directly regulated, other laws and regulations may affect the availability of gas for processing, such as state regulation of production rates and maximum daily production allowables from gas wells, which could impact the Company's processing business. Such regulation could result in additional costs and reduced revenues.

The Company may not be able to obtain access on commercially reasonable terms or otherwise to pipelines and storage facilities, gathering systems and other transportation, processing, fractionation, refining and export facilities to market its oil, NGL and gas production; the Company relies on a limited number of purchasers for a majority of its products.

The marketing of oil, NGL and gas production depends in large part on the availability, proximity and capacity of pipelines and storage facilities, gathering systems and other transportation, processing, fractionation, refining and export facilities, as well as the existence of adequate markets. If there were insufficient capacity available on these systems, if these systems were unavailable to the Company or if access to these systems were to become commercially unreasonable, the price offered for the Company's production could be significantly depressed, or the Company could be forced to shut in some production or delay or discontinue drilling plans and commercial production following a discovery of hydrocarbons while it constructs its own facility or awaits the availability of third party facilities. The Company also relies (and expects to rely in the future) on facilities developed and owned by third parties in order to store, process, transport, fractionate and sell its oil, NGL and gas production. The Company's plans to develop and sell its oil and gas reserves could be materially and adversely affected by the inability or unwillingness of third parties to provide sufficient transportation, storage or processing, fractionation, refining or export facilities to the Company, especially in areas of planned expansion where such facilities do not currently exist.

For example, following Hurricane Harvey in 2017 and Hurricanes Gustav and Ike in 2008, certain Permian Basin gas processors were forced to shut down their plants due to the inability of certain Texas Gulf Coast NGL fractionators to operate. The Company was able to produce its oil wells and vent or flare the associated gas; however, there is no certainty the Company will be able to vent or flare gas in the future due to potential changes in regulations. The amount of oil and gas that can be produced is subject to limitations in certain circumstances, such as pipeline interruptions due to scheduled and unscheduled maintenance, excessive pressure, physical damage to the gathering, transportation, storage, processing, fractionation, refining or export facilities, or lack of capacity at such facilities. The Company has periodically experienced high line pressure at its tank batteries, which has occasionally led to the flaring of gas due to the inability of the gas gathering systems in the areas to support the increased gas production. The curtailments arising from these and similar circumstances may last from a few days to several months, and in many cases, the Company may be provided only limited, if any, notice as to when these circumstances will arise and their duration.

To the extent that the Company enters into transportation contracts with pipelines that are subject to FERC regulation, the Company is subject to FERC requirements related to use of such capacity. Any failure on the Company's part to comply with FERC's regulations and policies or with a FERC-related pipeline's tariff could result in the imposition of civil and criminal penalties.

A limited number of companies purchase a majority of the Company's oil, NGL and gas. The loss of a significant purchaser could have a material adverse effect on the Company's ability to sell its production.

A failure by purchasers of the Company's production to satisfy their obligations to the Company could require the Company to recognize a charge in earnings and have a material adverse effect on the Company's results of operation.

The Company relies on a limited number of purchasers to purchase a majority of its products. To the extent that purchasers of the Company's production rely on access to the credit or equity markets to fund their operations, there is a risk that those purchasers could default in their contractual obligations to the Company if such purchasers were unable to access the credit or equity markets for an extended period of time. If for any reason the Company were to determine that it was probable that some or all of the accounts receivable from any one or more of the purchasers of the Company's production were uncollectible, the Company would recognize a charge in the earnings of that period for the probable loss.

Laws and regulations regarding hydraulic fracturing, as well as governmental reviews of such activities, could result in increased costs and additional operating restrictions, delays or cancellations and have a material adverse effect on the Company's production.

Hydraulic fracturing is a common practice that is used to stimulate production of hydrocarbons from tight formations. The Company conducts hydraulic fracturing in the majority of its drilling and completion programs. The process involves the injection of water, sand or other proppants and additives under pressure into targeted subsurface formations to stimulate oil and gas production. The process is typically regulated by state oil and gas commissions or similar agencies, but in recent years, several federal agencies have conducted investigations or asserted regulatory authority over certain aspects of the process. For example, in 2016, the EPA released its final report on the potential impacts of hydraulic fracturing on drinking water resources, concluding that "water cycle" activities associated with hydraulic fracturing may impact drinking water resources under certain circumstances. Additionally, the EPA has asserted regulatory authority pursuant to the SDWA's UIC program over hydraulic fracturing activities involving the use of diesel and issued guidance in 2014 covering such activities. Moreover, in 2014, the EPA published an Advance Notice of Proposed Rulemaking to collect data on chemicals used in hydraulic fracturing under the Toxic Substances Control Act and, in 2016, published a final rule under the CWA prohibiting the discharge of wastewater from onshore unconventional oil and gas extraction facilities to publicly-owned wastewater treatment plants. Also, the BLM published a final rule in 2015 establishing new or more stringent standards for performing hydraulic fracturing on federal and American Indian lands, but the BLM rescinded the rule in December 2017. However, litigation was filed in federal court in January 2018 challenging the BLM's rescission of the 2015 rule and legal challenges remain pending.

From time to time, the U.S. Congress has considered adopting legislation intended to provide for federal regulation of hydraulic fracturing and to require disclosure of the additives used in the hydraulic-fracturing process. In addition, certain states, including Texas where the Company operates, have adopted, and other states are considering adopting, regulations that could impose new or more stringent permitting, disclosure, disposal and well-construction requirements on hydraulic-fracturing operations. States could elect to prohibit high volume hydraulic fracturing altogether, following the lead of New York. Also, local land use restrictions, such as city ordinances, may be adopted to restrict or prohibit drilling in general or hydraulic fracturing in particular. In Texas, legislation was adopted providing that the regulation of oil and gas operations in Texas is under the exclusive jurisdiction of the state and thus preempts local regulation of those operations. Nonetheless, municipalities and political subdivisions in Texas continue to have the right to enact "commercially reasonable" regulations for surface activities. In the event federal, state or local restrictions pertaining to hydraulic fracturing are adopted in areas where the Company is currently conducting operations, or in the future plans to conduct operations, the Company may incur additional costs to comply with such requirements, experience restrictions, delays or cancellations in the pursuit of exploration, development or production activities, and perhaps be limited or precluded in the drilling of wells or in the volume that the Company is ultimately able to produce from its reserves; one or more of which developments could have a material adverse effect on the Company.

The Company's operations are subject to stringent environmental, oil and gas-related and occupational safety and health laws and regulations that could cause it to delay, curtail or cease its operations or expose it to material costs and liabilities.

The Company's operations are subject to stringent federal, state and local laws and regulations governing, among other things, the drilling of wells, rates of production, the size and shape of drilling and spacing units or proration units, the transportation and sale of oil, NGL and gas, and the discharging of materials into the environment and environmental protection. In connection with its operations, the Company must obtain and maintain numerous environmental and oil and gas-related permits, approvals and certificates from various federal, state and local governmental authorities, and may incur substantial costs in doing so. The need to obtain permits has the potential to delay, curtail or cease the development of oil and gas projects. Over the next several years, the Company may be charged royalties on gas emissions or required to incur certain capital expenditures for air pollution control equipment or other air emissions-related issues. For example, in 2015, the EPA issued a final rule under the CAA lowering the National Ambient Air Quality Standard ("NAAQS") for ground-level ozone from 75 parts per billion to 70 parts per billion under standards to provide protection of public health and welfare. In 2017 and 2018, the EPA issued area designations with respect to ground-level ozone as either "attainment/unclassifiable," "unclassifiable" or "non-attainment." Additionally, in November 2018, the EPA issued final requirements that apply to state, local and tribal air agencies for implementing the 2015 NAAQS for ground-level ozone. State implementation of the revised NAAQS could, among other things, require installation of new emission controls on some of the Company's equipment, resulting in longer permitting timelines, and significantly increase the Company's capital expenditures and operating costs. In another example, in 2016, the EPA published a final rule on the criteria for aggregating multiple surface sites into a single source for air-quality permitting purposes that is applicable to the oil and gas industry. This rule could cause small surface sites and the equipment at those sites to be aggregated for air emissions permitting purposes; however, in November 2018, the EPA published a final action that reinterprets source aggregation in a manner that could lessen the likelihood that air projects are aggregated for permitting. In a third example, the EPA and U.S. Army Corps of Engineers (the "Corps") released a final rule in 2015 outlining federal jurisdictional reach under the CWA over waters of the U.S., including wetlands. Beginning in the first quarter of 2017, the EPA and the Corps agreed to reconsider the 2015 rule and, thereafter, the agencies have (i) published a proposed rule in July 2017 to rescind the 2015 rule and recodify the regulatory text that governed waters of the U.S. prior to promulgation of the 2015 rule, (ii) published a proposed rule in November 2017 and a final rule in February 2018 adding a February 6, 2020 applicable date to the 2015 rule, and (iii) announced a proposed rule on December 11, 2018, redefining the CWA's jurisdiction over waters of the U.S. for which the agencies will seek public comment. The 2015 and February 2018 final rules are being challenged by various factions in federal district court and implementation of the 2015 rule has been enjoined in 28 states pending resolution of the various federal district court challenges. As a result of these legal developments, future implementation of the 2015 rule or a revised rule is uncertain at this time. Future compliance with these legal requirements or with any new or amended environmental laws or regulations could, among other things, delay, restrict or prohibit the issuance of necessary permits, increase the Company's capital expenditures and operating expenses by, for example, requiring installation of new emission controls on some of the Company's equipment, any one or more of which developments could have a material adverse effect on the Company's business, financial condition and results of operations.

Additionally, the Company's operations are subject to a number of federal and state laws and regulations, including the federal Occupational Safety and Health Act and comparable state statutes, whose purpose is to protect the health and safety of employees. Among other things, the Occupational Safety and Health Act hazard communication standard, the EPA community right-to-know regulations under Title III of the federal Superfund Amendment and Reauthorization Act and comparable state statutes require that information be maintained concerning hazardous materials used or produced in the Company's operations and that this information be provided to employees, state and local government authorities and citizens.

There can be no assurance that existing or future regulations will not result in a delay, curtailment or cessation of production or processing activities, result in a material increase in the costs of production, development, exploration or processing operations or materially and adversely affect the Company's future operations and financial condition. Noncompliance with these laws and regulations may subject the Company to sanctions, including administrative, civil or criminal penalties, remedial cleanups or corrective actions, delays in permitting or performance of projects, natural resource damages and other liabilities. Such laws and regulations may also affect the costs of acquisitions. In addition, these laws and regulations are subject to amendment or replacement in the future with more stringent legal requirements. Further, any delay, reduction or curtailment of the Company's development and producing operations due to these laws and regulations could result in the loss of acreage through lease expiration.

The nature of the Company's assets and production operations may impact the environment or cause environmental contamination, which could result in material liabilities to the Company.

The Company's assets and production operations may give rise to significant environmental costs and liabilities as a result of the Company's handling of petroleum hydrocarbons and wastes, because of air emissions and water discharges related to its operations, and due to past industry operations and waste disposal practices. The Company's oil and gas business involves the generation, handling, treatment, storage, transport and disposal of wastes, hazardous substances and petroleum hydrocarbons and is subject to environmental hazards, such as oil and produced water spills, NGL and gas leaks, pipeline and vessel ruptures and unauthorized discharges of such wastes, substances and hydrocarbons, that could expose the Company to substantial liability due to pollution and other environmental damage. For example, drilling fluids, produced waters and certain other wastes associated with the Company's exploration, development and production of oil or gas are currently excluded under RCRA from the definition of hazardous waste. These wastes are instead regulated under RCRA's less stringent non-hazardous waste provisions. There have been efforts from time to time to remove this exclusion, which removal could have a material adverse effect on the Company's results of operations and financial position. For example, in December 2016, the EPA entered into a settlement agreement with several non-governmental environmental groups in the U.S. District Court for the District of Columbia regarding the agency's alleged failure to timely assess its RCRA Subtitle D criteria regulations for oil and gas wastes. Under the terms of the settlement, the EPA is required to propose no later than March 15, 2019, a rulemaking for the revision of certain Subtitle D criteria regulations pertaining to oil and gas wastes or sign a determination that revision of the regulations is unnecessary. If the EPA proposes a rulemaking for revised oil and gas waste regulations, the settlement requires that the EPA take final action following notice and comment rulemaking no later than July 15, 2021.

The Company currently owns, leases or operates, and in the past has owned, leased or operated, properties that for many years have been used for oil and gas exploration and production activities, and petroleum hydrocarbons, hazardous substances and wastes may have been released on or under such properties, or on or under other locations, including off-site locations, where such substances have been taken for treatment or disposal. These wastes, substances and hydrocarbons may also be released during future operations. In addition, some of the Company's properties have been operated by predecessors or previous owners or operators whose treatment and disposal of hazardous substances, wastes or petroleum hydrocarbons were not under the Company's control. Joint and several strict liabilities may be incurred in connection with such releases of petroleum hydrocarbons, hazardous substances and wastes on, under or from the Company's properties. Private parties, including lessors of properties on which the Company operates and the owners or operators of properties adjacent to the Company's operations and facilities where the Company's petroleum hydrocarbons, hazardous substances or wastes are taken for reclamation or disposal, may also have the right to pursue legal actions to enforce compliance as well as seek damages for noncompliance with environmental laws and regulations or for personal injury or damage to property or natural resources. Such properties and the substances disposed or released on or under them may be subject to CERCLA, RCRA and analogous state laws, which could require the Company to remove previously disposed substances, wastes and petroleum hydrocarbons, remediate contaminated property or perform remedial plugging or pit closure operations to prevent future contamination, the costs of which could have a material adverse effect on the Company's business, financial condition and results of operations.

The Company may not be able to recover some or any of these costs from sources of contractual indemnity or insurance, as pollution and similar environmental risks generally are not insurable or fully insurable, either because such insurance is not available or because of the high premium costs and deductibles associated with obtaining such insurance.

Climate change legislation and regulatory initiatives restricting emissions of GHGs could result in increased operating costs and reduced demand for the oil, NGLs and gas the Company produces, while the potential physical effects of climate change could disrupt the Company's production and cause it to incur significant costs in preparing for or responding to those effects.

Climate change continues to attract considerable public, political and scientific attention. As a result, numerous proposals have been made and are likely to continue to be made at the international, national, regional and state levels of government to monitor and limit emissions of GHGs. These efforts have included consideration of cap-and-trade programs, carbon taxes, GHG reporting and tracking programs, and regulations that directly limit GHG emissions from certain sources. In November 2018, the Trump Administration released the second volume of the fourth interagency National Climate Assessment that is issued pursuant to federal law. The current version outlines potentially severe climate-related impairments for the United States' environment, economy and public health, which are indicated to worsen over time unless significant measures are taken to, among other things, reduce GHG emissions. This assessment could serve as a basis for increasing governmental pursuit of policies to restrict GHG emissions.

In the U.S., no comprehensive climate change legislation has been implemented at the federal level to date. In the absence of federal GHG-limiting legislation, the EPA has determined that GHG emissions present a danger to public health and the environment and has adopted rules under authority of the CAA that, among other things, establish certain permits and construction reviews designed to allow operations while ensuring the prevention of significant deterioration in air quality by GHG emissions from large stationary sources that are already potential sources of significant pollutant emissions. The Company could become subject to these permitting requirements and be required to install "best available control technology" to limit emissions of GHGs from any new or significantly modified facilities that the Company may seek to construct or modify in the future. The EPA has also adopted rules requiring the reporting of GHG emissions on an annual basis from specified GHG emission sources in the United States, including certain oil and gas production facilities, which include certain of the Company's facilities. Federal agencies also have begun directly regulating emissions of methane, a GHG, from oil and gas operations. In 2016, the EPA published a final rule establishing New Source Performance Standards, known as Subpart OOOOa, that require certain new, modified or reconstructed facilities in the oil and gas sector to reduce certain methane gas and volatile organic compound emissions. These Subpart OOOOa standards expand previously issued New Source Performance Standards, published by the EPA in 2012 and known as Subpart OOOO, by using certain equipment-specific emissions control practices. However, in June 2017, the EPA published a proposed rule to stay certain portions of these Subpart OOOOa standards for two years and revisit the entirety of the 2016 standard, but the rule has not been finalized. Rather, in February 2018, the EPA finalized amendments to certain requirements of the 2016 final rule and, in September 2018, the agency proposed additional amendments that included rescission or revision of certain requirements such as fugitive emission monitoring frequency. Furthermore, in 2016, the BLM published a final rule to reduce methane emissions by regulating venting, flaring and leaking from oil and gas operations on public lands. However, in September 2018, the BLM published a final rule that rescinds most of the requirements in the 2016 final rule and codifies the BLM's prior approach to venting and flaring. The rescission of the requirements in the 2016 final rule is being challenged in federal court.

At the state level, some states are considering and other states have issued requirements for the performance of leak detection programs that identify and repair methane leaks at certain oil and gas sources. State rules may be more stringent than federal rules.

Compliance with the EPA's 2016 rule and the BLM's 2016 rule, to the extent either are in effect, or with any future federal or state methane regulations could, among other things, require installation of new emission controls on some of the Company's equipment and significantly increase the Company's capital expenditures and operating costs.

Internationally, in late 2015, the U.S. joined other countries in entering into a United Nations sponsored non-binding agreement in Paris, France for nations to limit their GHG emissions through individually determined emission reduction goals every five years beginning in 2020. In August 2017, the U.S. State Department informed the United Nations of the United States' intention to withdraw from this Paris agreement, which provides for a four-year exit process beginning when it took effect in November 2016.

The adoption and implementation of any federal or state legislation or regulations or international agreements that require reporting of GHGs or otherwise restrict emissions of GHGs from the Company's equipment and operations could require the Company to incur increased capital and operating costs, such as costs to purchase and operate emissions control systems, acquire emissions allowances or comply with new regulatory or reporting requirements, including the imposition of a carbon tax, any of which could have a material adverse effect on the Company's business, financial condition and results of operations. Moreover, such new legislation or regulatory programs as well as conservation plans and efforts undertaken in response to climate change could also materially and adversely affect demand for the oil, NGLs and gas the Company produces and lower the value of its reserves. Depending on the severity of any such limitations, the effect on the value of the Company's reserves could be material. Non-governmental activism directed at shifting funding away from companies with energy-related assets could result in limitations or restrictions on certain sources of funding for the energy sector. In addition, increasing attention to the risks of climate change has resulted in an increased possibility of lawsuits brought by public and private entities against oil and gas companies in connection with their GHG emissions. Should the Company be targeted by any such litigation, it may incur substantial costs, which, to the extent that societal pressures or political or other factors are involved, could be imposed without regard to the causation of or contribution to the asserted damage, or to other mitigating factors.

Finally, it should be noted that some scientists have concluded that increasing concentrations of GHGs in the Earth's atmosphere may produce climate changes that have significant physical effects, such as increased frequency and severity of storms, floods, droughts and other extreme climatic events. If any such effects were to occur, they could have a material adverse effect on the Company's exploration and production operations.

Laws and regulations pertaining to protection of threatened and endangered species or to critical habitat, wetlands and natural resources could delay, restrict or prohibit the Company's operations and cause it to incur substantial costs that may have a material adverse effect on the Company's development and production of reserves.

The federal ESA and comparable state laws were established to protect endangered and threatened species. Under the ESA, if a species is listed as threatened or endangered, restrictions may be imposed on activities adversely affecting that species' habitat. Similar protections are offered to migratory birds under the Federal Migratory Bird Treaty Act. Oil and gas operations in the Company's operating areas may be adversely affected by seasonal or permanent restrictions imposed on drilling activities by the U.S. Fish and Wildlife Services (the "FWS") that are designed to protect various wildlife, which may materially restrict the Company's access to federal or private land use. Permanent restrictions imposed to protect endangered and threatened species could prohibit drilling in certain areas, impact suppliers of critical materials or services, or require the implementation of expensive mitigation measures. Additionally, federal statutes, including the CWA, the OPA and CERCLA, as well as comparable state laws, prohibit certain actions that adversely affect critical habitat, wetlands and natural resources. If harm to species or damages to wetlands, habitat or natural resources occur or may occur, government entities or, at times, private parties may act to prevent oil and gas exploration or development activities or seek damages for harm to species, habitat or natural resources resulting from drilling, construction or releases of petroleum hydrocarbons, wastes, hazardous substances or other regulated materials, and, in some cases, may seek criminal penalties.

Moreover, as a result of one or more settlements entered into by the FWS, the agency is required to make determinations on the potential listing of numerous species as endangered or threatened under the ESA. The designation of previously unprotected species as threatened or endangered in areas where the Company conducts operations could cause the Company to incur increased costs arising from species protection measures or could result in delays, restrictions or prohibitions on its development and production activities that could have a material adverse effect on the Company's ability to develop and produce reserves.

Future price declines could result in a reduction in the carrying value of the Company's proved oil and gas properties, which could materially and adversely affect the Company's results of operations.

Significant or extended price declines could result in the Company having to make downward adjustments to the carrying value of its proved oil and gas properties. The Company performs assessments of its oil and gas properties whenever events or circumstances indicate that the carrying values of those assets may not be recoverable. In order to perform these assessments, management uses various observable and unobservable inputs, including management's outlooks for (i) proved reserves and risk-adjusted probable and possible reserves, (ii) commodity prices, (iii) production costs, (iv) capital expenditures and (v) production. To the extent such tests indicate a reduction of the estimated useful life or estimated future cash flows of the Company's oil and gas properties, the carrying value may not be recoverable and therefore an impairment charge would be required to reduce the carrying value of the proved properties to their fair value. For example, during 2018 and 2017 the Company recorded impairment charges of $77 million and $285 million, respectively, attributable to its Raton Basin field in southeast Colorado, and in 2016, the Company recorded an impairment charge of $32 million attributable to its West Panhandle field assets in the panhandle region of Texas, primarily due to declines in commodity prices and downward adjustments to the economically recoverable reserves attributable to each asset. The Company may incur impairment charges in the future, which could materially affect the Company's results of operations in the period incurred. See "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations - Results of Operations - Impairment of oil and gas properties and other long-lived assets" and Note 4 of Notes to Consolidated Financial Statements included in "Item 8. Financial Statements and Supplementary Data" for additional information.

A portion of the Company's total estimated proved reserves at December 31, 2018 were undeveloped, and those proved reserves may not ultimately be developed.

At December 31, 2018, approximately eight percent of the Company's total estimated proved reserves were undeveloped. Recovery of undeveloped proved reserves requires significant capital expenditures and successful drilling. The Company's reserve data assumes that the Company can and will make these expenditures and conduct these operations successfully, which assumptions may not prove to be correct. If the Company chooses not to spend the capital to develop these proved undeveloped reserves, or if the Company is not otherwise able to successfully develop these proved undeveloped reserves, the Company will be required to write-off these proved reserves. In addition, under the SEC's rules, because proved undeveloped reserves may be booked only if they relate to wells planned to be drilled within five years of the date of booking, the Company may be required to write-off any proved undeveloped reserves that are not developed within this five-year timeframe. As with all oil and gas leases, the Company's leases require the Company to drill wells that are commercially productive and to maintain the production in paying quantities, and if the Company is unsuccessful in drilling such wells and maintaining such production, the Company could lose its rights under such leases. The Company's future production levels and, therefore, its future cash flow and income are highly dependent on successfully developing its proved undeveloped leasehold acreage.

Estimates of proved reserves and future net cash flows are not precise. The actual quantities and net cash flows of the Company's proved reserves may prove to be lower than estimated.

Numerous uncertainties exist in estimating quantities of proved reserves and future net cash flows therefrom. The estimates of proved reserves and related future net cash flows set forth in this Report are based on various assumptions, which may ultimately prove to be inaccurate.

Petroleum engineering is a subjective process of estimating underground accumulations of oil and gas that cannot be measured in an exact manner. Estimates of economically recoverable oil and gas reserves and estimates of future net cash flows depend upon a number of variable factors and assumptions, including the following:

- historical production from the area compared with production from other producing areas;
- the quality and quantity of available data;
- the interpretation of that data;
- the assumed effects of regulations by governmental agencies;
- assumptions concerning future commodity prices; and
- assumptions concerning future development costs, operating costs, severance, ad valorem and excise taxes, gathering, processing, transportation and fractionation costs and workover and remedial costs.

Because all proved reserve estimates are to some degree subjective, each of the following items may differ materially from those assumed in estimating proved reserves:

- the quantities of oil and gas that are ultimately recovered;
- the production costs incurred to recover the reserves;
- the amount and timing of future development expenditures; and
- future commodity prices.

Furthermore, different reserve engineers may make different estimates of proved reserves and cash flows based on the same available data. The Company's actual production, revenues and expenditures with respect to proved reserves will likely be different from estimates, and the differences may be material.

As required by the SEC, the estimated discounted future net cash flows from proved reserves are based on average prices preceding the date of the estimate and costs as of the date of the estimate, while actual future prices and costs may be materially higher or lower. Actual future net cash flows also will be affected by factors such as:

- the amount and timing of actual production;
- the level of future capital spending;
- increases or decreases in the supply of or demand for oil, NGL and gas; and
- changes in governmental regulations or taxation.

Standardized Measure is a reporting convention that provides a common basis for comparing oil and gas companies subject to the rules and regulations of the SEC. In general, it requires the use of commodity prices that are based upon a historical 12-month unweighted average, as well as operating and development costs being incurred at the end of the reporting period. Consequently, it may not reflect the prices ordinarily received or that will be received for future oil and gas production because of seasonal price fluctuations or other varying market conditions, nor may it reflect the actual costs that will be required to produce or develop the oil and gas properties. Accordingly, estimates included herein of future net cash flows may be materially different from the future net cash flows that are ultimately received. In addition, the ten percent discount factor, which is required by the SEC to be used in calculating discounted future net cash flows for reporting purposes, may not be the most appropriate discount factor based on interest rates in effect from time to time and risks associated with the Company or the oil and gas industry in general. Therefore, the estimates of discounted future net cash flows or Standardized Measure in this Report should not be construed as accurate estimates of the current market value of the Company's proved reserves.

The Company periodically evaluates its unproved oil and gas properties to determine recoverability of its cost and could be required to recognize noncash charges in the earnings of future periods.

At December 31, 2018, the Company carried unproved oil and gas property costs of $601 million. GAAP requires periodic evaluation of these costs on a project-by-project basis. These evaluations are affected by the results of exploration activities, commodity price outlooks, planned future sales or expiration of all or a portion of the leases and the contracts and permits appurtenant to such projects. If the quantity of potential reserves determined by such evaluations is not sufficient to fully recover the cost invested in each project, the Company will recognize noncash charges in the earnings of future periods.

Because the Company's proved reserves and production decline continually over time, the Company will need to mitigate these declines through drilling and production enhancement initiatives and/or acquisitions.

Producing oil and gas reservoirs are characterized by declining production rates, which vary depending upon reservoir characteristics and other factors. Because the Company's proved reserves and production decline continually over time as those reserves are produced, the Company will need to mitigate these declines through drilling and production enhancement initiatives and/or acquisitions of additional recoverable reserves. There can be no assurance that the Company will be able to develop, exploit, find or acquire sufficient additional reserves to replace its current or future production.

The Company may be unable to make attractive acquisitions and any acquisition it completes is subject to substantial risks that could materially and adversely affect its business.

Acquisitions of oil and gas properties, including acreage trades, have from time to time contributed to the Company's growth. Acquisition opportunities in the oil and gas industry are very competitive, which can increase the cost of, or cause the Company to refrain from, completing acquisitions. The success of any acquisition will depend on a number of factors and involves potential risks, including, among other things:

- the inability to estimate accurately the costs to develop the reserves, the recoverable volumes of reserves, rates of future production and future net cash flows attainable from the reserves;
- the assumption of unknown liabilities, including environmental liabilities, and losses or costs for which the Company is not indemnified or for which the indemnity the Company receives is inadequate;
- the validity of assumptions about costs, including synergies;
- the effect on the Company's liquidity or financial leverage of using available cash or debt to finance acquisitions;
- the diversion of management's attention from other business concerns; and
- an inability to hire, train or retain qualified personnel to manage and operate the Company's growing business and assets.

All of these factors affect whether an acquisition will ultimately generate cash flows sufficient to provide a suitable return on investment. Even though the Company performs a review of the properties it seeks to acquire that it believes is consistent with industry practices, such reviews are often limited in scope. As a result, among other risks, the Company's initial estimates of reserves may be subject to revision following an acquisition, which may materially and adversely affect the desired benefits of the acquisition.

The Company's ability to complete dispositions of assets, or interests in assets, may be subject to factors beyond its control, and in certain cases the Company may be required to retain liabilities for certain matters.

From time to time, the Company sells an interest in a strategic asset for the purpose of assisting or accelerating the asset's development. In addition, the Company regularly reviews its property base for the purpose of identifying nonstrategic assets, the disposition of which would increase capital resources available for other activities and create organizational and operational efficiencies. Various factors could materially affect the ability of the Company to dispose of such interests or nonstrategic assets or complete announced dispositions, including the receipt of approvals of governmental agencies or third parties and the availability of purchasers willing to acquire the interests or purchase the nonstrategic assets on terms and at prices acceptable to the Company.

Sellers typically retain certain liabilities or indemnify buyers for certain pre-closing matters, such as matters of litigation, environmental contingencies, royalty obligations and income taxes. The magnitude of any such retained liability or indemnification obligation may be difficult to quantify at the time of the transaction and ultimately may be material. Also, as is typical in divestiture transactions, third parties may be unwilling to release the Company from guarantees or other credit support provided prior to the sale of the divested assets. As a result, after a divestiture, the Company may remain secondarily liable for the obligations guaranteed or supported to the extent that the buyer of the assets fails to perform these obligations.

The Company's transportation of gas, sales and purchases of oil, NGLs and gas or other energy commodities, and any derivative activities related to such energy commodities, expose the Company to potential regulatory risks.

The FERC, the FTC and the CFTC hold statutory authority to monitor certain segments of the physical and futures energy commodities markets relevant to the Company's business. These agencies have imposed broad regulations prohibiting fraud and manipulation of such markets. With regard to the Company's transportation of gas in interstate commerce, physical sales and purchases of oil, NGL, gas or other energy commodities, and any derivative activities related to these energy commodities, the Company is required to observe the market-related regulations enforced by these agencies, which hold substantial enforcement authority. Failures to comply with such regulations, as interpreted and enforced, could materially and adversely affect the Company's results of operations and financial condition.

The Company's derivative risk management activities could result in financial losses; the Company may not enter into derivative arrangements with respect to future volumes if prices are unattractive.

To mitigate the effect of commodity price volatility on the Company's net cash provided by operating activities and its net asset value, support the Company's annual capital budgeting and expenditure plans and reduce commodity price risk associated with certain capital projects, the Company's strategy is to enter into derivative arrangements covering a portion of its oil, NGL and gas production. These derivative arrangements are subject to mark-to-market accounting treatment, and the changes in fair market value of the contracts are reported in the Company's statements of operations each quarter, which may result in significant noncash gains or losses. These derivative contracts may also expose the Company to risk of financial loss in certain circumstances, including when:

- production is less than the contracted derivative volumes;
- the counterparty to the derivative contract defaults on its contract obligations;
- there is a change in the expected differential between the underlying price in the derivative contract and actual prices received;
- a sudden, unexpected event materially impacts oil and gas prices; or
- the derivative contracts limit the benefit the Company would otherwise receive from increases in commodity prices.

On the other hand, failure to protect against declines in commodity prices exposes the Company to reduced liquidity when prices decline. A sustained lower commodity price environment would result in lower realized prices for unprotected volumes and reduce the prices at which the Company could enter into derivative contracts on future volumes. This could make such transactions unattractive, and, as a result, some or all of the Company's production volumes forecasted for 2019 and beyond may not be protected by derivative arrangements. In addition, the Company's derivatives arrangements may not achieve their intended strategic purposes.

The failure by counterparties to the Company's derivative risk management activities to perform their obligations could have a material adverse effect on the Company's results of operations.

The use of derivative risk management transactions involves the risk that the counterparties will be unable to meet the financial terms of such transactions. The Company is unable to predict changes in a counterparty's creditworthiness or ability to perform. Even if the Company accurately predicts sudden changes, the Company's ability to negate the risk may be limited depending upon market conditions and the contractual terms of the transactions. During periods of declining commodity prices, the Company's derivative receivable positions generally increase, which increases the Company's counterparty credit exposure. If any of the Company's counterparties were to default on its obligations under the Company's derivative arrangements, such a default could have a material adverse effect on the Company's results of operations, and could result in a larger percentage of the Company's future production being subject to commodity price changes and could increase the likelihood that the Company's derivative arrangements may not achieve their intended strategic purposes.

The enactment of derivatives legislation could have a material adverse effect on the Company's ability to use derivative instruments to reduce the effect of commodity price, interest rate and other risks associated with its business.

The Dodd-Frank Wall Street Reform and Consumer Protection Act (the "Dodd-Frank Act") enacted in July 2010, established federal oversight and regulation of the over-the-counter derivatives market and entities, such as the Company, that participate in that market. The Dodd-Frank Act requires the CFTC and the SEC to promulgate rules and regulations for its implementation. While many Dodd-Frank Act regulations are already in effect, the rulemaking and implementation process is ongoing, and the ultimate effect of the adopted rules and regulations and any future rules and regulations on the Company's business remain uncertain.

In one of the rulemaking proceedings still pending under the Dodd-Frank Act, the CFTC issued in December 2016, proposed rules imposing position limits for certain futures and options contracts in various commodities (including oil and gas) and for swaps that are their economic equivalents. Under the proposed rules on position limits, certain types of derivative transactions are exempt from these limits, provided that such derivative transactions satisfy the CFTC's requirements for certain enumerated "bona fide" derivative transactions. These rules may affect both the size of the positions that the Company may hold and the ability or willingness of counterparties to trade with the Company, potentially increasing the costs of transactions. Moreover, such changes could materially reduce the Company's access to derivative opportunities, which could adversely affect revenues or cash flow during periods of low commodity prices. As these new position limit rules are not yet final, the impact of those provisions on the Company is uncertain at this time.

The CFTC has designated certain interest rate swaps and credit default swaps for mandatory clearing and the associated rules also will require the Company, in connection with covered derivative activities, to comply with clearing and trade-execution requirements or take steps to qualify for an exemption to such requirements. Although the Company believes it qualifies for the end-user exception from the mandatory clearing requirements for swaps entered to mitigate its commercial risks, the application of the mandatory clearing and trade execution requirements to other market participants, such as swap dealers, may change the cost and availability of the swaps that the Company uses. If the Company's swaps do not qualify for the commercial end-user exception, or if the cost of entering into uncleared swaps becomes prohibitive, the Company may be required to clear such transactions. The ultimate effect of the proposed rules and any additional regulations on the Company's business is uncertain.

In addition, certain banking regulators and the CFTC have adopted final rules establishing minimum margin requirements for uncleared swaps. Although the Company expects to qualify for the end-user exception from margin requirements for swaps entered into to manage its commercial risks, the application of such requirements to other market participants, such as swap dealers, may change the cost and availability of the swaps that the Company uses. If any of the Company's swaps do not qualify for the commercial end-user exception, the posting of collateral could reduce its liquidity and cash available for capital expenditures and could reduce its ability to manage commodity price volatility and the volatility in its cash flows.

The full impact of the Dodd-Frank Act and related regulatory requirements upon the Company's business will not be known until the regulations are implemented and the market for derivatives contracts has adjusted. The Dodd-Frank Act and any new regulations could significantly increase the cost of derivative contracts, materially alter the terms of derivative contracts, reduce the availability of derivatives to protect against risks the Company encounters and reduce the Company's ability to monetize or restructure its existing derivative contracts. If the Company reduces its use of derivatives as a result of the Dodd-Frank Act and regulations, the Company's results of operations may become more volatile and its cash flows may be less predictable, which could materially and adversely affect the Company's ability to plan for and fund capital expenditures. Finally, the Dodd-Frank Act was intended, in part, to reduce the volatility of oil and gas prices, which some legislators attributed to speculative trading in derivatives and commodity instruments related to oil and gas. The Company's revenues could therefore be materially and adversely affected if a consequence of the Dodd-Frank Act and implementing regulations is to lower commodity prices. Any of these consequences could have a material adverse effect on the Company, its financial condition and its results of operations. In addition, the European Union and other non-U.S. jurisdictions are implementing regulations with respect to the derivatives market. To the extent the Company transacts with counterparties in foreign jurisdictions, it may become subject to such regulations. At this time, the impact of such regulations is not clear.

The future of the SEC and CFTC's rulemaking remains uncertain. Regulatory agendas that were released in late 2017 indicated that the SEC and CFTC plan to pursue fewer rulemaking items than in prior years. For example, the CFTC announced its intent to take action on an agency-wide internal review focused on simplifying and modernizing CFTC rules, regulations and practices and focus on streamlining the implementation of existing regulations and practices. Although the SEC and the CFTC's agendas are less expansive than they have been in the past, wholesale deregulation of the markets will not necessarily be the outcome. For example, the CFTC plans to take a new look at passing rules on position limits for certain futures contracts, and the SEC intends to re-propose rules for "plain vanilla" exchange-traded funds and add amendments to the Volcker Rule. The Trump Administration has also indicated in public statements that the Dodd-Frank Act will be under scrutiny and that some of its provisions and the rules promulgated thereunder may be revised, repealed or amended. Any such changes, including their nature and impact, cannot yet be determined with any degree of certainty.

Moreover, regulation by the CFTC and banking regulators of the over-the-counter derivatives market and market participants could cause the Company's contract counterparties, which are generally financial institutions and other market participants, to curtail or cease their derivatives activities, which could materially and adversely affect the cost and availability of derivatives to the Company.

Finally, the European Union and other non-U.S. jurisdictions are implementing regulations with respect to the derivatives market. To the extent the Company transacts with counterparties in foreign jurisdictions or counterparties with other businesses that subject them to regulations in foreign jurisdictions, the Company may become subject to, or otherwise affected by, such regulations.

The Company is a party to debt instruments, a credit facility and other financial commitments that may restrict its business and financing activities.

The Company is a borrower under fixed rate senior notes and maintains a credit facility that is currently undrawn. The terms of the Company's borrowings specify scheduled debt repayments and require the Company to comply with certain associated covenants and restrictions. The Company's ability to comply with the debt repayment terms, associated covenants and restrictions is dependent on, among other things, factors outside the Company's direct control, such as commodity prices and interest rates. In addition, from time to time, the Company enters into arrangements and transactions that can give rise to material off-balance sheet obligations, including firm purchase, transportation and fractionation commitments, gathering, processing and transportation commitments on uncertain volumes of future throughput, commitments to purchase minimum volumes of goods and services, operating lease agreements and drilling commitments. The Company's financial commitments could have important consequences to its business including, but not limited to, the following:

- the incurrence of charges associated with unused commitments if future events do not meet the Company's expectations at the time such commitments are entered into;
- increasing its vulnerability to adverse economic and industry conditions;
- limiting its flexibility to plan for, or react to, changes in its business and industry;
- limiting its ability to fund future development activities or engage in future acquisitions; and
- placing it at a competitive disadvantage compared to competitors that have less debt and/or fewer financial commitments.

The Company's ability to obtain additional financing is also affected by the Company's debt credit ratings and competition for available debt financing. A ratings downgrade could materially and adversely impact the Company's ability to access debt markets, increase the borrowing cost under the Company's credit facility and the cost of future debt and potentially require the Company to post letters of credit or other forms of collateral for certain obligations.

See "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations - Capital Commitments, Capital Resources and Liquidity" and Note 7 and Note 10 of Notes to Consolidated Financial Statements included in "Item 8. Financial Statements and Supplementary Data" for additional information.

The Company's ability to declare and pay dividends and repurchase shares is subject to certain considerations.

Dividends are authorized and determined by the Company's board of directors in its sole discretion, and the repurchase of shares pursuant to the Company's stock repurchase program are made from time to time based on management's discretion. Decisions regarding the payment of dividends and the repurchase of shares are subject to a number of considerations, including:

- cash available for distribution;
- the Company's results of operations and anticipated future results of operations;
- the Company's financial condition, especially in relation to the anticipated future capital needs;
- the level of cash reserves the Company may establish to fund future capital expenditures;
- the Company's stock price; and
- other factors the board of directors deems relevant.

The Company can provide no assurance that it will continue to pay dividends or authorize share repurchases at the current rate or at all. Any elimination of or downward revision in the Company's dividend payout or stock repurchase program could have a material adverse effect on the market price of the Company's common stock.

The Company's business could be materially and adversely affected by security threats, including cybersecurity threats, and other disruptions.

As an oil and gas producer, the Company faces various security threats, including cybersecurity threats to gain unauthorized access to, or control of, sensitive information or to render data or systems corrupted or unusable; threats to the security of the Company's facilities and infrastructure or third party facilities and infrastructure, such as processing plants and pipelines; and threats from terrorist acts. The potential for such security threats has subjected the Company's operations to increased risks that could have a material adverse effect on the Company's business. In particular, the Company's implementation of various procedures and controls to monitor and mitigate security threats and to increase security for the Company's information, facilities and infrastructure may result in increased capital and operating costs. Costs for insurance may also increase as a result of security threats, and some insurance coverage may become more difficult to obtain, if available at all. Moreover, there can be no assurance that such procedures and controls will be sufficient to prevent security breaches from occurring. If any of these security breaches were to occur, they could lead to losses of sensitive information, critical infrastructure or capabilities essential to the Company's operations and could have a material adverse effect on the Company's reputation, financial position, results of operations and cash flows.

Cybersecurity attacks in particular are becoming more sophisticated. The Company relies extensively on information technology systems, including internet sites, computer software, data hosting facilities and other hardware and platforms, some of which are hosted by third parties, to assist in conducting its business. The Company's technologies systems and networks, and those of its business associates may become the target of cybersecurity attacks, including without limitation denial-of-service attacks, malicious software, data privacy breaches by employees, insiders or others with authorized access, cyber or phishing-attacks, ransomeware, attempts to gain unauthorized access to data and systems, and other electronic security breaches that could lead to disruptions in critical systems and materially and adversely affect the Company in a variety of ways, including the following:

- unauthorized access to and release of seismic data, reserves information, strategic information or other sensitive or proprietary information, which could have a material adverse effect on the Company's ability to compete for oil and gas resources;
- data corruption, communication interruption, or other operational disruptions during drilling activities, which could result in the failure to reach the intended target or a drilling incident;
- data corruption or operational disruptions of production infrastructure, which could result in loss of production or accidental discharges;
- unauthorized access to and release of personal information of royalty owners, employees and vendors, which could expose the Company to allegations that it did not sufficiently protect that information;
- a cybersecurity attack on a vendor or service provider, which could result in supply chain disruptions and could delay or halt operations;
- a cybersecurity attack on third-party gathering, transportation, processing, fractionation, refining or export facilities, which could delay or prevent the Company from transporting and marketing its production, resulting in a loss of revenues;
- a cybersecurity attack on a communications network or power grid, which could cause operational disruptions resulting in the loss of revenues; and
- a cybersecurity attack on the Company's automated and surveillance systems, which could cause a loss in production and potential environmental hazards.

These events could damage the Company's reputation and lead to financial losses from remedial actions, loss of business or potential liability. Additionally, certain cyber incidents, such as surveillance, may remain undetected for an extended period of time.

As cyber threats continue to evolve, the Company may be required to expend significant additional resources to continue to modify or enhance its protective measures or to investigate and remediate any information security vulnerabilities. Additionally, the continuing and evolving threat of cybersecurity attacks has resulted in evolving legal and compliance matters, including increased regulatory focus on prevention, which could require the Company to expend significant additional resources to meet such requirements.

Provisions of the Company's charter documents and Delaware law may inhibit a takeover, which could limit the price investors might be willing to pay in the future for the Company's common stock.

Provisions in the Company's certificate of incorporation and bylaws may have the effect of delaying or preventing an acquisition of the Company or a merger in which the Company is not the surviving company and may otherwise prevent or slow changes in the Company's board of directors and management. In addition, because the Company is incorporated in Delaware, it is governed by the provisions of Section 203 of the Delaware General Corporation Law. These provisions could discourage an acquisition of the Company or other change in control transactions and thereby negatively affect the price that investors might be willing to pay in the future for the Company's common stock.

The Company periodically evaluates its goodwill for impairment and could be required to recognize noncash charges in the earnings of future periods.

At December 31, 2018, the Company had a carrying value for goodwill of $264 million. Goodwill is assessed for impairment annually during the third quarter and whenever facts or circumstances indicate that the carrying value of the Company's goodwill may be impaired, which may require an estimate of the fair values of the reporting unit's assets and liabilities. Those assessments may be affected by (i) positive or negative reserve adjustments, (ii) results of drilling activities, (iii) management's outlook for commodity prices and costs and expenses, (iv) changes in the Company's market capitalization, (v) changes in the Company's weighted average cost of capital and (vi) changes in income taxes. If the fair value of the reporting unit's net assets is not sufficient to fully support the goodwill balance in the future, the Company will reduce the carrying value of goodwill for the impaired value, with a corresponding noncash charge to earnings in the period in which goodwill is determined to be impaired.

The Company's sand mining operations are subject to operating risks that are often beyond the Company's control, and such risks may not be covered by insurance.

Ownership of industrial sand mining operations is subject to risks, many of which are beyond the Company's control. These risks include:

- unusual or unexpected geological formations or pressures;
- cave-ins, pit wall failures or rock falls;
- unanticipated ground, grade or water conditions;
- inclement or hazardous weather conditions, including flooding, and the physical impacts of climate change;
- environmental hazards, such as unauthorized spills, releases and discharges of wastes, vessel ruptures and emission of unpermitted levels of pollutants;
- changes in laws and regulations;
- inability to acquire or maintain necessary permits or mining or water rights;
- restrictions on blasting operations;
- inability to obtain necessary production equipment or replacement parts;
- reduction in the amount of water available for processing;
- technical difficulties or failures;
- labor disputes;
- late delivery of supplies;
- fires, explosions or other accidents; and
- facility interruptions or shutdowns in response to environmental regulatory actions.

Any of these risks could result in damage to, or destruction of, the Company's mining properties or production facilities, personal injury, environmental damage, delays in mining or processing, losses or possible legal liability. Not all of these risks are insurable, and the Company's insurance coverage contains limits, deductibles, exclusions and endorsements. The Company's insurance coverage may not be sufficient to meet its needs in the event of loss and any such loss may have an adverse effect on the Company.

The Company's sand mining operations are subject to extensive environmental and occupational health and safety regulations that impose significant costs and potential liabilities.

The Company's sand mining operations are subject to a variety of federal, state and local environmental requirements affecting the mining and mineral processing industry, including, among others, those relating to:

- employee health and safety;
- permitting and licensing;
- air emissions and water discharges, GHG emissions, water pollution, waste management and disposal, remediation of soil and groundwater contamination;
- land use restrictions;
- reclamation and restoration of properties; and
- wastes, hazardous substances and other regulated materials and natural resources.

Sand mining operations require numerous governmental, mining and other permits and water rights and approvals authorizing operations at each sand mining facility, and are subject to extensive regulation on matters such as permitting and licensing requirements, reclamation and restoration of mining properties after mining is completed, and the effects that mining have on groundwater quality and availability. Obtaining or renewing required permits or approvals may be delayed or prevented due to opposition by neighboring property owners, members of the public or other third parties and other factors beyond the Company's control. Moreover, issuance of any permits, permit renewals or other approvals by governmental agencies may be conditioned on new or modified requirements or procedures with respect to mining that may be costly or time-consuming to implement. A decision by a governmental agency or other third party to deny or delay issuing a new or renewed permit or approval, or to revoke or substantially modify an existing permit or approval, could have an adverse effect on the Company's sand mining operations at the affected facility.

Some environmental laws impose substantial penalties for noncompliance, and others, such as the CERCLA, impose strict, retroactive and joint and several liability for the remediation of releases of hazardous substances. Failure to properly handle, transport, store or dispose of wastes, hazardous substances and other regulated materials or otherwise conduct the Company's sand mining operations in compliance with environmental and occupational health and safety laws could expose the Company to liability for governmental penalties, cleanup costs and civil or criminal liability associated with releases of such materials into the environment, damages to property or natural resources and other damages, and exposure of workers or other persons to petroleum hydrocarbons, wastes or hazardous substances, as well as potentially impair the Company's ability to conduct its sand mining operations. The Federal Mine Safety and Health Act of 1977, as amended by the Mine Improvement and New Emergency Response Act of 2006, which imposes stringent health and safety standards on numerous aspects of mineral extraction and processing operations, including the training of personnel, operating procedures, operating equipment and other matters.

Furthermore, laws and regulations are subject to amendment, replacement or re-interpretation by more stringent and comprehensive legal requirements. While the Company's environmental compliance costs under existing laws and regulations with respect to its sand mining operations have not historically had a material adverse effect on its results of operations, there can be no assurance that such costs will not be material in the future. Future compliance costs also may be incurred by the Company in connection increased governmental standards or permissible exposure limits for worker health and safety that are imposed in the future for added protection of workers from exposure to pollutants including crystalline silica dust. Moreover, such future environmental and occupational health and safety compliance with existing, new or amended laws and regulations could restrict the Company's ability to expand its facilities or extract mineral deposits or could require the Company to acquire costly equipment or to incur other significant expenses in connection with its sand mining operations or reclamation thereof, which restrictions, costs or expenses could have an adverse effect on the Company's sand mining operations.

Any failure by the Company to comply with applicable laws and regulations in connection with its sand mining operations may cause governmental authorities to take actions that could adversely affect the Company, including:

- issuance of administrative, civil and criminal penalties;
- denial, modification or revocation of permits or other authorizations;
- imposition of injunctive obligations or other limitations on the Company's operations, including interruptions or cessation of operations;
- obligations to install new or improved controls or provide additional personal protective equipment to mitigate exposure to pollutants such as crystalline silica dust; and
- requirements to perform site investigatory, remedial or other corrective actions.

The Company's sand mining operations and hydraulic fracturing may result in silica-related health issues and litigation that could have a material adverse effect on the Company.

The inhalation of respirable crystalline silica dust is associated with the lung disease silicosis. There is evidence of an association between crystalline silica exposure or silicosis and lung cancer and a possible association with other diseases, including immune system disorders, such as scleroderma. These health risks have been, and may continue to be, a significant issue confronting the commercial sand industry. The actual or perceived health risks of mining, processing and handling sand could materially and adversely affect the Company through the threat of product liability or personal injury lawsuits, recently adopted OSHA silica regulations and increased scrutiny by federal, state and local regulatory authorities.

Pioneer Sands LLC ("Pioneer Sands"), the Company's wholly-owned sand mining subsidiary, is named as a defendant, usually among many defendants, in numerous products liability lawsuits brought by or on behalf of current or former employees of Pioneer Sands or its commercial customers alleging damages caused by silica exposure. As of December 31, 2018, Pioneer Sands was the subject of silica exposure claims from 16 plaintiffs. Almost all of the claims pending against Pioneer Sands arise out of the alleged use of Pioneer Sands' sand products in foundries or as an abrasive blast media and have been filed in the states of Texas, Mississippi and Alabama, although some cases have been brought in other jurisdictions over the years.

It is possible that Pioneer Sands will have additional silica-related claims filed against it, including claims that allege silica exposure for periods for which there is not insurance coverage. In addition, it is possible that similar claims could be asserted arising out of the Company's other operations, including its hydraulic fracturing operations. Any pending or future claims or inadequacies of insurance coverage or contractual indemnification could have a material adverse effect on the Company's results of operations.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

Reserve Estimation Procedures and Audits

The information included in this Report about the Company's proved reserves as of December 31, 2018, 2017 and 2016 is based on evaluations prepared by the Company's engineers and audited by Netherland, Sewell & Associates, Inc. ("NSAI"), with respect to the Company's major properties. The Company has no oil and gas reserves from non-traditional sources. Additionally, the Company does not provide optional disclosure of probable or possible reserves.

Reserve estimation procedures. The Company has established internal controls over reserve estimation processes and procedures to support the accurate and timely preparation and disclosure of reserve estimates in accordance with SEC requirements. These controls include oversight of the reserves estimation reporting processes by Pioneer's Corporate Reserves Group ("Corporate Reserves"), and annual external audits of substantial portions of the Company's proved reserves by NSAI.

Corporate Reserves is responsible for the management of the oil and gas proved reserve estimation processes in each of the Company's asset areas. Corporate Reserves is staffed with reservoir engineers and geoscientists who prepare reserve estimates at the end of each calendar quarter for the assets that they manage, using reservoir engineering information technology. There is oversight of the reservoir engineers by the Director of Corporate Reserves and the Vice President of Corporate Reserves, each of whom is in turn subject to direct or indirect oversight by the Company's management committee ("MC"). The Company's MC is comprised of its Chief Executive Officer, Chief Financial Officer and other executive officers. The reserve estimates are prepared by reservoir engineers before being submitted to the Director and Vice President of Corporate Reserves for further review.

The reserve estimates are summarized in reserve reconciliations that quantify reserve changes since the previous year end as revisions of previous estimates, purchases of minerals-in-place, improved recovery, extensions and discoveries, production and sales of minerals-in-place. All reserve estimates, material assumptions and inputs used in reserve estimates and significant changes in reserve estimates are reviewed for engineering and financial appropriateness and compliance with SEC and GAAP standards by Corporate Reserves, in consultation with the Company's accounting and financial management personnel. Annually, the MC reviews the reserve estimates and any differences with the reserve auditors (for the portion of the reserves audited by NSAI) on a consolidated basis before these estimates are approved. The engineers and geoscientists who participate in the reserve estimation and disclosure process periodically attend training provided by external consultants and through internal Pioneer programs. Additionally, Corporate Reserves has prepared and maintains written policies and guidelines for its staff to reference on reserve estimation and preparation to promote consistency in the preparation of the Company's reserve estimates and compliance with the SEC reserve estimation and reporting rules.

Proved reserves audits. The proved reserve audits performed by NSAI for the years ended December 31, 2018, 2017 and 2016, in the aggregate, represented 79 percent, 77 percent and 77 percent of the Company's year-end 2018, 2017 and 2016 proved reserves, respectively; and 95 percent, 91 percent and 93 percent of the Company's year-end 2018, 2017 and 2016 associated pre-tax present value of proved reserves discounted at ten percent, respectively.

NSAI follows the general principles set forth in the "Standards Pertaining to the Estimating and Auditing of Oil and Gas Reserve Information" promulgated by the Society of Petroleum Engineers (the "SPE"). A reserve audit as defined by the SPE is not the same as a financial audit. The SPE's definition of a reserve audit includes the following concepts:

- A reserve audit is an examination of reserve information that is conducted for the purpose of expressing an opinion as to whether such reserve information, in the aggregate, is reasonable and has been presented in conformity with the 2007 SPE publication entitled "Standards Pertaining to the Estimating and Auditing of Oil and Gas Reserves Information."

- The estimation of reserves is an imprecise science due to the many unknown geologic and reservoir factors that cannot be estimated through sampling techniques. Since reserves are only estimates, they cannot be audited for the purpose of verifying exactness. Instead, reserve information is audited for the purpose of reviewing in sufficient detail the policies, procedures and methods used by a company in estimating its reserves so that the reserve auditors may express an opinion as to whether, in the aggregate, the reserve information furnished by a company is reasonable.
- The methods and procedures used by a company, and the reserve information furnished by a company, must be reviewed in sufficient detail to permit the reserve auditor, in its professional judgment, to express an opinion as to the reasonableness of the reserve information. The auditing procedures require the reserve auditor to prepare their own estimates of reserve information for the audited properties.

In conjunction with the audit of the Company's proved reserves and associated pre-tax present value discounted at ten percent, Pioneer provided to NSAI its external and internal engineering and geoscience technical data and analyses. Following NSAI's review of that data, it had the option of honoring Pioneer's interpretations, or making its own interpretations. No data was withheld from NSAI. NSAI accepted without independent verification the accuracy and completeness of the historical information and data furnished by Pioneer with respect to ownership interest, oil and gas production, well test data, commodity prices, operating and development costs, and any agreements relating to current and future operations of the properties and sales of production. However, if in the course of its evaluations something came to its attention that brought into question the validity or sufficiency of any such information or data, NSAI did not rely on such information or data until it had satisfactorily resolved its questions relating thereto or had independently verified such information or data.

In the course of its evaluations, NSAI prepared, for all of the audited properties, its own estimates of the Company's proved reserves and the pre-tax present values of such reserves discounted at ten percent. NSAI reviewed its audit differences with the Company, and, in a number of cases, held meetings with the Company to review additional reserves work performed by the Company's technical teams and any updated performance data related to the proved reserve differences. Such data was incorporated, as appropriate, by both parties into the proved reserve estimates. NSAI's estimates, including any adjustments resulting from additional data, of those proved reserves and the pre-tax present value of such reserves discounted at ten percent did not differ from Pioneer's estimates by more than ten percent in the aggregate. However, when compared on a lease-by-lease, field-by-field or area-by-area basis, some of the Company's estimates were greater than those of the reserve auditors and some were less than the estimates of the reserve auditors. When such differences do not exceed ten percent in the aggregate and NSAI is satisfied that the proved reserves and pre-tax present values of such reserves discounted at ten percent are reasonable and that its audit objectives have been met, NSAI will issue an unqualified audit opinion. Remaining differences are not resolved due to the limited cost benefit of continuing such analyses by the Company and the reserve auditors. At the conclusion of the audit process, it was NSAI's opinion, as set forth in its audit letter, which is included as an exhibit to this Report, that Pioneer's estimates of the Company's proved oil and gas reserves and associated pre-tax present values discounted at ten percent are, in the aggregate, reasonable and have been prepared in accordance with the "Standards Pertaining to the Estimating and Auditing of Oil and Gas Reserves Information."

Qualifications of proved reserves preparers and auditors. Corporate Reserves is staffed by petroleum engineers with extensive industry experience and is managed by the Vice President of Corporate Reserves, the technical person who is primarily responsible for overseeing the Company's reserves estimates. These individuals meet the professional qualifications of reserves estimators and reserves auditors as defined by the "Standards Pertaining to the Estimating and Auditing of Oil and Gas Reserves Information." The qualifications of the Vice President of Corporate Reserves include 41 years of experience as a petroleum engineer, with 34 years focused on reserves reporting for independent oil and gas companies, including Pioneer. His educational background includes an undergraduate degree in Chemical Engineering and a Masters of Business Administration degree in Finance. He is also a Chartered Financial Analyst Charterholder.

NSAI provides worldwide petroleum property analysis services for energy clients, financial organizations and government agencies. NSAI was founded in 1961 and performs consulting petroleum engineering services under Texas Board of Professional Engineers Registration No. F-2699. The technical person primarily responsible for auditing the Company's reserves estimates has been a practicing consulting petroleum engineer at NSAI since 1983 and has over 40 years of practical experience in petroleum engineering, including over 37 years of experience in the estimation and evaluation of proved reserves. He graduated with a Bachelor of Science degree in Chemical Engineering in 1978 and meets or exceeds the education, training and experience requirements set forth in the "Standards Pertaining to the Estimating and Auditing of Oil and Gas Reserves Information."

Technologies used in proved reserves estimates. Proved undeveloped reserves include those reserves that are expected to be recovered from new wells on undrilled acreage, or from existing wells where a relatively major expenditure is required for completion. Undeveloped reserves may be classified as proved reserves on undrilled acreage directly offsetting development areas that are reasonably certain of production when drilled, or where reliable technology provides reasonable certainty of economic producibility. Undrilled locations may be classified as having undeveloped proved reserves only if an ability and intent has been established to drill the reserves within five years, unless specific circumstances justify a longer time period.

In the context of reserves estimations, reasonable certainty means a high degree of confidence that the quantities will be recovered and reliable technology means a grouping of one or more technologies (including computational methods) that has been field-tested and has been demonstrated to provide reasonable certainty that the results will be consistent and repeatable in the formation being evaluated or in an analogous formation. In estimating proved reserves, the Company uses several different traditional methods such as performance-based methods, volumetric-based methods and analogy with similar properties. In addition, the Company utilizes additional technical analysis such as seismic interpretation, wireline formation tests, geophysical logs and core data to provide incremental support for more complex reservoirs. Information from this incremental support is combined with the traditional technologies outlined above to enhance the certainty of the Company's proved reserve estimates.

Proved Reserves

Oil and gas proved reserves, located entirely in the United States, are as follows:

	Summary of Oil and Gas Proved Reserves as of Fiscal Year-End Based on Average Fiscal-Year Prices				
	Proved Reserve Volumes				
	Oil (MBbls)	NGLs (MBbls)	Gas (MMcf) (a)	Total (MBOE)	%
As of December 31, 2018:					
Developed	521,579	219,730	1,330,852	963,118	92%
Undeveloped	43,431	21,184	127,722	85,902	8%
Total proved reserves	565,010	240,914	1,458,574	1,049,020	100%
As of December 31, 2017:					
Developed	442,364	189,434	1,629,451	903,373	92%
Undeveloped	40,525	21,063	122,429	81,993	8%
Total proved reserves	482,889	210,497	1,751,880	985,366	100%
As of December 31, 2016:					
Developed	343,515	126,928	1,215,861	673,085	93%
Undeveloped	34,681	10,013	48,868	52,840	7%
Total proved reserves	378,196	136,941	1,264,729	725,925	100%

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(a) Total proved gas reserves contain 106,948 MMcf, 171,623 MMcf and 137,853 MMcf of gas that the Company expected to be produced and used as field fuel (primarily for compressors), rather than being delivered to a sales point as of December 31, 2018, 2017 and 2016, respectively.

The Company's Standardized Measure of total proved reserves are as follows:

	As of December 31,		
	2018	2017	2016
	(in millions)		
Proved developed reserves	$ 10,694	$ 7,708	$ 4,012
Proved undeveloped reserves	639	443	178
Total proved reserves (a)	$ 11,333	$ 8,151	$ 4,190

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(a) The Standardized Measure of total proved reserves as of December 31, 2018 and 2017 includes the reduction of the federal corporate income tax rate to 21 percent associated with the enactment of the Tax Cut and Jobs Act.

See "Unaudited Supplementary Information" included in "Item 8. Financial Statements and Supplementary Data" for additional information.

Description of Properties

Development drilling activity by significant asset area is as follows:

	Year Ended December 31, 2018	
	Permian Basin	Total Company
Beginning wells in progress	14	14
Wells spud	38	38
Successful wells	(35)	(35)
Unsuccessful wells	(1)	(1)
Ending wells in progress	16	16

Exploration/extension drilling activity by significant asset area is as follows:

	Year Ended December 31, 2018	
	Permian Basin	Total Company
Beginning wells in progress	125	136
Wells spud	289	292
Successful wells	(250)	(251)
Unsuccessful wells	(1)	(10)
Wells sold	—	(1)
Ending wells in progress	163	166

Average daily oil, NGLs, gas and total production by significant asset area are as follows:

	Year Ended December 31, 2018	
	Permian Basin	Total Company
Oil (Bbls)	181,402	190,639
NGLs (Bbls)	54,459	63,780
Gas (Mcf) (a)	282,010	393,391
Total (BOE)	282,862	319,984

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(a) Gas production excludes gas produced and used as field fuel.

Costs incurred by significant asset area are as follows:

	Year Ended December 31, 2018	
	Permian Basin	Total Company
	(in millions)	
Property acquisition costs:		
Proved	$ 1	$ 1
Unproved	64	64
Exploration costs	2,642	2,653
Development costs	911	933
Asset retirement obligations	21	17
Total	$ 3,639	$ 3,668

Permian Basin. With approximately 760,000 gross acres (680,000 net acres), Pioneer is the largest acreage holder in the Spraberry/Wolfcamp field, which the U.S. Geological Survey ("USGS") estimates is the largest continuous oil field in the United States. Pioneer's interests in the northern portion of the play comprise approximately 560,000 gross acres and its interests in the southern portion of the play, where the Company has a joint venture with Sinochem, comprise approximately 200,000 gross acres. The oil produced from the Spraberry/Wolfcamp field is West Texas Intermediate Sweet, and the gas produced is casinghead gas with an average energy content of 1,400 Btu. The oil and gas are produced primarily from six formations, the Spraberry, the Jo Mill, the Dean, the Wolfcamp, the Strawn and the Atoka, at depths ranging from 7,500 feet to 14,000 feet. The Company believes that it has significant resource potential within its Spraberry, Jo Mill and Wolfcamp formation acreage, based on its extensive geologic data covering the Jo Mill, Lower Spraberry and Middle Spraberry intervals and the Wolfcamp A, B, C and D intervals and its drilling results to date.

During 2018, the Company successfully completed 221 horizontal wells in the northern portion of the play and 64 horizontal wells in the southern portion of the play. In the northern portion of the play, approximately 40 percent of the horizontal wells placed on production were Wolfcamp B interval wells, approximately 45 percent were Wolfcamp A interval wells and approximately 15 percent were Spraberry interval wells. The majority of the wells placed on production in the southern portion of the play were Wolfcamp B interval wells. In addition, the Company continues to complete acreage trades that allow the Company to drill wells with longer laterals, improving the expected returns of the wells. The Company estimates that the acreage trades completed in 2018 added approximately 4.6 million lateral feet to the Company's drilling inventory.

The Company plans to operate 21 to 23 rigs in the Spraberry/Wolfcamp field in 2019, with 16 to 18 rigs operating in the northern portion of the play and five rigs operating in the southern portion of the play. During 2019, the Company expects to place on production between 265 and 290 horizontal wells. Approximately 45 percent of the horizontal wells are planned to be drilled in the Wolfcamp B interval, 35 percent in the Wolfcamp A interval and the remaining 20 percent will be a combination of wells in the Spraberry intervals and a limited appraisal program for the Wolfcamp D interval.

Selected Oil and Gas Information

Production, price and cost data. The price that the Company receives for the oil and gas it produces is largely a function of market supply and demand. Demand is affected by general economic conditions, weather and other seasonal conditions, including hurricanes and tropical storms. Over or under supply of oil or gas can result in substantial price volatility. Historically, commodity prices have been volatile and the Company expects that volatility to continue in the future. A decline in oil, NGL and gas prices or poor drilling results could have a material adverse effect on the Company's financial position, results of operations, cash flows, quantities of oil and gas reserves that may be economically produced and the Company's ability to access the capital markets.

The following tables set forth production, price and cost data with respect to the Company's properties. These amounts represent the Company's historical results of operations without making pro forma adjustments for any acquisitions, divestitures or drilling activity that occurred during the respective years. The production amounts will not match the proved reserve volume tables in the "Unaudited Supplementary Information" section included in "Item 8. Financial Statements and Supplementary Data" because field fuel volumes are included in the proved reserve volume tables. Because of normal production declines, increased or decreased drilling activities and the effects of acquisitions or divestitures, the historical information presented below should not be interpreted as being indicative of future results.

PIONEER NATURAL RESOURCES COMPANY

PRODUCTION, PRICE AND COST DATA

	Year Ended December 31, 2018	
	Permian Basin	Total Company
Production information		
Annual sales volumes:		
Oil (MBbls)	66,212	69,583
NGLs (MBbls)	19,878	23,280
Gas (MMcf)	102,934	143,588
Total (MBOE)	103,245	116,794
Average daily sales volumes:		
Oil (Bbls)	181,402	190,639
NGLs (Bbls)	54,459	63,780
Gas (Mcf)	282,010	393,391
Total (BOE)	282,862	319,984
Average prices:		
Oil (per Bbl)	$ 57.13	$ 57.36
NGL (per Bbl)	$ 30.32	$ 29.84
Gas (per Mcf)	$ 1.90	$ 2.13
Revenue (per BOE)	$ 44.37	$ 42.73
Average costs (per BOE):		
Production costs:		
Lease operating	$ 4.27	$ 4.29
Third-party transportation charges	2.21	2.52
Net natural gas plant/gathering	(0.67)	(0.41)
Workover	1.01	0.92
Total	$ 6.82	$ 7.32
Production and ad valorem taxes:		
Ad valorem	$ 0.59	$ 0.60
Production	1.94	1.83
Total	$ 2.53	$ 2.43
Depletion expense	$ 13.42	$ 12.52

PIONEER NATURAL RESOURCES COMPANY

PRODUCTION, PRICE AND COST DATA - (continued)

	Year Ended December 31, 2017	
	Permian Basin	Total Company
Production information		
Annual sales volumes:		
Oil (MBbls)	53,889	57,878
NGLs (MBbls)	16,096	20,078
Gas (MMcf)	71,140	128,665
Total (MBOE)	81,842	99,401
Average daily sales volumes:		
Oil (Bbls)	147,641	158,571
NGLs (Bbls)	44,099	55,008
Gas (Mcf)	194,904	352,507
Total (BOE)	224,224	272,330
Average prices:		
Oil (per Bbl)	$ 48.32	$ 48.24
NGL (per Bbl)	$ 18.69	$ 19.31
Gas (per Mcf)	$ 2.45	$ 2.63
Revenue (per BOE)	$ 37.62	$ 35.39
Average costs (per BOE):		
Production costs:		
Lease operating	$ 4.36	$ 4.58
Third-party transportation charges	0.19	0.85
Net natural gas plant/gathering	(0.63)	(0.28)
Workover	0.87	0.80
Total	$ 4.79	$ 5.95
Production and ad valorem taxes:		
Ad valorem	$ 0.58	$ 0.57
Production	1.81	1.59
Total	$ 2.39	$ 2.16
Depletion expense	$ 15.34	$ 13.61

PIONEER NATURAL RESOURCES COMPANY

PRODUCTION, PRICE AND COST DATA - (continued)

	Year Ended December 31, 2016	
	Permian Basin	Total Company
Production information		
Annual sales volumes:		
Oil (MBbls)	43,049	48,926
NGLs (MBbls)	10,886	15,922
Gas (MMcf)	51,528	124,428
Total (MBOE)	62,523	85,586
Average daily sales volumes:		
Oil (Bbls)	117,619	133,677
NGLs (Bbls)	29,743	43,504
Gas (Mcf)	140,788	339,966
Total (BOE)	170,827	233,842
Average prices:		
Oil (per Bbl)	$ 40.30	$ 39.65
NGL (per Bbl)	$ 13.48	$ 13.49
Gas (per Mcf)	$ 2.11	$ 2.11
Revenue (per BOE)	$ 31.84	$ 28.25
Average costs (per BOE):		
Production costs:		
Lease operating	$ 5.35	$ 5.02
Third-party transportation charges	0.20	1.41
Net natural gas plant/gathering	(0.43)	0.01
Workover	0.35	0.35
Total	$ 5.47	$ 6.79
Production and ad valorem taxes:		
Ad valorem	$ 0.50	$ 0.46
Production	1.44	1.14
Total	$ 1.94	$ 1.60
Depletion expense	$ 19.62	$ 16.77

Productive wells. Productive wells consist of producing wells and wells capable of production, including shut-in wells and gas wells awaiting pipeline connections to commence deliveries and oil wells awaiting connection to production facilities. One or more completions in the same well bore are counted as one well. Any well in which one of the multiple completions is an oil completion is classified as an oil well.

Productive oil and gas wells attributable to the Company's properties are as follows:

PRODUCTIVE WELLS

As of December 31, 2018

Gross Productive Wells			Net Productive Wells		
Oil	Gas	Total	Oil	Gas	Total
7,454	694	8,148	6,568	371	6,939

Developed, undeveloped and royalty leasehold acreage is as follows:

LEASEHOLD ACREAGE

As of December 31, 2018

Developed Acreage		Undeveloped Acreage		
Gross Acres	Net Acres	Gross Acres	Net Acres	Royalty Acreage
884,713	736,546	42,913	35,225	106,143

The expiration dates of the leases attributable to gross and net undeveloped acres are as follows:

	As of December 31, 2018	
	Acres Expiring (a)	
	Gross	Net
2019	21,739	19,399
2020	4,565	2,329
2021	1,517	285
2022	2,004	1,636
2023	5,592	5,333
Thereafter	7,496	6,243
	42,913	35,225

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(a) Acres expiring are based on contractual lease maturities.

Of the 21,728 net acres expiring in 2019 and 2020, 20,254 net acres are concentrated in the Permian Basin in West Texas, where the Company has an active drilling program and ongoing efforts to extend leases that may not be drilled prior to expiration. The Company currently has no proved undeveloped reserve locations scheduled to be drilled after lease expiration. The remaining 1,474 net acres are concentrated in eastern Colorado. The Company has no drilling plans for this acreage and does not have any undeveloped acreage costs recorded as of December 31, 2018 associated with this acreage.

Drilling and other exploratory and development activities. The following table sets forth the number of gross and net wells drilled by the Company that were productive or dry holes. This information should not be considered indicative of future performance, nor should it be assumed that there was any correlation between the number of productive wells drilled and the oil and gas reserves generated thereby or the costs to the Company of productive wells compared to the costs of dry holes.

DRILLING ACTIVITIES

	Gross Wells			Net Wells		
	Year Ended December 31,			Year Ended December 31,		
	2018	2017	2016	2018	2017	2016
Productive wells:						
Development	35	26	39	23	20	32
Exploratory	251	222	215	226	198	194
Dry holes:						
Development	1	—	—	1	—	—
Exploratory	10	2	—	6	1	—
	297	250	254	256	219	226
Success ratio (a)	96%	99%	100%	97%	99%	100%

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(a) Represents the ratio of those wells that were successfully completed as producing wells or wells capable of producing to total wells drilled and evaluated.

Wells in process of being drilled are as follows:

	As of December 31, 2018	
	Gross Wells	Net Wells
Development	16	10
Exploratory	166	152
	182	162

ITEM 3. LEGAL PROCEEDINGS

The Company is party to various proceedings and claims incidental to its business. While many of these matters involve inherent uncertainty, the Company believes that the amount of the liability, if any, ultimately incurred with respect to these proceedings and claims will not have a material adverse effect on the Company's consolidated financial position as a whole or on its liquidity, capital resources or future annual results of operations. See Note 10 of Notes to Consolidated Financial Statements included in "Item 8. Financial Statements and Supplementary Data" for additional information.

ITEM 4. MINE SAFETY DISCLOSURES

The Company's sand mines are subject to regulation by the Federal Mine Safety and Health Administration under the Federal Mine Safety and Health Act of 1977, as amended by the Mine Improvement and New Emergency Response Act of 2006. Information concerning mine safety violations or other regulatory matters required by Section 1503(a) of the Dodd-Frank Wall Street Reform and Consumer Protection Act and Item 104 of Regulation S-K is included in Exhibit 95.1 to this Annual Report filed on Form 10-K.

EXECUTIVE OFFICERS OF THE REGISTRANT

The following table sets forth certain information as of the date of this Report regarding the Company's executive officers. All of the Company's executive officers serve at the discretion of the Company's board of directors. There are no family relationships among any of the Company's directors or executive officers.

Name	Position	Age
Scott D. Sheffield	President and Chief Executive Officer	66
Mark S. Berg	Executive Vice President, Corporate/Vertically Integrated Operations	60
Chris J. Cheatwood	Executive Vice President and Chief Technology Officer	58
Richard P. Dealy	Executive Vice President and Chief Financial Officer	52
J.D. Hall	Executive Vice President, Permian Operations	53
Kenneth H. Sheffield, Jr.	Executive Vice President, Operations/Engineering/Facilities	58
William F. Hannes	Senior Vice President, Special Projects	59
Mark H. Kleinman	Senior Vice President and General Counsel	57
Teresa A. Fairbrook	Vice President and Chief Human Resources Officer	45
Margaret M. Montemayor	Vice President and Chief Accounting Officer	41
Neal H. Shah	Vice President, Investor Relations	48
Stephanie D. Stewart	Vice President and Chief Information Officer	50

Scott D. Sheffield

Mr. Sheffield was appointed Company's President and Chief Executive Officer in February 2019. Previously, he had served as Chief Executive Officer of the Company from 1997 through December 31, 2016, and then as the Executive Chairman until December 31, 2017. He has served as a director of the Company since 1997 and had served as Chairman of the Board from 1999 through February 2019. Mr. Sheffield was the Chairman of the Board of Directors and Chief Executive Officer of Parker & Parsley Petroleum Company, a predecessor of the Company (together with its predecessor companies, "Parker & Parsley"), from January 1989 until the Company was formed in August 1997. Mr. Sheffield joined Parker & Parsley as a petroleum engineer in 1979, was promoted to Vice President - Engineering in September 1981, was elected President and a Director in April 1985, and became Parker & Parsley's Chairman of the Board and Chief Executive Officer on January 19, 1989. Before joining Parker & Parsley, Mr. Sheffield was employed as a production and reservoir engineer for Amoco Production Company. He had also served as Chief Executive Officer and director from June 2007, and as Chairman of the Board from May 2008, of the general partner of Pioneer Southwest Energy Partners L.P. ("Pioneer Southwest") through December 2013. Mr. Sheffield is a distinguished graduate of the University of Texas with a Bachelor of Science degree in Petroleum Engineering.

Mark S. Berg

Mr. Berg was elected as the Company's Executive Vice President and General Counsel in April 2005, serving in those capacities until January 2014, at which time he assumed broader executive responsibilities, most recently being elected to serve as Executive Vice President, Corporate/Vertically Integrated Operations in May 2017. Mr. Berg had previously served as Executive Vice President, Corporate/Operations since August 2015 and Executive Vice President and General Counsel of the general partner of Pioneer Southwest from June 2007 through the Company's acquisition of Pioneer Southwest in December 2013. Prior to joining the Company, Mr. Berg served as Executive Vice President, General Counsel and Secretary of American General Corporation, a Fortune 200 diversified financial services company, from 1997 through 2002. Subsequent to the sale of American General to American International Group, Inc., Mr. Berg joined Hanover Compressor Company as Senior Vice President, General Counsel and Secretary. He served in that capacity from May 2002 through April 2004. Mr. Berg began his career in 1983 with the Houston-based law firm of Vinson & Elkins L.L.P. He was a partner with the firm from 1990 through 1997. Mr. Berg is also a director of ProPetro Holding Corp. and HighPoint Resources Corporation. Mr. Berg graduated Magna Cum Laude and Phi Beta Kappa with a Bachelor of Arts degree from Tulane University in 1980. He earned his Juris Doctorate with honors from the University of Texas School of Law in 1983.

Chris J. Cheatwood

Mr. Cheatwood was elected as the Company's Executive Vice President and Chief Technology Officer in May 2017. Mr. Cheatwood had previously served as Executive Vice President, Business Development and Geoscience since November 2011, Executive Vice President, Business Development and Technology from February 2010 until November 2011, Executive Vice President, Geoscience from November 2007 until February 2010, Executive Vice President - Worldwide Exploration from January 2002 until November 2007, Senior Vice President - Worldwide Exploration from December 2000 to January 2002 and Vice

President - Domestic Exploration from July 1998 to December 2000. Mr. Cheatwood also served as an Executive Vice President of the general partner of Pioneer Southwest from June 2007 through the Company's acquisition of Pioneer Southwest in December 2013. Before joining the Company, Mr. Cheatwood spent ten years with Exxon Corporation. Mr. Cheatwood is a graduate of the University of Oklahoma with a Bachelor of Science degree in Geology and earned his Master of Science degree in Geology from the University of Tulsa.

Richard P. Dealy

Mr. Dealy was elected as the Company's Executive Vice President and Chief Financial Officer in November 2004. Mr. Dealy held positions for the Company as Vice President and Chief Accounting Officer from February 1998 to November 2004 and Vice President and Controller from August 1997 to January 1998. Mr. Dealy also served as Executive Vice President, Chief Financial Officer, Treasurer and Director of the general partner of Pioneer Southwest from June 2007 through the Company's acquisition of Pioneer Southwest in December 2013. Mr. Dealy joined Parker & Parsley in July 1992 and was promoted to Vice President and Controller in 1996, in which position he served until August 1997. Before joining Parker & Parsley, Mr. Dealy was employed by KPMG LLP. Mr. Dealy graduated with honors from Eastern New Mexico University with a Bachelor of Business Administration degree in Accounting and Finance and is a Certified Public Accountant.

J. D. Hall

Mr. Hall was elected as the Company's Executive Vice President, Permian Operations, in August 2015. Mr. Hall had previously held positions for the Company as Executive Vice President, Southern Wolfcamp Operations from August 2014 to August 2015, Senior Vice President, South Texas Operations from June 2013 to August 2014, Vice President, South Texas Operations from February 2013 to June 2013, Vice President, South Texas Asset Team from September 2012 to February 2013 and Vice President, Eagle Ford Asset Team from January 2010 to September 2012. Prior to his positions in South Texas, he was the Operations Manager in Alaska from January 2005 to January 2010. He previously held several other positions with the Company, including managing offshore, onshore and international projects. He began his career with a predecessor company, MESA, Inc. ("MESA"), in 1989. He has a Bachelor of Science degree in Mechanical Engineering from Texas Tech University and is a Registered Professional Engineer in Texas.

Kenneth H. Sheffield, Jr.

Mr. Sheffield was elected as the Company's Executive Vice President, Operations/Engineering/Facilities in May 2017. Mr. Sheffield had previously served the Company in a number of executive positions, including Executive Vice President, South Texas Asset Team, Western Asset Team and Corporate Engineering from August 2015 to May 2017, Executive Vice President, South Texas Operations from August 2014 to August 2015, Senior Vice President, Operations and Engineering from June 2013 to August 2014, Vice President, Corporate Engineering from November 2011 to June 2013 and President of the Company's Alaska subsidiary from September 2002 to November 2011. Mr. Sheffield joined MESA in June 1982 and held a number of supervisory and technical positions with MESA in the areas of drilling, production, reservoir engineering and acquisitions until being promoted to Vice President Acquisitions & Development in 1996. He is a graduate of Texas A&M University with a Bachelor of Science degree in Petroleum Engineering.

William F. Hannes

Mr. Hannes was elected as the Company's Senior Vice President, Special Projects in January 2017. Mr. Hannes had previously served the Company as Senior Vice President, Special Management Committee Advisor since August 2014, Executive Vice President, Southern Wolfcamp Operations from February 2013 until August 2014, Executive Vice President, South Texas Operations from February 2010 until February 2013, Executive Vice President, Business Development from December 2007 until February 2010, Executive Vice President, Worldwide Business Development from November 2005 until December 2007 and Vice President, Engineering and Development from September 2003 until November 2005. Mr. Hannes joined Parker & Parsley in July 1997 as Director of Business Development, and continued to serve the Company in this capacity after the Company's formation in August 1997 until he was promoted to Vice President - Engineering and Development in June 2001, which position he held until November 2005. Prior to joining Parker & Parsley, Mr. Hannes held engineering positions with Mobil Corporation and Superior Oil Company. Mr. Hannes earned his Bachelor of Science degree in Petroleum Engineering from Texas A&M University.

Mark H. Kleinman

Mr. Kleinman was elected as the Company's Senior Vice President and General Counsel in January 2014. He also held the positions of Corporate Secretary from June 2005 through August 2015, Vice President from May 2006 until January 2014 and Chief Compliance Officer from June 2005 until May 2013. Mr. Kleinman also served as Vice President and Secretary of the general partner of Pioneer Southwest from June 2007 until April 2008 and as its Vice President and Chief Compliance Officer from April

2008 through the Company's acquisition of Pioneer Southwest in December 2013. Mr. Kleinman earned a Bachelor of Arts degree in Government from the University of Texas and graduated, with honors, from the University of Texas School of Law.

Teresa A. Fairbrook

Ms. Fairbrook was elected as the Company's Vice President and Chief Human Resources Officer in March 2016, prior to which she had served as Vice President, Human Resources since February 2013. She joined the Company in 1999, serving in a number of positions in the Human Resources Department. Prior to joining the Company, Ms. Fairbrook was in human resources at Dal-Tile Corporation in Dallas, Texas, where she held a variety of roles in employee relations, recruiting and benefits. Ms. Fairbrook received a Bachelor of Business Administration degree from St. Mary's University in San Antonio, Texas, with an emphasis in Human Resource Management, and is a Certified Compensation Professional.

Margaret M. Montemayor

Ms. Montemayor was elected as the Company's Vice President and Chief Accounting Officer in March 2014. Ms. Montemayor had previously served the Company as Vice President and Corporate Controller since January 2014, Corporate Controller from April 2012 to December 2013 and Director of Technical Accounting and Financial Reporting from June 2010 to March 2012. Prior to joining the Company, Ms. Montemayor served as a Manager at PricewaterhouseCoopers LLP since June 2006. Ms. Montemayor graduated from St. Mary's University in San Antonio, Texas with a Bachelor of Business Administration degree in Accounting and a Master of Business Administration degree and is a Certified Public Accountant.

Neal H. Shah

Mr. Shah joined the Company in June 2017 as Vice President, Investor Relations. Before joining the Company, Mr. Shah served as Senior Equity Research Analyst at Thrivent Asset Management from June 2016 to June 2017, and as Vice President at Nuveen LLC from March 2006 to June 2016. He has a financial and equity research background and has held various financial analysis positions at Piper Jaffray & Company, RBC Capital Markets and Goldman Sachs & Company. Mr. Shah earned a Bachelor of Science degree in Electrical Engineering from Louisiana State University and a Master of Business Administration degree from the Booth School of Business at the University of Chicago, where he was a Siebel Scholar and a recipient of the Irwin J. Biedrman Leadership award.

Stephanie D. Stewart

Ms. Stewart joined the Company in June 2014 as Vice President and Chief Information Officer. Before joining the Company, she served as Vice President of E&P Data and Analytics at the end of her 12-year tenure at Devon Energy. Prior to Devon Energy, she worked in information technology at Williams Energy and BP Amoco. Ms. Stewart earned a Bachelor of Business Administration degree from the University of Oklahoma and her Executive Master of Business Administration degree in Energy from the University of Oklahoma's Price College of Business.

Officers are generally elected by the Company's board of directors at its meeting on the day of each annual election of directors, with each such officer serving until a successor has been elected and qualified.

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

The Company's common stock is listed and traded on the NYSE under the symbol "PXD." The Company's board of directors has authority to declare dividends to the holders of the Company's common stock. The board of directors intends to consider the payment of dividends to the holders of the Company's common stock in the future. The declaration and payment of future dividends, however, will be at the discretion of the board of directors and will depend on, among other things, the Company's earnings, financial condition, capital requirements, level of indebtedness, statutory and contractual restrictions applying to the payment of dividends and other considerations that the board of directors deems relevant.

As of February 21, 2019, the Company's common stock was held by 9,900 holders of record.

Purchases of Equity Securities by the Issuer and Affiliated Purchasers

Purchases of the Company's common stock are as follows:

	Three months ended December 31, 2018			
Period	**Total Number of Shares Purchased (a)**	**Average Price Paid per Share**	**Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs**	**Approximate Dollar Amount of Shares that May Yet Be Purchased under Plans or Programs (b)**
October 2018	51	$ 175.90	—	$ 77,647,626
November 2018	38	$ 154.31	—	$ 77,647,626
December 2018	976,412	$ 130.94	973,465	$ 1,872,535,773
	976,501		973,465	

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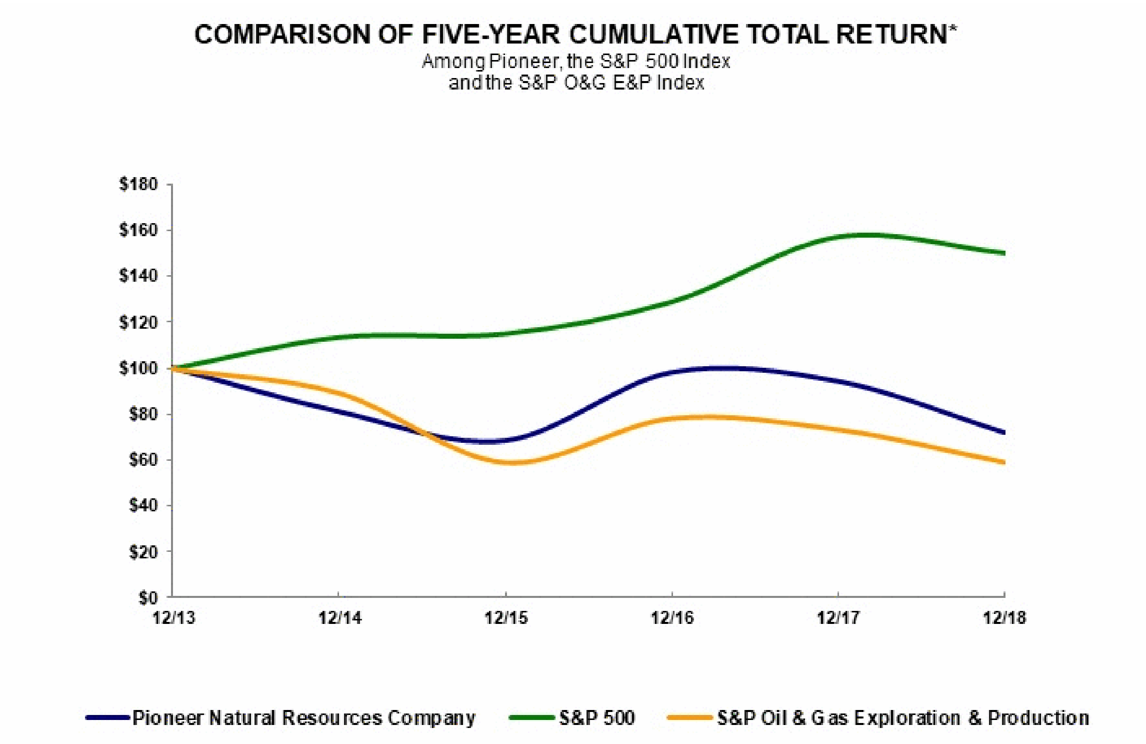
(a) Includes shares purchased from employees in order for employees to satisfy income tax withholding payments related to share-based awards that vested during the period.

(b) In February 2018, the Company's board of directors authorized a $100 million common stock repurchase program. In December 2018, the Company's board of directors canceled the previously authorized program and authorized a new $2 billion common stock repurchase program.

Performance Graph

The following performance graph and related information shall not be deemed "soliciting material" or to be "filed" with the Securities and Exchange Commission, nor shall the information be incorporated by reference into any future filing under the Securities Act of 1933 or Securities Exchange Act of 1934, each as amended, except to the extent that the Company specifically incorporates it by reference into such filing.

The following graph compares the cumulative total stockholder return on the Company's common stock during the five-year period ended December 31, 2018, with cumulative total returns during the same period for the Standard & Poor's ("S&P") Oil and Gas Exploration & Production Index and the S&P 500.



*$100 invested on 12/31/13 in stock or index, including reinvestment of dividends.

	As of December 31,					
	2013	2014	2015	2016	2017	2018
Pioneer Natural Resources Company	$ 100.00	$ 80.90	$ 68.18	$ 97.97	$ 94.09	$ 71.73
S&P 500	$ 100.00	$ 113.69	$ 115.26	$ 129.05	$ 157.22	$ 150.33
S&P Oil & Gas Exploration & Production	$ 100.00	$ 89.41	$ 58.87	$ 78.22	$ 73.29	$ 58.99

The stock price performance included in this graph is not necessarily indicative of future stock price performance.

ITEM 6. SELECTED FINANCIAL DATA

The Company's selected consolidated financial data as of and for each of the five years ended December 31, 2018 should be read in conjunction with "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations" and "Item 8. Financial Statements and Supplementary Data."

	Year Ended December 31,				
	2018	2017	2016	2015	2014
	(in millions, except per share data)				
Statements of Operations Data:					
Oil and gas revenues (a)	$ 4,991	$ 3,518	$ 2,418	$ 2,178	$ 3,599
Sales of purchased oil and gas (b)	$ 4,388	$ 1,776	$ 1,091	$ 700	$ 608
Gain on disposition of assets, net (c)	$ 290	$ 208	$ 2	$ 782	$ 9
Total revenues and other income	$ 9,415	$ 5,455	$ 3,382	$ 4,561	$ 4,954
Purchased oil and gas (b)	$ 3,930	$ 1,807	$ 1,155	$ 739	$ 585
Total costs and expenses (a)(d)	$ 8,164	$ 5,146	$ 4,341	$ 4,982	$ 3,357
Income (loss) from continuing operations	$ 975	$ 833	$ (556)	$ (266)	$ 1,041
Loss from discontinued operations, net of tax	$ —	$ —	$ —	$ (7)	$ (111)
Net income (loss) attributable to common stockholders	$ 978	$ 833	$ (556)	$ (273)	$ 930
Income (loss) from continuing operations attributable to common stockholders per share:					
Basic	$ 5.71	$ 4.86	$ (3.34)	$ (1.79)	$ 7.17
Diluted	$ 5.70	$ 4.85	$ (3.34)	$ (1.79)	$ 7.15
Net income (loss) attributable to common stockholders per share:					
Basic	$ 5.71	$ 4.86	$ (3.34)	$ (1.83)	$ 6.40
Diluted	$ 5.70	$ 4.85	$ (3.34)	$ (1.83)	$ 6.38
Dividends declared per share	$ 0.32	$ 0.08	$ 0.08	$ 0.08	$ 0.08
Balance Sheet Data (as of December 31):					
Total assets	$ 17,903	$ 17,003	$ 16,459	$ 15,154	$ 14,909
Long-term obligations	$ 3,974	$ 3,596	$ 4,482	$ 5,317	$ 4,901
Total equity	$ 12,111	$ 11,279	$ 10,411	$ 8,375	$ 8,589

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(a) Results for 2018 are presented under Accounting Standards Codification ("ASC") 606, "Revenue from Contracts with Customers," while prior period amounts are not adjusted and continue to be reported in accordance with historical accounting under ASC 605, "Revenue Recognition." See Note 2 of Notes to Consolidated Financial Statements included in "Item 8. Financial Statements and Supplementary Data" for additional information.

(b) The Company enters into purchase transactions with third parties and separate sale transactions with third parties to (i) diversify a portion of the Company's oil sales to the Gulf Coast refinery or international export markets and (ii) satisfy unused gas pipeline capacity commitments. The net balance of these transactions results in either a cash uplift or cash detriment associated with these purchase and sale transactions.

(c) See Note 3 of Notes to Consolidated Financial Statements included in "Item 8. Financial Statements and Supplementary Data" for additional information.

(d) The Company recorded unusual items in total costs and expenses as follows:
  - 2018: $77 million of noncash impairment charges related to the Company's gas field assets in the Raton Basin; $443 million of accelerated depreciation on its sand mine assets to be decommissioned in 2019; $39 million of employee-related charges; and $124 million of contract termination charges associated with the Company's asset divestitures.
  - 2017: $285 million of noncash impairment charges related to gas field assets in the Raton Basin.
  - 2016: $32 million of noncash impairment charges related to oil and gas properties in the West Panhandle gas and liquids field.
  - 2015: $1.1 billion of noncash impairment charges related to oil and gas properties in the West Panhandle gas and liquids field and West Eagle Ford Shale gas and liquids field.

See Note 3, Note 4 and Note 15 of Notes to Consolidated Financial Statements included in "Item 8. Financial Statements and Supplementary Data" for additional information.

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Financial and Operating Performance

Pioneer's financial and operating performance for 2018 included the following highlights:

- Net income attributable to common stockholders was $978 million ($5.70 per diluted share) for the year ended December 31, 2018, as compared to net income of $833 million ($4.85 per diluted share) in 2017. The primary components of the $145 million increase in earnings attributable to common stockholders include:
    - a $1.5 billion increase in oil and gas revenues as a result of a 21 percent increase in average realized commodity prices per BOE, including the effects of a $207 million increase in gas and NGL revenues as a result of the adoption of new revenue recognition rules in 2018, combined with a 17 percent increase in sales volumes;
    - a $489 million increase in net revenue generated by purchases and sales of oil and gas, primarily related to the Company's firm transportation agreements that provide opportunities for enhanced margins by moving oil and gas from the Company's areas of production to price advantaged markets;
    - a $208 million decrease in impairment charges reflecting the 2018 noncash impairment charge of $77 million to reduce the carrying value of the Company's Raton Basin assets as compared to the 2017 noncash impairment charge of $285 million related to the same assets;
    - an $82 million increase in net gains on disposition of assets reflecting the 2018 divestitures of the Company's pressure pumping assets; Sinor Nest (Lower Wilcox) oil field; West Panhandle and West Eagle Ford Shale gas and liquids fields; and Raton Basin gas field assets; and
    - a $27 million decrease in interest expense, primarily due to the repayment of the Company's 6.875% senior notes, which matured in May 2018.

    Partially offset by:

    - an $800 million increase in the Company's income tax provision, primarily a result of the 2017 Tax Cuts and Jobs Act, which resulted in recording a $625 million income tax benefit during 2017;
    - a $605 million increase in other expense, primarily related to a noncash charge of $443 million associated with the Company's planned closure of its Brady, Texas sand mine and $173 million of asset divestiture-related charges associated with the sale of the aforementioned pressure pumping assets and oil and gas properties during 2018;
    - a $333 million increase in total oil and gas production costs and production and ad valorem taxes as a result of the adoption of new revenue recognition rules, which had the effect of increasing production costs by $207 million in 2018 and the aforementioned increases in commodity prices and sales volumes;
    - a $192 million increase in derivative net losses, primarily as a result of changes in forward commodity prices and the cash settlement of derivative positions in accordance with their terms;
    - a $134 million increase in DD&A expense, primarily related to the aforementioned increase in sales volumes due to the Company's successful Spraberry/Wolfcamp horizontal drilling program; and
    - a $55 million increase in general and administrative expense, primarily due to an increase in compensation costs, including benefits expense, as a result of an increase in headcount due to the Company's continued growth and costs associated with the implementation of a new enterprise resource planning system.
- During 2018, average daily sales volumes increased on a BOE basis by 17 percent to 319,984 BOEPD, as compared to 272,330 BOEPD during 2017, primarily due to the Company's successful Spraberry/Wolfcamp horizontal drilling program, which more than offset the loss of production associated with the Company's 2018 divestitures.
- Average oil and NGL prices increased per Bbl in 2018 to $57.36 and $29.84, respectively, as compared to $48.24 and $19.31, respectively, in 2017. Average gas prices decreased per Mcf in 2018 to $2.13 as compared to $2.63 in 2017.
- Net cash provided by operating activities increased by 54 percent to $3.2 billion for 2018, as compared to $2.1 billion during 2017, primarily due to increases in the Company's oil and gas revenues in 2018 as a result of increases in commodity prices and sales volumes, partially offset by a $627 million reduction in cash available from commodity derivative activities.

First Quarter 2019 Outlook

Based on the Company's ongoing South Texas divestiture process, it is only providing Permian Basin specific estimates for production, production costs and DD&A expense for the quarter ending March 31, 2019. All other operating and financial results for the quarter ending March 31, 2019 provided below reflect the expected results of the total Company.

	Three Months Ending March 31, 2019
	Guidance
	(in millions, except volumes, per BOE amounts and percentages)
Permian Basin Specific Guidance:	
Average daily production (MBOE)	302 - 317
Average daily oil production (MBbl)	194 - 204
Production costs per BOE	$8.50 - $10.50
DD&A per BOE	$13.00 - $15.00
Total Company Guidance:	
Exploration and abandonments expense	$20 - $30
General and administrative expense	$95 - $100
Accretion of discount on asset retirement obligations	$3 - $6
Interest expense	$28 - $33
Other expense	$45 - $55
Cash flow uplift from firm transportation	$40 - $100
Current income tax provision (benefit)	<$5
Effective tax rate	21% - 25%

2019 Capital Budget

The Company's capital budget for 2019 is expected to be in the range of $3.1 billion to $3.4 billion, consisting of $2.8 billion to $3.1 billion for drilling and completion related activities, including additional tank batteries and saltwater disposal facilities, and $300 million for gas processing facilities, water infrastructure, well services and vehicles. The 2019 capital budget excludes acquisitions, asset retirement obligations, capitalized interest and geological and geophysical general and administrative expense and corporate facilities.

The 2019 capital budget is expected to be funded from a combination of operating cash flow, cash and cash equivalents on hand, sales of short-term and long-term investments and, if necessary, proceeds from planned asset divestitures or borrowings under the Company's credit facility.

Divestitures

In February 2018, the Company announced its intention to divest its properties in the South Texas, Raton Basin and West Panhandle fields and focus its efforts and capital resources on its Permian Basin assets.

In December 2018, the Company completed the sale of its pressure pumping assets to ProPetro in exchange for total consideration of $282 million, comprised of $110 million of short-term receivables to be paid by ProPetro during the first quarter of 2019 and 16.6 million shares of ProPetro's common stock. On January 1, 2019, ProPetro became a strategic long-term service provider to the Company of pressure pumping and related services. The Company recorded a gain of $30 million, employee-related charges of $19 million, contract termination charges of $13 million and other divestiture-related charges of $6 million associated with the sale.

In December 2018, the Company completed the sale of approximately 2,900 net acres in the Sinor Nest (Lower Wilcox) oil field in South Texas to an unaffiliated third party for cash proceeds of $105 million, after normal closing adjustments. During 2018, the Company recorded a gain of $54 million associated with the sale.

In August 2018, the Company completed the sale of its assets in the West Panhandle gas and liquids field to an unaffiliated third party for net cash proceeds of $170 million, after normal closing adjustments. The assets sold represent all of the Company's interests in the field, including all of its producing wells and the associated infrastructure. During 2018, the Company recorded a gain of $127 million and employee-related charges of $7 million associated with sale.

In July 2018, the Company completed the sale of its gas field assets in the Raton Basin to an unaffiliated third party for net cash proceeds of $54 million, after normal closing adjustments. The Company recorded a noncash impairment charge of $77 million in June 2018 to reduce the carrying value of its Raton Basin assets to their estimated fair value less costs to sell as the assets were considered held for sale. The Company recorded a gain of $2 million associated with this divestiture. The Company also recorded divestiture-related charges of $117 million, including $111 million of deficiency charges related to certain firm transportation contracts retained by the Company and employee-related charges of $6 million.

In April 2018, the Company completed the sale of approximately 10,200 net acres in the West Eagle Ford Shale gas and liquids field to an unaffiliated third party for net cash proceeds of $100 million, after normal closing adjustments. The Company recorded a gain of $75 million associated with the sale.

In April 2017, the Company completed the sale of approximately 20,500 acres in the Martin County region of the Permian Basin, with net production of approximately1,500 BOEPD, to an unaffiliated third party for cash proceeds of $264 million. The sale resulted in a gain of $194 million.

See Note 3 and Note 4 of Notes to Consolidated Financial Statements included in "Item 8. Financial Statements and Supplementary Data" for additional information.

Decommissioning Activities

In November 2018, the Company announced plans to close its sand mine located in Brady, Texas and transition its proppant supply requirements to West Texas sand sources. During 2018, the Company recorded $443 million of accelerated depreciation and $7 million of employee-related charges associated with the pending shutdown.

See Note 3 of Notes to Consolidated Financial Statements included in "Item 8. Financial Statements and Supplementary Data" for additional information.

Results of Operations

Oil and gas revenues. Oil and gas revenues totaled $5.0 billion, $3.5 billion and $2.4 billion for 2018, 2017 and 2016, respectively.

The increase in 2018 oil and gas revenues relative to 2017 is primarily due to increases of 20 percent, 16 percent and 12 percent in oil, NGL and gas sales volumes, respectively, and increases of 19 percent and 55 percent in oil and NGL prices, respectively, with a decrease of 19 percent in gas prices.

The increase in 2017 oil and gas revenues relative to 2016 is primarily due to increases of 19 percent, 26 percent and four percent in oil, NGL and gas sales volumes, respectively, and increases of 22 percent, 43 percent and 25 percent in oil, NGL and gas prices, respectively.

Average daily sales volumes in 2018 and 2017 increased by 17 percent and 16 percent, respectively, as compared to the average daily sales volumes in the respective prior years, principally due to the Company's successful Spraberry/Wolfcamp horizontal drilling program, which more than offset the loss of production associated with the Company's 2018 divestitures.

Average daily sales volumes are as follows:

	Year Ended December 31,		
	2018	2017	2016
Oil (Bbls)	190,639	158,571	133,677
NGLs (Bbls)	63,780	55,008	43,504
Gas (Mcf) (a)	393,391	352,507	339,966
Total (BOE)	319,984	272,330	233,842

(a) Gas production excludes gas produced and used as field fuel.

The oil, NGL and gas prices reported by the Company are based on the market prices received for the commodities. The average prices are as follows:

	Year Ended December 31,		
	2018	2017	2016
Oil (per Bbl)	$ 57.36	$ 48.24	$ 39.65
NGLs (per Bbl)	$ 29.84	$ 19.31	$ 13.49
Gas (per Mcf)	$ 2.13	$ 2.63	$ 2.11
Total (per BOE)	$ 42.73	$ 35.39	$ 28.25

Sales of purchased oil and gas. The Company enters into pipeline capacity commitments in order to secure available oil, NGL and gas transportation capacity from the Company's areas of production. The Company also enters into purchase transactions with third parties and separate sale transactions with third parties to (i) diversify a portion of the Company's oil sales to the Gulf Coast refinery or international export markets and (ii) satisfy unused gas pipeline capacity commitments. Revenues and expenses from these transactions are presented on a gross basis as the Company acts as a principal in the transaction by assuming both the risk and rewards of ownership, including credit risk, of the commodities purchased and the responsibility to deliver the commodities sold. The transportation costs associated with these transactions are presented on a net basis in purchased oil and gas expense. The net effect of third party purchases and sales of oil and gas for the year ended December 31, 2018 was earnings of $458 million, as compared to a loss of $31 million and a loss of $64 million for the years ended December 31, 2017 and 2016, respectively. Firm transportation payments on excess pipeline capacity are included in other expense in the accompanying consolidated statements of operations. See Note 15 of Notes to Consolidated Financial Statements included in "Item 8. Financial Statements and Supplementary Data" for additional information.

Interest and other income. The Company's interest and other income was $38 million for the year ended December 31, 2018, as compared to $53 million and $32 million for the years ended December 31, 2017 and 2016, respectively. The decrease in interest and other income for 2018 as compared to 2017 was primarily due to (i) a decrease of $3 million in interest income from short-term and long-term investments and (ii) a decrease of $12 million in severance, sales and property tax refunds. The increase in interest and other income for 2017 as compared to 2016 was primarily due to an increase of $11 million in severance, sales and property tax refunds and an increase of $10 million in interest income on short-term and long-term investments. See Note 14 of Notes to Consolidated Financial Statements included in "Item 8. Financial Statements and Supplementary Data" for additional information.

Derivative gains (losses), net. The Company utilizes commodity swap contracts, option contracts and collar contracts with short puts to (i) reduce the effect of price volatility on the commodities the Company produces and sells or consumes, (ii) support the Company's annual capital budgeting and expenditure plans and (iii) reduce commodity price risk associated with certain capital projects. During the year ended December 31, 2018, the Company recorded $292 million of derivative net losses, compared to $100 million and $161 million of derivative net losses for the years ended December 31, 2017 and 2016, respectively, on commodity price, marketing and interest rate derivatives. For the year ended December 31, 2018, the Company made net cash payments of $562 million related to its derivative activities, as compared to net cash receipts of $74 million and $690 million for the years ended December 31, 2017 and 2016, respectively.

Commodity derivatives and the relative price impact (per Bbl or Mcf) are as follows:

	Year Ended December 31,					
	2018		2017		2016	
	Net cash (payments) (a)	Price impact (a)	Net cash receipts (payments)	Price impact	Net cash receipts	Price impact
	(in millions)		(in millions)		(in millions)	
Oil derivative receipts (payments)	$ (451)	$ (6.48) per Bbl	$ 67	$ 1.15 per Bbl	$ 609	$ 12.42 per Bbl
NGL derivative receipts (payments)	(1)	$ (0.05) per Bbl	(1)	$ (0.06) per Bbl	5	$ 0.30 per Bbl
Gas derivative receipts (payments)	(22)	$ (0.15) per Mcf	2	$ 0.02 per Mcf	67	$ 0.54 per Mcf
Total net commodity derivative receipts (payments)	$ (474)		$ 68		$ 681	

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(a) Excludes the effect of liquidating the Company's NYMEX WTI collar contracts with short puts and its Brent swap contracts for cash payments of $81 million and its ethane basis contracts for cash payments of $4 million.

The Company's open derivative contracts are subject to continuing market risk. See "Item 7A. Quantitative and Qualitative Disclosures About Market Risk" and Note 5 of Notes to Consolidated Financial Statements included in "Item 8. Financial Statements and Supplementary Data" for additional information.

Gain on disposition of assets, net. The Company recorded net gains on the disposition of assets of $290 million, $208 million and $2 million for the years ended December 31, 2018, 2017 and 2016, respectively. For the year ended December 31, 2018, the Company substantially carried out its plan to divest of its properties in the South Texas, Raton Basin and West Panhandle fields and focus its efforts and capital resources on its Permian Basin assets.

During 2018, the Company completed the following divestitures:

Assets sold	Completion date	Net gain recorded
		(in millions)
Pressure pumping assets	December 2018	$ 30
Sinor Nest (Lower Wilcox) oil field (South Texas)	December 2018	$ 54
West Panhandle gas and liquids field (Texas Panhandle)	August 2018	$ 127
Raton Basin gas field (southern Colorado)	July 2018	$ 2
Western portion of Eagle Ford Shale gas and liquids field (South Texas)	April 2018	$ 75

For the year ended December 31, 2017, the Company's gain on disposition of assets is primarily due to a gain of $194 million recorded on the sale of approximately 20,500 acres in the Martin County region of the Permian Basin.

See Note 3 of Notes to Consolidated Financial Statements included in "Item 8. Financial Statements and Supplementary Data" for additional information .

Oil and gas production costs. The Company recorded oil and gas production costs of $855 million, $591 million and $581 million for the years ended December 31, 2018, 2017 and 2016, respectively. Lease operating expenses and workover expenses represent the components of oil and gas production costs over which the Company has management control. Current year gathering, processing and transportation charges are inclusive of the effect of the adoption of ASC 606 as described in Note 2 of Notes to Consolidated Financial Statements included in "Item 8. Financial Statements and Supplementary Data."

Net natural gas plant/gathering charges represent the net costs to gather and process the Company's gas, reduced by net revenues earned from gathering and processing of third party gas in Company-owned facilities.

Total production costs per BOE are as follows:

	Year Ended December 31,		
	2018	2017	2016
Lease operating expenses	$ 4.29	$ 4.58	$ 5.02
Gathering, processing and transportation expenses	2.52	0.85	1.41
Net natural gas plant (income) charges	(0.41)	(0.28)	0.01
Workover costs	0.92	0.80	0.35
	$ 7.32	$ 5.95	$ 6.79

Total oil and gas production costs per BOE for the year ended December 31, 2018 increased 23 percent and eight percent compared to 2017 and 2016, respectively. Lease operating expense per BOE decreased for the year ended December 31, 2018, as compared to the 2017 and 2016 due to a greater proportion of the Company's production coming from horizontal wells in Spraberry/Wolfcamp area, which have lower per BOE lease operating costs. The adoption of ASC 606 had the effect of increasing gathering, processing and transportation charges by $1.78 per BOE over what would have been reported if these changes were accounted for under ASC 605. Th decline in gathering, processing and transportation expenses from 2016 to 2017 is primarily attributable to lower aggregate gathering fees in the Eagle Ford field due to declining production. The net natural gas plant income per BOE is primarily reflective of increased earnings on third party volumes that are processed in the Company-owned facilities due to higher NGL prices. The increase in workover costs per BOE was primarily due to an increase in Permian vertical well workover activity due to the improvement in oil and NGL prices.

Production and ad valorem taxes. The Company recorded production and ad valorem taxes of $284 million for 2018, as compared to $215 million and $136 million for 2017 and 2016, respectively. In general, production taxes and ad valorem taxes are directly related to commodity price changes; however, Texas ad valorem taxes are based upon prior year commodity prices, whereas production taxes are based upon current year commodity prices. The increase in production and ad valorem taxes per BOE for the year ended December 31, 2018 as compared to 2017 and 2016, is primarily due to the increase in oil and NGL prices during 2017 and 2018 and, for ad valorem tax purposes, the higher valuation attributable to the Company's successful Spraberry/Wolfcamp horizontal drilling program.

Production and ad valorem taxes per BOE are as follows:

	Year Ended December 31,		
	2018	2017	2016
Production taxes	$ 1.83	$ 1.59	$ 1.14
Ad valorem taxes	0.60	0.57	0.46
	$ 2.43	$ 2.16	$ 1.60

Depletion, depreciation and amortization expense. The Company's total DD&A expense was $1.5 billion ($13.13 per BOE), $1.4 billion ($14.08 per BOE) and $1.5 billion ($17.29 per BOE) for 2018, 2017 and 2016, respectively. Depletion expense on oil and gas properties, the largest component of DD&A expense, was $12.52, $13.61 and $16.77 per BOE for 2018, 2017 and 2016, respectively.

Year over year depletion expense on oil and gas properties per BOE for the years ended December 31, 2018, 2017 and 2016 decreased eight percent and 19 percent, respectively. The decrease was primarily due to (i) additions to proved reserves attributable to the Company's successful Spraberry/Wolfcamp horizontal drilling program and (ii) commodity price increases and cost reduction initiatives, both of which had the effect of adding proved reserves by lengthening the economic lives of the Company's producing wells.

Impairment of oil and gas properties and other long-lived assets. The Company performs assessments of its long-lived assets to be held and used, including oil and gas properties, whenever events or circumstances indicate that the carrying values of those assets may not be recoverable.

As a result of the Company's impairment assessments, the Company recorded noncash impairment charges to reduce the carrying values of its oil and gas properties as follows:

- 2018: Raton Basin gas field assets ($77 million);
- 2017: Raton Basin gas field assets ($285 million); and
- 2016: West Panhandle gas and liquids field ($32 million).

See Note 2 and Note 4 of Notes to Consolidated Financial Statements included in "Item 8. Financial Statements and Supplementary Data" for additional information.

Exploration and abandonments expense. Geological and geophysical costs, exploratory dry holes expense and leasehold abandonments and other exploration expense are as follows:

	Year Ended December 31,		
	2018	2017	2016
	(in millions)		
Geological and geophysical	$ 85	$ 84	$ 77
Exploratory well costs	23	10	1
Leasehold abandonments and other	6	12	41
	$ 114	$ 106	$ 119

The increase in exploration and abandonments expense of $8 million for the year ended December 31, 2018, as compared to 2017, was primarily due to a $13 million increase in exploratory well costs related to the abandonment of seven drilled but not completed exploration wells in South Texas as a result of the Company's decision to focus capital spending on its Permian Basin assets, partially offset by a decrease in leasehold abandonments expense and other of $6 million. The decrease in exploration and abandonments expense of $13 million for the year ended December 31, 2017, as compared to 2016, was primarily due to a decrease in leasehold abandonments and other of $29 million, partially offset by an increase in unsuccessful exploration wells of $9 million. Leasehold abandonments and other in 2016 included $32 million associated with unproved acreage in Alaska in which the Company held an overriding royalty interest.

During 2018, 2017 and 2016, the Company completed and evaluated 261, 224, and 215 exploration/extension wells, respectively, and 96 percent, 99 percent, and 100 percent, respectively, were successfully completed as discoveries.

General and administrative expense. General and administrative expense totaled $381 million ($3.26 per BOE), $326 million ($3.28 per BOE) and $325 million ($3.80 per BOE) for 2018, 2017 and 2016, respectively. The increase in general and administrative expense for the year ended December 31, 2018, as compared to 2017 and 2016, was primarily due to an increase in compensation costs, including benefits expense, as a result of an increase in headcount due to the Company's continued growth and costs associated with the implementation of a new enterprise resource planning system.

Accretion of discount on asset retirement obligations. Accretion of discount on asset retirement obligations was $14 million, $19 million and $18 million for the years ended December 31, 2018, 2017 and 2016, respectively. See Note 9 of Notes to Consolidated Financial Statements included in "Item 8. Financial Statements and Supplementary Data" for additional information.

Interest expense. Interest expense was $126 million, $153 million and $207 million for 2018, 2017 and 2016, respectively. The decrease in interest expense for the year ended December 31, 2018, as compared to 2017, was primarily due to the repayment of the Company's 6.875% Senior Notes, which matured in May 2018. The decrease in interest expense for the year ended December 31, 2017, as compared to 2016, was primarily due to the repayment of both the Company's 6.65% Senior Notes, which matured in March 2017, and the Company's 5.875% Senior Notes, which matured in July 2016. The weighted average interest rate on the Company's indebtedness for the year ended December 31, 2018 was 5.4 percent, as compared to 5.6 percent and 6.0 percent for the years ended December 31, 2017 and 2016, respectively.

See Note 7 of Notes to Consolidated Financial Statements included in "Item 8. Financial Statements and Supplementary Data" for additional information.

Other expense. Other expense was $849 million for 2018, as compared to $244 million for 2017 and $288 million for 2016. The $605 million increase in other expense for 2018, as compared to 2017, was primarily due to accelerated depreciation of $443 million related to the decommissioning of the Company's Brady, Texas sand mine and other divestiture-related charges of $173 million associated with the Company's 2018 asset divestitures.

The $44 million decrease in other expense for 2017, as compared to 2016, was primarily due to (i) a decrease of $64 million in idle drilling and well service equipment charges and (ii) a decrease of $37 million in net losses from Company-provided fracture stimulation and related service operations that are provided to third party working interest owners, partially offset by (iii) an increase of $58 million in unused firm transportation costs.

The Company expects to continue to incur charges associated with excess firm gathering and transportation commitments until the contractual obligations expire.

See Note 2, Note 10 and Note 15 of Notes to Consolidated Financial Statements included in "Item 8. Financial Statements and Supplementary Data" for additional information.

Income tax (provision) benefit. The Company recorded an income tax provision attributable to earnings of $276 million during 2018, as compared to an income tax benefit of $524 million and $403 million during 2017 and 2016, respectively. The increase of $800 million in the income tax provision recorded in 2018 as compared to the income tax benefit recorded in 2017 is primarily attributable to a $625 million income tax benefit recorded during 2017 as a result of the enactment of the December 22, 2017 Tax Cuts and Jobs Act (the "Tax Reform Legislation").

The Company's effective tax rate on earnings, excluding income from noncontrolling interest, for 2018, 2017 and 2016 was 22 percent, (170) percent and 42 percent, respectively, as compared to the combined United States federal and state statutory rates of 22 percent for 2018 and 36 percent for years prior to 2018.

The Company's effective tax rate for 2017 differs from the combined statutory rate primarily due to the enactment of the Tax Reform Legislation, which made significant changes to the U.S. federal income tax law. The most significant change affecting the Company was a reduction in the federal corporate income tax rate to 21 percent beginning January 1, 2018. This rate change resulted in a $625 million income tax benefit for 2017, primarily associated with the remeasurement of the Company's deferred tax liabilities at the new corporate tax rate as of December 31, 2017. Excluding the effects of the Tax Reform Legislation, the Company's effective tax rate for 2017 would have been 33 percent.

The effective tax rate for 2016 differs from the combined statutory rate primarily due to recognizing research and experimental expenditures credits of $72 million during 2016 and, to a lesser extent, state income tax apportionments and nondeductible expenses.

See Note 16 of Notes to Consolidated Financial Statements included in "Item 8. Financial Statements and Supplementary Data" for additional information.

Liquidity and Capital Resources

Liquidity. The Company's primary sources of short-term liquidity are (i) cash and cash equivalents, (ii) net cash provided by operating activities, (iii) sales of short-term and long-term investments, (iv) proceeds from divestitures, (iv) unused borrowing capacity under its credit facility (the "Credit Facility"), (v) issuances of debt or equity securities and (vi) other sources, such as sales of nonstrategic assets.

The Company's primary needs for cash are for (i) capital expenditures, (ii) acquisitions of oil and gas properties, (iii) payments of contractual obligations, including debt maturities, (iv) dividends and share repurchases and (v) working capital obligations. Funding for these cash needs may be provided by any combination of the Company's sources of liquidity. Although the Company expects that its sources of funding will be adequate to fund its 2019 capital expenditures, dividend payments and provide adequate liquidity to fund other needs, including stock repurchases, no assurance can be given that such funding sources will be adequate to meet the Company's future needs.

2019 capital budget. The Company' capital budget for 2019 is expected to be in the range of $3.1 billion to $3.4 billion, consisting of $2.8 billion to $3.1 billion for drilling and completion related activities, including additional tank batteries and saltwater disposal facilities, and $300 million for gas processing facilities, water infrastructure, well services and vehicles. The 2019 capital budget excludes acquisitions, asset retirement obligations, capitalized interest, geological and geophysical general and administrative expense and corporate facilities.

Capital resources. Cash flows from operating, investing and financing activities are summarized below.

As of December 31, 2018, the Company had no outstanding borrowings under its Credit Facility, leaving $1.5 billion of unused borrowing capacity. The Company was in compliance with all of its debt covenants as of December 31, 2018. The Company also had cash on hand of $825 million, short-term investments of $443 million and long-term investments of $125 million as of December 31, 2018.

Operating activities. Net cash provided by operating activities for the years ended December 31, 2018, 2017 and 2016 was $3.2 billion, $2.1 billion and $1.5 billion, respectively. The increase in net cash flow provided by operating activities in 2018, as compared to 2017, was primarily due to increases in the Company's oil and gas revenues in 2018 as a result of increases in commodity prices and sales volumes, partially offset by a $627 million reduction in cash available from commodity derivative activities. The increase in net cash flow provided by operating activities in 2017, as compared to 2016, was primarily due to increases in the Company's oil and gas revenues in 2017 as a result of increases in commodity prices and sales volumes, partially offset by a $613 million reduction in cash provided by commodity derivatives.

Investing activities. Net cash used in investing activities during 2018 was $2.6 billion, as compared to net cash used in investing activities of $1.8 billion and $3.8 billion during 2017 and 2016, respectively.

The increase of $818 million in net cash flow used in investing activities during 2018, as compared to 2017, is primarily due an increase of $1.2 billion in additions to oil and gas properties offset by a decrease of $235 million in purchases of investments (commercial paper, corporate bonds and time deposits) and a $117 million increase in net cash proceeds from the disposition of assets. The Company's investing activities during the year ended December 31, 2018 were primarily funded by net cash provided by operating activities.

The decrease of $2.0 billion in net cash flow used in investing activities during 2017, as compared to 2016, is primarily due to (i) a decrease of $1.8 billion in purchases of investments (commercial paper, corporate bonds and time deposits), (ii) a $562 million increase in proceeds from investments and (iii) the purchase of 28,000 net acres in the Permian Basin for $428 million in 2016, partially offset by (iv) a $508 million increase in additions to oil and gas properties, (v) a $155 million decrease in net cash proceeds from the disposition of assets and (v) a $135 million increase in additions to other property and equipment.

Net cash proceeds received from the Company's significant divestitures are as follows:

Assets sold	Completion Date	Net cash proceeds	
		(in millions)	
Year Ended December 31, 2018:			
Sinor Nest (Lower Wilcox) oil field (South Texas)	December 2018	$	105
West Panhandle gas and liquids field (Texas Panhandle)	August 2018	$	170
Raton Basin gas field (southern Colorado)	July 2018	$	54
Western portion of Eagle Ford Shale gas and liquids field (South Texas)	April 2018	$	100
Year Ended December 31, 2017:			
Martin County region (Permian Basin)	April 2017	$	264
Year Ended December 31, 2016:			
EFS Midstream (a)	July 2015	$	501

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(a) The Company received total consideration of $1.0 billion related to the sale of its equity interest in EFS Midstream, of which $530 million was received at closing in July 2015 and the remaining $501 million was received in July 2016.

See Note 3 of Notes to Consolidated Financial Statements included in "Item 8. Financial Statements and Supplementary Data" for additional information.

Financing activities. Net cash used in financing activities during 2018 was $703 million, as compared to $529 million during 2017 and net cash provided by financing activities of $2.0 billion during 2016. The Company's significant financing activities are as follows:

- 2018: The Company repaid $450 million associated with the maturity of its 6.875% senior notes, repurchased $179 million of its common stock and paid dividends of $55 million.
- 2017: The Company repaid $485 million associated with the maturity of its 6.65% senior notes and repurchased $36 million of its common stock.
- 2016: The Company repaid $455 million associated with the maturity of the Company's 5.875% senior notes and received net cash proceeds of $2.5 billion associated with the sale of shares of its common stock.

See Note 7 of Notes to Consolidated Financial Statements included in "Item 8. Financial Statements and Supplementary Data" for additional information.

Dividends/distributions. During the year ended December 31, 2018, the Company's board of directors declared semiannual dividends of $0.16 per common share, compared to semiannual dividends of $0.04 per common share during each of the years ended December 31, 2017 and 2016. The Company paid $55 million, $14 million and $13 million, respectively, of aggregate dividends. In addition, in February 2019, the board of directors declared a cash dividend of $0.32 per share on Pioneer's outstanding common stock, payable April 12, 2019 to stockholders of record at the close of business on March 29, 2019. Future dividends are at the discretion of the Company's board of directors, and, if declared, the board of directors may change the dividend amount based on the Company's liquidity and capital resources at that time.

Off-balance sheet arrangements. From time to time, the Company enters into arrangements and transactions that can give rise to material off-balance sheet obligations of the Company. As of December 31, 2018, the material off-balance sheet arrangements and transactions that the Company had entered into included (i) operating lease agreements (primarily related to contracted drilling rigs, equipment and office facilities), (ii) firm purchase, transportation and fractionation commitments, (iii) open purchase commitments and (iv) contractual obligations for which the ultimate settlement amounts are not fixed and determinable. The contractual obligations for which the ultimate settlement amounts are not fixed and determinable include (i) derivative contracts that are sensitive to future changes in commodity prices or interest rates, (ii) gathering, processing (primarily treating and fractionation) and transportation commitments on uncertain volumes of future throughput, (iii) open purchase commitments and (iv) indemnification obligations following certain divestitures. Other than the off-balance sheet arrangements described above, the Company has no transactions, arrangements or other relationships with unconsolidated entities or other persons that are reasonably likely to materially affect the Company's liquidity or availability of or requirements for capital resources. The Company expects to enter into similar contractual arrangements in the future, including incremental derivative contracts and additional firm purchase, transportation and fractionation arrangements, in order to support the Company's business plans. See "Contractual obligations" below and Note 10 of Notes to Consolidated Financial Statements included in "Item 8. Financial Statements and Supplementary Data" for additional information.

Contractual obligations. The Company's contractual obligations include long-term debt, operating leases (primarily related to contracted drilling rigs, equipment and office facilities), capital funding obligations, derivative obligations, firm transportation and fractionation commitments, minimum annual gathering, processing and transportation commitments and other liabilities (including postretirement benefit obligations). Other joint owners in the properties operated by the Company could incur portions of the costs represented by these commitments.

Contractual obligations are estimated as follows:

	Payments Due by Year			
	2019	2020 and 2021	2022 and 2023	Thereafter
	(in millions)			
Long-term debt (a)	$ —	$ 950	$ 600	$ 750
Operating leases (b)	234	266	106	647
Derivative obligations (c)	27	—	—	—
Purchase commitments (d)	263	2	—	—
Other liabilities (e)	105	116	54	145
Firm commitments (f)	662	1,384	869	1,516
	$ 1,291	$ 2,718	$ 1,629	$ 3,058

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(a) The amounts included in the table above represent principal maturities only. See "Item 7A. Quantitative and Qualitative Disclosures About Market Risk" and Note 7 of Notes to Consolidated Financial Statements included in "Item 8. Financial Statements and Supplementary Data" for additional information.

(b) Includes drilling commitments that represent future minimum expenditure commitments for drilling rig services and well commitments under contracts to which the Company was a party on December 31, 2018. See Note 10 of Notes to Consolidated Financial Statements included in "Item 8. Financial Statements and Supplementary Data" for additional information.

(c) Derivative obligations represent net liabilities determined in accordance with master netting arrangements for commodity derivatives that were valued as of December 31, 2018. The Company's commodity derivative contracts are periodically measured and recorded at fair value and continue to be subject to market and credit risk. The ultimate liquidation value of the Company's commodity derivatives will be dependent upon actual future commodity prices, which may differ materially from the inputs used to determine the derivatives' fair values as of December 31, 2018. See Note 5 and Note 10 of Notes to Consolidated Financial Statements included in "Item 8. Financial Statements and Supplementary Data" and "Item 7A. Quantitative and Qualitative Disclosures About Market Risk" for additional information.

(d) Open purchase commitments primarily represent expenditure commitments for inventories, materials and other property and equipment ordered, but not received, as of December 31, 2018.

(e) The Company's other liabilities represent current and noncurrent other liabilities that are comprised of litigation and environmental contingencies, asset retirement obligations and other obligations for which neither the ultimate settlement amounts nor their timings can be precisely determined in advance. See Note 8, Note 9 and Note 10 of Notes to Consolidated Financial Statements included in "Item 8. Financial Statements and Supplementary Data" for additional information.

(f) Firm purchase, gathering, processing, transportation and fractionation commitments represent take-or-pay agreements, which include (i) contractual commitments to purchase sand and water for use in the Company's drilling operations and

(ii) estimated fees on production throughput commitments and demand fees associated with volume delivery commitments. The Company does not expect to be able to fulfill all of its short-term and long-term volume delivery obligations from projected production of available reserves; consequently, the Company plans to purchase third party volumes to satisfy its commitments if it is economic to do so; otherwise, it will pay demand fees for any commitment shortfalls. See "Item 2. Properties" and Note 10 of Notes to Consolidated Financial Statements included in "Item 8. Financial Statements and Supplementary Data" for additional information.

Debt ratings. The Company is rated as mid-investment grade by three credit rating agencies. The Company receives debt credit ratings from several of the major ratings agencies, which are subject to regular reviews. The Company believes that each of the rating agencies considers many factors in determining the Company's ratings, including: (i) production growth opportunities, (ii) liquidity, (iii) debt levels, (iv) asset composition and (v) proved reserve mix. A reduction in the Company's debt ratings could increase the interest rates that the Company incurs on Credit Facility borrowings and could negatively impact the Company's ability to obtain additional financing or the interest rate, fees and other terms associated with such additional financing.

Book capitalization and current ratio. The Company's net book capitalization at December 31, 2018 was $13.0 billion, consisting of cash and cash equivalents of $825 million, short-term and long-term investments of $568 million, debt of $2.3 billion and equity of $12.1 billion. The Company's net debt to book capitalization increased to seven percent at December 31, 2018 from five percent at December 31, 2017, primarily due to funding the Company's oil and gas drilling and other property investments with cash flow from operations and a portion of the Company's cash and cash equivalents. The Company's ratio of current assets to current liabilities remained consistent between periods at 1.42:1 at December 31, 2018, as compared to 1.41:1 at December 31, 2017.

Critical Accounting Estimates

The Company prepares its consolidated financial statements for inclusion in this Report in accordance with GAAP. See Note 2 of Notes to Consolidated Financial Statements included in "Item 8. Financial Statements and Supplementary Data" for additional information. The following is a discussion of the Company's most critical accounting estimates, judgments and uncertainties that are inherent in the Company's application of GAAP.

Asset retirement obligations. The Company has significant obligations to remove tangible equipment and facilities and to restore the land at the end of oil and gas production operations. The Company's removal and restoration obligations are primarily associated with plugging and abandoning wells. Estimating the future restoration and removal costs is difficult and requires management to make estimates and judgments because most of the removal obligations are many years in the future and contracts and regulations often have vague descriptions of what constitutes removal. Asset removal technologies and costs are constantly changing, as are regulatory, political, environmental, safety and public relations considerations.

Inherent in the present value calculation are numerous assumptions and judgments including the ultimate settlement amounts, credit-adjusted discount rates, timing of settlement and changes in the legal, regulatory, environmental and political environments. To the extent future revisions to these assumptions impact the present value of the existing asset retirement obligations, a corresponding adjustment is generally made to the oil and gas property or other property and equipment balance. See Note 9 of Notes to Consolidated Financial Statements included in "Item 8. Financial Statements and Supplementary Data" for additional information.

Successful efforts method of accounting. The Company utilizes the successful efforts method of accounting for oil and gas producing activities as opposed to the alternate acceptable full cost method. In general, the Company believes that net assets and net income are more conservatively measured under the successful efforts method of accounting for oil and gas producing activities than under the full cost method, particularly during periods of active exploration. The critical difference between the successful efforts method of accounting and the full cost method is as follows: under the successful efforts method, exploratory dry holes and geological and geophysical exploration costs are charged against earnings during the periods in which they occur; whereas, under the full cost method of accounting, such costs and expenses are capitalized as assets, pooled with the costs of successful wells and charged against the earnings of future periods as a component of depletion expense. During 2018, 2017 and 2016, the Company recorded exploration and abandonments expense of $114 million, $106 million and $119 million, respectively.

Proved reserve estimates. Estimates of the Company's proved reserves included in this Report are prepared in accordance with GAAP and SEC guidelines. The accuracy of a reserve estimate is a function of:

- the quality and quantity of available data;
- the interpretation of that data;
- the accuracy of various mandated economic assumptions; and
- the judgment of the persons preparing the estimate.

The Company's proved reserve information included in this Report as of December 31, 2018, 2017 and 2016 was prepared by the Company's engineers and audited by independent petroleum engineers with respect to the Company's major properties. Estimates prepared by third parties may be higher or lower than those included herein.

Because these estimates depend on many assumptions, all of which may substantially differ from future actual results, proved reserve estimates will be different from the quantities of oil and gas that are ultimately recovered. In addition, results of drilling, testing and production after the date of an estimate may justify, positively or negatively, material revisions to the estimate of proved reserves.

It should not be assumed that the Standardized Measure included in this Report as of December 31, 2018 is the current market value of the Company's estimated proved reserves. In accordance with SEC requirements, the Company based the 2018 Standardized Measure on a twelve month average of commodity prices on the first day of each month in 2018 and prevailing costs on the date of the estimate. Actual future prices and costs may be materially higher or lower than the prices and costs utilized in the estimate. See "Item 2. Properties" and Unaudited Supplementary Information included in "Item 8. Financial Statements and Supplementary Data" for additional information.

The Company's estimates of proved reserves materially impact depletion expense. If the estimates of proved reserves decline, the rate at which the Company records depletion expense will increase, reducing future net income. Such a decline may result from lower commodity prices, which may make it uneconomical to drill for and produce higher cost fields. In addition, a decline in proved reserve estimates may impact the outcome of the Company's assessment of its proved properties and goodwill for impairment.

Impairment of proved oil and gas properties. The Company reviews its proved properties to be held and used whenever management determines that events or circumstances indicate that the recorded carrying value of the properties may not be recoverable. Management assesses whether or not an impairment provision is necessary based upon estimated future recoverable proved and risk-adjusted probable and possible reserves, Management's Price Outlooks, production and capital costs expected to be incurred to recover the reserves, discount rates commensurate with the nature of the properties and net cash flows that may be generated by the properties. Proved oil and gas properties are reviewed for impairment at the level at which depletion of proved properties is calculated. See Note 4 of Notes to Consolidated Financial Statements included in "Item 8. Financial Statements and Supplementary Data" for additional information.

Impairment of unproved oil and gas properties. At December 31, 2018, the Company carried unproved property costs of $601 million. Management assesses unproved oil and gas properties for impairment on a project-by-project basis. Management's impairment assessments include evaluating the results of exploration activities, Management's Price Outlooks and planned future sales or expiration of all or a portion of such projects.

Suspended wells. The Company suspends the costs of exploratory wells that discover hydrocarbons pending a final determination of the commercial potential of the discovery. The ultimate disposition of these well costs is dependent on the results of future drilling activity and development decisions. If the Company decides not to pursue additional appraisal activities or development of these fields, the costs of these wells will be charged to exploration and abandonment expense.

The Company does not carry the costs of drilling an exploratory well as an asset in its consolidated balance sheets following the completion of drilling unless both of the following conditions are met:

(i) The well has found a sufficient quantity of reserves to justify its completion as a producing well; and
(ii) The Company is making sufficient progress assessing the reserves and the economic and operating viability of the project.

Due to the capital intensive nature and the geographical location of certain projects, it may take an extended period of time to evaluate the future potential of an exploration project and economics associated with making a determination on its commercial viability. In these instances, the project's feasibility is not contingent upon price improvements or advances in technology, but rather the Company's ongoing efforts and expenditures related to accurately predicting the hydrocarbon recoverability based on well information, gaining access to other companies' production, transportation or processing facilities and/or getting partner approval to drill additional appraisal wells. These activities are ongoing and being pursued constantly. Consequently, the Company's assessment of suspended exploratory well costs is continuous until a decision can be made that the well has found proved reserves to sanction the project or is noncommercial and is impaired. See Note 6 of Notes to Consolidated Financial Statements included in "Item 8. Financial Statements and Supplementary Data" for additional information.

Deferred tax asset valuation allowances. The Company continually assesses both positive and negative evidence to determine whether it is more likely than not that its deferred tax assets will be realized prior to their expiration. Pioneer monitors Company-specific, oil and gas industry and worldwide economic factors and based on that information, along with other data, reassesses the likelihood that the Company's net operating loss carryforwards and other deferred tax attributes in each jurisdiction will be utilized prior to their expiration. There can be no assurance that facts and circumstances will not materially change and require the Company to establish deferred tax asset valuation allowances in certain jurisdictions in a future period.

Uncertain tax positions. The Company recognizes the tax benefit from an uncertain tax position only if it is more likely than not that the tax position will be sustained upon examination by the taxing authorities, based upon the technical merits of the position. The Company had unrecognized tax benefits resulting from research and experimental expenditures related to horizontal drilling and completion innovations. If all or a portion of the unrecognized tax benefit is sustained upon examination by the taxing authorities, the tax benefit will be recognized as a reduction to the Company's deferred tax liability and will affect the Company's effective tax rate in the period it is recognized. See Note 16 of Notes to the Consolidated Financial Statements included in "Item 8. Financial Statements and Supplementary Data" for additional information.

Goodwill impairment. The Company reviews its goodwill for impairment at least annually. During the third quarter of 2018, the Company performed a qualitative assessment of goodwill to assess whether it was more likely than not that the fair value of the Company's reporting unit was less than its carrying amount as a basis for determining whether it was necessary to record a noncash impairment charge. The Company determined that it was more likely than not that the Company's goodwill was not impaired. There is considerable judgment involved in estimating fair values, particularly in determining the valuation methodologies to utilize, the estimation of proved reserves as described above and the weighting of different valuation methodologies applied.

Litigation and environmental contingencies. The Company makes judgments and estimates in recording liabilities for ongoing litigation and environmental remediation. Actual costs can vary from such estimates for a variety of reasons. The costs to settle litigation can vary from estimates based on differing interpretations of laws and opinions and assessments on the amount of damages. Similarly, environmental remediation liabilities are subject to change because of changes in laws and regulations, developing information relating to the extent and nature of site contamination and improvements in technology. A liability is recorded for these types of contingencies if the Company determines the loss to be both probable and reasonably estimable. See Note 10 of Notes to Consolidated Financial Statements included in "Item 8. Financial Statements and Supplementary Data" for additional information.

Valuation of stock-based compensation. The Company calculates the fair value of stock-based compensation using various valuation methods. The valuation methods require the use of estimates to derive the inputs necessary to determine fair value. The Company utilizes (i) the Black-Scholes option pricing model to measure the fair value of stock options, (ii) the closing stock price on the day prior to the date of grant for the fair value of restricted stock awards, (iii) the closing stock price on the balance sheet date for restricted stock awards that are expected to be settled wholly or partially in cash on their vesting date and (iv) the Monte Carlo simulation method for the fair value of performance unit awards. See Note 8 of Notes to Consolidated Financial Statements included in "Item 8. Financial Statements and Supplementary Data" for additional information.

Valuation of other assets and liabilities at fair value. The Company periodically measures and records certain assets and liabilities at fair value. The assets and liabilities that the Company measures and records at fair value on a recurring basis include trading securities, commodity derivative contracts and interest rate contracts. Other assets are not measured at fair value on an ongoing basis, but are subject to fair value adjustments in certain circumstances. The assets and liabilities that the Company measures and records at fair value on a nonrecurring basis include inventories, proved and unproved oil and gas properties, assets acquired and liabilities assumed in business combinations and other long-lived assets that are written down to fair value when they are determined to be impaired or held for sale. The Company also measures and discloses certain financial assets and liabilities at fair value, such as long-term debt and investments. The valuation methods used by the Company to measure the fair values of these assets and liabilities may require considerable management judgment and estimates to derive the inputs necessary to determine fair value estimates, such as future prices, credit-adjusted risk-free rates and current volatility factors. See Note 4 of Notes to Consolidated Financial Statements included in "Item 8. Financial Statements and Supplementary Data" for additional information.

New Accounting Pronouncements

The effects of new accounting pronouncements are discussed in Note 2 of Notes to Consolidated Financial Statements included in "Item 8. Financial Statements and Supplementary Data."

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

In the normal course of business, the Company's financial position is routinely subject to a variety of risks, including market risks associated with changes in commodity prices, interest rate movements on outstanding debt and credit risks. These risks are mitigated through the Company's risk management program, which includes the use of derivative instruments. The following quantitative and qualitative information is provided about financial instruments to which the Company was a party as of December 31, 2018, and from which the Company may incur future gains or losses from changes in commodity prices or interest rates. The Company does not enter into any financial instruments, including derivatives, for speculative or trading purposes.

Interest rate risk. As of December 31, 2018 the Company had no variable rate debt outstanding under its credit facility and therefore no related exposure to interest rate risk. As of December 31, 2018, the Company had $2.3 billion of fixed rate long-term debt outstanding with an weighted average interest rate of 5.4 percent. Although changes in interest rates may affect the fair value of the Company's fixed rate long-term debt, any changes would not expose the Company to the risk of earnings or cash flow losses. The Company has no interest rate derivative instruments outstanding; however, it may enter into such instrument in the future to mitigate interest rate risk. See Note 4 and Note 7 of Notes to Consolidated Financial Statements included in "Item 8. Financial Statements and Supplementary Data" for additional information.

Commodity price risk. The Company's primary market risk exposure is in the price it receives from the sale of its oil, NGL and gas production. Realized pricing is volatile and is determined by market prices that fluctuate with changes in supply and demand for these products throughout the world. The price the Company receives for its production depends on many factors outside of the control of the Company, including differences in commodity pricing at the point of sale versus various index prices. Reducing the Company's exposure to price volatility helps secure funds to be used in its capital program. The Company mitigates its commodity price risk through the use of derivative financial instruments and sales of purchased oil and gas.

Derivative financial instruments. The Company's decision on the quantity and price at which it executes derivative contracts is based in part on its view of current and future market conditions. The Company may choose not to enter into derivative positions for expected production if the price environment for certain time periods is deemed to be unfavorable. Additionally, the Company may choose to liquidate existing derivative positions prior to the expiration of their contractual maturity in order to monetize gain positions for the purpose of funding its capital program. While derivative positions limit the downside risk of adverse price movements, it also limits future revenues from upward price movements. The Company manages commodity price risk with the following types of derivative contracts:

- *Swaps.* The Company receives a fixed price and pays a floating market price to the counterparty on a notional amount of sales volumes, thereby fixing the price for the commodity sold.
- *Collars.* Collar contracts provide minimum ("floor" or "long put") and maximum ("ceiling") prices on a notional amount of sales volumes, thereby allowing some price participation if the relevant index price closes above the floor price but below the ceiling price.
- *Collar contracts with short put options.* Collar contracts with short put options differ from other collar contracts by virtue of the short put option price, below which the Company's realized price will exceed the variable market prices by the long put-to-short put price differential.
- *Basis swaps.* Basis swap contracts fix the basis differentials between the index price at which the Company sells its production and the index price used in swap or collar contracts.
- *Options.* Selling individual call options can enhance the market price by the premium received or the premium received can be utilized to improve swap or collar contract prices. Purchased put options establish a minimum floor price (less any premiums paid) and allows participation in higher prices when prices close above the floor price.

The Company has entered into derivative contracts for only a small portion of its forecasted 2019 production; consequently, if commodity prices decline, the Company could realize lower prices for volumes not protected by the Company's derivative activities and could see a reduction in derivative contract prices on additional volumes in the future. As a result, the Company's internal cash flows will be negatively impacted by a reduction in commodity prices.

The average forward prices based on December 31, 2018 market quotes are as follows:

	2019			
	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
Average forward Brent oil price	$ 54.04	$ 54.74	$ 54.99	$ 55.25
Average forward NYMEX gas price	$ 2.90	$ 2.69	$ 2.75	$ 2.83
Permian Basin index swap contracts:				
Average forward basis differential price (a)	$ (1.72)	$ (1.75)	$ (1.34)	$ —
Southern California index swap contracts:				
Average forward basis differential price (b)	$ 1.45	$ 0.87	$ 1.54	$ 0.96

The average forward prices based on February 21, 2019 market quotes are as follows:

	2019			
	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
Average forward Brent oil price	$ 67.13	$ 66.97	$ 66.57	$ 66.13
Average forward NYMEX gas price	$ 2.70	$ 2.75	$ 2.84	$ 2.92
Permian Basin index swap contracts:				
Average forward basis differential price (a)	$ (1.44)	$ (1.67)	$ (1.38)	$ —
Southern California index swap contracts:				
Average forward basis differential price (b)	$ 1.55	$ 1.03	$ 1.56	$ 0.92

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(a) Based on market quotes for basis differentials between Permian Basin index prices and the NYMEX Henry Hub index price. The Company currently has no Permian Basin index swap contracts covering the fourth quarter of 2019.
(b) Based on market quotes for basis differentials between Permian Basin index prices and southern California index prices.

See Note 4 and Note 5 of Notes to Consolidated Financial Statements included in "Item 8. Financial Statements and Supplementary Data" for a description of the Company's open derivative positions and additional information.

Sales of purchased oil and gas. The Company enters into pipeline capacity commitments in order to secure available oil, NGL and gas transportation capacity from the Company's areas of production. The Company also enters into purchase transactions with third parties and separate sale transactions with third parties to (i) diversify a portion of the Company's oil sales to the Gulf Coast refinery or international export markets and (ii) satisfy unused gas pipeline capacity commitments.

Credit risk. The Company's primary concentration of credit risks are associated with the collection of receivables resulting from the sale of oil and gas production and purchased oil and gas and the risk of a counterparty's failure to meet its obligations under derivative contracts with the Company.

The Company's oil and gas is sold to various purchasers who must be prequalified under the Company's credit risk policies and procedures. The Company monitors exposure to counterparties primarily by reviewing credit ratings, financial criteria and payment history. Where appropriate, the Company obtains assurances of payment, such as a guarantee by the parent company of the counterparty or other credit support. Historically, the Company's credit losses on oil and gas receivables have not been material.

The Company uses credit and other financial criteria to evaluate the credit standing of, and to select, counterparties to its derivative instruments. Although the Company does not obtain collateral or otherwise secure the fair value of its derivative instruments, associated credit risk is mitigated by the Company's credit risk policies and procedures.

The Company has entered into International Swap Dealers Association Master Agreements ("ISDA Agreements") with each of its derivative counterparties. The terms of the ISDA Agreements provide the Company and the counterparties with right of set off upon the occurrence of defined acts of default by either the Company or a counterparty to a derivative contract, whereby the party not in default may set off all derivative liabilities owed to the defaulting party against all derivative asset receivables from the defaulting party. See Note 5 of Notes to Consolidated Financial Statements included in "Item 8. Financial Statements and Supplementary Data" for additional information.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Stockholders and the Board of Directors of Pioneer Natural Resources Company

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Pioneer Natural Resources Company (the Company) as of December 31, 2018 and 2017, and the related consolidated statements of operations, equity and cash flows for each of the three years in the period ended December 31, 2018, and the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2018 and 2017, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2018, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2018, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework), and our report dated February 26, 2019 expressed an unqualified opinion thereon.

Adoption of ASU No. 2014-09

As discussed in Note 2 to the consolidated financial statements, the Company changed its method for recognizing revenue as a result of the adoption of Accounting Standards Update (ASU) No. 2014-09, Revenue from Contracts with Customers (Topic 606), and the related amendments, effective January 1, 2018.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ Ernst & Young LLP

We have served as the Company's auditor since 1998.
Dallas, Texas
February 26, 2019

PIONEER NATURAL RESOURCES COMPANY

CONSOLIDATED BALANCE SHEETS
(in millions)

	December 31, 2018	December 31, 2017
ASSETS		
Current assets:		
Cash and cash equivalents	$ 825	$ 896
Short-term investments	443	1,213
Accounts receivable:		
Trade, net	694	644
Due from affiliates	120	1
Income taxes receivable	7	7
Inventories	242	212
Derivatives	52	11
Investment in affiliate	172	—
Other	25	23
Total current assets	2,580	3,007
Property, plant and equipment, at cost:		
Oil and gas properties, using the successful efforts method of accounting:		
Proved properties	21,165	20,404
Unproved properties	601	558
Accumulated depletion, depreciation and amortization	(8,218)	(9,196)
Total property, plant and equipment	13,548	11,766
Long-term investments	125	66
Goodwill	264	270
Other property and equipment, net	1,291	1,762
Other assets	95	132
	$ 17,903	$ 17,003

The accompanying notes are an integral part of these consolidated financial statements.

PIONEER NATURAL RESOURCES COMPANY

CONSOLIDATED BALANCE SHEETS (continued)
(in millions, except share data)

	December 31, 2018	December 31, 2017
LIABILITIES AND EQUITY		
Current liabilities:		
Accounts payable:		
Trade	$ 1,441	$ 1,174
Due to affiliates	183	108
Interest payable	53	59
Income taxes payable	2	—
Current portion of long-term debt	—	449
Derivatives	27	232
Other	112	106
Total current liabilities	1,818	2,128
Long-term debt	2,284	2,283
Derivatives	—	23
Deferred income taxes	1,152	899
Other liabilities	538	391
Equity:		
Common stock, $.01 par value; 500,000,000 shares authorized; 174,321,171 and 173,796,743 shares issued as of December 31, 2018 and 2017, respectively	2	2
Additional paid-in capital	9,062	8,974
Treasury stock, at cost; 4,822,069 and 3,608,132 shares as of December 31, 2018 and 2017, respectively	(423)	(249)
Retained earnings	3,470	2,547
Total equity attributable to common stockholders	12,111	11,274
Noncontrolling interest in consolidated subsidiaries	—	5
Total equity	12,111	11,279
Commitments and contingencies		
	$ 17,903	$ 17,003

The accompanying notes are an integral part of these consolidated financial statements.

PIONEER NATURAL RESOURCES COMPANY

CONSOLIDATED STATEMENTS OF OPERATIONS
(in millions, except per share data)

	Year Ended December 31,		
	2018	2017	2016
Revenues and other income:			
Oil and gas	$ 4,991	$ 3,518	$ 2,418
Sales of purchased oil and gas	4,388	1,776	1,091
Interest and other	38	53	32
Derivative losses, net	(292)	(100)	(161)
Gain on disposition of assets, net	290	208	2
	9,415	5,455	3,382
Costs and expenses:			
Oil and gas production	855	591	581
Production and ad valorem taxes	284	215	136
Depletion, depreciation and amortization	1,534	1,400	1,480
Purchased oil and gas	3,930	1,807	1,155
Impairment of oil and gas properties	77	285	32
Exploration and abandonments	114	106	119
General and administrative	381	326	325
Accretion of discount on asset retirement obligations	14	19	18
Interest	126	153	207
Other	849	244	288
	8,164	5,146	4,341
Income (loss) before income taxes	1,251	309	(959)
Income tax benefit (provision)	(276)	524	403
Net income (loss)	975	833	(556)
Net loss attributable to noncontrolling interests	3	—	—
Net income (loss) attributable to common stockholders	$ 978	$ 833	$ (556)
Net income (loss) per share attributable to common stockholders:			
Basic	$ 5.71	$ 4.86	$ (3.34)
Diluted	$ 5.70	$ 4.85	$ (3.34)
Basic and diluted weighted average shares outstanding	171	170	166

The accompanying notes are an integral part of these consolidated financial statements.

PIONEER NATURAL RESOURCES COMPANY

CONSOLIDATED STATEMENTS OF EQUITY
(in millions, except share data and dividends per share)

		Equity Attributable to Common Stockholders					
	Shares Outstanding	Common Stock	Additional Paid-in Capital	Treasury Stock	Retained Earnings	Noncontrolling Interests	Total Equity
	(in thousands)						
Balance as of December 31, 2015	149,380	$ 2	$ 6,267	$ (199)	$ 2,298	$ 7	$ 8,375
Issuance of common stock	19,838	—	2,534	—	—	—	2,534
Dividends declared ($0.08 per share)	—	—	—	—	(14)	—	(14)
Exercise of long term incentive plan stock options and employee stock purchases	98	—	1	6	—	—	7
Purchase of treasury stock	(200)	—	—	(25)	—	—	(25)
Tax benefits related to stock-based compensation	—	—	1	—	—	—	1
Compensation costs:							
Vested compensation awards, net	608	—	—	—	—	—	—
Compensation costs included in net loss	—	—	89	—	—	—	89
Net loss	—	—	—	—	(556)	—	(556)
Balance as of December 31, 2016	169,724	$ 2	$ 8,892	$ (218)	$ 1,728	$ 7	$ 10,411
Dividends declared ($0.08 per share)	—	—	—	—	(14)	—	(14)
Exercise of long-term incentive plan stock options and employee stock purchases	81	—	1	5	—	—	6
Purchase of treasury stock	(191)	—	—	(36)	—	—	(36)
Compensation costs:							
Vested compensation awards, net	575	—	—	—	—	—	—
Compensation costs included in net income	—	—	79	—	—	—	79
Purchase of noncontrolling interest	—	—	2	—	—	(2)	—
Net income	—	—	—	—	833	—	833
Balance as of December 31, 2017	170,189	$ 2	$ 8,974	$ (249)	$ 2,547	$ 5	$ 11,279

The accompanying notes are an integral part of these consolidated financial statements.

PIONEER NATURAL RESOURCES COMPANY

CONSOLIDATED STATEMENTS OF EQUITY (continued)
(in millions, except share data and dividends per share)

		Equity Attributable to Common Stockholders					
	Shares Outstanding	Common Stock	Additional Paid-in Capital	Treasury Stock	Retained Earnings	Noncontrolling Interests	Total Equity
	(in thousands)						
Balance as of December 31, 2017	170,189	$ 2	$ 8,974	$ (249)	$ 2,547	$ 5	$ 11,279
Dividends declared ($0.32 per share)	—	—	—	—	(55)	—	(55)
Exercise of long-term incentive plan stock options and employee stock purchases	58	—	3	5	—	—	8
Purchases of treasury stock	(1,272)	—	—	(179)	—	—	(179)
Compensation costs:							
Vested compensation awards	524	—	—	—	—	—	—
Compensation costs included in net income	—	—	85	—	—	—	85
Sale of noncontrolling interest	—	—	—	—	—	(2)	(2)
Net income (loss)	—	—	—	—	978	(3)	975
Balance as of December 31, 2018	169,499	$ 2	$ 9,062	$ (423)	$ 3,470	$ —	$ 12,111

The accompanying notes are an integral part of these consolidated financial statements.

PIONEER NATURAL RESOURCES COMPANY

CONSOLIDATED STATEMENTS OF CASH FLOWS
(in millions)

	Year Ended December 31,		
	2018	**2017**	**2016**
Cash flows from operating activities:			
Net income (loss)	$ 975	$ 833	$ (556)
Adjustments to reconcile net income (loss) to net cash provided by operating activities:			
Depletion, depreciation and amortization	1,534	1,400	1,480
Impairment of oil and gas properties	77	285	32
Impairment of inventory and other property and equipment	11	2	8
Exploration expenses, including dry holes	27	22	42
Deferred income taxes	274	(519)	(379)
Gain on disposition of assets, net	(290)	(208)	(2)
Accretion of discount on asset retirement obligations	14	19	18
Interest expense	5	5	13
Derivative related activity	(270)	174	851
Amortization of stock-based compensation	85	79	89
Other	658	85	70
Change in operating assets and liabilities			
Accounts receivable	(52)	(120)	(141)
Income taxes receivable	—	(4)	40
Inventories	(70)	(35)	(32)
Derivatives	—	—	(24)
Investments	4	(2)	(21)
Other current assets	(1)	3	(3)
Accounts payable	321	134	58
Interest payable	(5)	(9)	3
Other current liabilities	(55)	(45)	(46)
Net cash provided by operating activities	3,242	2,099	1,500
Cash flows from investing activities:			
Proceeds from disposition of assets, net of cash sold	469	352	507
Payments for acquisitions	—	—	(428)
Proceeds from investments	1,373	1,467	905
Purchase of investments	(669)	(904)	(2,741)
Additions to oil and gas properties	(3,520)	(2,365)	(1,857)

Additions to other assets and other property and equipment, net	(263)	(342)	(207)
Net cash used in investing activities	(2,610)	(1,792)	(3,821)
Cash flows from financing activities:			
Principal payments on long-term debt	(450)	(485)	(455)
Proceeds from issuance of common stock, net of issuance costs	—	—	2,534
Payments of other liabilities	(23)	—	—
Exercise of long-term incentive plan stock options and employee stock purchases	8	6	7
Purchases of treasury stock	(179)	(36)	(25)
Payments of financing fees	(4)	—	—
Dividends paid	(55)	(14)	(13)
Net cash provided by (used in) financing activities	(703)	(529)	2,048
Net decrease in cash and cash equivalents	(71)	(222)	(273)
Cash and cash equivalents, beginning of period	896	1,118	1,391
Cash and cash equivalents, end of period	$ 825	$ 896	$ 1,118

The accompanying notes are an integral part of these consolidated financial statements.

PIONEER NATURAL RESOURCES COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
December 31, 2018, 2017 and 2016

NOTE 1. Organization and Nature of Operations

Pioneer Natural Resources Company ("Pioneer" or the "Company") is a Delaware corporation whose common stock is listed and traded on the New York Stock Exchange. The Company is a large independent oil and gas exploration and production company that explores for, develops and produces oil, natural gas liquids ("NGLs") and gas within the United States, with operations primarily in the Permian Basin in West Texas.

NOTE 2. Summary of Significant Accounting Policies

Principles of consolidation. The consolidated financial statements include the accounts of the Company and its wholly-owned and majority-owned subsidiaries since their acquisition or formation. All material intercompany balances and transactions have been eliminated. Certain reclassifications have been made to prior period amounts to conform to the current period's presentation.

Use of estimates in the preparation of financial statements. Preparation of the Company's consolidated financial statements in conformity with generally accepted accounting principles in the United States ("GAAP") requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting periods. Depletion of oil and gas properties and impairment of goodwill and proved and unproved oil and gas properties, in part, is determined using estimates of proved, probable and possible oil and gas reserves. There are numerous uncertainties inherent in the estimation of quantities of proved, probable and possible reserves and in the projection of future rates of production and the timing of development expenditures. Similarly, evaluations for impairment of proved and unproved oil and gas properties are subject to numerous uncertainties including, among others, estimates of future recoverable reserves and commodity price outlooks. Actual results could differ from the estimates and assumptions utilized.

Cash and cash equivalents. The Company's cash and cash equivalents include depository accounts held by banks and marketable securities with original issuance maturities of 90 days or less.

Investments. Periodically, the Company invests in commercial paper and corporate bonds with investment grade rated entities. The Company also periodically enters into time deposits with financial institutions. Commercial paper and time deposits are included in cash and cash equivalents if they have maturity dates that are less than 90 days at the date of purchase; otherwise, investments are classified as short-term investments or long-term investments in the consolidated balance sheets based on their maturity dates.

Investments are carried at amortized cost and classified as held-to-maturity as the Company has the intent and ability to hold them until they mature. The carrying values of held-to-maturity investments are adjusted for amortization of premiums and accretion of discounts over the remaining life of the investment. Income related to these investments is recorded as interest and other income in the consolidated statements of operations.

Accounts receivable. The Company's accounts receivable – trade are primarily comprised of oil and gas sales receivables, joint interest receivables and other receivables for which the Company does not require collateral security. The Company's share of oil and gas production is sold to various purchasers who must be prequalified under the Company's credit risk policies and procedures. The Company records allowances for doubtful accounts based on the age of accounts receivables and the financial condition of its purchasers. The Company's credit risk related to collecting accounts receivables is mitigated by using credit and other financial criteria to evaluate the credit standing of the entity obligated to make payment on the accounts receivable, and where appropriate, the Company obtains assurances of payment, such as a guarantee by the parent company of the counterparty or other credit support.

As of December 31, 2018 and 2017, the Company's allowance for doubtful accounts totaled $2 million and $1 million, respectively. The Company establishes allowances for bad debts equal to the estimable portions of accounts receivable for which failure to collect is considered probable. The Company estimates the portions of joint interest receivables for which failure to collect is probable based on percentages of joint interest receivables that are past due. The Company estimates the portions of other receivables for which failure to collect is probable based on the relevant facts and circumstances surrounding the receivable. Allowances for doubtful accounts are recorded as reductions to the carrying values of the receivables included in the Company's consolidated balance sheets and as charges to other expense in the consolidated statements of operations in the accounting periods during which failure to collect an estimable portion is determined to be probable.

Inventories. The Company's inventories consist of materials, supplies and commodities. The Company's materials and supplies inventory is primarily comprised of oil and gas drilling or repair items such as tubing, casing, proppant used to fracture-stimulate oil and gas wells, water, chemicals, operating supplies and ordinary maintenance materials and parts. The materials and supplies inventory is primarily acquired for use in future drilling operations or repair operations and is carried at the lower of cost or market, on a weighted average cost basis. Valuation allowances for materials and supplies inventories are recorded as reductions to the carrying values of the materials and supplies inventories in the Company's consolidated balance sheets and as charges to other expense in the consolidated statements of operations.

During the second quarter of 2018, the Company made a voluntary change in accounting policy to account for its materials and supplies inventory on a weighted average cost basis, versus using the previous accounting policy of the first-in-first-out basis. The Company made this voluntary change in accounting policy because it believes this method is preferable, as the weighted average cost basis more closely aligns with the physical flow of material and supplies inventory and is more widely utilized in the oil and gas industry. This voluntary change in accounting policy did not have a material effect on the Company's consolidated financial statements for prior periods. As such, prior periods have not been restated.

Commodity inventories are carried at the lower of cost or market, on a first-in, first-out basis. The Company's commodity inventories consist of oil, NGLs and gas volumes held in storage or as linefill in pipelines. Any valuation allowances of commodity inventories are recorded as reductions to the carrying values of the commodity inventories included in the Company's consolidated balance sheets and as charges to other expense in the consolidated statements of operations.

The components of inventories are as follows:

	As of December 31,	
	2018	2017
	(in millions)	
Materials and supplies (a)	$ 128	$ 134
Commodities	114	78
	$ 242	$ 212

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(a) As of December 31, 2018 and 2017, the Company's materials and supplies inventories were net of valuation allowances of $5 million and $5 million, respectively.

Investment in affiliate. In December 2018, the Company completed the sale of its pressure pumping assets to ProPetro Holding Corp. ("ProPetro") in exchange for short-term receivables and 16.6 million shares of ProPetro's common stock, representing an ownership interest in ProPetro of approximately 16 percent as of December 31, 2018. Additionally, the Company is entitled to designate a director and an independent director to ProPetro's board of directors. Based on its ownership in ProPetro and representation on the ProPetro board of directors, the Company has determined it has the ability to exercise significant influence over the operating and financial policies of ProPetro. The Company uses the fair value option to account for its equity method investment in ProPetro. The carrying value of the Company's short-term receivables and investment in ProPetro are classified as accounts receivable – due from affiliates and investment in affiliate, respectively, in the consolidated balance sheets. See Note 4 and Note 11 for additional information.

Oil and gas properties. The Company utilizes the successful efforts method of accounting for its oil and gas properties. Under this method, all costs associated with productive wells and nonproductive development wells are capitalized while nonproductive exploration costs and geological and geophysical expenditures are expensed. The Company capitalizes interest on expenditures for significant development projects, generally when the underlying project is sanctioned, until such projects are ready for their intended use.

The Company does not carry the costs of drilling an exploratory well as an asset in its consolidated balance sheets following the completion of drilling unless both of the following conditions are met: (i) the well has found a sufficient quantity of reserves to justify its completion as a producing well and (ii) the Company is making sufficient progress assessing the reserves and the economic and operating viability of the project.

Due to the capital-intensive nature and the geographical location of certain projects, it may take an extended period of time to evaluate the future potential of an exploration project and the economics associated with making a determination on its commercial viability. In these instances, the project's feasibility is not contingent upon price improvements or advances in technology, but rather the Company's ongoing efforts and expenditures related to accurately predicting the hydrocarbon recoverability based on well information, gaining access to other companies' production data in the area, transportation or processing facilities and/or getting partner approval to drill additional appraisal wells. These activities are ongoing and are being pursued constantly. Consequently, the Company's assessment of suspended exploratory well costs is continuous until a decision can be made that the project has found sufficient proved reserves to sanction the project or is noncommercial and is charged to exploration and abandonments expense. See Note 6 for additional information.

The Company owns interests in 11 gas processing plants and two treating facilities. The Company is the operator of the two treating facilities and none of the gas processing plants. Two of the gas processing facilities are under construction and one of the treating facilities is not currently being used. The Company's ownership interests in the gas processing plants and treating facilities are primarily to accommodate handling the Company's gas production and thus are considered a component of the capital and operating costs of the respective fields that they service. To the extent that there is excess capacity at a plant or treating facility, the Company attempts to process third-party gas volumes for a fee to keep the plant or treating facility at capacity. All revenues and expenses derived from third-party gas volumes processed through the plants and treating facilities are reported as components of oil and gas production costs. Third-party revenues generated from the processing plants and treating facilities for the years ended December 31, 2018, 2017 and 2016 were $78 million, $60 million and $41 million, respectively. Third-party expenses attributable to the processing plants and treating facilities for the same respective periods were $36 million, $26 million and $24 million. The capitalized costs of the plants and treating facilities are included in proved oil and gas properties and are depleted using the unit-of-production method along with the other capitalized costs of the field that they service.

The capitalized costs of proved properties are depleted using the unit-of-production method based on proved reserves. Costs of significant nonproducing properties, wells in the process of being drilled and development projects are excluded from depletion until the related project is completed and proved reserves are established or, if unsuccessful, impairment is determined.

Proceeds from the sales of individual properties and the capitalized costs of individual properties sold or abandoned are credited and charged, respectively, to accumulated depletion, depreciation and amortization, if doing so does not materially impact the depletion rate of an amortization base. Generally, no gain or loss is recorded until an entire amortization base is sold. However, gain or loss is recorded from the sale of less than an entire amortization base if the disposition is significant enough to materially impact the depletion rate of the remaining properties in the amortization base.

The Company performs assessments of its long-lived assets to be held and used, including proved oil and gas properties accounted for under the successful efforts method of accounting, whenever events or circumstances indicate that the carrying value of those assets may not be recoverable. An impairment loss is indicated if the sum of the expected future cash flows, including vertical integrated services that are used in the development of the assets, is less than the carrying amount of the assets, including the carrying value of vertical integrated services assets. In these circumstances, the Company recognizes an impairment charge for the amount by which the carrying amount of the assets exceeds the estimated fair value of the assets. See Note 4 for additional information.

Unproved oil and gas properties are periodically assessed for impairment on a project-by-project basis. These impairment assessments are affected by the results of exploration activities, commodity price outlooks, planned future sales or expirations of all or a portion of such projects. If the estimated future net cash flows attributable to such projects are not expected to be sufficient to fully recover the costs invested in each project, the Company will recognize an impairment charge at that time.

Goodwill. Goodwill is assessed for impairment whenever it is likely that events or circumstances indicate the carrying value of a reporting unit exceeds its fair value, but no less often than annually. An impairment charge is recorded for the amount by which the carrying amount exceeds the fair value of a reporting unit in the period it is determined to be impaired.

In January 2017, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") No. 2017-04, "Simplifying the Test of Goodwill Impairment" ("ASU 2017-04"). ASU 2017-04 simplifies the quantitative goodwill impairment test by eliminating the requirement to calculate the implied fair value of goodwill (step 2 of the previous goodwill impairment test). Instead, a company would record an impairment charge based on the excess of a reporting unit's carrying value over its fair value (as measured in step 1 of the previous goodwill impairment test). ASU 2017-04 is effective for fiscal years beginning after December 15, 2019, with early adoption permitted. In July 2018, the Company elected to early adopt this update. The adoption of ASU 2017-04 had no impact on the Company's consolidated financial statements.

The Company performed its annual qualitative assessment of goodwill during the third quarter of 2018 to determine whether it was more likely than not that the fair value of the Company's reporting unit was less than its carrying amount. Based on the results of the assessment, the Company determined it was not likely that the carrying value of the Company's reporting unit exceeded its fair value.

Other property and equipment, net. Other property and equipment is recorded at cost. The net carrying values of other property and equipment are as follows:

	As of December 31,	
	2018 (a)	2017 (a)
	(in millions)	
Land and buildings (b)	$ 380	$ 469
Proved and unproved sand properties (c)	36	468
Water infrastructure (d)	343	319
Transport and field equipment (b)(e)	50	152
Information technology	143	140
Leasehold improvements	13	20
Furniture and fixtures	15	19
Construction in progress and capitalized interest (f)	311	175
	$ 1,291	$ 1,762

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(a) At December 31, 2018 and 2017, other property and equipment was net of accumulated depreciation of $854 million and $937 million, respectively.
(b) The decrease from December 31, 2017 is primarily due to the Company's sale of its pressure pumping assets on December 31, 2018.
(c) Includes sand mines, facilities and unproved leaseholds that primarily provide the Company with proppant for use in the fracture stimulation of oil and gas wells. The decrease from December 31, 2017 is primarily due to the Company's plan to close its sand mine located in Brady, Texas. Other property and equipment associated with the Brady, Texas sand mine was subject to accelerated depreciation to reduce such property and equipment to its net realizable value by its expected closure in May 2019. The accelerated depreciation associated with the planned closure is recorded to other expense in the consolidated statements of operations. See Note 3 for additional information.
(d) Includes pipeline infrastructure costs and water supply wells.
(e) Includes vehicles and well servicing equipment, including pulling units, fracture stimulation tanks, water transport trucks, hot oilers, construction equipment and fishing tools that provide well services on Company-operated properties.
(f) Includes capitalized costs and capitalized interest on other property and equipment not yet placed in service as of December 31, 2018 and 2017. Construction in progress, including related capitalized interest, associated with the Company's new corporate headquarters was $217 million and $57 million as of December 31, 2018 and 2017, respectively. See Note 10 for additional information.

Other property and equipment is depreciated over its estimated useful life on a straight-line basis. Buildings are generally depreciated over 20 to 39 years. Equipment, vehicles, furniture and fixtures and information technology assets are generally depreciated over two to 15 years. Water infrastructure is generally depreciated over ten to 50 years. Leasehold improvements are amortized over the lesser of their estimated useful lives or the underlying terms of the associated leases.

The Company reviews its long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. If such assets are considered to be impaired, the impairment to be recorded is measured by the amount by which the carrying amount of the asset exceeds its estimated fair value. The estimated fair value is determined using either a discounted future cash flow model or another appropriate fair value method.

Asset retirement obligations. The Company records a liability for the fair value of an asset retirement obligation in the period in which the associated asset is acquired or placed into service, if a reasonable estimate of fair value can be made. Asset retirement obligations are generally capitalized as part of the carrying value of the long-lived asset to which it relates. Conditional asset retirement obligations meet the definition of liabilities and are recorded when incurred and when fair value can be reasonably estimated.

The Company records the current and noncurrent portions of asset retirement obligations in other current liabilities and other liabilities, respectively, in the consolidated balance sheets and expenditures are classified as cash used in operating activities in the consolidated statements of cash flows. See Note 9 for additional information.

Treasury stock. Treasury stock purchases are recorded at cost. Upon reissuance, the cost of treasury shares held is reduced by the average purchase price per share of the aggregate treasury shares held.

Issuance of common stock. In January and June of 2016, the Company issued 13.8 million and 6.0 million shares of its common stock, respectively, and realized cash proceeds of $1.6 billion and $937 million, respectively, net of associated underwriting and offering expenses.

Revenue recognition. The Company recognizes revenue when control of the promised goods or services is transferred to customers at an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. The Company adopted ASU No. 2014-09, Accounting Standards Codification ("ASC") 606, "Revenue from Contracts with Customers" ("ASC 606"), which supersedes the revenue recognition requirements in ASC 605, "Revenue Recognition" ("ASC 605"), on January 1, 2018 using the modified retrospective transition method. Results for reporting periods beginning after January 1, 2018 are presented under ASC 606, while prior period amounts are not adjusted and continue to be reported in accordance with historic accounting under ASC 605. The Company completed a detailed review of its revenue contracts in 2017, which represented all of the Company's revenue streams including oil, NGL and gas sales and sales of purchased oil and gas, in order to adopt the new standard beginning on January 1, 2018. The Company did not record a change to its opening retained earnings as of January 1, 2018 as there was no material change to the timing or pattern of revenue recognition due to the adoption of ASC 606.

Prior to the adoption of ASC 606 on January 1, 2018, the Company recognized revenue when it was realized or realizable and earned. Revenues were considered realized or realizable and earned when: (i) persuasive evidence of an arrangement existed, (ii) delivery occurred or services had been rendered, (iii) the seller's price to the buyer was fixed or determinable and (iv) collectability was reasonably assured.

The adoption of ASC 606 as of January 1, 2018 impacted the Company's results of operations as follows:

	Year Ended December 31, 2018		
	As Reported	ASC 605 (Without Adoption of ASC 606)	Effect of Change
		(in millions)	
Revenues and other income:			
Oil and gas	$ 4,991	$ 4,784	$ 207
Costs and expenses:			
Oil and gas production	$ 855	$ 648	$ 207

Changes in oil and gas revenues and oil and gas production costs (specifically gathering, processing and transportation costs) are due to the conclusion under the control model in ASC 606 that the third-party processor or transporter is only providing gas processing or transportation services and that the Company remains the principal owner of the commodity until sold to the ultimate purchaser. This is a change from ASC 605 where the Company historically recorded gas processing fees as a reduction of revenue recognized by the Company, as these fees were considered necessary to separate the wet gas stream into its sellable components (i.e., dry gas and individual NGL components). Under ASC 605, third-party processing and transportation companies were determined to have control of the commodities being processed and transported. As a result of adopting ASC 606, the Company has modified its presentation of revenues and expenses for these arrangements. Revenues related to these agreements are now presented on a gross basis for amounts expected to be received from third-party purchasers through the marketing process. Gathering, processing and transportation expenses related to these agreements, incurred prior to the transfer of control to the purchaser, are now presented as oil and gas production costs. See Note 13 for additional information.

The Company enters into purchase transactions with third parties and separate sale transactions with third parties to diversify a portion of the Company's West Texas Intermediate oil ("WTI") sales to a Gulf Coast or export market price and to satisfy unused gas pipeline capacity commitments. Revenues and expenses from these transactions are presented on a gross basis as the Company acts as a principal in the transaction by assuming the risk and rewards of ownership, including credit risk, of the commodities purchased and assuming the responsibility to deliver the commodities sold. Transportation costs associated with purchases and sales of third-party oil and gas are presented on a net basis in purchased oil and gas expense. Firm transportation payments on excess pipeline capacity are recorded as other expense in the consolidated statements of operations. See Note 15 for additional information.

Derivatives. All of the Company's derivatives are accounted for as non-hedge derivatives and are recorded at estimated fair value in the consolidated balance sheets. All changes in the fair values of its derivative contracts are recorded as gains or losses in the earnings of the periods in which they occur. The Company enters into derivatives under master netting arrangements, which, in an event of default, allows the Company to offset payables to and receivables from the defaulting counterparty. The Company classifies the fair value amounts of derivative assets and liabilities executed under master netting arrangements as net current or noncurrent derivative assets or net current or noncurrent derivative liabilities, whichever the case may be, by commodity and counterparty.

Net derivative asset values are determined, in part, by utilization of the derivative counterparties' credit-adjusted risk-free rate curves and net derivative liabilities are determined, in part, by utilization of the Company's credit-adjusted risk-free rate curve. The credit-adjusted risk-free rate curves for the Company and the counterparties are based on their independent market-quoted credit default swap rate curves plus the United States Treasury Bill yield curve as of the valuation date.

The Company's credit risk related to derivatives is a counterparty's failure to perform under derivative contracts owed to the Company. The Company uses credit and other financial criteria to evaluate the credit standing of, and to select, counterparties to its derivative instruments. Although the Company does not obtain collateral or otherwise secure the fair value of its derivative instruments, associated credit risk is mitigated by the Company's credit risk policies and procedures.

The Company has entered into International Swap Dealers Association Master Agreements ("ISDA Agreements") with each of its derivative counterparties. The terms of the ISDA Agreements provide the Company and the counterparties with rights of set off upon the occurrence of defined acts of default by either the Company or a counterparty to a derivative, whereby the party not in default may set off all derivative liabilities owed to the defaulting party against all derivative asset receivables from the defaulting party. See Note 5 for additional information.

Income taxes. The provision for income taxes is determined using the asset and liability approach of accounting for income taxes. Under this approach, deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes and net operating loss and tax credit carryforwards. The amount of deferred taxes on these temporary differences is determined using the tax rates that are expected to apply to the period when the asset is realized or the liability is settled, as applicable, based on tax rates and laws in the respective tax jurisdiction enacted as of the balance sheet date.

The Company reviews its deferred tax assets for recoverability and establishes a valuation allowance based on projected future taxable income, applicable tax strategies and the expected timing of the reversals of existing temporary differences. A valuation allowance is provided when it is more likely than not (likelihood of greater than 50 percent) that some portion or all of the deferred tax assets will not be realized.

The Company recognizes the tax benefit from an uncertain tax position only if it is more likely than not that the tax position will be sustained upon examination by the taxing authorities, based upon the technical merits of the position. If all or a portion of the unrecognized tax benefit is sustained upon examination by the taxing authorities, the tax benefit will be recognized as a reduction to the Company's deferred tax liability and will affect the Company's effective tax rate in the period it is recognized. See Note 16 for additional information.

The Company records any tax-related interest charges as interest expense and any tax-related penalties as other expense in the consolidated statements of operations.

Stock-based compensation. Stock-based compensation expense for restricted stock, restricted stock units and performance units expected to be settled in the Company's common stock ("Equity Awards") is measured at the grant date or modification date, as applicable, using the fair value of the award, and is recorded, net of estimated forfeitures, on a straight line basis over the vesting period of the respective award. The fair value of Equity Awards, except performance unit awards, is determined on the grant date or modification date, as applicable, using the prior day's closing stock price. The fair value of performance unit awards is determined using the Monte Carlo simulation model.

Equity Awards are net settled by withholding shares of the Company's common stock to satisfy income tax withholding payments due upon vesting. Remaining vested shares are remitted to individual employee brokerage accounts. Shares to be delivered upon vesting of Equity Awards are made available from authorized, but unissued shares or shares held as treasury stock.

Restricted stock awards expected to be settled in cash on their vesting dates, rather than in common stock ("Liability Awards"), are classified as accounts payable – due to affiliates on the consolidated balance sheets. The fair value of Liability Awards on the grant date is determined using the prior day's closing stock price. Liability Awards are marked to fair value as of each balance sheet date using the closing stock price on the balance sheet date. Changes in the fair value of Liability Awards are recorded as increases or decreases to stock-based compensation expense.

Equity Awards and Liability awards participate in dividends during vesting periods and generally vest over three years.

Segments. Based upon how the Company is organized and managed, the Company has one reportable operating segment, which is oil and gas development, exploration and production. The Company considers its vertical integration services as ancillary to its oil and gas development, exploration and producing activities and manages these services to support such activities. In addition, the Company has a single, company-wide management team that allocates capital resources to maximize profitability and measures financial performance as a single enterprise.

New accounting pronouncements. In February 2016, the FASB issued ASU 2016-02, "Leases (Topic 842)" ("ASC 842"). ASC 842 requires lessees to recognize lease assets and lease liabilities for those leases currently classified as operating leases and makes certain changes to the accounting for lease expenses. This standard will be effective for the Company for interim periods beginning January 1, 2019. ASC 842 should be applied using a modified retrospective approach. The Company will elect to apply transition guidance under ASU 2018-11, "Leases (Topic 842) Targeted Improvements," in which ASC 842 is applied at the adoption date, while the comparative periods will continue to be reported in accordance with historic accounting under ASC 840, "Leases." This standard does not apply to leases to explore for or use minerals, oil or gas resources, including the right to explore for those natural resources and rights to use the land in which those natural resources are contained.

Based on its current commitments, the Company will be required to recognize lease assets and liabilities related to drilling rig commitments, certain equipment rentals and leases, certain surface use agreements and potentially other arrangements. The Company plans to apply certain practical expedients provided in ASC 842 that, among other things, allow entities to not reassess contracts that commenced prior to adoption and to not recognize right of use assets and lease liabilities related to short-term leases. The adoption of ASC 842 will have a material impact on the Company's consolidated balance sheets, but will not have an impact on the consolidated statements of operations or the consolidated statements of cash flows. In preparation for the adoption of the standard, the Company has developed internal controls applicable to the process used to determine financial information required to be recognized and disclosed.

Upon adoption of ASC 842, the Company will recognize lease assets and lease liabilities in the range of $300 million to $350 million each, as of January 1, 2019. The Company will also derecognize $217 million of other property and equipment and $219 million of build-to-suit lease liability costs associated with the construction of the Company's new corporate headquarters as this contract will no longer qualify for capitalization. The contract for the Company's new corporate headquarters will be evaluated under ASC 842 upon lease commencement, which is expected to occur during the second half of 2019.

NOTE 3. Acquisitions, Divestitures and Decommissioning Activities

Acquisitions. During 2018, 2017 and 2016, the Company spent a total of $65 million, $136 million and $446 million, respectively, to acquire primarily undeveloped acreage for future exploitation and exploration activities in the Spraberry/Wolfcamp field of the Permian Basin.

As part of the the 2016 acquisitions, the Company acquired approximately 28,000 net acres in the Permian Basin, with net production of approximately 1,400 barrels of oil equivalent per day ("BOEPD"), from an unaffiliated third party for $428 million. The acquisition was accounted for as a business combination.

The allocation of the acquisition price to the assets acquired and the liabilities assumed based on their fair value at the acquisition date (in millions) is as follows:

Assets acquired:		
Proved properties	$	79
Unproved properties		347
Other property and equipment		5
Liabilities assumed:		
Asset retirement obligations		(2)
Other liabilities		(1)
Net assets acquired	$	428

The fair value measurements of the net assets acquired in 2016 are based on inputs that are not observable in the market and, therefore, represent Level 3 inputs in the fair value hierarchy (see Note 4 for additional information). The Company calculated the fair value of the acquired proved properties and asset retirement obligations using a discounted future cash flow model that utilizes management's estimates of (i) proved reserves, (ii) forecasted production rates, (iii) future operating, development and plugging and abandonment costs, (iv) future commodity prices and (v) a discount rate of ten percent for proved properties and seven percent for asset retirement obligations. The Company calculated the fair value of the acquired unproved properties based on the average price per acre in comparable market transactions. The operating results attributable to the acquired assets and liabilities assumed are included in the Company's consolidated statements of operations since the date of acquisition. In connection with the acquisition, the Company incurred acquisition related costs (primarily consulting, advisory and legal fees) of $1 million.

Divestitures.

The Company's significant divestitures are as follows:

- In December 2018, the Company completed the sale of its pressure pumping assets to ProPetro in exchange for total consideration of $282 million, comprised of $110 million of short-term receivables to be paid by ProPetro during the first quarter of 2019 and 16.6 million shares of ProPetro's common stock that had a fair value of $172 million. The total consideration is a noncash investing activity as of December 31, 2018. The Company recorded a gain of $30 million, employee-related charges of $19 million, contract termination charges of $13 million and other divestiture-related charges of $6 million associated with the sale. Additionally, the Company reduced the carrying value of goodwill by $3 million, reflecting the portion of the Company's goodwill related to the assets sold. See Note 2 and Note 11 for additional information.
- In December 2018, the Company completed the sale of approximately 2,900 net acres in the Sinor Nest (Lower Wilcox) oil field in South Texas to an unaffiliated third party for net cash proceeds $105 million, after normal closing adjustments. The Company recorded a gain of $54 million associated with the sale. Additionally, the Company reduced the carrying value of goodwill by $1 million, reflecting the portion of the Company's goodwill related to the assets sold.
- In August 2018, the Company completed the sale of its assets in the West Panhandle gas and liquids field to an unaffiliated third party for net cash proceeds of $170 million, after normal closing adjustments. The assets sold represent all of the Company's interests in the field, including all of its producing wells and the associated infrastructure. The Company recorded a gain of $127 million and employee-related charges of $7 million associated with the sale. Additionally, the Company reduced the carrying value of goodwill by $1 million, reflecting the portion of the Company's goodwill related to the assets sold.
- In July 2018, the Company completed the sale of its gas field assets in the Raton Basin to an unaffiliated third party for net cash proceeds of $54 million, after normal closing adjustments. The Company recorded a noncash impairment charge of $77 million in June 2018 to reduce the carrying value of its Raton Basin assets to their estimated fair value less costs to sell as the assets were considered held for sale. The Company recorded a gain of $2 million associated with this divestiture. The Company also recorded other divestiture-related charges of $117 million, including $111 million of deficiency charges related to certain firm transportation contracts retained by the Company and employee-related charges of $6 million. Additionally, the Company reduced the carrying value of goodwill by $1 million, reflecting the portion of the Company's goodwill related to the assets sold.

- In April 2018, the Company completed the sale of approximately 10,200 net acres in the West Eagle Ford Shale gas and liquids field to an unaffiliated third party for net cash proceeds of $100 million, after normal closing adjustments. The Company recorded a gain of $75 million associated with the sale. Additionally, the Company reduced the carrying value of goodwill by $1 million, reflecting the portion of the Company's goodwill related to the assets sold.

- In April 2017, the Company completed the sale of approximately 20,500 acres in the Martin County region of the Permian Basin, with net production of approximately1,500 BOEPD, to an unaffiliated third party for cash proceeds of $264 million. The sale resulted in a gain of $194 million. In conjunction with the divestiture, the Company reduced the carrying value of goodwill by $2 million, reflecting the portion of the Company's goodwill related to the assets sold.

- *Other*. During 2018, 2017 and 2016, the Company sold other proved and unproved properties, inventory and other property and equipment and recorded net gains of $1 million, $14 million and $2 million, respectively. The net gain of $14 million for 2017 is primarily related to the sale of nonstrategic proved and unproved properties in the Permian Basin for cash proceeds of $77 million.

Decommissioning activities. In November 2018, the Company announced plans to close its sand mine located in Brady, Texas and transition its proppant supply requirements to West Texas sand sources. During 2018, the Company recorded $443 million of accelerated depreciation and $7 million of employee-related charges associated with the pending shutdown.

Divestiture-related and decommissioning-related charges. Divestiture-related charges, including employee-related charges, contract termination charges and other costs resulting from the Company's divestitures, are recorded as other expense in the statements of operations and as other noncash operating activities in the consolidated statements of cash flows. Obligations associated with employee-related charges are classified as accounts payable - due to affiliates in the consolidated balance sheets. Obligations associated with contract termination charges are classified as other current or noncurrent liabilities in the consolidated balance sheets.

Divestiture-related and decommissioning-related obligations activity is as follows:

	Year Ended December 31, 2018
	(in millions)
Employee-related charges:	
Beginning employee-related obligations	$ —
Additions	39
Cash payments	(12)
Ending employee-related obligations	27
Contract termination charges:	
Beginning contract termination obligations	—
Additions	124
Cash payments	(13)
Ending contract termination obligations (a)	111
Total divestiture-related and decommissioning-related obligations	$ 138

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(a) Includes $98 million of deficiency charges related to certain firm transportation contracts associated with the divestiture of the Company's gas field assets in the Raton Basin. These obligations were retained by the Company and are expected to be paid as follows: $42 million in 2019, $44 million in 2020 and $12 million in 2021.

NOTE 4. Fair Value Measurements

The Company determines fair value based on the price that would be received from selling an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Fair value measurements are based upon inputs that market participants use in pricing an asset or liability, which are characterized according to a hierarchy that prioritizes those inputs based on the degree to which they are observable. Observable inputs represent market data obtained from independent sources, whereas unobservable inputs reflect a company's own market assumptions, which are used if observable inputs are not reasonably available without undue cost and effort. The fair value input hierarchy level to which an asset or liability measurement in its entirety falls is determined based on the lowest level input that is significant to the measurement in its entirety.

The three input levels of the fair value hierarchy are as follows:

- Level 1 – quoted prices for identical assets or liabilities in active markets.
- Level 2 – quoted prices for similar assets or liabilities in active markets; quoted prices for identical or similar assets or liabilities in markets that are not active; inputs other than quoted prices that are observable for the asset or liability (e.g. interest rates) and inputs derived principally from or corroborated by observable market data by correlation or other means.
- Level 3 – unobservable inputs for the asset or liability, typically reflecting management's estimate of assumptions that market participants would use in pricing the asset or liability. The fair values are therefore, determined using model-based techniques, including discounted cash flow models.

Assets and liabilities measured at fair value on a recurring basis. Assets and liabilities measured at fair value on a recurring basis are as follows:

	Fair Value Measurements at December 31, 2018 Using			
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Fair Value as of December 31, 2018
	(in millions)			
Assets:				
Commodity derivatives	$ —	$ 52	$ —	$ 52
Deferred compensation plan assets	82	—	—	82
Investment in affiliate	—	172	—	172
Total assets	82	224	—	306
Liabilities:				
Commodity derivatives	—	27	—	27
Total liabilities	—	27	—	27
Total recurring fair value measurements	$ 82	$ 197	$ —	$ 279

	Fair Value Measurements at December 31, 2017 Using			
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Fair Value as of December 31, 2017
	(in millions)			
Assets:				
Commodity derivatives	$ —	$ 11	$ —	$ 11
Deferred compensation plan assets	95	—	—	95
Total assets	95	11	—	106
Liabilities:				
Commodity derivatives	—	255	—	255
Total liabilities	—	255	—	255
Total recurring fair value measurements	$ 95	$ (244)	$ —	$ (149)

Commodity derivatives. The Company's commodity derivatives represent oil, NGL and gas swap contracts, collar contracts and collar contracts with short puts. The asset and liability measurements for the Company's commodity derivative contracts are determined using Level 2 inputs. The Company utilizes discounted cash flow and option-pricing models for valuing its commodity derivatives using inputs that include (i) the contracted notional volumes, (ii) independent active market price quotes, (iii) the applicable estimated credit-adjusted risk-free rate yield curve and (iv) the implied rate of volatility inherent in the collar contracts and collar contracts with short puts, which is based on active and independent market-quoted volatility factors.

Deferred compensation plan assets. The Company's deferred compensation plan assets include investments in equity and mutual fund securities that are actively traded on major exchanges. These investments are measured based on observable prices on major exchanges. The significant inputs to these asset exchange values represented Level 1 independent active exchange market price inputs.

Investment in affiliate. The Company elected the fair value option for measuring its equity method investment in ProPetro. The fair value of its investment in ProPetro is determined using Level 2 inputs, including the quoted market price for the stock as adjusted to reflect a value discount due to the shares not being able to be sold until mid-2019. See Note 11 for additional information.

Assets and liabilities measured at fair value on a nonrecurring basis. Assets and liabilities measured at fair value on a nonrecurring basis are subject to fair value adjustments in certain circumstances. The Company assesses recoverability of the carrying amount of certain assets and liabilities whenever events or changes in circumstances indicate the carrying amount of an asset or liability may not be recoverable. These assets and liabilities can include inventories, proved and unproved oil and gas properties and other long-lived assets that are written down to fair value when they are impaired or held for sale.

Proved oil and gas properties. As a result of the the Company's proved property impairment assessments, the Company recorded noncash impairment charges to reduce the carrying values of its Raton Basin gas field assets during the year ended December 31, 2017 and the West Panhandle gas and liquids field during the year ended December 31, 2016. Impairment charges for proved oil and gas properties are recorded as impairment of oil and gas properties in the consolidated statements of operations.

The Company calculated the fair values of the Raton Basin assets and West Panhandle field proved properties using a discounted cash flow model. Significant Level 3 assumptions associated with the calculation of discounted future cash flows included management's longer-term commodity price outlooks ("Management's Price Outlooks") and management's outlooks for (i) production, (ii) capital expenditures, (iii) production costs and (iv) estimated proved reserves and risk-adjusted probable reserves. Management's Price Outlooks are developed based on third-party longer-term commodity futures price outlooks as of each measurement date. The expected future net cash flows were discounted using an annual rate of ten percent to determine fair value.

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The fair value and fair value adjustments for proved properties, as well as the average oil price per barrel ("Bbl") and gas price per British thermal unit ("MMBtu") utilized in the respective Management's Price Outlooks are as follows:

		Fair Value	Fair Value Adjustment	Management's Price Outlooks	
				Oil	Gas
		(in millions)			
Raton Basin	March 2017	$ 186	$ (285)	$ 53.65	$ 3.00
West Panhandle	March 2016	$ 33	$ (32)	$ 49.77	$ 3.24

Unproved oil and gas properties. During 2016, the Company recorded a noncash impairment charge of $32 million to write-off the carrying value of its unproved royalty acreage in Alaska as a result of the operator curtailing operations in the area and Management's Price Outlooks. The impairment charges for unproved oil and gas properties are recorded as exploration and abandonments in the consolidated statements of operations.

Sale of Raton Basin assets. In June 2018, the Company recognized impairment charges of $77 million to reduce the carrying value of its Raton Basin gas field assets to the agreed upon sales price for these assets, which were sold in July 2018. The impairment charges included $65 million attributable to proved oil and gas properties and $12 million of other property and equipment. These impairment charges are recorded as impairment of oil and gas properties in the consolidated statement of operations. The Company also recorded other divestiture-related charges of $111 million attributable to deficiency charges related to certain firm transportation contracts retained by the Company. The fair value of these contracts was determined using Level 2 inputs, including an annual discount rate of 4.4 percent, to discount the expected future cash flows. See Note 3 for additional information.

Financial instruments not carried at fair value. Carrying values and fair values of financial instruments that are not carried at fair value in the consolidated balance sheets are as follows:

	December 31, 2018		December 31, 2017	
	Carrying Value	Fair Value	Carrying Value	Fair Value
	(in millions)			
Assets:				
Cash and cash equivalents:				
Cash (a)	$ 775	775	$ 846	$ 846
Time deposits (a)	50	50	50	50
Total	$ 825	$ 825	$ 896	$ 896
Short-term investments:				
Commercial paper (b)	$ 53	53	$ 124	124
Corporate bonds (c)	290	288	642	640
Time deposits (b)	100	100	447	447
Total	$ 443	$ 441	$ 1,213	$ 1,211
Long-term investments:				
Corporate bonds (c)	$ 125	$ 125	$ 66	$ 66
Total	$ 125	$ 125	$ 66	$ 66
Liabilities:				
Current portion of long-term debt (d)	$ —	$ —	$ 449	$ 457
Long-term debt (d)	$ 2,284	$ 2,374	$ 2,283	$ 2,479

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(a) Fair value approximates carrying value due to the short-term nature of the instruments.
(b) Fair value is determined using Level 2 inputs.
(c) Fair value is determined using Level 1 inputs.
(d) Fair value is determined using Level 2 inputs. The Company's senior notes are quoted but not actively traded on major exchanges; therefore, fair value is based on periodic values as quoted on major exchanges.

The Company has other financial instruments consisting primarily of receivables, payables and other current assets and liabilities that approximate fair value due to the nature of the instrument and their relatively short maturities. Non-financial assets and liabilities initially measured at fair value include assets acquired and liabilities assumed in a business combination, goodwill and asset retirement obligations.

NOTE 5. Derivative Financial Instruments

The Company utilizes commodity swap contracts, option contracts, collar contracts, collar contracts with short puts and basis swap contracts to (i) reduce the effect of price volatility on the commodities the Company produces and sells or consumes, (ii) support the Company's annual capital budgeting and expenditure plans and (iii) reduce commodity price risk associated with certain capital projects. The Company also, from time to time, utilizes interest rate contracts to reduce the effect of interest rate volatility on the Company's indebtedness.

Periodically, the Company may pay a premium to enter into commodity contracts. Premiums paid, if any, have been nominal in relation to the value of the underlying asset in the contract. The Company recognizes the nominal premium payments as an increase to the value of the derivative assets when paid.

Oil production derivatives. The Company sells its oil production at the lease and the sales contracts governing such oil production are tied directly to, or are correlated with, New York Mercantile Exchange ("NYMEX") West Texas Intermediate ("WTI") oil prices. The Company also enters into pipeline capacity commitments in order to secure available oil transportation capacity from its areas of production to the Gulf Coast. In order to diversify the oil price it receives, the Company (i) enters into oil purchase transactions with third parties in its areas of production that are consistent with the oil prices that the Company receives at the lease, adjusted for transportation costs to the point of purchase, (ii) transports the purchased oil using its pipeline capacity to the Gulf Coast, and (iii) enters into third party sale transactions to sell the oil into the Gulf Coast refinery or international export markets at prices that are highly correlated with Brent oil prices. As a result, the Company will generally use Brent derivative contracts to manage future oil price volatility.

Volumes per day associated with outstanding oil derivative contracts as of December 31, 2018 and the weighted average oil prices for those contracts are as follows:

	2019			
	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
Brent collar contracts with short puts:				
Volume per day (Bbl)	15,000	15,000	15,000	15,000
Price per Bbl:				
Ceiling	$ 89.90	$ 89.90	$ 89.90	$ 89.90
Floor	$ 75.00	$ 75.00	$ 75.00	$ 75.00
Short put	$ 65.00	$ 65.00	$ 65.00	$ 65.00

NGL production derivatives. All material physical sales contracts governing the Company's NGL production are tied directly or indirectly to Mont Belvieu, Texas NGL component product prices. The Company uses derivative contracts to manage the NGL component product price volatility. As of December 31, 2018 the Company did not have any NGL derivative contracts outstanding.

Gas production derivatives. All material physical sales contracts governing the Company's gas production are tied directly or indirectly to NYMEX Henry Hub ("HH") gas prices or regional index prices where the gas is sold. The Company uses derivative contracts to manage gas price volatility and basis swap contracts to reduce basis risk between HH prices and actual index prices at which the gas is sold.

Volumes per day associated with outstanding gas derivative contracts as of December 31, 2018 and the weighted average gas prices for those contracts are as follows:

	2019			
	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
Swap contracts:				
Volume per day (MMBtu)	102,622	50,000	50,000	16,848
Price per MMBtu	$ 3.39	$ 2.94	$ 2.94	$ 2.94
Basis swap contracts:				
Permian Basin index swap volume per day (MMBtu) (a)	57,378	60,000	60,000	—
Price differential ($/MMBtu)	$ (1.47)	$ (1.46)	$ (1.46)	$ —
Southern California index swap volume per day (MMBtu) (b)	100,000	80,000	80,000	80,000
Price differential ($/MMBtu)	$ 0.40	$ 0.31	$ 0.31	$ 0.31
Call option contracts sold:				
Volume per day (MMBtu) (c)	50,000	—	—	—
Price per MMBtu	$ 3.93	$ —	$ —	$ —

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(a) The referenced basis swap contracts fix the basis differentials between the index price at which the Company sells its Permian Basin gas and the HH price used in swap contracts.

(b) The referenced basis swap contracts fix the basis differentials between Permian Basin index prices and southern California index prices for Permian Basin gas forecasted for sale in Arizona and southern California.

(c) The premium associated with selling these call option contracts was utilized to improve the swap contract prices for April through October 2019 swap volumes.

Fair value. The fair value of derivative financial instruments not designated as hedging instruments is as follows:

Fair Value of Derivative Instruments as of December 31, 2018

Type	Consolidated Balance Sheet Location	Fair Value	Gross Amounts Offset in the Consolidated Balance Sheet	Net Fair Value Presented in the Consolidated Balance Sheet
			(in millions)	
Asset Derivatives:				
Commodity price derivatives	Derivatives - current	$ 59	$ (7)	$ 52
				$ 52
Liability Derivatives:				
Commodity price derivatives	Derivatives - current	$ 34	$ (7)	$ 27
				$ 27

PIONEER NATURAL RESOURCES COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
December 31, 2018, 2017 and 2016

Fair Value of Derivative Instruments as of December 31, 2017

Type	Consolidated Balance Sheet Location	Fair Value	Gross Amounts Offset in the Consolidated Balance Sheet	Net Fair Value Presented in the Consolidated Balance Sheet
			(in millions)	
Asset Derivatives:				
Commodity price derivatives	Derivatives - current	$ 13	$ (2)	$ 11
Commodity price derivatives	Derivatives - noncurrent	$ 3	$ (3)	—
				$ 11
Liability Derivatives:				
Commodity price derivatives	Derivatives - current	$ 234	$ (2)	$ 232
Commodity price derivatives	Derivatives - noncurrent	$ 26	$ (3)	23
				$ 255

Gains (losses) recorded on derivative contracts are as follows:

Derivatives Not Designated as Hedging Instruments	Location of Gain/(Loss) Recorded as Earnings on Derivatives	Amount of Gain/(Loss) Recorded as Earnings on Derivatives		
		Year Ended December 31,		
		2018	2017	2016
			(in millions)	
Commodity price derivatives	Derivative losses, net	$ (292)	$ (99)	$ (174)
Interest rate derivatives	Derivative losses, net	—	(1)	13
		$ (292)	$ (100)	$ (161)

Net derivative assets (liabilities) by counterparty are as follows:

	December 31, 2018
	Net Assets (Liabilities)
	(in millions)
Macquarie Bank	$ (27)
J Aron & Company	2
Bank of Montreal	2
JP Morgan Chase	2
Societe Generale	46
	$ 25

See Note 2 for additional information.

NOTE 6. Exploratory Well Costs

The Company capitalizes exploratory well and project costs until a determination is made that the well or project has either found proved reserves, is impaired or is sold. The Company's capitalized exploratory well and project costs are classified as proved properties in the consolidated balance sheets. If the exploratory well or project is determined to be impaired, the impaired costs are recorded as exploration and abandonments expense.

Capitalized exploratory well project activity is as follows:

	Year Ended December 31,		
	2018	2017	2016
		(in millions)	
Beginning capitalized exploratory well costs	$ 505	$ 323	$ 306
Additions to exploratory well costs pending the determination of proved reserves	2,585	1,956	1,387
Reclassification due to determination of proved reserves	(2,557)	(1,764)	(1,369)
Disposition of assets	(1)	—	—
Exploratory well costs charged to exploration and abandonment expense	(23)	(10)	(1)
Ending capitalized exploratory well costs	$ 509	$ 505	$ 323

Aging of capitalized exploratory costs and the number of projects for which exploratory well costs have been capitalized for a period greater than one year, based on the date drilling was completed are as follows:

	As of December 31,		
	2018	2017	2016
		(in millions, except well counts)	
Capitalized exploratory well costs that have been suspended:			
One year or less	$ 509	$ 493	$ 318
More than one year	—	12	5
	$ 509	$ 505	$ 323
Number of projects with exploratory well costs that have been suspended for a period greater than one year	—	7	3

NOTE 7. Long-term Debt and Interest Expense

The components of long-term debt, including the effects of issuance costs and issuance discounts, are as follows:

	December 31,	
	2018	2017
	(in millions)	
Outstanding debt principal balances:		
6.875% senior notes due 2018 (a)	$ —	$ 450
7.50% senior notes due 2020	450	450
3.45% senior notes due 2021	500	500
3.95% senior notes due 2022	600	600
4.45% senior notes due 2026	500	500
7.20% senior notes due 2028	250	250
	2,300	2,750
Issuance costs and discounts	(16)	(18)
Long-term debt	2,284	2,732
Less current portion of long-term debt (a)	—	449
Long-term debt	$ 2,284	$ 2,283

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(a) The 6.875% senior notes, net of $106 thousand of unamortized issuance costs and discounts, are classified as current in the consolidated balance sheet as of December 31, 2017.

Credit facility. During October 2018, the Company entered into a Credit Agreement dated as of October 24, 2018 (the "Credit Facility") with a syndicate of financial institutions (the "Syndicate"), primarily to extend the maturity of the Credit Facility from August 2020 to October 2023, while maintaining aggregate loan commitments of $1.5 billion. The Company accounted for the entry into the Credit Facility as a modification of the prior agreement and capitalized the debt issuance costs along with those unamortized issuance costs that remained from the issuance of the prior agreement. As of December 31, 2018, the Company had no outstanding borrowings under the Credit Facility.

Borrowings under the Credit Facility may be in the form of revolving loans or swing line loans. Revolving loans represent loans made ratably by the Syndicate in accordance with their respective commitments under the Credit Facility and bear interest, at the option of the Company, based on (a) a rate per annum equal to the higher of the prime rate announced from time to time by Wells Fargo Bank, National Association or the weighted average of the rates on overnight federal funds transactions with members of the Federal Reserve System during the last preceding business day plus 0.5 percent plus a defined alternate base rate spread margin, which is currently 0.25 percent based upon the Company's debt rating or (b) a base Eurodollar rate, substantially equal to LIBOR, plus a margin (the "Applicable Margin"), which is currently 1.25 percent and is also determined by the Company's debt rating. Swing line loans represent loans made by a subset of the lenders in the Syndicate and may not exceed $150 million. Swing line loans under the Credit Facility bear interest at a rate per annum equal to the "ASK" rate for federal funds periodically published by the Dow Jones Market Service plus the Applicable Margin. Letters of credit outstanding under the Credit Facility are subject to a per annum fee, representing the Applicable Margin plus 0.125 percent. The Company also pays commitment fees on undrawn amounts under the Credit Facility that are determined by the Company's debt rating (currently 0.15 percent). Borrowings under the Credit Facility are general unsecured obligations.

The Credit Facility requires the maintenance of a ratio of total debt to book capitalization, subject to certain adjustments, not to exceed 0.65 to 1.0. As of December 31, 2018, the Company was in compliance with all of its debt covenants.

Senior notes. The Company's 6.875% senior notes (the "6.875% Senior Notes") and 6.65% senior notes (the "6.65% Senior Notes"), with debt principal balances of $450 million and $485 million, respectively, matured and were repaid in May 2018 and March 2017, respectively. The Company funded the repayments with cash on hand. The 6.875% Senior Notes were classified as current in the consolidated balance sheet as of December 31, 2017.

The Company's senior notes are general unsecured obligations ranking equally in right of payment with all other senior unsecured indebtedness of the Company and are senior in right of payment to all existing and future subordinated indebtedness of the Company. The Company is a holding company that conducts all of its operations through subsidiaries; consequently, the senior notes are structurally subordinated to all obligations of its subsidiaries. Interest on the Company's senior notes is payable semiannually.

Principal payments scheduled to be made on the Company's long-term debt are as follows (in millions):

2019	$	—
2020	$	450
2021	$	500
2022	$	600
2023	$	—
Thereafter	$	750

Interest expense activity is as follows:

	Year Ended December 31,		
	2018	2017	2016
	(in millions)		
Cash payments for interest	$ 133	$ 164	$ 196
Amortization of issuance discounts	1	1	9
Amortization of capitalized loan fees	4	4	4
Net changes in accruals	(6)	(9)	2
Interest incurred	132	160	211
Less capitalized interest	(6)	(7)	(4)
	$ 126	$ 153	$ 207

NOTE 8. Incentive Plans

Deferred compensation retirement plan. The Company's deferred compensation retirement plan allows for qualified officers and certain key employees of the Company to contribute up to 25 percent of their base salary and 100 percent of their annual bonus. The Company provides a matching contribution of 100 percent of the officer's and key employee's contribution limited up to the first ten percent of the officer's base salary and eight percent of the key employee's base salary. The Company's matching contribution vests immediately. A trust fund has been established by the Company to accumulate the contributions made under this retirement plan. The Company's matching contributions were $3 million for each of the years ended December 31, 2018, 2017 and 2016, respectively.

401(k) plan. The Pioneer Natural Resources USA, Inc. ("Pioneer USA," a wholly-owned subsidiary of the Company) 401(k) and Matching Plan (the "401(k) Plan") is a defined contribution plan established under the Internal Revenue Code Section 401. All regular full-time and part-time employees of Pioneer USA are eligible to participate in the 401(k) Plan on the first day of the month following their date of hire. Participants may contribute up to 80 percent of their annual base salary into the 401(k) Plan. Matching contributions are made to the 401(k) Plan in cash by Pioneer USA in amounts equal to 200 percent of a participant's contributions to the 401(k) Plan that are not in excess of five percent of the participant's annual base salary (the "Matching Contribution"). Each participant's account is credited with the participant's contributions, Matching Contributions and allocations of the 401(k) Plan's earnings. Participants are fully vested in their account balances except for Matching Contributions and their proportionate share of 401(k) Plan earnings attributable to Matching Contributions, which proportionately vest over a four-year period that begins on the participant's date of hire. Beginning in February 2018, eligible employees are automatically enrolled in the 401(k) Plan at a contribution rate of five percent of the employee's annual base salary, unless the employee opts out of participation or makes an alternate election within 30 days of becoming eligible for participation.

During the years ended December 31, 2018, 2017 and 2016, the Company recorded compensation expense of $36 million, $25 million and $23 million, respectively, as a result of Matching Contributions.

Stock-based compensation costs. The Company records stock-based compensation expense ratably over the vesting periods of the Company's stock-based compensation awards using the awards' fair value. The Company maintains two plans providing for stock-based compensation: the Amended and Restated 2006 Long-Term Incentive Plan ("LTIP") and the Employee Stock Purchase Plan ("ESPP").

Long-Term Incentive Plan. The LTIP provides for the granting of various forms of awards, including stock options, stock appreciation rights, performance units, restricted stock and restricted stock units to directors, officers and employees of the Company.

The number of shares available for grant pursuant to awards under the LTIP is as follows:

	As of December 31, 2018
Approved and authorized awards	12,600,000
Awards issued under plan	(7,746,616)
Awards available for future grant	4,853,384

Employee Stock Purchase Plan. The ESPP allows eligible employees to annually purchase the Company's common stock at a discounted price. Officers of the Company are not eligible to participate in the ESPP. Contributions to the ESPP are limited to 15 percent of an employee's base salary (subject to certain ESPP limits) during the eight-month offering period (January 1 to August 31). Participants in the ESPP purchase the Company's common stock at a price that is 15 percent below the closing sales price of the Company's common stock on either the first day or the last day of each offering period, whichever closing sales price is lower.

The number of shares available for issuance under the ESPP is as follows:

	As of December 31, 2018
Approved and authorized shares	1,250,000
Shares issued	(1,002,433)
Shares available for future issuance	247,567

Stock-based compensation expense and the associated income tax benefit are as follows:

	Year Ended December 31,		
	2018	2017	2016
		(in millions)	
Restricted stock - Equity Awards	$ 65	$ 60	$ 66
Restricted stock - Liability Awards	17	24	24
Performance unit awards	18	17	21
ESPP	2	2	2
	$ 102	$ 103	$ 113
Income tax benefit	$ 17	$ 19	$ 34

As of December 31, 2018, there was $80 million of unrecorded stock-based compensation expense related to unvested share-based compensation plans, including $14 million attributable to Liability Awards that are expected to be settled in cash on their vesting dates. The weighted average remaining vesting period of the awards is less than three years.

Restricted stock awards. During 2018, the Company awarded 503,982 restricted shares or units of the Company's common stock as compensation to directors, officers and employees of the Company (including 113,364 shares or units representing Liability Awards).

Restricted stock award activity is as follows:

	Year Ended December 31, 2018		
	Equity Awards		Liability Awards
	Number of Shares	Weighted Average Grant-Date Fair Value	Number of Shares
Outstanding at beginning of year	916,223	$ 151.71	252,735
Shares granted	390,618	$ 180.66	113,364
Shares forfeited	(60,103)	$ 168.20	(26,967)
Shares vested	(447,066)	$ 150.83	(137,631)
Outstanding at end of year	799,672	$ 165.10	201,501

The weighted average grant-date fair value of restricted stock Equity Awards awarded during 2018, 2017 and 2016 was $180.66, $180.50 and $122.72, respectively. The grant-date fair value of restricted stock Equity Awards that vested during 2018, 2017 and 2016 was $67 million, $70 million and $66 million, respectively.

As of December 31, 2018 and 2017, accounts payable - due to affiliates in the consolidated balance sheets includes $14 million and $20 million, respectively, of liabilities attributable to the Liability Awards, representing the fair value of the earned, but unvested, portion of the outstanding awards as of that date. The cash paid for Liability Awards that vested during 2018, 2017 and 2016 was $24 million, $20 million and $18 million, respectively.

Performance unit awards. During 2018, 2017 and 2016, the Company awarded performance units to certain of the Company's officers under the LTIP. The number of shares of common stock to be issued is determined by comparing the Company's total shareholder return to the total shareholder return of a predetermined group of peer companies over the performance period. The performance unit awards vest over a 34-month service period.

The grant-date fair values per unit of the 2018, 2017 and 2016 performance unit awards were $246.18, $258.27 and $203.69, respectively, which were determined using the Monte Carlo simulation model, and are being recorded as stock-based compensation expense ratably over the performance period. The Monte Carlo simulation model utilizes multiple input variables that determine the probability of satisfying the market condition stipulated in the award grant and calculates the fair value of the award. Expected volatilities utilized in the model were estimated using a historical period consistent with the performance period of approximately three years. The risk-free interest rate was based on the United States Treasury rate for a term commensurate with the expected life of the grant.

Assumptions used to estimate the fair value of performance unit awards granted are as follows:

	Year Ended December 31,		
	2018	2017	2016
Risk-free interest rate	2.41%	1.42%	0.96%
Range of volatilities	30.4% - 53.3%	33.6% - 58.2%	28.3% - 53.6%

Performance unit activity is as follows:

	Year Ended December 31, 2018	
	Number of Units (a)	Weighted Average Grant-Date Fair Value
Beginning performance unit awards	163,158	$ 223.45
Units granted	62,541	$ 246.18
Units forfeited	(1,285)	$ 225.14
Units vested (b)	(105,245)	$ 204.68
Ending performance unit awards	119,169	$ 251.92

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(a) Amount reflects the number of performance units initially granted. The actual payout of shares upon vesting may be between zero percent and 250 percent of the performance units included in this table depending upon the total shareholder return ranking of the Company compared to peer companies at the vesting date.

(b) Amount reflects the number of performance units vested upon retirement of eligible officers and the vesting of performance units for which the service period has ended. On December 31, 2018, the service period lapsed on 103,334 performance unit awards that earned 1.10 shares for each vested award, representing 113,674 aggregate shares of common stock issued on January 2, 2019. The vested performance units that earned 1.10 shares for each vested award included 68,556 units that vested in the current year and 34,778 units that vested in prior years associated with the retirement of the participant. In addition, 1,911 units vested upon retirement of an eligible officer and will be issued when the performance period ends in 2019.

The grant-date fair value of performance units that vested during 2018, 2017 and 2016 was $21 million, $18 million and $15 million, respectively.

NOTE 9. Asset Retirement Obligations

The Company's asset retirement obligations primarily relate to the future plugging and abandonment of wells and related facilities. Market risk premiums associated with asset retirement obligations are estimated to represent a component of the Company's credit-adjusted risk-free rate that is utilized in the calculations of asset retirement obligations.

Asset retirement obligations activity is as follows:

	Year Ended December 31,		
	2018	2017	2016
	(in millions)		
Beginning asset retirement obligations	$ 271	$ 297	$ 285
Obligations assumed in acquisitions	—	—	2
New wells placed on production	1	3	2
Changes in estimates (a)	16	(9)	17
Dispositions	(89)	(7)	—
Liabilities settled	(30)	(32)	(27)
Accretion of discount	14	19	18
Ending asset retirement obligations	$ 183	$ 271	$ 297

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(a) Changes in estimates are determined based on several factors, including abandonment cost estimates based on recent actual costs incurred to abandon wells, credit-adjusted risk-free discount rates and well life estimates. The increase in 2018 is primarily due to an increase in abandonment expense estimates, offset by an increase in commodity prices, which has the effect of lengthening the economic life of the Company's producing wells. Abandonment expense estimates used in the calculation of asset retirement obligations are based on actual cost incurred per well for such costs. The decrease in 2017 was primarily due to an increase in commodity prices, which has the effect of lengthening the economic life of the Company's producing wells.

The Company classifies the current and noncurrent portions of asset retirement obligations as other current liabilities and other liabilities, respectively, in the consolidated balance sheets. As of December 31, 2018 and 2017, the current portion of the Company's asset retirement obligations were $25 million and $41 million, respectively.

NOTE 10. Commitments and Contingencies

Severance agreements. The Company has entered into severance and change in control agreements with its officers and certain key employees. The current annual salaries for the officers and key employees covered under such agreements total $30 million.

Indemnifications. The Company has agreed to indemnify its directors and certain of its officers, employees and agents with respect to claims and damages arising from acts or omissions taken in such capacity, as well as with respect to certain litigation.

Legal actions. The Company is party to various proceedings and claims incidental to its business. While many of these matters involve inherent uncertainty, the Company believes that the amount of the liability, if any, ultimately incurred with respect to these proceedings and claims will not have a material adverse effect on the Company's consolidated financial position as a whole or on its liquidity, capital resources or future annual results of operations. The Company records reserves for contingencies when information available indicates that a loss is probable and the amount of the loss can be reasonably estimated.

Environmental. Environmental expenditures that relate to an existing condition caused by past operations and that have no future economic benefits are expensed. Environmental expenditures that extend the life of the related property or mitigate or prevent future environmental contamination are capitalized. Liabilities for expenditures that will not qualify for capitalization are recorded when environmental assessment and/or remediation is probable and the costs can be reasonably estimated. Such liabilities are undiscounted unless the timing of cash payments for the liability is fixed or reliably determinable. Environmental liabilities normally involve estimates that are subject to revision until settlement or remediation occurs.

Obligations following divestitures. In connection with its divestiture transactions, the Company may retain certain liabilities and provide the purchaser certain indemnifications, subject to defined limitations, which may apply to identified pre-closing matters, including matters of litigation, environmental contingencies, royalty obligations and income taxes. The Company does not believe that these obligations are probable of having a material impact on its liquidity, financial position or future results of operations. Also associated with our divestiture transactions, the Company has issued and received guarantees to facilitate the transfer of contractual obligations such as firm transportation agreements or gathering and processing arrangements. The Company believes the likelihood of making or receiving payments under these guarantees to be remote. As of December 31, 2018 the maximum amount of payments the Company could be required to make under the guarantees is $132 million, which could be partially offset by credit support from third parties of $69 million.

Texas Commission on Environmental Quality ("TCEQ") enforcement action. The Company has been advised by the TCEQ that the agency is pursuing an enforcement action against the Company and may seek monetary sanctions due to various emissions occurring during the Company's ownership of the Fain gas plant in the West Panhandle region of Texas, which was sold during 2018. The Company has engaged in discussions with the TCEQ regarding these matters and the TCEQ staff has proposed an enforcement order that is acceptable to, and has been executed by, the Company. The proposed enforcement order is now awaiting formal consideration and approval by TCEQ commissioners. Commissioner approval is not assured and the Company cannot predict the outcome of the TCEQ commissioner considerations with any certainty. The Company believes such monetary sanctions will not exceed $235,500 in the aggregate.

Lease commitments. The Company leases drilling rigs, storage tanks, equipment and office facilities under operating leases. Rent expense for the years ended December 31, 2018, 2017 and 2016 was $98 million, $82 million and $69 million, respectively.

In June 2017, the Company entered into a 20-year operating lease for the Company's new corporate headquarters that is currently being constructed in Irving, Texas. Annual base rent is expected to be $33 million and lease payments are expected to commence once the building is complete, which is expected to occur during the second half of 2019. The Company has a variable equity interest in the entity that is constructing the building. The Company is not the primary beneficiary of the variable interest entity and only has a profit sharing interest after certain economic returns are achieved. The Company has no exposure to the variable interest entity's losses or future liabilities, if any. The Company is the deemed owner of the building (for accounting purposes) during the construction period and is following the build-to-suit accounting guidance.

The build-to-suit asset and liability associated with the Company's new corporate headquarters are as follows:

	As of December 31,	
	2018	2017
	(in millions)	
Other property and equipment, net (a)	$ 217	$ 57
Other noncurrent liabilities (b)	$ 219	$ 56

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(a) A noncash investing activity for purposes of the consolidated statements of cash flows.
(b) A noncash financing activity for purposes of the consolidated statements of cash flows.

Drilling commitments. The Company's principal drilling commitments are related to drilling rig contracts that require the Company to pay day rates for contracted drilling rigs over their contractual term. The majority of the drilling rig day rates are linked to oil prices causing the day rates to fluctuate over the contract term as oil prices change. In addition, the Company periodically enters into contractual arrangements under which the Company is committed to expend funds to drill wells in the future. The Company recognizes its drilling commitments in the periods in which the rig services are performed.

Firm commitments. The Company from time to time enters into, and is a party to, take-or-pay agreements, which include contractual commitments to purchase sand and water for use in the Company's drilling operations and contractual commitments with midstream service companies and pipeline carriers for future gathering, processing, transportation, fractionation and storage. These commitments are normal and customary for the Company's business activities. Certain future minimum gathering, processing, transportation, fractionation and storage fees are based upon rates and tariffs that are subject to change over the terms of the commitments.

Minimum commitments are as follows:

	As of December 31, 2018		
	Lease Commitments	Firm Commitments	Total
		(in millions)	
2019	$ 234	$ 662	$ 896
2020	169	694	863
2021	97	690	787
2022	66	546	612
2023	40	323	363
Thereafter	647	1,516	2,163
Total minimum commitments	$ 1,253	$ 4,431	$ 5,684

Gas delivery commitments. The Company has contracts that require delivery of fixed volumes of gas. The Company intends to fulfill its short-term and long-term obligations with production or from purchases of third party volumes.

Delivery commitments for gas are as follows:

	As of December 31, 2018
	(MMBtu per day)
2019	38,247
2020	111,557
2021	100,000
2022	100,000
2023	100,000
2024	83,675

NOTE 11. Related Party Transactions

On December 31, 2018, the Company completed the sale of its pressure pumping assets to ProPetro in exchange for 16.6 million shares of ProPetro common stock and $110 million of short-term receivables to be paid by ProPetro during the first quarter of 2019. The shares acquired in the acquisition represent approximately 16 percent of ProPetro's outstanding common stock, resulting in ProPetro being considered a related party as of December 31, 2018. In addition to the sale of equipment and related facilities, the Company entered into a long-term agreement with ProPetro to provide pressure pumping and related services. See Note 2 and Note 3 for additional information.

In February 2019, the Company exercised its right to designate (i) a director to the board of directors of ProPetro, which right will exist for so long as the Company owns five percent or more of ProPetro's outstanding common stock, and (ii) an independent director to the board of directors of ProPetro, which is a one time right. Mark S. Berg, the Company's Executive Vice President Corporate/Vertically Integrated Operations, was the Company's designee in the first category, and Royce W. Mitchell, an independent member of the Company's board of directors, was the Company's designee in the second category.

Balances with the Company's affiliate are as follows:

	As of December 31, 2018
	(in millions)
Accounts receivable - due from affiliate (a)	$ 119
Accounts payable - due to affiliate (b)	$ 37

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(a) Includes $110 million of short-term receivables and employee-related charges to be reimbursed by ProPetro.
(b) Prior to the Company's sale of its pressure pumping assets to ProPetro, the Company utilized the services of ProPetro in the normal course of business. The balance represents invoices associated with those services that are in the process of being paid.

NOTE 12. Major Customers

Purchasers of the Company's oil, NGL and gas production that individually accounted for ten percent or more of the Company's oil and gas revenues in at least one of the three years ended December 31, 2018 are as follows:

	Year Ended December 31,		
	2018	2017	2016
Sunoco Logistics Partners L.P.	28%	21%	19%
Occidental Energy Marketing Inc.	17%	16%	16%
Plains Marketing L.P.	15%	14%	16%
Enterprise Products Partners L.P.	6%	11%	12%

The loss of any of these major purchasers of oil, NGL and gas production could have a material adverse effect on the ability of the Company to produce and sell its oil, NGL and gas production.

Purchasers of the Company's purchased oil and gas that individually accounted for ten percent or more of the Company's sales of purchased oil and gas in at least one of the three years ended December 31, 2018 are as follows:

	Year Ended December 31,		
	2018	2017	2016
Occidental Energy Marketing Inc.	34%	39%	27%
Valero Marketing and Supply Company	9%	14%	17%
BP Energy	9%	11%	18%
Exxon Mobil	5%	11%	23%

The loss of any of these major purchasers of purchased oil and gas would not be expected to have an adverse effect on the ability of the Company to sell commodities it purchases from third parties.

NOTE 13. Revenue Recognition

The Company recognizes revenue when control of the promised goods or services is transferred to customers at an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. See Note 2 for additional information.

Disaggregated revenue from contracts with purchasers. Revenues on sales of oil, NGL, gas and purchased oil and gas are recognized when control of the product is transferred to the purchaser and payment can be reasonably assured. Sales prices for oil, NGL and gas production are negotiated based on factors normally considered in the industry, such as an index or spot price, distance from the well to the pipeline or market, commodity quality and prevailing supply and demand conditions. As such, the prices of oil, NGL and gas generally fluctuate based on the relevant market index rates.

Disaggregated revenue from contracts with purchasers by product type is as follows:

	Year Ended December 31, 2018
	(in millions)
Oil sales	$ 3,991
NGL sales	695
Gas sales	305
Total oil and gas sales	4,991
Sales of purchased oil	4,339
Sales of purchased gas	49
Total sales of purchased oil and gas	4,388
	$ 9,379

Oil sales. Sales under the Company's oil contracts are generally considered performed when the Company sells oil production at the wellhead and receives an agreed-upon index price, net of any price differentials. The Company recognizes revenue when control transfers to the purchaser at the wellhead based on the net price received.

NGL and gas sales. The Company evaluated whether it was the principal or the agent in gas processing transactions and concluded that it is the principal when it has the ability to take-in-kind, which is the case in the majority of the Company's gas processing and transportation contracts. Therefore, beginning January 1, 2018, the Company began recognizing revenue on a gross basis, with the gathering, processing and transportation costs associated with its take-in-kind arrangements being recorded as oil and gas production costs in the consolidated statement of operations. Gas and NGL processing fees that were previously reflected as a reduction in the Company's reported gas and NGL revenue are now recorded as an expense in the Company's production costs.

Sales of purchased oil and gas. The Company enters into pipeline capacity commitments in order to secure available oil, NGL and gas transportation capacity from the Company's areas of production. The Company also enters into purchase transactions with third parties and separate sale transactions with third parties to (i) diversify a portion of the Company's oil sales to the Gulf Coast refinery or international export markets and (ii) satisfy unused gas pipeline capacity commitments. Revenues and expenses from these transactions are presented on a gross basis as the Company acts as a principal in the transaction by assuming control of the commodities purchased and the responsibility to deliver the commodities sold. Revenue is recognized when control transfers to the purchaser at the delivery point based on the price received from the purchaser. The transportation costs associated with these transactions are presented as a component of purchased oil and gas expense. Firm transportation payments on excess pipeline capacity are recorded as other expense in the consolidated statements of operations.

Performance obligations and contract balances. The majority of the Company's product sale commitments are short-term in nature with a contract term of one year or less. The Company typically satisfies its performance obligations upon transfer of control as described above in *Disaggregated revenue from contracts with purchasers* and records the related revenue in the month production is delivered to the purchaser. Settlement statements for sales of oil, NGL and gas and sales of purchased oil and gas may not be received for 30 to 60 days after the date the volumes are delivered, and as a result, the Company is required to estimate the amount of volumes delivered to the purchaser and the price that will be received for the sale of the product. The Company records the differences between estimates and the actual amounts received for product sales in the month that payment is received from the purchaser. The implementation of ASC 606 has not changed existing controls around revenue estimates and the accrual process. Historically, differences between the Company's revenue estimates and actual revenue received have not been significant. As of December 31, 2018 and 2017, the accounts receivable balance representing amounts due or billable under the terms of contracts with purchasers was $646 million and $594 million, respectively.

NOTE 14. Interest and Other Income

The components of interest and other income are as follows:

	Year Ended December 31,		
	2018	2017	2016
	(in millions)		
Interest income	$ 29	$ 32	$ 22
Seismic data sales	5	—	—
Severance, sales and property tax refunds	1	13	2
Deferred compensation plan income (loss)	(2)	4	3
Right of way income	4	1	—
Other income	1	3	5
	$ 38	$ 53	$ 32

NOTE 15. Other Expense

The components of other expense are as follows:

	Year Ended December 31,		
	2018	2017	2016
	(in millions)		
Accelerated depreciation (a)	$ 443	$ —	$ —
Asset divestiture-related charges (b)	173	—	4
Transportation commitment charges (c)	161	167	109
Legal and environmental charges	19	20	6
Loss (income) from vertical integration services (d)	2	17	54
Idle drilling and well service equipment charges (e)	—	—	64
Other	51	40	51
	$ 849	$ 244	$ 288

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(a) Represents accelerated depreciation related to the decommissioning of the Company's Brady, Texas sand mine. See Note 3 for additional information.
(b) Primarily represents $111 million of deficiency charges related to certain firm transportation contracts retained by the Company associated with the sale of its gas field assets in the Raton Basin, $39 million of employee-related charges associated with the Company's 2018 divestitures and sand mine decommissioning efforts and $13 million of contract termination charges associated with the sale of the Company's pressure pumping assets. See Note 3 for additional information.
(c) Primarily represents firm transportation charges on excess pipeline capacity commitments.
(d) Primarily represents net margins (attributable to third party working interest owners) that result from Company-provided fracture stimulation and well service operations, which are ancillary to and supportive of the Company's oil and gas joint operating activities, and do not represent intercompany transactions. For the three years ended December 31, 2018, 2017 and 2016, these vertical integration net margins included $128 million, $140 million and $147 million of gross vertical integration revenues, respectively, and $130 million, $157 million and $201 million of total vertical integration costs and expenses, respectively.
(e) Primarily represents expenses attributable to idle drilling rig fees that are not chargeable to joint operations and charges to terminate rig contracts that were not required to meet planned drilling activities.

NOTE 16. Income Taxes

The Company and its eligible subsidiaries file a consolidated U.S. federal income tax return. Certain subsidiaries are not eligible to be included in the consolidated U.S. federal income tax return and separate provisions for income taxes have been determined for these entities or groups of entities. The tax returns and the amount of taxable income or loss are subject to examination by U.S. federal, state, local and foreign taxing authorities.

Taxes paid, net of refunds are as follows:

	Year Ended December 31,		
	2018	2017	2016
		(in millions)	
Taxes paid, net of (refunds)	$ —	$ —	$ (66)

The Company continually assesses both positive and negative evidence to determine whether it is more likely than not that deferred tax assets can be realized prior to their expiration. Pioneer monitors Company-specific, oil and gas industry and worldwide economic factors and based on that information, along with other data, reassesses the likelihood that the Company's net operating loss carryforwards ("NOLs") and other deferred tax attributes in the U.S. federal, state, local and foreign tax jurisdictions will be utilized prior to their expiration.

Enactment of the Tax Cuts and Jobs Act. On December 22, 2017, the U.S. enacted the Tax Cuts and Jobs Act (the "Tax Reform Legislation"), which introduced significant changes to the U.S. federal income tax law. The changes that most impact the Company include:

- A reduction in the federal corporate income tax rate from 35 percent to 21 percent. The rate reduction is effective for the Company as of January 1, 2018. The application of the rate change on the Company's existing deferred tax liabilities resulted in a $625 million income tax benefit to the Company during 2017.
- Repeal of the corporate alternative minimum tax ("AMT"). The Tax Reform Legislation provides that existing AMT credit carryovers are refundable beginning in 2018. As of December 31, 2018, the Company had AMT credit carryovers of $20 million that are expected to be fully refunded by 2022.
- The Tax Reform Legislation preserves the deductibility of intangible drilling costs and provides for 100 percent bonus depreciation on personal tangible property expenditures through 2022. The bonus depreciation percentage is phased down from 100 percent beginning in 2023 through 2026.

The Tax Reform Legislation is a comprehensive bill containing other provisions, such as limitations on the deductibility of interest expense and certain executive compensation, that are not expected to materially affect Pioneer. The ultimate impact of the Tax Reform Legislation may differ from the Company's estimates as of December 31, 2018 due to changes in the interpretations and assumptions made by the Company as well as additional regulatory guidance that may be issued.

ASC 740 "Income Taxes" requires companies to recognize the effect of tax law changes in the period of enactment. However, the Securities and Exchange Commission staff issued Staff Accounting Bulletin No. 118 that allowed companies to record provisional amounts during a measurement period not extending beyond one year from the Tax Reform Legislation enactment date. The Company’s accounting for the impacts of the Tax Reform Legislation is complete as of December 31, 2018, and the Company has not recorded any material adjustments to the provisional amounts recorded in the fourth quarter of 2017 related to the Tax Reform Legislation.

Uncertain tax positions. The Company recognizes the tax benefit from an uncertain tax position only if it is more likely than not that the tax position will be sustained upon examination by the taxing authorities, based upon the technical merits of the position. The Company has unrecognized tax benefits ("UTBs") resulting from research and experimental expenditures related to horizontal drilling and completion innovations. If all or a portion of the UTBs is sustained upon examination by the taxing authorities, the tax benefit will be recorded as a reduction to the Company's deferred tax liability and will affect the Company's effective tax rate in the period it is recorded. The timing as to when the Company will substantially resolve the uncertainties associated with the UTBs is uncertain.

Unrecognized tax benefit activity is as follows:

	Year Ended December 31,		
	2018	2017	2016
		(in millions)	
Beginning unrecognized tax benefits	$ 124	$ 112	$ —
Additions based on current year tax positions	17	12	112
Ending unrecognized tax benefits	$ 141	$ 124	$ 112

Other tax matters. The Company files income tax returns in the U.S. federal jurisdiction and various state and foreign jurisdictions. As of December 31, 2018, there are no proposed adjustments in any jurisdiction that would have a significant effect on the Company's future results of operations or financial position.

The earliest open years in the Company's key jurisdictions are as follows:

U.S. federal	2012
Various U.S. states	2013

Income tax (provision) benefit is as follows:

	Year Ended December 31,		
	2018	2017	2016
		(in millions)	
Current:			
U.S. federal	$ —	$ 5	$ 22
U.S. state	(2)	—	2
	(2)	5	24
Deferred:			
U.S. federal	(258)	526	375
U.S. state	(16)	(7)	4
	(274)	519	379
Income tax (provision) benefit	$ (276)	$ 524	$ 403

The effective tax rate for income (loss) is reconciled to the United States federal statutory rate as follows:

	Year Ended December 31,		
	2018	2017	2016
	(in millions, except percentages)		
Income (loss) before income taxes	$ 1,251	$ 309	$ (959)
Net loss attributable to noncontrolling interests	3	—	—
Income (loss) attributable to common stockholders before income taxes	$ 1,254	$ 309	$ (959)
Federal statutory income tax rate	21%	35%	35%
(Provision) benefit for federal income taxes at the statutory rate	(263)	(108)	336
State income tax (provision) benefit (net of federal tax)	(12)	(4)	3
State valuation allowance (net of federal tax)	(2)	(1)	(3)
Change in federal income tax rate (a)	—	625	—
Equity compensation excess tax benefit	3	9	—
Federal credit for increasing research activities (net of UTBs)	6	6	68
State credit for increasing research activities (net of UTBs and federal tax)	—	—	4
Other	(8)	(3)	(5)
Income tax (provision) benefit	$ (276)	$ 524	$ 403
Effective income tax rate, excluding net loss attributable to noncontrolling interests	22%	(170)%	42%

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(a) During 2017, the Company recorded a benefit of $625 million as a result of the Tax Reform Legislation that reduced the federal income tax rate beginning in 2018.

Significant components of deferred tax assets and deferred tax liabilities are as follows:

	December 31,	
	2018	2017
	(in millions)	
Deferred tax assets:		
Net operating loss carryforward (a)	$ 882	$ 594
Credit carryforwards (b)	111	87
Asset retirement obligations	40	59
Incentive plans	48	48
Net deferred hedge losses	11	52
Other	51	22
Total deferred tax assets	1,143	862
Deferred tax liabilities:		
Oil and gas properties, principally due to differences in basis, depletion and the deduction of intangible drilling costs for tax purposes	(2,248)	(1,604)
Other property and equipment, principally due to the deduction of bonus depreciation for tax purposes	(47)	(157)
Total deferred tax liabilities	(2,295)	(1,761)
Net deferred tax liability	$ (1,152)	$ (899)

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(a) Net operating loss carryforwards as of December 31, 2018 consist of $4.2 billion of U.S. federal NOLs, which expire between 2032 and 2038. Additionally, the net operating loss carryforwards consist of $177 million of Colorado NOLs that begin to expire in 2027, all of which have a fully offsetting valuation allowance.

(b) Credit carryforwards as of December 31, 2018, consist of $20 million of U.S. federal minimum tax credits. Additionally, the credit carryforwards consist of $88 million of U.S. federal credits and $3 million of Texas credits for increasing research activities. The U.S. federal and state research credits as of December 31, 2018 exclude $141 million of unrecognized tax benefits.

NOTE 17. Net Income (Loss) Per Share

The Company's basic net income (loss) per share attributable to common stockholders is computed as (i) net income (loss) attributable to common stockholders, (ii) less participating share- and unit-based basic earnings (iii) divided by weighted average basic shares outstanding. The Company's diluted net income (loss) per share attributable to common stockholders is computed as (i) basic net income (loss) attributable to common stockholders, (ii) plus diluted adjustments to participating undistributed earnings (iii) divided by weighted average diluted shares outstanding. Diluted net income (loss) per share attributable to common stockholders is calculated under both the two-class method and the treasury stock method and the more dilutive of the two calculations is presented.

The components of basic and diluted net income (loss) per share attributable to common stockholders are as follows:

	Year Ended December 31,		
	2018	2017	2016
	(in millions)		
Net income (loss) attributable to common stockholders	$ 978	$ 833	$ (556)
Participating share based earnings (a)	(5)	(6)	—
Basic and diluted net income (loss) attributable to common stockholders	$ 973	$ 827	$ (556)

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(a) Unvested restricted stock awards represent participating securities because they participate in nonforfeitable dividends with the common equity owners of the Company. Participating share- or unit-based earnings represent the distributed and undistributed earnings of the Company attributable to the participating securities. Unvested restricted stock awards do not participate in undistributed net losses as they are not contractually obligated to do so.

Basic and diluted weighted average common shares outstanding were 171 million, 170 million and 166 million for the years ended December 31, 2018, 2017 and 2016, respectively.

Stock repurchase program. In December 2018, the Company's board of directors authorized a common stock repurchase program that will allow the Company to repurchase up to $2 billion of its common stock. Under this stock repurchase program, the Company may repurchase shares from time to time at management's discretion in accordance with applicable securities laws. In addition, the Company may repurchase shares pursuant to a trading plan meeting the requirements of Rule 10b5-1 under the Securities Act of 1934, which would permit the Company to repurchase shares at times that may otherwise be prohibited under the Company's insider trading policy. The stock repurchase program has no time limit, may be modified, suspended or terminated at any time by the board of directors and replaces and terminates the Company's prior $100 million common stock repurchase program announced in February 2018.

During 2018, the Company repurchased $22 million of common stock pursuant to the prior common stock repurchase program and $127 million of common stock pursuant to the newly authorized common stock repurchase program. As of December 31, 2018, $1.9 billion remains available for use to repurchase shares under the newly authorized common stock repurchase program.

NOTE 18. Subsequent Events

In February 2019, the board of directors declared a cash dividend of $0.32 per share on Pioneer's outstanding common stock, payable April 12, 2019 to stockholders of record at the close of business on March 29, 2019.

PIONEER NATURAL RESOURCES COMPANY
UNAUDITED SUPPLEMENTARY INFORMATION
December 31, 2018, 2017 and 2016

Oil & Gas Exploration and Production Activities

The Company has only one reportable operating segment, which is oil and gas development, exploration and production in the U.S. See the Company's accompanying consolidated statements of operations for information about results of operations for oil and gas producing activities.

Capitalized Costs

	December 31,	
	2018	2017
	(in millions)	
Oil and gas properties:		
Proved	$ 21,165	$ 20,404
Unproved	601	558
Capitalized costs for oil and gas properties	21,766	20,962
Less accumulated depletion, depreciation and amortization	(8,218)	(9,196)
Net capitalized costs for oil and gas properties	$ 13,548	$ 11,766

Costs Incurred for Oil and Gas Producing Activities

	Year Ended December 31,		
	2018	2017	2016
Property acquisition costs:			
Proved	$ 1	$ 8	$ 78
Unproved	64	128	368
Exploration costs	2,654	2,033	1,454
Development costs	949	628	509
Total costs incurred (a)	$ 3,668	$ 2,797	$ 2,409

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(a) The costs incurred for oil and gas producing activities include amounts related to asset retirement obligations as follows:

	Year Ended December 31,		
	2018	2017	2016
		(in millions)	
Proved property acquisition costs	$ —	$ —	$ 2
Exploration costs	1	2	2
Development costs	16	(19)	17
	$ 17	$ (17)	$ 21

Reserve Quantity Information

The estimates of the Company's proved reserves as of December 31, 2018, 2017 and 2016 were based on evaluations prepared by the Company's engineers and audited by independent petroleum engineers with respect to the Company's major properties and prepared by the Company's engineers with respect to all other properties. Proved reserves were estimated in accordance with guidelines established by the U.S. Securities and Exchange Commission (the "SEC") and the FASB, which require that reserve estimates be prepared under existing economic and operating conditions based upon an average of the first-day-of-the-month commodity price during the 12-month period ending on the balance sheet date with no provision for price and cost escalations except by contractual arrangements.

Proved reserve quantity estimates are subject to numerous uncertainties inherent in the estimation of quantities of proved reserves and in the projection of future rates of production and the timing of development expenditures. The accuracy of such estimates is a function of the quality of available data and of engineering and geological interpretation and judgment. Results of subsequent drilling, testing and production may cause either upward or downward revision of previous estimates. Further, the volumes considered to be commercially recoverable fluctuate with changes in commodity prices and operating costs. The Company emphasizes that proved reserve estimates are inherently imprecise and that estimates of new discoveries are more imprecise than those of currently producing oil and gas properties. Accordingly, these estimates are expected to change as additional information becomes available in the future.

PIONEER NATURAL RESOURCES COMPANY
UNAUDITED SUPPLEMENTARY INFORMATION
December 31, 2018, 2017 and 2016

The following table provides a rollforward of total proved reserves. Oil and NGL volumes are expressed in thousands of Bbls ("MBbls"), gas volumes are expressed in millions of cubic feet ("MMcf") and total volumes are expressed in thousands of barrels of oil equivalent ("MBOE").

	Year Ended December 31,											
	2018				2017				2016			
	Oil (MBbls)	NGLs (MBbls)	Gas (MMcf) (a)	Total (MBOE)	Oil (MBbls)	NGLs (MBbls)	Gas (MMcf) (a)	Total (MBOE)	Oil (MBbls)	NGLs (MBbls)	Gas (MMcf) (a)	Total (MBOE)
Balance, January 1	482,889	210,497	1,751,880	985,366	378,196	136,941	1,264,729	725,925	311,970	126,344	1,356,487	664,395
Production (b)	(69,583)	(23,280)	(157,278)	(119,076)	(57,878)	(20,078)	(143,464)	(101,867)	(48,926)	(15,922)	(139,510)	(88,100)
Revisions of previous estimates	(15,665)	21,087	257,502	48,339	20,140	44,995	365,275	126,015	(3,912)	1,279	(76,998)	(15,466)
Extensions and discoveries	175,067	51,414	230,272	264,859	146,822	49,378	266,347	240,591	117,406	24,735	120,766	162,269
Sales of minerals-in-place	(7,722)	(18,809)	(623,830)	(130,502)	(4,899)	(918)	(4,898)	(6,633)	(908)	(238)	(1,377)	(1,376)
Purchases of minerals-in-place	24	5	28	34	508	179	3,891	1,335	2,566	743	5,361	4,203
Balance, December 31	565,010	240,914	1,458,574	1,049,020	482,889	210,497	1,751,880	985,366	378,196	136,941	1,264,729	725,925

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(a) The proved gas reserves as of December 31, 2018, 2017 and 2016 include 106,948 MMcf, 171,623 MMcf and 137,853 MMcf, respectively, of gas that the Company expected to be produced and utilized as field fuel. Field fuel is gas consumed to operate field equipment (primarily compressors) rather than being delivered to a sales point.

(b) Production for 2018, 2017 and 2016 includes 13,690 MMcf, 14,799 MMcf and 15,082 MMcf of field fuel, respectively.

PIONEER NATURAL RESOURCES COMPANY
UNAUDITED SUPPLEMENTARY INFORMATION
December 31, 2018, 2017 and 2016

Revisions of previous estimates. Revisions of previous estimates for 2018 were comprised of 20 million barrels of oil equivalent ("MMBOE") of positive price revisions due to a 28 percent increase in the NYMEX oil price and a four percent increase in the NYMEX gas price that were used to determine proved oil and gas reserves for 2018, as compared to 2017, in addition to 29 MMBOE of positive revisions that were primarily attributable to improved performance from horizontal wells placed on production in the Spraberry/Wolfcamp oil field in the Permian Basin prior to 2018. The December 31, 2018 NYMEX price used for oil and gas reserve preparation based upon SEC guidelines was $65.57 per barrel of oil and $3.10 per Mcf of gas, compared to $51.34 per barrel of oil and $2.98 per Mcf of gas at December 31, 2017.

Revisions of previous estimates for 2017 were comprised of 52 MMBOE of positive price revisions due to 20 percent increases in both the NYMEX oil and NYMEX gas prices that were used to determine proved oil and gas reserves for 2017, as compared to 2016, in addition to 74 MMBOE of positive revisions that were primarily attributable to improved performance from horizontal wells placed on production in the Spraberry/Wolfcamp prior to 2017 and, to a lesser extent, reductions in costs (based on the Company's cost reduction initiatives during 2017) that had the effect of extending the economic lives of the Company's producing wells. The December 31, 2017 NYMEX price used for oil and gas reserve preparation based upon SEC guidelines was $51.34 per barrel of oil and $2.98 per Mcf of gas, compared to $42.82 per barrel of oil and $2.48 per Mcf of gas at December 31, 2016.

Revisions of previous estimates for 2016 were comprised of 58 MMBOE of negative price revisions due to 15 percent and four percent declines in the NYMEX oil and gas prices, respectively, that were used to determine proved oil and gas reserves for 2016, as compared to 2015, partially offset by 43 MMBOE of positive revisions that were primarily attributable to reductions in cost estimates (based on cost savings achieved during 2016) that had the effect of extending the economic lives of the Company's producing wells. The December 31, 2016 NYMEX price used for oil and gas reserve preparation based upon SEC guidelines was $42.82 per barrel of oil and $2.48 per Mcf of gas, compared to $50.11 per barrel of oil and $2.59 per Mcf of gas at December 31, 2015.

Extensions and discoveries. Extensions and discoveries for 2018, 2017 and 2016 were primarily comprised of proved reserve additions attributable to the Company's successful horizontal drilling program in the Spraberry/Wolfcamp oil field.

Sales of minerals-in-place. Sales of minerals-in-place in 2018 were primarily related to the sale of approximately 10,200 net acres in the West Eagle Ford Shale gas and liquids field, the sale of the Raton Basin gas field assets in southeast Colorado, the sale of the West Panhandle gas and liquids field assets in the panhandle region of Texas and the sale of 2,900 net acres in the Sinor Nest (Lower Wilcox) oil field in South Texas. See Note 3 to the accompanying financial statements for additional information.

Purchases of minerals-in-place. Purchases of minerals-in-place during 2018, 2017 and 2016 were primarily attributable to acquisitions in the Company's Spraberry/Wolfcamp oil field.

Proved developed and proved undeveloped reserves are as follows:

	Oil (MBbls)	NGLs (MBbls)	Gas (MMcf)	Total (MBOE)
Proved Developed Reserves:				
December 31, 2018	521,579	219,730	1,330,852	963,118
December 31, 2017	442,364	189,434	1,629,451	903,373
December 31, 2016	343,515	126,928	1,215,861	673,085
Proved Undeveloped Reserves:				
December 31, 2018	43,431	21,184	127,722	85,902
December 31, 2017	40,525	21,063	122,429	81,993
December 31, 2016	34,681	10,013	48,868	52,840

Proved undeveloped reserves activity is as follows (in MBOE):

	Year Ended December 31, 2018
Beginning proved undeveloped reserves	81,993
Revisions of previous estimates	1,590
Extensions and discoveries	23,045
Transfers to proved developed	(20,726)
Ending proved undeveloped reserves	85,902

As of December 31, 2018, the Company had 134 proved undeveloped well locations as compared to 134 and 90 at December 31, 2017 and 2016, respectively. The Company has no proved undeveloped well locations that are scheduled to be drilled more than five years from their original date of booking.

The changes in proved undeveloped reserves during 2018 were comprised of the following items:

Revisions of previous estimates. Revisions of previous estimates were primarily comprised of 2 MMBOE of positive revisions that were related to pricing and technical revisions.

Extensions and discoveries. Extensions and discoveries were primarily comprised of proved reserve additions attributable to the Company's successful horizontal drilling program in the Spraberry/Wolfcamp oil field.

Transfers to proved developed. Transfers to proved developed reserves represented those undeveloped proved reserves that moved to proved developed as a result of development drilling. During 2018, the Company incurred $949 million of development costs and developed 25 percent of its proved undeveloped reserves.

The Company uses both public and proprietary geologic data to establish continuity of the formation and its producing properties. This included seismic data and interpretations (2-D, 3-D and micro seismic); open hole log information (both vertical and horizontally collected) and petrophysical analysis of the log data; mud logs; gas sample analysis; drill cutting samples; measurements of total organic content; thermal maturity; sidewall cores and data measured from the Company's internal core analysis facility. After the geologic area was shown to be continuous, statistical analysis of existing producing wells was conducted to generate areas of reasonable certainty at distances from established production. As a result of this analysis, proved undeveloped reserves for drilling locations within these areas of reasonable certainty were recorded during 2018.

While the Company expects, based on Management's Price Outlooks, that future operating cash flows will provide adequate funding for future development of its proved undeveloped reserves over the next five years, it may also use any combination of internally-generated cash flows, cash and cash equivalents on hand, sales of short-term and long-term investments, availability under its credit facility, proceeds from divestitures of nonstrategic assets or external financing sources to fund these and other capital expenditures, including exploratory drilling and acquisitions.

The estimated timing and cash flows of developing proved undeveloped reserves are as follows:

	As of December 31, 2018				
	Estimated Future Production (MBOE)	Future Cash Inflows	Future Production Costs	Future Development Costs	Future Net Cash Flows
			(in millions)		
Year Ended December 31, (a)					
2019	3,312	$ 162	$ 22	$ 283	$ (143)
2020	7,867	348	59	220	69
2021	9,752	379	81	143	155
2022	11,562	444	96	197	151
2023	8,312	316	70	2	244
Thereafter (b)	45,097	1,819	505	11	1,303
	85,902	$ 3,468	$ 833	$ 856	$ 1,779

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(a) Production and cash flows represent the drilling results from the respective year plus the incremental effects of proved undeveloped drilling beginning in 2019.

(b) The $11 million of future development costs represents net abandonment costs in years beyond the forecasted years.

Standardized Measure of Discounted Future Net Cash Flows

The standardized measure of discounted future net cash flows is computed by applying commodity prices used in determining proved reserves (with consideration of price changes only to the extent provided by contractual arrangements) to the estimated future production of proved reserves less estimated future expenditures (based on year-end estimated costs) to be incurred in developing and producing the proved reserves, discounted using a rate of ten percent per year to reflect the estimated timing of the future cash flows. Future income taxes are calculated by comparing undiscounted future cash flows to the tax basis of oil and gas properties plus available carryforwards and credits and applying the current tax rates to the difference. The discounted future cash flow estimates do not include the effects of the Company's commodity derivative contracts.

Discounted future cash flow estimates like those shown below are not intended to represent estimates of the fair value of oil and gas properties. Estimates of fair value should also consider probable and possible reserves, anticipated future commodity prices, interest rates, changes in development and production costs and risks associated with future production. Because of these and other considerations, any estimate of fair value is necessarily subjective and imprecise.

The standardized measure of discounted future cash flows as well as a rollforward in total for each respective year are as follows:

	December 31,		
	2018	2017	2016
		(in millions)	
Oil and gas producing activities:			
Future cash inflows	$ 43,057	$ 31,716	$ 19,313
Future production costs	(16,800)	(13,304)	(10,462)
Future development costs (a)	(1,613)	(1,532)	(1,189)
Future income tax expense	(1,461)	(725)	(55)
	23,183	16,155	7,607
Ten percent annual discount factor	(11,850)	(8,004)	(3,417)
Standardized measure of discounted future cash flows	$ 11,333	$ 8,151	$ 4,190

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(a) Includes $621 million, $639 million and $603 million of undiscounted future asset retirement expenditures estimated as of December 31, 2018, 2017 and 2016, respectively, using current estimates of future abandonment costs. See Note 9 for additional information.

PIONEER NATURAL RESOURCES COMPANY
UNAUDITED SUPPLEMENTARY INFORMATION
December 31, 2018, 2017 and 2016

Changes in Standardized Measure of Discounted Future Net Cash Flows

	Year Ended December 31,		
	2018	2017	2016
		(in millions)	
Oil and gas sales, net of production costs	$ (3,673)	$ (2,713)	$ (1,700)
Revisions of previous estimates:			
Net changes in prices and production costs	2,067	2,690	(284)
Changes in future development costs	(299)	(130)	39
Revisions in quantities	(283)	467	(50)
Accretion of discount	1,163	770	552
Extensions, discoveries and improved recovery	5,053	3,454	2,275
Development costs incurred during the period	177	139	142
Sales of minerals-in-place	(287)	(57)	(12)
Purchases of minerals-in-place	—	10	39
Change in present value of future net revenues	3,918	4,630	1,001
Net change in present value of future income taxes	(736)	(669)	(55)
	3,182	3,961	946
Balance, beginning of year	8,151	4,190	3,244
Balance, end of year	$ 11,333	$ 8,151	$ 4,190

PIONEER NATURAL RESOURCES COMPANY
UNAUDITED SUPPLEMENTARY INFORMATION
December 31, 2018, 2017 and 2016

Selected Quarterly Financial Results

Selected quarterly financial results, with adjustments to conform to annual results, are as follows:

	Quarter			
	First	Second	Third	Fourth
	(in millions, except per share data)			
Year Ended December 31, 2018:				
Oil and gas revenues	$ 1,266	$ 1,286	$ 1,317	$ 1,122
Derivative gains (losses), net	$ (208)	$ (358)	$ (135)	$ 409
Total revenues and other income	$ 2,150	$ 2,111	$ 2,476	$ 2,677
Impairment of oil and gas properties (a)	$ —	$ 77	$ —	$ —
Total costs and expenses	$ 1,922	$ 2,029	$ 1,947	$ 2,265
Net income attributable to common stockholders	$ 178	$ 66	$ 411	$ 324
Net income attributable to common stockholders per share:				
Basic	$ 1.04	$ 0.38	$ 2.40	$ 1.89
Diluted	$ 1.04	$ 0.38	$ 2.39	$ 1.89
Year Ended December 31, 2017:				
Oil and gas revenues	$ 809	$ 768	$ 855	$ 1,085
Derivative gains (losses), net	$ 151	$ 135	$ (133)	$ (254)
Total revenues and other income	$ 1,300	$ 1,462	$ 1,167	1,526
Impairment of oil and gas properties (b)	$ 285	$ —	$ —	$ —
Total costs and expenses	$ 1,373	$ 1,108	$ 1,201	$ 1,464
Net income (loss) attributable to common stockholders	$ (42)	$ 233	$ (23)	$ 665
Net income (loss) attributable to common stockholders per share:				
Basic	$ (0.25)	$ 1.36	$ (0.13)	$ 3.88
Diluted	$ (0.25)	$ 1.36	$ (0.13)	$ 3.87

(a) During the second quarter of 2018, the Company impaired the carrying value of proved properties and related assets in the Raton Basin gas field (sold July 2018).

(b) During the first quarter of 2017, the Company impaired the carrying value of proved properties in the Raton Basin gas field (sold July 2018).

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9A. CONTROLS AND PROCEDURES

Evaluation of disclosure controls and procedures. The Company's management, with the participation of its principal executive officer and principal financial officer, have evaluated, as required by Rule 13a-15(b) under the Securities Exchange Act of 1934 ("the Exchange Act"), the effectiveness of the Company's disclosure controls and procedures (as defined in Exchange Act Rule 13a-15(e)) as of the end of the period covered by this Report. Based on that evaluation, the principal executive officer and principal financial officer concluded that the Company's disclosure controls and procedures were effective, as of the end of the period covered by this Report, in ensuring that information required to be disclosed by the Company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms, including that such information is accumulated and communicated to the Company's management, including the principal executive officer and principal financial officer, to allow timely decisions regarding required disclosure.

Changes in internal control over financial reporting. There have been no changes to the Company's internal control over financial reporting (as defined in Rule 13a-15(f) under the Exchange Act) that occurred during the three months ended December 31, 2018 that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

MANAGEMENT'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING

The management of the Company is responsible for establishing and maintaining adequate internal control over financial reporting. The Company's internal control over financial reporting is a process designed by or under the supervision of the Company's principal executive officer and principal financial officer and effected by the board of directors, management and other personnel to provide reasonable assurance regarding the reliability of financial reporting and the preparation of the Company's financial statements for external purposes in accordance with generally accepted accounting principles.

The Company's management, with the participation of its principal executive officer and principal financial officer assessed the effectiveness, as of December 31, 2018, of the Company's internal control over financial reporting based on the criteria for effective internal control over financial reporting established in "Internal Control — Integrated Framework (2013)," issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on the assessment, management determined that the Company maintained effective internal control over financial reporting at a reasonable assurance level as of December 31, 2018, based on those criteria.

Ernst & Young LLP, the independent registered public accounting firm that audited the consolidated financial statements of the Company included in this Annual Report on Form 10-K, has issued an attestation report on the effectiveness of the Company's internal control over financial reporting as of December 31, 2018. The report, which expresses an unqualified opinion on the effectiveness of the Company's internal control over financial reporting as of December 31, 2018, is included in this Item under the heading "Report of Independent Registered Public Accounting Firm."

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Stockholders and the Board of Directors of Pioneer Natural Resources Company

Opinion on Internal Control over Financial Reporting

We have audited Pioneer Natural Resources Company's internal control over financial reporting as of December 31, 2018, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). In our opinion, Pioneer Natural Resources Company (the Company) maintained, in all material respects, effective internal control over financial reporting as of December 31, 2018, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of Pioneer Natural Resources Company as of December 31, 2018 and 2017, and the related consolidated statements of operations, equity and cash flows for each of the three years in the period ended December 31, 2018, and the related notes and our report dated February 26, 2019 expressed an unqualified opinion thereon.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects.

Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control Over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ Ernst & Young LLP

Dallas, Texas
February 26, 2019

ITEM 9B. OTHER INFORMATION

None.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The names of the executive officers of the Company and their ages, titles and biographies as of the date hereof are incorporated by reference from Part I of this Report. The other information required in response to this Item will be set forth in the Company's definitive proxy statement for the annual meeting of stockholders to be held in May 2019 and is incorporated herein by reference.

ITEM 11. EXECUTIVE COMPENSATION

The information required in response to this Item will be set forth in the Company's definitive proxy statement for the annual meeting of stockholders to be held in May 2019 and is incorporated herein by reference.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

Securities Authorized for Issuance under Equity Compensation Plans

Summarized information about the Company's equity compensation plans is as follows:

	As of December 31, 2018		
	Number of securities to be issued upon exercise of outstanding options, warrants and rights (a)	Weighted-average exercise price of outstanding options, warrants and rights	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in first column)
Equity compensation plans approved by security holders:			
2006 Long-Term Incentive Plan (b)(c)	131,630	$ 99.39	4,853,384
Employee Stock Purchase Plan (d)	—	—	247,567
	131,630	$ 99.39	5,100,951

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(a) There are no outstanding warrants or equity rights awarded under the Company's equity compensation plans.
(b) In May 2006, the stockholders of the Company approved the 2006 Long-Term Incentive Plan, which provided for the issuance of up to 9.1 million securities, as was supplementally approved by the stockholders of the Company in May 2009. In May 2016, the stockholders of the Company approved a 3.5 million increase in the number of securities available for issuance under the plan. Awards under the 2006 Long-Term Incentive Plan can be in the form of stock options, stock appreciation rights, performance units, restricted stock and restricted stock units.
(c) The number of securities remaining for future issuance has been reduced by the maximum number of shares that could be issued pursuant to outstanding grants of performance units as of December 31, 2018.
(d) The number of remaining securities available for future issuance under the Company's Employee Stock Purchase Plan is based on the aggregate authorized issuances of 1,250,000 shares less 1,002,433 cumulative shares issued through December 31, 2018.

See Note 8 of Notes to Consolidated Financial Statements included in "Item 8. Financial Statements and Supplementary Data" for additional information.

The remaining information required in response to this Item will be set forth in the Company's definitive proxy statement for the annual meeting of stockholders to be held in May 2019 and is incorporated herein by reference.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The information required in response to this Item will be set forth in the Company's definitive proxy statement for the annual meeting of stockholders to be held in May 2019 and is incorporated herein by reference.

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

The information required in response to this Item will be set forth in the Company's definitive proxy statement for the annual meeting of stockholders to be held in May 2019 and is incorporated herein by reference.

PART IV

ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES

(a) Listing of Financial Statements

Financial Statements

The following consolidated financial statements of the Company are included in "Item 8. Financial Statements and Supplementary Data:"

- Report of Independent Registered Pubic Accounting Firm
- Consolidated Balance Sheets as of December 31, 2018 and 2017
- Consolidated Statements of Operations for the Years Ended December 31, 2018, 2017 and 2016
- Consolidated Statements of Equity for the Years Ended December 31, 2018, 2017 and 2016
- Consolidated Statements of Cash Flows for the Years Ended December 31, 2018, 2017 and 2016
- Notes to Consolidated Financial Statements
- Unaudited Supplementary Information

(b) Exhibits

The exhibits to this Report that are required to be filed pursuant to Item 15(b) are listed below.

(c) Financial Statement Schedules

No financial statement schedules are required to be filed as part of this Report or they are inapplicable.

PIONEER NATURAL RESOURCES COMPANY

Exhibits

Exhibit Number		Description
3.1	—	Amended and Restated Certificate of Incorporation of the Company, dated June 26, 1997, and Certificate of Amendment of the Amended and Restated Certificate of Incorporation, effective May 18, 2012 (incorporated by reference to Exhibit 3.1 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2018, File No. 1-13245).
3.2	—	Fifth Amended and Restated Bylaws of the Company (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K, File No. 1-13245, filed with the SEC on May 24, 2016).
4.1	—	Form of Certificate of Common Stock, par value $.01 per share, of the Company (incorporated by reference to Exhibit 4.1 to the Company's Registration Statement on Form S-4 (Amendment No. 2), dated June 26, 1997, Registration No. 333-26951).
4.2	—	Indenture, dated January 13, 1998, between the Company and The Bank of New York, as trustee (incorporated by reference to Exhibit 99.1 to the Company's and Pioneer USA's Current Report on Form 8-K, File No. 1-13245, filed with the SEC on January 14, 1998).
4.3	—	First Supplemental Indenture, dated as of January 13, 1998, by and among the Company, Pioneer USA and The Bank of New York, as trustee, with respect to the indenture identified above as Exhibit 4.2 (incorporated by reference to Exhibit 99.2 to the Company's and Pioneer USA's Current Report on Form 8-K, File No. 1-13245, filed with the SEC on January 14, 1998).
4.4	—	Indenture, dated January 22, 2008, between the Company and Wells Fargo Bank, National Association, as trustee (incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K, File No. 1-13245, filed with the SEC on January 22, 2008).
4.5	—	Second Supplemental Indenture, dated November 13, 2009, by and among the Company, Pioneer USA and Wells Fargo Bank, National Association, as trustee, with respect to the indenture identified above as Exhibit 4.4 (incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K, File No. 1-13245, filed with the SEC on November 13, 2009).
4.6	—	Indenture, dated June 26, 2012, between the Company and Wells Fargo Bank, National Association, as trustee (incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K, File No. 1-13245, filed with the SEC on June 28, 2012).
4.7	—	First Supplemental Indenture, dated June 26, 2012, by and among the Company, Pioneer USA and Wells Fargo Bank, National Association, as trustee, with respect to the indenture identified above as Exhibit 4.6 (incorporated by reference to Exhibit 4.2 to the Company's Current Report on Form 8-K, File No. 1-13245, filed with the SEC on June 28, 2012).
4.8	—	Second Supplemental Indenture, dated December 7, 2015, by and among the Company, Pioneer USA and Wells Fargo Bank, National Association, as trustee, with respect to the indenture identified above as Exhibit 4.6 (incorporated by reference to Exhibit 4.2 to the Company's Current Report on Form 8-K File No. 1-13245, filed with the SEC on December 7, 2015).
10.1	—	Credit Agreement, dated as of October 24, 2018, by and among the Company, as the Borrower, Wells Fargo Bank, National Association, as Administrative Agent, and certain other lenders (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K, File No. 1-13245, filed with the SEC on October 30, 2018).
10.2 **H**	—	The Company's Long-Term Incentive Plan (incorporated by reference to Exhibit 4.1 to the Company's Registration Statement on Form S-8, Registration No. 333-35087, filed with the SEC on September 8, 1997).
10.3 **H**	—	First Amendment to the Company's Long-Term Incentive Plan, effective as of November 23, 1998 (incorporated by reference to Exhibit 10.72 to the Company's Annual Report on Form 10-K for the year ended December 31, 1999, File No. 1-13245).
10.4 **H**	—	Amendment No. 2 to the Company's Long-Term Incentive Plan, effective as of May 20, 1999 (incorporated by reference to Exhibit 10.73 to the Company's Annual Report on Form 10-K for the year ended December 31, 1999, File No. 1-13245).
10.5 **H**	—	Amendment No. 3 to the Company's Long-Term Incentive Plan, effective as of February 17, 2000 (incorporated by reference to Exhibit 10.76 to the Company's Annual Report on Form 10-K for the year ended December 31, 1999, File No. 1-13245).
10.6 **H**	—	Amendment No. 4 to the Company's Long-Term Incentive Plan, effective as of November 20, 2003 (incorporated by reference to Exhibit 10.5 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2005, File No. 1-13245).
10.7 **H**	—	Amendment No. 5 to the Company's Long-Term Incentive Plan, effective as of May 12, 2004 (incorporated by reference to Exhibit 10.6 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2005, File No. 1-13245).
10.8 **H**	—	Amendment No. 6 to the Company's Long-Term Incentive Plan, effective as of December 17, 2004 (incorporated by reference to Exhibit 10.7 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2005, File No. 1-13245).
10.9 **H**	—	Amendment No. 7 to the Company's Long-Term Incentive Plan, effective November 20, 2008 (incorporated by reference to Exhibit 10.8 to the Company's Current Report on Form 8-K, File No. 1-13245, filed with the SEC on November 25, 2008).
10.10 **H**	—	Pioneer Natural Resources Company Amended and Restated 2006 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K, File No. 1-13245, filed with the SEC on May 24, 2016).
10.11 **H**	—	Form of Restricted Stock Unit Award Agreement for Non-Employee Directors to be used in connection with initial equity awards under the Company's 2006 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.18 to the Company's Annual Report on Form 10-K for the year ended December 31, 2014, File No. 1-13245).
10.12 **H**	—	Form of Restricted Stock Unit Award Agreement for Non-Employee Directors to be used in connection with annual equity awards under the Company's 2006 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2010, File No. 1-13245).
10.13 **H**	—	Form of Restricted Stock Award Agreement between the Company and Timothy L. Dove, with respect to annual awards made under the Company's 2006 Long-Term Incentive Plan, together with a schedule identifying other substantially identical agreements between the Company and each of its other executive officers who received this award and identifying the material differences between each of those agreements and the filed Restricted Stock Award Agreement (incorporated by reference to Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2012, File No. 1-13245).

10.14 **H**	—	Form of Nonstatutory Stock Option Agreement between the Company and each of Scott D. Sheffield and Timothy L. Dove, with respect to awards made under the Company's 2006 Long-Term Incentive Plan, together with a schedule identifying other substantially identical agreements between the Company and each of its other executive officers and identifying the material differences between each of those agreements and the filed Nonstatutory Stock Option Agreement (incorporated by reference to Exhibit 10.5 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2012, File No. 1-13245).
10.15 **H**	—	Form of Performance Unit Award Agreement between the Company and each of Scott D. Sheffield and Timothy L. Dove, with respect to awards made under the Company's 2006 Long-Term Incentive Plan, together with a schedule identifying other substantially identical agreements between the Company and each of its other executive officers and identifying the material differences between each of those agreements and the filed Performance Unit Award Agreement (incorporated by reference to Exhibit 10.3 to the Company's Current Report on Form 8-K, File No. 1-13245, filed with the SEC on May 24, 2016).
10.16 **H**	—	Form of Restricted Stock Unit Agreement between the Company and each of Scott D. Sheffield and Timothy L. Dove, with respect to annual awards made under the Company's 2006 Long-Term Incentive Plan, together with a schedule identifying other substantially identical agreements between the Company and each of its other executive officers who received this award and identifying the material differences between each of those agreements and the filed Restricted Stock Unit Agreement (incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K, File No. 1-13245), filed with the SEC on May 24, 2016).
10.17 **H**	—	Form of Restricted Stock Unit Award Agreement between the Company and executive officers of the Company with respect to retention awards made under the Company's 2006 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.7 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2012, File No. 1-13245).
10.18 **H**	—	Form of Performance Unit Award Agreement between the Company and Timothy L. Dove, with respect to awards made under the Company's 2006 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2017, File No. 1-13245).
10.19 **H**	—	Form of Restricted Stock Unit Agreement between the Company and Timothy L. Dove, with respect to annual awards made under the Company's 2006 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2017, File No. 1-13245).
10.20 **H**		Form of Performance Unit Award Agreement between the Company and Timothy L. Dove, with respect to awards made under the Company's 2006 Long-Term Incentive Plan, commencing in 2018, together with a schedule identifying other substantially identical agreements between the Company and each of its other executive officers and identifying the material differences between each of those agreements and the filed Performance Unit Award Agreement (incorporated by reference to Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2018, File No. 1-13245).
10.21 **H**		Form of Restricted Stock Unit Award Agreement between the Company and Timothy L. Dove, with respect to awards made under the Company's 2006 Long-Term Incentive Plan, commencing in 2018, together with a schedule identifying other substantially identical agreements between the Company and each of its other executive officers and identifying the material differences between each of those agreements and the filed Performance Unit Award Agreement (incorporated by reference to Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2018, File No. 1-13245).
10.22 **H**		Form of Restricted Stock Award Agreement between the Company and executive officers of the Company with respect to annual awards made under the Company's 2006 Long-Term Incentive Plan, commencing in 2018 (incorporated by reference to Exhibit 10.4 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2018, File No. 1-13245).
10.23 **H**	—	Pioneer Natural Resources Company Employee Stock Purchase Plan, as amended and restated, effective September 1, 2007 (incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2007, File No. 1-13245).
10.24 **H**	—	First Amendment to Amended and Restated Pioneer Natural Resources Company Employee Stock Purchase Plan, effective September 1, 2012 (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K, File No. 1-13245, filed with the SEC on May 18, 2012).
10.25 **H**	—	The Company's Executive Deferred Compensation Plan, Amended and Restated, effective as of August 1, 2002 (incorporated by reference to Exhibit 10.15 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2005, File No. 1-13245).
10.26 **H**	—	Amendment No. 1 to the Company's Executive Deferred Compensation Plan, effective as of January 1, 2007 (incorporated by reference to Exhibit 10.15 to the Company's Annual Report on Form 10-K for the year ended December 31, 2006, File No. 1-13245).
10.27 **H**	—	Amended and Restated Executive Deferred Compensation Plan, effective as of January 1, 2009 (incorporated by reference to Exhibit 10.6 to the Company's Current Report on Form 8-K, File No. 1-13245, filed with the SEC on November 25, 2008).
10.28 **H**	—	Amendment No. 1 to the Company's Amended and Restated Executive Deferred Compensation Plan, effective January 1, 2009 (incorporated by reference to Exhibit 10.4 to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2009, File No. 1-13245).
10.29 **H**	—	Amendment No. 2 to the Company's Amended and Restated Executive Deferred Compensation Plan, effective January 1, 2011 (incorporated by reference to Exhibit 10.56 to the Company's Annual Report on Form 10-K for the year ended December 31, 2010, File No. 1-13245).
10.30 **H**	—	Amendment No. 3 to the Company's Amended and Restated Executive Deferred Compensation Plan, executed August 19, 2013 and effective January 1, 2009 (incorporated by reference to Exhibit 10.36 to the Company's Annual Report on Form 10-K for the year ended December 31, 2013, File No. 1-13245).
10.31 **H**	—	Amendment No. 4 to the Company's Amended and Restated Executive Deferred Compensation Plan, effective January 1, 2014 (incorporated by reference to Exhibit 10.37 to the Company's Annual Report on Form 10-K for the year ended December 31, 2013, File No. 1-13245).
10.32 **H**	—	Amendment No. 5 to the Company's Amended and Restated Executive Deferred Compensation Plan, executed November 15, 2016 (incorporated by reference to Exhibit 10.30 to the Company's Annual Report on Form 10-K for the year ended December 31, 2016, File No. 1-13245).

10.33 **H**		Amendment No. 6 to the Company's Amended and Restated Executive Deferred Compensation Plan, executed August 30, 2018 (incorporated by reference to Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2018, File No. 1-13245).
10.34 **H**	—	Pioneer USA 401(k) and Matching Plan, Amended and Restated, effective as of January 1, 2013 (incorporated by reference to Exhibit 10.38 to the Company's Annual Report on Form 10-K for the year ended December 31, 2013, File No. 1-13245).
10.35 **H**	—	First Amendment to Pioneer USA 401(k) and Matching Plan, dated February 27, 2014 (incorporated by reference to Exhibit 10.37 to the Company's Annual Report on Form 10-K for the year ended December 31, 2014, File No. 1-13245).
10.36 **H**	—	Second Amendment to Pioneer USA 401(k) and Matching Plan, dated November 10, 2014 (incorporated by reference to Exhibit 10.38 to the Company's Annual Report on Form 10-K for the year ended December 31, 2014, File No. 1-13245).
10.37 **H**	—	Third Amendment to Pioneer USA 401(k) and Matching Plan, dated May 13, 2015 (incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2015, File No. 1-13245).
10.38 **H**	—	Fourth Amendment to Pioneer USA 401(k) and Matching Plan, dated July 7, 2015 (incorporated by reference to Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2015, File No. 1-13245).
10.39 **H**	—	Fifth Amendment to Pioneer USA 401(k) and Matching Plan, dated October 29, 2015 (incorporated by reference to Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2015, File No. 1-13245).
10.40 **H**	—	Sixth Amendment to Pioneer USA 401(k) and Matching Plan, dated December 7, 2015 (incorporated by reference to Exhibit 10.41 to the Company's Annual Report on Form 10-K for the year ended December 31, 2015, File No. 1-13245).
10.41 **H**	—	Seventh Amendment to Pioneer USA 401(k) and Matching Plan, dated March 8, 2016 (incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2016, File No. 1-13245).
10.42 **H**	—	Eighth Amendment to Pioneer USA 401(k) and Matching Plan, dated August 28, 2017 (incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2017, File No. 1-13245).
10.43 **H**	—	Ninth Amendment to Pioneer USA 401(k) and Matching Plan, dated November 10, 2017 (incorporated by reference to Exhibit 10.42 to the Company's Annual Report on Form 10-K for the year ended December 31, 2017, File No. 1-13245).
10.44 **H**	—	Tenth Amendment to Pioneer USA 401(k) and Matching Plan, dated February 6, 2018 (incorporated by reference to Exhibit 10.43 to the Company's Annual Report on Form 10-K for the year ended December 31, 2017, File No. 1-13245).
10.45 **H**		Eleventh Amendment to Pioneer USA 401(k) and Matching Plan, dated June 29, 2018 (incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2018, File No. 1-13245).
10.46 H		Twelfth Amendment to Pioneer USA 401(k) and Matching Plan, dated August 30, 2018 (incorporated by reference to Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2018, File No. 1-13245).
10.47 H (a)		Thirteenth Amendment to Pioneer USA 401(k) and Matching Plan, dated November 15, 2018.
10.48 **H**	—	Indemnification Agreement, dated February 21, 2013, between the Company and Thomas D. Arthur, together with a schedule identifying other substantially identical agreements between the Company and each of the other non-employee directors identified on the schedule (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K, File No. 1-13245, filed with the SEC on February 26, 2013).
10.49 **H**	—	Indemnification Agreement, dated March 4, 2013, between the Company and Scott D. Sheffield, together with a schedule identifying other substantially identical agreements between the Company and each of its executive officers identified on the schedule and identifying the material differences between each of those agreements and the filed Indemnification Agreement (incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K, File No. 1-13245, filed with the SEC on March 8, 2013).
10.50 **H**	—	Indemnification Agreement, dated March 4, 2013, between the Company and J.D. Hall, together with a schedule identifying other substantially identical agreements between the Company and the executive officers identified on the schedule and identifying the material differences between each of those agreements and the filed Indemnification Agreement (incorporated by reference to Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2014).
10.51 **H**	—	Indemnification Agreement, dated effective July 23, 2013, between the Company and Stacy P. Methvin, together with a schedule identifying other substantially identical agreements between the Company and each of the other non-employee directors identified on the schedule (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K, File No. 1-13245, filed with the SEC on July 29, 2013).
10.52 **H**	—	Indemnification Agreement, dated March 13, 2014, between the Company and Margaret M. Montemayor (incorporated by reference to Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2014).
10.53 **H**	—	Indemnification Agreement, dated July 7, 2014, between the Company and Phillip A. Gobe, together with a schedule identifying other substantially identical agreement between the Company and the other non-employee director identified on the schedule (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K, File No. 1-13245, filed with the SEC on July 10, 2014).
10.54 **H**	—	Indemnification Agreement, dated June 29, 2015, between the Company and Mona K. Sutphen, together with a schedule identifying other substantially identical agreement between the Company and the other non-employee director identified on the schedule (incorporated by reference to Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2015, File No. 1-13245).
10.55 **H**	—	Indemnification Agreement, dated effective March 2, 2016, between the Company and Teresa A. Fairbrook, together with a schedule identifying other substantially identical agreements between the Company and the executive officers identified on the schedule and identifying the material differences between each of those agreements and the filed Indemnification Agreement (incorporated by reference to Exhibit 10.46 to the Company's Annual Report on Form 10-K for the year ended December 31, 2016, File No. 1-13245).
10.56 **H** (a)		Indemnification Agreement, dated effective January 1, 2018, between the Company and Neal H. Shah.
10.57 **H**	—	Severance Agreement, dated August 16, 2005, between the Company and Scott D. Sheffield, together with a schedule identifying other substantially identical agreements between the Company and each of its executive officers identified on the schedule and identifying the material differences between each of those agreements and the filed Severance Agreement (incorporated by reference to Exhibit 10.24 to the Company's Annual Report on Form 10-K for the year ended December 31, 2007, File No. 1-13245).

10.58 **H**	—	Form of Amendment to Severance Agreement, dated November 20, 2008, between the Company and each of Scott D. Sheffield and Timothy L. Dove (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K, File No. 1-13245, filed with the SEC on November 25, 2008).
10.59 **H**	—	Form of Amendment to Severance Agreement, dated November 20, 2008, between the Company and each executive officer of the Company other than Scott D. Sheffield and Timothy L. Dove (incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K, File No. 1-13245, filed with the SEC on November 25, 2008).
10.60 **H**	—	Letter Agreement, dated May 19, 2016, between the Company and Scott D. Sheffield (incorporated by reference to Exhibit 10.4 to the Company's Current Report on Form 8-K, File No. 1-13245, filed with the SEC on May 24, 2016).
10.61 **H**	—	Amended and Restated Severance Agreement, dated February 27, 2017, between the Company and Timothy L. Dove (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K, File No. 1-13245, filed with the SEC on March 3, 2017).
10.62 **H**	—	Severance Agreement, dated effective August 10, 2005, between the Company and Kenneth Sheffield, together with a schedule identifying the other substantially identical agreement between the Company and the executive officer identified on the schedule and identifying the material differences between that agreement and the filed Severance Agreement (incorporated by reference to Exhibit 10.4 to the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2014, File No. 1-13245).
10.63 **H**	—	Amendment to Severance Agreement, dated December 8, 2008, between the Company and Kenneth Sheffield, together with a schedule identifying the other substantially identical agreement between the Company and the executive officer identified on the schedule and identifying the material differences between that agreement and the filed Amendment to Severance Agreement (incorporated by reference to Exhibit 10.5 to the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2014, File No. 1-13245).
10.64 **H**	—	Severance Agreement, dated effective January 14, 2010, between the Company and J. D. Hall (incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2014, File No. 1-13245).
10.65 **H**	—	Severance Agreement, dated effective January 1, 2014, between the Company and Margaret M. Montemayor (incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2014, File No. 1-13245).
10.66 **H**	—	Severance Agreement, dated effective December 12, 2005, between the Company and William Hannes, together with a schedule identifying the other substantially identical agreement between the Company and the executive officer identified on the schedule and identifying the material differences between that agreement and the filed Severance Agreement (incorporated by reference to Exhibit 10.55 to the Company's Annual Report on Form 10-K for the year ended December 31, 2016, File No. 1-3245).
10.67 H	—	Amendment to Severance Agreement, dated November 20, 2008, between the Company and William Hannes, together with a schedule identifying the other substantially identical agreement between the Company and the executive officer identified on the schedule and identifying the material differences between that agreement and the filed Amendment to Severance Agreement (incorporated by reference to Exhibit 10.56 to the Company's Annual Report on Form 10-K for the year ended December 31, 2016, File No. 1-3245).
10.68 **H**	—	Severance Agreement, dated effective February 27, 2013, between the Company and Teresa A. Fairbrook, together with a schedule identifying the other substantially identical agreement between the Company and the executive officer identified on the schedule and identifying the material differences between that agreement and the filed Severance Agreement (incorporated by reference to Exhibit 10.57 to the Company's Annual Report on Form 10-K for the year ended December 31, 2016, File No. 1-3245).
10.69 **H**	—	Change in Control Agreement, dated February 27, 2018, between the Company and Timothy L. Dove, together with a schedule identifying other substantially identical agreements between the Company and each of its executive officers identified on the schedule and identifying the material differences between each of those agreements and the filed Change in Control Agreement (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K, File No. 1-13245, filed with the SEC on March 5, 2018).
10.70 **H (a)**	—	Change in Control Agreement, dated January 1, 2018, between the Company and Neal H. Shah.
10.71 **H**	—	Form of Amendment to Severance Agreement and Change in Control Agreement, dated May 17, 2017, between the Company and each executive officer of the Company (incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2017, File No. 1-13245).
21.1 (a)	—	Subsidiaries of the registrant.
23.1 (a)	—	Consent of Ernst & Young LLP.
23.2 (a)	—	Consent of Netherland, Sewell & Associates, Inc.
31.1 (a)	—	Chief Executive Officer certification under Section 302 of the Sarbanes-Oxley Act of 2002.
31.2 (a)	—	Chief Financial Officer certification under Section 302 of the Sarbanes-Oxley Act of 2002.
32.1 (b)	—	Chief Executive Officer certification under Section 906 of the Sarbanes-Oxley Act of 2002.
32.2 (b)	—	Chief Financial Officer certification under Section 906 of the Sarbanes-Oxley Act of 2002.
95.1 (a)	—	Mine Safety Disclosure pursuant to Section 1503(a) of the Dodd-Frank Wall Street Reform and Consumer Protection Act.
99.1 (a)	—	Report of Netherland, Sewell & Associates, Inc.
101. INS (a)	—	XBRL Instance Document.
101. SCH (a)	—	XBRL Taxonomy Extension Schema.
101. CAL (a)	—	XBRL Taxonomy Extension Calculation Linkbase Document.
101. DEF (a)	—	XBRL Taxonomy Extension Definition Linkbase Document.
101. LAB (a)	—	XBRL Taxonomy Extension Label Linkbase Document.
101. PRE (a)	—	XBRL Taxonomy Extension Presentation Linkbase Document.

(a) Filed herewith.

(b) Furnished herewith.

H Executive Compensation Plan or Arrangement.

ITEM 16. 10-K SUMMARY

None.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

PIONEER NATURAL RESOURCES COMPANY

Date: February 26, 2019

By: /s/ Scott D. Sheffield

Scott D. Sheffield,
President and Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Scott D. Sheffield Scott D. Sheffield	President and Chief Executive Officer (principal executive officer)	February 26, 2019
/s/ Richard P. Dealy Richard P. Dealy	Executive Vice President and Chief Financial Officer (principal financial officer)	February 26, 2019
/s/ Margaret M. Montemayor Margaret M. Montemayor	Vice President and Chief Accounting Officer (principal accounting officer)	February 26, 2019
/s/ J. Kenneth Thompson J. Kenneth Thompson	Chairman of the Board	February 26, 2019
/s/ Edison C. Buchanan Edison C. Buchanan	Director	February 26, 2019
/s/ Andrew F. Cates Andrew F. Cates	Director	February 26, 2019
/s/ Phillip A. Gobe Phillip A. Gobe	Director	February 26, 2019
/s/ Larry R. Grillot Larry R. Grillot	Director	February 26, 2019
/s/ Stacy P. Methvin Stacy P. Methvin	Director	February 26, 2019
/s/ Royce W. Mitchell Royce W. Mitchell	Director	February 26, 2019
/s/ Frank A. Risch Frank A. Risch	Director	February 26, 2019
/s/ Mona K. Sutphen Mona K. Sutphen	Director	February 26, 2019
/s/ Phoebe A. Wood Phoebe A. Wood	Director	February 26, 2019
/s/ Michael D. Wortley Michael D. Wortley	Director	February 26, 2019

THIRTEENTH AMENDMENT TO THE
PIONEER NATURAL RESOURCES USA, INC.
401(k) AND MATCHING PLAN
(Amended and Restated Effective as of January 1, 2013)

THIS THIRTEENTH AMENDMENT is made and entered into by Pioneer Natural Resources USA, Inc. (the "**Company**"):

WITNESSETH:

WHEREAS, the Company maintains the Pioneer Natural Resources USA, Inc. 401(k) and Matching Plan (the "**Plan**");

WHEREAS, pursuant to Section 8.3 of the Plan, the Benefit Plan Design Committee (the "**Committee**") of the Company maintains the authority to amend the Plan at any time; and

WHEREAS, the Committee desires to amend the Plan to (i) provide for full and immediate vesting in any employer-derived benefits accrued under the Plan for certain employees who are involuntarily terminated in connection with the sale of certain pumping services assets in Midland, Texas and the sand plant closings and (ii) implement changes to hardship withdrawals under the Plan in accordance with the Bipartisan Budget Act of 2018 including removal of the requirement that participants exhaust all loans under the Plan prior to requesting hardship withdrawals and elimination of the six-month suspension on employee contributions following a request for a hardship withdrawal.

NOW THEREFORE, the Plan is hereby amended as follows.

1. Effective November 13, 2018, Section 5.3(r) is hereby added to the Plan as follows:

   (r) Any provision of this Plan to the contrary notwithstanding, the amounts credited to the Employer Account of a Participant who is specifically designated by the Vice President and Chief Human Resources Officer of the Company as being involuntarily terminated in connection with the sale of the Midland, Texas pumping services assets shall become fully vested and nonforfeitable on the date of such involuntary termination.

2. Effective November 13, 2018, Section 5.3(s) is hereby added to the Plan as follows:

   (s) Any provision of this Plan to the contrary notwithstanding, the amounts credited to the Employer Account of a Participant who is specifically designated by the Vice President and Chief Human Resources Officer of the Company as being involuntarily terminated in connection with the closing of sand plants in Brady, Texas; Millwood, Ohio; and Bakersfield, California shall become fully vested and nonforfeitable on the date of such involuntary termination.

3. Effective January 1, 2019, Section 6.6(c) of the Plan is hereby amended as follows:

(c) A hardship withdrawal will be considered to be necessary to satisfy an immediate and heavy financial need of a Participant only if the Committee determines that (i) the amount of such withdrawal is not in excess of the amount of such need plus any amounts necessary to pay any federal, state or local income taxes or penalties reasonably anticipated to result from the withdrawal, and (ii) such Participant has obtained all distributions and withdrawals (but not loans), other than hardship withdrawals, currently available under all plans maintained by the Employers.

4. Effective January 1, 2019, Section 6.6(d) of the Plan is hereby removed.

NOW, THEREFORE, be it further provided that except as provided above, the Plan shall continue to read in its current state.

IN WITNESS WHEREOF, the Company has executed this Thirteenth Amendment this 15th day of November 2018 to be effective as specified above.

PIONEER NATURAL RESOURCES USA, INC.

By: /s/ Teresa A. Fairbrook
Name: Teresa A. Fairbrook
Title: Vice President and Chief Human Resources Officer

EXHIBIT 10.56

PIONEER NATURAL RESOURCES COMPANY

INDEMNIFICATION AGREEMENT

This Agreement ("Agreement") is made and entered into as of the 1st day of January, 2019, by and between Pioneer Natural Resources Company, a Delaware corporation (the "Company"), and Neal H. Shah ("Indemnitee").

RECITALS

A. Highly competent and experienced persons are reluctant to serve corporations as directors, executive officers or in other capacities unless they are provided with adequate protection through insurance and indemnification against claims and actions against them arising out of their service to and activities on behalf of the Company.

B. The Board of Directors of the Company (the "Board") has determined that the inability to attract and retain such persons would be detrimental to the best interests of the Company and its stockholders and that the Company should act to assure such persons that there will be increased certainty of such protection in the future.

C. The Board has also determined that it is reasonable, prudent and necessary for the Company, in addition to purchasing and maintaining directors' and officers' liability insurance (or otherwise providing for adequate arrangements of self-insurance), contractually to obligate itself to indemnify such persons to the fullest extent permitted by applicable law so that they will serve or continue to serve the Company free from undue concern that they will not be adequately protected.

D. Indemnitee is willing to serve, continue to serve and to take on additional service for or on behalf of the Company on the condition that Indemnitee be so indemnified to the fullest extent permitted by law.

E. Article Twelfth of the Amended and Restated Certificate of Incorporation of the Company provides for indemnification of directors and officers to the fullest extent permitted by law.

In consideration of the foregoing and the mutual covenants herein contained, and other good and valuable consideration, the sufficiency and receipt of which are hereby acknowledged, the parties hereby agree as follows:

ARTICLE I

Certain Definitions

As used herein, the following words and terms shall have the following respective meanings (whether singular or plural):

"Acquiring Person" means any Person other than (i) the Company, (ii) any of the Company's Subsidiaries, (iii) any employee benefit plan of the Company or of a Subsidiary of the Company or of a Company owned directly or indirectly by the stockholders of the Company in substantially the same proportions as their ownership of stock of the Company, or (iv) any trustee or other fiduciary holding securities under an employee benefit plan of the Company or of a Subsidiary of the Company or of a Company owned directly or indirectly by the stockholders of the Company in substantially the same proportions as their ownership of stock of the Company.

"Change in Control" means the occurrence of any of the following events:

(i) The acquisition by any Person of beneficial ownership (within the meaning of Rule 13d-3 promulgated under the Exchange Act) of 40% or more of either (x) the then outstanding shares of Common Stock of the Company (the "Outstanding Company Common Stock") or (y) the combined voting power of the then outstanding voting securities of the Company entitled to vote generally in the election of directors (the "Outstanding Company Voting Securities"); provided, however, that for purposes of this Subparagraph (i), the following acquisitions shall not constitute a Change of Control: (A) any acquisition directly from the Company, (B) any acquisition by the Company, (C) any acquisition by any employee benefit plan (or related trust) sponsored or maintained by the Company or any corporation controlled by the Company or (D) any acquisition by any corporation pursuant to a transaction which complies with clauses (A), (B) and (C) of paragraph (iii) below; or

(ii) Members of the Incumbent Board cease for any reason to constitute at least a majority of the Board; or

(iii) Consummation of a reorganization, merger or consolidation or sale or other disposition of all or substantially all of the assets of the Company or an acquisition of assets of another entity (a "Business Combination"), in each case, unless, following such Business Combination, (A) all or substantially all of the individuals and entities who were the beneficial owners, respectively, of the Outstanding Company Common Stock and Outstanding Company Voting Securities immediately prior to such Business Combination beneficially own, directly or indirectly, more than 50% of, respectively, the then outstanding shares of common equity and the combined voting power of the then outstanding voting securities entitled to vote generally in the election of directors or other similar governing body, as the case may be, of the entity resulting from such Business Combination (including, without limitation, an entity which as a result of such transaction owns the Company or all or substantially all of the Company's assets either directly or through one or more subsidiaries) in substantially the same proportions as their ownership, immediately prior to such Business Combination of the Outstanding Company Common Stock and Outstanding Company Voting Securities, as the case may be, (B) no Person (excluding any employee benefit plan (or related trust) of the Company or the entity resulting from such Business Combination) beneficially owns, directly or indirectly, 40% or more of, respectively, the then outstanding shares of common equity of the entity resulting from such Business Combination or the combined voting power of the then outstanding voting securities of such entity except to the extent that such ownership results solely from ownership of the Company that existed prior to the Business Combination and (C) at least a majority of the members of the board of directors or other similar governing body of the entity resulting from such Business Combination were members of the Incumbent Board at the time of the execution of the initial agreement, or of the action of the Board, providing for such Business Combination; or

(iv) Approval by the stockholders of the Company of a complete liquidation or dissolution of the Company.

"Claim" means an actual or threatened claim or request for relief which was, is or may be made by reason of anything done or not done by Indemnitee in, or by reason of any event or occurrence related to, Indemnitee's Corporate Status.

"Corporate Status" means the status of a person who is, becomes or was a director, officer, employee, agent or fiduciary of the Company or is, becomes or was serving at the request of the Company as a director, officer, partner, member, venturer, proprietor, trustee, employee, agent, fiduciary or similar functionary of another foreign or domestic corporation, partnership, limited liability company, joint venture, sole proprietorship, trust, employee benefit plan or other enterprise. For purposes of this Agreement, the Company agrees that Indemnitee's service on behalf of or with respect to any Subsidiary of the Company shall be deemed to be at the request of the Company.

"DGCL" means the Delaware General Corporation Law and any successor statute thereto, as either of them may from time to time be amended.

"Disinterested Director" with respect to any request by Indemnitee for indemnification hereunder, means a director of the Company who at the time of the vote is not a named defendant or respondent in the Proceeding in respect of which indemnification is sought by Indemnitee.

"Exchange Act" means the Securities Exchange Act of 1934.

"Expenses" means all attorneys' fees and disbursements, retainers, accountant's fees and disbursements, private investigator fees and disbursements, court costs, transcript costs, fees and expenses of experts, witness fees and expenses, travel expenses, duplicating costs, printing and binding costs, telephone charges, postage, delivery service fees and all other disbursements, costs or expenses of the types customarily incurred in connection with prosecuting, defending (including affirmative defenses and counterclaims), preparing to prosecute or defend, investigating, being or preparing to be a witness in, or participating in or preparing to participate in (including on appeal) a Proceeding and all interest or finance charges attributable to any thereof. Should any payments by the Company under this Agreement be determined to be subject to any federal, state or local income or excise tax, "Expenses" shall also include such amounts as are necessary to place Indemnitee in the same after-tax position (after giving effect to all applicable taxes) as Indemnitee would have been in had no such tax been determined to apply to such payments. Also, in this Agreement "witness" includes responding (or objecting) to a discovery request, whether in writing or in an oral deposition, in any Proceeding.

"Incumbent Board" means the individuals who, as of the date of this Agreement, constitute the Board and any other individual who becomes a director of the Company after that date and whose election or appointment by the Board or nomination for election by the Company's stockholders was approved by a vote of at least a majority of the directors then comprising the Incumbent Board, but excluding, for this purpose, any such individual whose initial assumption of office occurs as a result of an actual or threatened election contest with respect to the election or removal of directors or other actual or threatened solicitation of proxies or consents by or on behalf of a Person other than the Incumbent Board.

"Independent Counsel" means a law firm, or a member of a law firm, that is experienced in matters of corporation law and neither contemporaneously is, nor in the five years theretofore has been, retained to represent: (a) the Company or Indemnitee in any matter material to either such party (other than as Independent Counsel under this Agreement or similar agreements), (b) any other party to the Proceeding giving rise to a claim for indemnification hereunder or (c) the beneficial owner, directly or indirectly, of securities of the Company representing 5% or more of the combined voting power of the Company's then outstanding voting securities (other than, in each such case, with respect to matters concerning the rights of Indemnitee under this Agreement, or of other indemnitees under similar indemnification agreements). Notwithstanding the foregoing, the term "Independent Counsel" shall not include any person who, under the applicable standards of professional conduct then prevailing, would have a conflict of interest in representing either the Company or Indemnitee in an action to determine Indemnitee's rights under this Agreement.

"Independent Directors" means the directors on the Board that are independent directors as defined in Section 303A of the New York Stock Exchange Listed Company Manual or successor provision, or, if the Company's common stock is not then quoted on the NYSE, that qualify as independent, disinterested, or a similar term as defined in the rules of the principal securities exchange or inter-dealer quotation system on which the Company's common stock is then listed or quoted.

"Person" means any individual, entity or group (within the meaning of Sections 13(d)(3) and 14(d)(2) of the Exchange Act).

"Potential Change in Control" shall be deemed to have occurred if (i) any Person shall have announced publicly an intention to effect a Change in Control, or commenced any action (such as the commencement of a tender offer for the Company's Common Stock or the solicitation of proxies for the election of any of the Company's directors) that, if successful, could reasonably be expected to result in the occurrence of a Change in Control; (ii) the Company enters into an agreement, the consummation of which would constitute a Change in Control; or (iii) any other event occurs which the Board declares to be a Potential Change of Control.

"Proceeding" means any threatened, pending or completed action, suit, arbitration, investigation, inquiry, alternate dispute resolution mechanism, administrative or legislative hearing, or any other proceeding (including, without limitation, any securities laws action, suit, arbitration, alternative dispute resolution mechanism, hearing or procedure) whether civil, criminal, administrative, arbitrative or investigative and whether or not based upon events occurring, or actions taken, before the date hereof, and any appeal in or related to any such action, suit, arbitration, investigation, hearing or proceeding and any inquiry or investigation (including discovery), whether conducted by or in the right of the Company or any other Person, that Indemnitee in good faith believes could lead to any such action, suit, arbitration, alternative dispute resolution mechanism, hearing or other proceeding or appeal thereof.

"Subsidiary" means, with respect to any Person, any corporation or other entity of which a majority of the voting power of the voting equity securities or equity interest is owned, directly or indirectly, by that Person.

"Voting Securities" means any securities that vote generally in the election of directors, in the admission of general partners, or in the selection of any other similar governing body.

ARTICLE II

Services by Indemnitee

Indemnitee is serving as an officer of the Company. Indemnitee may from time to time also agree to serve, as the Company may request from time to time, in another capacity for the Company (including another officer or director position) or as a director, officer, partner, member, venturer, proprietor, trustee, employee, agent, fiduciary or similar functionary of another foreign or domestic corporation, partnership, joint venture, limited liability company, sole proprietorship, trust, employee benefit plan or other enterprise. Indemnitee and the Company each acknowledge that they have entered into this Agreement as a means of inducing Indemnitee to serve, or continue to serve, the Company in such capacities. Indemnitee may at any time and for any reason resign from such position or positions (subject to any other contractual obligation or any obligation imposed by operation of law). The Company shall have no obligation under this Agreement to continue Indemnitee in any such position or positions.

ARTICLE III

Indemnification

Section 3.1 General. Subject to the provisions set forth in Article IV, the Company shall indemnify, and advance Expenses to, Indemnitee to the fullest extent permitted by applicable law in effect on the date hereof and to such greater extent as applicable law may hereafter from time to time permit. The other provisions set forth in this Agreement are provided in addition to and as a means of furtherance and implementation of, and not in limitation of, the obligations expressed in this Article III. No requirement, condition to or limitation of any right to indemnification or to advancement of Expenses under this Article III shall in any way limit the rights of Indemnitee under Article VII.

Section 3.2 Additional Indemnity of the Company. Indemnitee shall be entitled to indemnification pursuant to this Section 3.2 if, by reason of anything done or not done by Indemnitee in, or by reason of any event or occurrence related to, Indemnitee's Corporate Status, Indemnitee is, was or becomes, or is threatened to be made, a party to, or witness or other participant in any Proceeding. Pursuant to this Section 3.2, Indemnitee shall be indemnified against any and all Expenses, judgments, penalties (including excise or similar taxes), fines and amounts paid in settlement (including all interest, assessments and other charges paid or payable in connection with or in respect of any such Expenses, judgments, penalties, fines and amounts paid in settlement) actually and reasonably incurred by Indemnitee or on Indemnitee's behalf in connection with such Proceeding or any Claim, issue or matter therein. Notwithstanding the foregoing, the obligations of the Company under this Section 3.2 shall be subject to the condition that no determination (which, in any case in which Independent Counsel is involved, shall be in a form of a written opinion) shall have been made pursuant to Article IV that Indemnitee would not be permitted to be indemnified under applicable law. Nothing in this Section 3.2 shall limit the benefits of Section 3.1, Section 3.3 or any other Section hereunder.

Section 3.3 Advancement of Expenses. The Company shall pay all Expenses reasonably incurred by, or in the case of retainers to be incurred by, or on behalf of Indemnitee (or, if applicable, reimburse Indemnitee for any and all Expenses reasonably incurred by Indemnitee and previously paid by Indemnitee) in connection with any Claim or Proceeding, whether brought by the Company or otherwise, in advance of any determination respecting entitlement to indemnification pursuant to Article IV hereof (and shall continue to pay such Expenses after such determination and until it shall ultimately be determined (in a final adjudication by a court from which there is no further right of appeal or in a final adjudication of an arbitration pursuant to Section 5.1 if Indemnitee elects to seek such arbitration) that Indemnitee is not entitled to be indemnified by the Company against such Expenses) within 10 days after the receipt by the Company of (a) a written request from Indemnitee requesting such payment or payments from time to time, whether prior to or after final disposition of such Claim or Proceeding, and (b) a written affirmation from Indemnitee of Indemnitee's good faith belief that Indemnitee has met the standard of conduct necessary for Indemnitee to be permitted to be indemnified under applicable law. Any such payment by the Company is referred to in this Agreement as an "Expense Advance." In connection with any request for an Expense Advance, if requested by the Company, Indemnitee or Indemnitee's counsel shall also submit an affidavit stating that the Expenses incurred were, or in the case of retainers to be incurred are, reasonably incurred. Any dispute as to the reasonableness of the incurrence of any Expense shall not delay an Expense Advance by the Company, and the Company agrees that any such dispute shall be resolved only upon the disposition or conclusion of the underlying Claim against Indemnitee. Indemnitee hereby undertakes and agrees that Indemnitee will reimburse and repay the Company without interest for any Expense Advances to the extent that it shall ultimately be determined (in a final adjudication by a court from which there is no further right of appeal or in a final adjudication of an arbitration pursuant to Section 5.1 if Indemnitee elects to seek such arbitration) that Indemnitee is not entitled to be indemnified by the Company against such Expenses. Indemnitee shall not be required to provide collateral or otherwise secure the undertaking and agreement described in the prior sentence. The Company shall make all Expense Advances pursuant to this Section 3.3 without regard to the financial ability of the Indemnitee to make repayment and without regard to the prospect of whether the Indemnitee may ultimately be found to be entitled to indemnification under the provisions of this Agreement.

Section 3.4 Indemnification for Additional Expenses. The Company shall indemnify Indemnitee against any and all costs and expenses (of the types described in the definition of Expenses in Article I) and, if requested by Indemnitee, shall (within two business days of that request) advance those costs and expenses to Indemnitee, that are incurred by Indemnitee in connection with any claim asserted against, or action brought by, Indemnitee for (i) indemnification or an Expense Advance by the Company under this Agreement or any other agreement or provision of the Company's Certificate of Incorporation or Bylaws now or hereafter in effect relating to any Claim or Proceeding, (ii) recovery under any directors' and officers' liability insurance policies maintained by the Company, or (iii) enforcement of, or claims for breaches of, any provision of this Agreement, in each of the foregoing situations regardless of whether Indemnitee ultimately is determined to be entitled to that indemnification, Expense Advance payment, insurance recovery, enforcement, or damage claim, as the case may be, and regardless of whether the nature of the proceeding with respect to such matters is judicial, by arbitration, or otherwise.

Section 3.5 Partial Indemnity. If Indemnitee is entitled under any provision of this Agreement to indemnification by the Company for some or a portion of the Expenses, judgments, fines, penalties, and amounts paid in settlement of a Claim or Proceeding but not, however, for all of the total amount thereof, the Company shall nevertheless indemnify Indemnitee for the portion thereof to which Indemnitee is entitled. Moreover, notwithstanding any other provision of this Agreement, to the extent that Indemnitee has been successful on the merits or otherwise in defense of any or all Claims or Proceedings, or in defense of any issue or matter therein, including dismissal without prejudice, Indemnitee shall be indemnified against all Expenses incurred in connection therewith.

ARTICLE IV

Procedure for Determination of Entitlement to Indemnification

Section 4.1 Request by Indemnitee. To obtain indemnification under this Agreement, Indemnitee shall submit to the Company a written request, including therein or therewith such documentation and information as is reasonably available to Indemnitee and is reasonably necessary to determine whether and to what extent Indemnitee is entitled to indemnification. The Secretary or an Assistant Secretary of the Company shall, promptly upon receipt of such a request for indemnification, advise the Board in writing that Indemnitee has requested indemnification. Nevertheless, any failure of Indemnitee to provide a request to the Company, or to provide such a request timely, shall not relieve the Company of any liability that it may have to Indemnitee hereunder except, and to the extent that, such failure actually and materially prejudices the interests of the Company.

Section 4.2 Determination of Request. Upon written request by Indemnitee for indemnification pursuant to the first sentence of Section 4.1 hereof, a determination, if required by applicable law, with respect to whether Indemnitee is permitted under applicable law to be indemnified shall be made, in accordance with the terms of Section 4.5, in the specific case as follows:

(a) If a Potential Change in Control or a Change in Control shall have occurred, by Independent Counsel (selected in accordance with Section 4.3) in a written opinion to the Board and

Indemnitee, unless Indemnitee shall request that such determination be made by the Board, or a committee of the Board, in which case by the person or persons or in the manner provided for in clause (i) or (ii) of paragraph (b) below; or

(b) If a Potential Change in Control or a Change in Control shall not have occurred, (i) by the Board by a majority vote of the Disinterested Directors even though less than a quorum of the Board, or (ii) by a majority vote of a committee solely of two or more Disinterested Directors designated to act in the matter by a majority vote of all Disinterested Directors even though less than a quorum of the Board, or (iii) by Independent Counsel selected by the Board or a committee of the Board by a vote as set forth in clauses (i) or (ii) of this paragraph (b), or if such vote is not obtainable or such a committee cannot be established, by a majority vote of all directors, or (iv) if Indemnitee and the Company agree, by the stockholders of the Company in a vote that excludes the shares held by directors who are not Disinterested Directors.

If it is so determined that Indemnitee is permitted to be indemnified under applicable law, payment to Indemnitee shall be made within 10 days after such determination. Nothing contained in this Agreement shall require that any determination be made under this Section 4.2 prior to the disposition or conclusion of a Claim or Proceeding against Indemnitee; provided, however, that Expense Advances shall continue to be made by the Company pursuant to, and to the extent required by, the provisions of Article III. Indemnitee shall cooperate with the person or persons making such determination with respect to Indemnitee's entitlement to indemnification, including providing to such person upon reasonable advance request any documentation or information that is not privileged or otherwise protected from disclosure and that is reasonably available to Indemnitee and reasonably necessary to such determination. Any costs or expenses (including attorneys' fees and disbursements) incurred by Indemnitee in so cooperating with the person or persons making such determination shall be borne by the Company (irrespective of the determination as to Indemnitee's entitlement to indemnification), and the Company shall indemnify and hold harmless Indemnitee therefrom.

Section 4.3 Independent Counsel. If a Potential Change in Control or a Change in Control shall not have occurred and the determination of entitlement to indemnification is to be made by Independent Counsel, the Independent Counsel shall be selected by (a) a majority vote of the Disinterested Directors, even though less than a quorum of the Board or (b) if there are no Disinterested Directors, by a majority vote of the Board, and the Company shall give written notice to Indemnitee, within 10 days after receipt by the Company of Indemnitee's request for indemnification, specifying the identity and address of the Independent Counsel so selected. If a Potential Change in Control or a Change in Control shall have occurred and the determination of entitlement to indemnification is to be made by Independent Counsel, the Independent Counsel shall be selected by Indemnitee, and Indemnitee shall give written notice to the Company, within 10 days after submission of Indemnitee's request for indemnification, specifying the identity and address of the Independent Counsel so selected (unless Indemnitee shall request that such selection be made by the Disinterested Directors or a committee of the Board, in which event the Company shall give written notice to Indemnitee within 10 days after receipt of Indemnitee's request for the Board or a committee of the Disinterested Directors to make such selection, specifying the identity and address of the Independent Counsel so selected). In either event, (i) such notice to Indemnitee or the Company, as the case may be, shall be accompanied by a written affirmation of the Independent Counsel so selected that it satisfies the requirements of the definition of "Independent Counsel" in Article I and that it agrees to serve in such capacity and (ii) Indemnitee or the Company, as the case may be, may, within seven days after such written notice of selection shall have been given, deliver to the Company or to Indemnitee, as the case may be, a written objection to such selection. Any objection to the selection of Independent Counsel pursuant to this Section 4.3 may be asserted only on the ground that the Independent Counsel so selected does not meet the requirements of the definition of "Independent Counsel" in Article I, and the objection shall set forth with particularity the factual basis of such assertion. If such written objection is timely made, the Independent Counsel so selected may not serve as Independent Counsel unless and until a court of competent jurisdiction (the "Court") has determined that such objection is without merit or such objection is withdrawn. In the event of a timely written objection to a choice of Independent Counsel, the party originally selecting the Independent Counsel shall have seven days to make an alternate selection of Independent Counsel and to give written notice of such selection to the other party, after which time such other party shall have five days to make a written objection to such alternate selection. If, within 30 days after submission of Indemnitee's request for indemnification pursuant to Section 4.1, no Independent Counsel shall have been selected and not objected to, either the Company or Indemnitee may petition the Court for resolution of any objection that shall have been made by the Company or Indemnitee to the other's selection of Independent Counsel and/or for the appointment as Independent Counsel of a person selected by the Court or by such other person as the Court shall designate, and the person with respect to whom an objection is so resolved or the person so appointed shall act as Independent Counsel under Section 4.2. The Company shall pay any and all fees of, and expenses reasonably incurred by, such Independent Counsel in connection with acting pursuant to Section 4.2, and the Company shall pay all fees and expenses reasonably incurred incident to the procedures of this Section 4.3, regardless of the manner in which such Independent Counsel was selected or appointed. Upon the due commencement of any judicial proceeding or arbitration pursuant to Section 5.1, Independent Counsel shall be discharged and relieved of any further responsibility in such capacity (subject to the applicable standards of professional conduct then prevailing).

Section 4.4 Establishment of a Trust. In the event of a Potential Change in Control or a Change in Control, the Company shall, upon written request by Indemnitee, create a trust for the benefit of Indemnitee (the "Trust") and from time to time upon written request of Indemnitee shall fund the Trust in an amount sufficient to satisfy any and all Expenses reasonably anticipated at the time of each such request to be incurred in connection with investigating, preparing for, and defending any Claim, and any and all judgments, fines, penalties, and settlement amounts of any and all Claims from time to time actually paid or claimed, reasonably anticipated, or proposed to be paid. The amount to be deposited in the Trust pursuant to the foregoing funding obligation shall be determined by the Independent Counsel (or other person(s) making the determination of whether Indemnitee is permitted to be indemnified by applicable law). The terms of the Trust shall provide that, upon a Change in Control, (i) the Trust shall not be revoked or the principal thereof invaded, without the written consent of Indemnitee; (ii) the trustee of the Trust shall advance to Indemnitee, within ten days of a request by Indemnitee, any and all Expenses reasonably incurred by, or in case of retainer to be incurred by, or on behalf of Indemnitee (or, if applicable, reimburse Indemnitee for any Expense reasonably incurred by Indemnitee and previously paid by Indemnitee), with any required determination concerning the reasonableness of the Expenses to be made by the Independent Counsel (and Indemnitee hereby agrees to reimburse the Trust under the circumstances in which Indemnitee would be required to reimburse the Company for Expense Advances under Section 3.3 of this Agreement); (iii) the Trust shall continue to be funded by the Company in accordance with the funding obligation set forth above; (iv) the trustee of the Trust shall promptly pay to Indemnitee all amounts for which Indemnitee shall be entitled to indemnification pursuant to this Agreement; and (v) all unexpended funds in the Trust shall revert to the Company upon a final determination by the Independent Counsel or a court of competent jurisdiction, as the case may be, that Indemnitee has been fully indemnified under the terms of this Agreement. The trustee of the Trust shall be chosen by Indemnitee and shall be an institution that is not affiliated with Indemnitee. Nothing in this Section 4.4 shall relieve the Company of any of its obligations under this Agreement.

Section 4.5 Presumptions and Effect of Certain Proceedings.

(a) Indemnitee shall be presumed to be entitled to indemnification under this Agreement upon submission of a request for indemnification under Section 4.1, and the Company shall have the burden of proof in overcoming that presumption in reaching a determination contrary to that presumption. Such presumption shall be used by Independent Counsel (or other person or persons determining entitlement to indemnification) as a basis for a determination of entitlement to indemnification unless the Company provides information sufficient to overcome such presumption by clear and convincing evidence or unless the investigation, review and analysis of Independent Counsel (or such other person or persons) convinces Independent Counsel by clear and convincing evidence that the presumption should not apply.

(b) If the person or persons empowered or selected under Article IV of this Agreement to determine whether Indemnitee is entitled to indemnification shall not have made a determination within 60 days after receipt by the Company of the request by Indemnitee therefor, the determination of entitlement to indemnification shall be deemed to have been made and Indemnitee shall be entitled to such indemnification; provided, however, that such 60-day period may be extended for a reasonable time, not to exceed an additional 30 days, if the person making the determination with respect to entitlement to indemnification in good faith requires such additional time for the obtaining or evaluating of documentation and/or information relating to such determination; and provided, further, that the 60-day limitation set forth in this Section 4.5(b) shall not apply and such period shall be extended as necessary (i) if within 30 days after receipt by the Company of the request for indemnification under Section 4.1 Indemnitee and the Company have agreed, and the Board has resolved, to submit such determination to the stockholders of the Company pursuant to Section 4.2(b) for their consideration at an annual meeting of stockholders to be held within 90 days after such agreement and such determination is made thereat, or a special meeting of stockholders is called within 30 days after such receipt for the purpose of making such determination, such meeting is held for such purpose within 60 days after having been so called and such determination is made thereat, or (ii) if the determination of entitlement to indemnification is to be made by Independent Counsel pursuant to Section 4.2(a) of this Agreement, in which case the applicable period shall be as set forth in Section 5.1(c).

(c) The termination of any Proceeding or of any Claim, issue or matter by judgment, order, settlement (whether with or without court approval) or conviction, or upon a plea of nolo contendere or its equivalent, shall not (except as otherwise expressly provided in this Agreement) by itself adversely affect the rights of Indemnitee to indemnification or create a presumption that Indemnitee failed to meet any particular standard of conduct, that Indemnitee had any particular belief, or that a court has determined that indemnification is not permitted by applicable law. Indemnitee shall be deemed to have been found liable in respect of any Claim, issue or matter only after Indemnitee shall have been so adjudged by the Court after exhaustion of all appeals therefrom.

(d) For purposes of the second sentence of Section 3.5, a settlement or other resolution of a Proceeding short of final judgment may be successful if it permits a party to avoid expense, delay, distraction, disruption and uncertainty. For purposes of the second sentence of Section 3.5, in the event that any Proceeding to which Indemnitee is a party is resolved in any manner other than by adverse judgment against Indemnitee (including settlement of such Proceeding with or without payment of money or other consideration), it shall be presumed that Indemnitee has been successful on the merits or otherwise in such Proceeding. Anyone seeking to overcome this presumption shall have the burden of proof by clear and convincing evidence.

(e) The failure of the Company (including by its directors or Independent Counsel) to have made a determination before the commencement of any action pursuant to this Agreement that indemnification is proper because Indemnitee has met the applicable standard of conduct shall not be a defense to the action or create a presumption that Indemnitee has not met the standard of conduct.

ARTICLE V

Certain Remedies of Indemnitee

Section 5.1 Indemnitee Entitled to Adjudication in an Appropriate Court. If (a) a determination is made pursuant to Article IV that Indemnitee is not entitled to indemnification under this Agreement; (b) there has been any failure by the Company to make timely payment or advancement of any amounts due hereunder (including, without limitation, any Expense Advances); or (c) the determination of entitlement to indemnification is to be made by Independent Counsel pursuant to Section 4.2 and such determination shall not have been made and delivered in a written opinion within 90 days after the latest of (i) such Independent Counsel's being appointed, (ii) the overruling by the Court of objections to such counsel's selection, or (iii) expiration of all periods for the Company or Indemnitee to object to such counsel's selection, Indemnitee shall be entitled to commence an action seeking an adjudication in the Court of Indemnitee's entitlement to such indemnification or advancements due hereunder, including, without limitation, Expense Advances. Alternatively, Indemnitee, at Indemnitee's option, may seek an award in arbitration to be conducted by a single arbitrator pursuant to the commercial arbitration rules of the American Arbitration Association. Indemnitee shall commence such action seeking an adjudication or an award in arbitration within 180 days following the date on which Indemnitee first has the right to commence such action pursuant to this Section 5.1, or such right shall expire. The Company agrees not to oppose Indemnitee's right to seek any such adjudication or award in arbitration and it shall continue to pay Expense Advances pursuant to Section 3.3 until it shall ultimately be determined (in a final adjudication by a court from which there is no further right of appeal or in a final adjudication of an arbitration pursuant to this Section 5.1 if Indemnitee elects to seek such arbitration) that Indemnitee is not entitled to be indemnified by the Company against such Expenses.

Section 5.2 Adverse Determination Not to Affect any Judicial Proceeding. If a determination shall have been made pursuant to Article IV that Indemnitee is not entitled to indemnification under this Agreement, any judicial proceeding or arbitration commenced pursuant to this Article V shall be conducted in all respects as a de novo trial or arbitration on the merits, and Indemnitee shall not be prejudiced by reason of such initial adverse determination. In any judicial proceeding or arbitration commenced pursuant to this Article V, Indemnitee shall be presumed to be entitled to indemnification or advancement of Expenses, as the case may be, under this Agreement and the Company shall have the burden of proof in overcoming such presumption and to show by clear and convincing evidence that Indemnitee is not entitled to indemnification or advancement of Expenses, as the case may be.

Section 5.3 Company Bound by Determination Favorable to Indemnitee in any Judicial Proceeding or Arbitration. If a determination shall have been made or deemed to have been made pursuant to Article IV that Indemnitee is entitled to indemnification, the Company shall be irrevocably bound by such determination in any judicial proceeding or arbitration commenced pursuant to this Article V, and shall be precluded from asserting that such determination has not been made or that the procedure by which such determination was made is not valid, binding and enforceable.

Section 5.4 Company Bound by the Agreement. The Company shall be precluded from asserting in any judicial proceeding or arbitration commenced pursuant to this Article V that the procedures and presumptions of this Agreement are not valid, binding and enforceable and shall stipulate in any such court or before any such arbitrator that the Company is bound by all the provisions of this Agreement. Without limiting the generality of the preceding sentence, the Company shall not seek from a court, or agree to, a "bar order" that would have the effect of prohibiting or limiting Indemnitee's rights to advancement of any Expenses under this Agreement.

ARTICLE VI

Contribution

Section 6.1 Contribution Payment.

(a) Whether or not the indemnification provided in Article III hereof is available, in respect of any threatened, pending or completed action, suit or Proceeding in which the Company is jointly liable with Indemnitee (or would be if joined in such action, or Proceeding), the Company shall pay, in the first instance, the entire amount of any judgment or settlement of such action, suit or Proceeding without requiring Indemnitee to contribute to such payment, and the Company hereby waives and relinquishes any right of contribution it may have against Indemnitee. The Company shall not enter into any settlement of any action, suit or Proceeding in which the Company is jointly liable with Indemnitee (or would be if joined in such action, suit or Proceeding) unless such settlement provides for a full and final release of all claims asserted against Indemnitee.

(b) Without diminishing or impairing the obligations of the Company set forth in the preceding subparagraph, if, for any reason, Indemnitee shall elect or be required to pay all or any portion of any judgment or settlement in any threatened, pending or completed action, suit or Proceeding in which the Company is jointly liable with Indemnitee (or would be if joined in such action, suit or Proceeding), the Company shall contribute to the amount of Expenses, judgments, fines and amounts paid in settlement actually and reasonably incurred and paid or payable by Indemnitee in proportion to the relative benefits received by the Company and all officers, directors or employees of the Company, other than Indemnitee, who are jointly liable with Indemnitee (or would be if joined in such action, suit or Proceeding), on the one hand, and Indemnitee, on the other hand, from the transaction or events from which such action, suit or Proceeding arose; provided, however, that the proportion determined on the basis of relative benefit may, to the extent necessary to conform to law, be further adjusted by reference to the relative fault of the Company and all officers, directors or employees of the Company other than Indemnitee who are jointly liable with Indemnitee (or would be if joined in such action, suit or Proceeding), on the one hand, and Indemnitee, on the other hand, in connection with the transaction or events that resulted in such Expenses, judgments, fines or settlement amounts, as well as any other equitable considerations which applicable law may require to be considered.

(c) The Company hereby agrees, to the fullest extent permitted by applicable law, to fully indemnify and hold Indemnitee harmless from any claims of contribution which may be brought by officers, directors or employees of the Company, other than Indemnitee, who may be jointly liable with Indemnitee.

(d) To the fullest extent permissible under applicable law and without diminishing or impairing the obligations of the Company set forth in the preceding subparagraphs of this Section 6.1, if the indemnification provided for in this Agreement is unavailable to Indemnitee for any reason whatsoever, the Company, in lieu of indemnifying Indemnitee, shall contribute to the amount incurred by Indemnitee, whether for judgments, fines, penalties, excise taxes, amounts paid or to be paid in settlement and/or for Expenses, in connection with any claim relating to an indemnifiable event under this Agreement, in such proportion as is deemed fair and reasonable in light of all of the circumstances of such Proceeding in order to reflect (i) the relative benefits received by the Company and Indemnitee as a result of the event(s) and/or transaction(s) giving cause to such Proceeding; and/or (ii) the relative fault of the Company (and its directors, officers, employees and agents) and Indemnitee in connection with such event(s) and/or transaction(s).

Section 6.2 Relative Fault. The relative fault of the Indemnitee, on the one hand, and of the Company and any and all other parties (including officers and directors of the Company other than Indemnitee) who may be at fault with respect to such matter shall be determined (i) by reference to the relative fault of Indemnitee as determined by the court or other governmental agency assessing the contribution amounts or (ii) to the extent such court or other governmental agency does not apportion relative fault, by the Independent Counsel (or such other party which makes a determination under Article IV) after giving effect to, among other things, the degree of which their actions were motivated by intent to gain personal profit or advantage, the degree to which their liability is primary or secondary, the degree to which their conduct is active or passive, the degree of the knowledge, access to information, and opportunity to prevent or correct the subject matter of the Proceedings and other relevant equitable considerations of each party. The Company and Indemnitee agree that it would not be just and equitable if contribution pursuant to this Section 6.2 were determined by pro rata allocation or by any other method of allocation which does not take account of the equitable considerations referred to in this Section 6.2.

ARTICLE VII

Miscellaneous

Section 7.1 Non-Exclusivity. The rights of Indemnitee to receive indemnification and advancement of Expenses under this Agreement shall be in addition to, and shall not be deemed exclusive of, any other rights Indemnitee shall under the DGCL or other applicable law, the charter or bylaws of the Company, any other agreement, vote of stockholders or a resolution of directors, or otherwise. Every other right or remedy of Indemnitee shall be cumulative of the rights and remedies granted Indemnitee hereunder. No amendment or alteration of the charter or bylaws of the Company or any provision thereof shall adversely affect Indemnitee's rights hereunder, and such rights shall be in addition to any rights Indemnitee may have under the charter, bylaws and the DGCL or other applicable law. To the extent that there is a change in the DGCL or other applicable law (whether by statute or judicial decision) that allows greater indemnification by agreement than would be afforded currently under the Company's charter or bylaws and this Agreement, it is the intent of the parties hereto that Indemnitee shall enjoy by virtue of this Agreement the greater benefit so afforded by such change. Any amendment, alteration or repeal of the DGCL that adversely affects any right of Indemnitee shall be prospective only and shall not limit or eliminate any such right with respect to any Proceeding involving any occurrence or alleged occurrence of any action or omission to act that took place before the effective date of such amendment or repeal.

Section 7.2 Insurance and Subrogation.

(a) To the extent that the Company maintains an insurance policy or policies providing liability insurance for directors, officers, employees, agents or fiduciaries of the Company or for individuals serving at the request of the Company as directors, officers, partners, members, venturers, proprietors, trustees, employees, agents, fiduciaries or similar functionaries of another foreign or domestic corporation, partnership, limited liability company, joint venture, sole proprietorship, trust, employee benefit plan or other enterprise, Indemnitee shall be covered by such policy or policies in accordance with its or their terms to the maximum extent of the coverage available for any such director, officer, employee, agent or fiduciary under such policy or policies.

(b) In the event of any payment by the Company under this Agreement for which reimbursement is available under any insurance policy or policies obtained by the Company, the Company shall be subrogated to the extent of such payment to all of the rights of recovery of Indemnitee under such insurance policy or policies, who shall execute all papers required and take all action necessary to secure such rights, including execution of such documents as are necessary to enable the Company to bring suit to enforce such rights, provided that all Expenses relating to such action shall be borne by the Company.

(c) The Company shall not be liable under this Agreement to make any payment of amounts otherwise indemnifiable hereunder if and to the extent that Indemnitee has otherwise actually received such payment under the Company's charter or bylaws or any insurance policy, contract, agreement or otherwise.

(d) If Indemnitee is a director of the Company, the Company will advise the Board of any proposed material reduction in the coverage for Indemnitee to be provided by the Company's directors' and officers' liability insurance policy and will not effect such a reduction with respect to Indemnitee without the prior approval of at least 80% of the Independent Directors of the Company.

(e) If Indemnitee is a director of the Company during the term of this Agreement and if Indemnitee ceases to be a director of the Company for any reason, the Company shall procure a run-off directors' and officers' liability insurance policy with respect to claims arising from facts or events that occurred before the time Indemnitee ceased to be a director of the Company and covering Indemnitee, which policy, without any lapse in coverage, will provide coverage for a period of six years after the time Indemnitee ceased to be a director of the Company and will provide coverage (including amount and type of coverage and size of deductibles) that are substantially comparable to the Company's directors' and officers' liability insurance policy that was most protective of Indemnitee in the 12 months preceding the time Indemnitee ceased to be a director of the Company; provided, however, that:

i. this obligation shall be suspended during the period immediately following the time Indemnitee ceases to be a director of the Company if and only so long as the Company has a directors' and officers' liability insurance policy in effect covering Indemnitee for such claims that, if it were a run-off policy, would meet or exceed the foregoing standards, but in any event this suspension period shall end when a Change in Control occurs; and

ii. no later than the end of the suspension period provided in the preceding clause (i) (whether because of failure to have a policy meeting the foregoing standards or because a Change in Control occurs), the Company shall procure a run-off directors' and officers' liability insurance policy meeting the foregoing standards and lasting for the remainder of the six-year period.

(f) Notwithstanding the preceding clause (e) including the suspension provisions therein, if Indemnitee ceases to be an officer or a director of the Company in connection with a Change in Control or at or during the one-year period following the occurrence of a Change in Control, the Company shall procure a run-off directors' and officers' liability insurance policy covering Indemnitee and meeting the foregoing standards in clause (e) and lasting for a six-year period upon the Indemnitee's ceasing to be an officer or a director of the Company in such circumstances.

(g) If at the time of the receipt of a notice of a Claim or Proceeding pursuant to the terms hereof, the Company has directors' and officers' liability insurance in effect, the Company shall give prompt notice of the commencement of such Claim or Proceeding to the insurers in accordance with the procedures set forth in the respective policies. The Company shall thereafter take all necessary or desirable action to cause such insurers to pay, on behalf of the Indemnitee, all amounts payable as a result of such Claim or Proceeding in accordance with the terms of such policies.

Section 7.3 Self Insurance of the Company; Other Arrangements. The parties hereto recognize that the Company may, but except as provided in Section 7.2(d), Section 7.2(e), and Section 7.2(f) is not required to, procure or maintain insurance or other similar arrangements, at its expense, to protect itself and any person, including Indemnitee, who is or was a director, officer, employee, agent or fiduciary of the Company or who is or was serving at the request of the Company as a director, officer, partner, member, venturer, proprietor, trustee, employee, agent, fiduciary or similar functionary of another foreign or domestic corporation, partnership, limited liability company, joint venture, sole proprietorship, trust, employee benefit plan or other enterprise against any expense, liability or loss asserted against or incurred by such person, in such a capacity or arising out of the person's status as such a person, whether or not the Company would have the power to indemnify such person against such expense or liability or loss.

Except as provided in Section 7.2(d), Section 7.2(e) and Section 7.2(f), in considering the cost and availability of such insurance, the Company (through the exercise of the business judgment of its directors and officers) may, from time to time, purchase insurance which provides for certain (i) deductibles, (ii) limits on payments required to be made by the insurer, or (iii) coverage which may not be as comprehensive as that previously included in insurance purchased by the Company or its predecessors. The purchase of insurance with deductibles, limits on payments and coverage exclusions, even if in the best interest of the Company, may not be in the best interest of Indemnitee. As to the Company, purchasing insurance with deductibles, limits on payments and coverage exclusions is similar to the Company's practice of self-insurance in other areas. In order to protect Indemnitee who would otherwise be more fully or entirely covered under such policies, the Company shall, to the maximum extent permitted by applicable law, indemnify and hold Indemnitee harmless to the extent (i) of such deductibles, (ii) of amounts exceeding payments required to be made by an insurer, or (iii) of amounts that prior policies of directors' and officers' liability insurance held by the Company or its predecessors have provided for payment to Indemnitee, if by reason of Indemnitee's Corporate Status Indemnitee is or is threatened to be made a party to any Proceeding. The obligation of the Company in the preceding sentence shall be without regard to whether the Company would otherwise be required to indemnify such officer or director under the other provisions of this Agreement, or under any law, agreement, vote of stockholders or directors or other arrangement. Without limiting the generality of any provision of this Agreement, the procedures in Article IV hereof shall, to the extent applicable, be used for determining entitlement to indemnification under this Section 7.3.

Section 7.4 Certain Settlement Provisions. The Company shall have no obligation to indemnify Indemnitee under this Agreement for amounts paid in settlement of a Proceeding or Claim without the Company's prior written consent. The Company shall not settle any Proceeding or Claim in any manner that would impose any fine or other obligation on Indemnitee without Indemnitee's prior written consent. Neither the Company nor Indemnitee shall unreasonably withhold their consent to any proposed settlement.

Section 7.5 Duration of Agreement. This Agreement shall continue for so long as Indemnitee serves as a director, officer, employee, agent or fiduciary of the Company or, at the request of the Company, as a director, officer, partner, member, venturer, proprietor, trustee, employee, agent, fiduciary or similar functionary of another foreign or domestic corporation, partnership, limited liability company, joint venture, sole proprietorship, trust, employee benefit plan or other enterprise, and thereafter shall survive until and terminate upon the later to occur of: (a) the expiration of 20 years after the latest date that Indemnitee shall have ceased to serve in any such capacity; (b) the final termination of all pending Proceedings in respect of which Indemnitee is granted rights of indemnification or advancement of Expenses hereunder and of any proceeding commenced by Indemnitee pursuant to Article IV relating thereto; or (c) the expiration of all statutes of limitation applicable to possible Claims arising out of Indemnitee's Corporate Status.

Section 7.6 Notice by Each Party. Indemnitee shall promptly notify the Company in writing upon being served with any summons, citation, subpoena, complaint, indictment, information or other document or communication relating to any Proceeding or Claim for which Indemnitee may be entitled to indemnification or advancement of Expenses hereunder; provided, however, that any failure of Indemnitee to so notify the Company shall not adversely affect Indemnitee's rights under this Agreement except to the extent the Company shall have been materially prejudiced as a direct result of such failure. The Company shall promptly notify Indemnitee in writing as to the pendency of any Proceeding or Claim that may involve a claim against Indemnitee for which Indemnitee may be entitled to indemnification or advancement of Expenses hereunder.

Section 7.7 Amendment. This Agreement may not be modified or amended except by a written instrument executed by or on behalf of each of the parties hereto.

Section 7.8 Waivers. The observance of any term of this Agreement may be waived (either generally or in a particular instance and either retroactively or prospectively) by the party entitled to enforce such term only by a writing signed by the party against which such waiver is to be asserted. Unless otherwise expressly provided herein, no delay on the part of any party hereto in exercising any right, power or privilege hereunder shall operate as a waiver thereof, nor shall any waiver on the part of any party hereto of any right, power or privilege hereunder operate as a waiver of any other right, power or privilege hereunder nor shall any single or partial exercise of any right, power or privilege hereunder preclude any other or further exercise thereof or the exercise of any other right, power or privilege hereunder.

Section 7.9 Entire Agreement. This Agreement and the documents expressly referred to herein constitute the entire agreement between the parties hereto with respect to the matters covered hereby, and any other prior or contemporaneous oral or written understandings or agreements with respect to the matters covered hereby, including without limitation any prior indemnification agreements, are expressly superseded by this Agreement.

Section 7.10 Severability. If any provision of this Agreement (including any provision within a single section, paragraph or sentence) or the application of such provision to any Person or circumstance, shall be judicially declared to be invalid, unenforceable or void, such decision will not have the effect of invalidating or voiding the remainder of this Agreement or affect the application of such provision to other Persons or circumstances, it being the intent and agreement of the parties that this Agreement shall be deemed amended by modifying such provision to the extent necessary to render it valid, legal and enforceable while preserving its intent, or if such modification is not possible, by substituting therefor another provision that is valid, legal and enforceable and that achieves the same objective. Any such finding of invalidity or unenforceability shall not prevent the enforcement of such provision in any other jurisdiction to the maximum extent permitted by applicable law.

Section 7.11 Notices. All notices and other communications hereunder shall be in writing and shall be deemed given upon (a) transmitter's confirmation of a receipt of a facsimile transmission if during normal business hours of the recipient, otherwise on the next business day, (b) confirmed delivery of a standard overnight courier or when delivered by hand or (c) the expiration of five business days after the date mailed by certified or registered mail (return receipt requested), postage prepaid, to the parties at the following addresses (or at such other addresses for a party as shall be specified by like notice):

If to the Company, to it at:

Pioneer Natural Resources Company
5205 North O'Connor Blvd.
Suite 200
Irving, Texas 75039-3746
Attn: Corporate Secretary
Facsimile: (972) 969-3552

If to Indemnitee, to Indemnitee at:

Neal H. Shah
806 Shadow Glen Drive
Southlake, TX 76092

or to such other address or to such other individuals as any party shall have last designated by notice to the other parties. All notices and other communications given to any party in accordance with the provisions of this Agreement shall be deemed to have been given when delivered or sent to the intended recipient thereof in accordance with and as provided in the provisions of this Section 7.11.

Section 7.12 Governing Law. This Agreement shall be construed in accordance with and governed by the laws of the State of Delaware without regard to the principles of conflict of laws.

Section 7.13 Certain Construction Rules.

(a) The article and section headings contained in this Agreement are for reference purposes only and shall not affect in any way the meaning or interpretation of this Agreement. As used in this Agreement, unless otherwise provided to the contrary, (1) all references to days shall be deemed references to calendar days and (2) any reference to a "Section" or "Article" shall be deemed to refer to a section or article of this Agreement. The words "hereof," "herein" and "hereunder" and words of similar import referring to this Agreement refer to this Agreement as a whole and not to any particular provision of this Agreement. Whenever the words "include," "includes" or "including" are used in this Agreement, they shall be deemed to be followed by the words "without limitation." Unless otherwise specifically provided for herein, the term "or" shall not be deemed to be exclusive. Whenever the context may require, any pronoun used in this Agreement shall include the corresponding masculine, feminine or neuter forms, and the singular form of nouns, pronouns and verbs shall include the plural and vice versa.

(b) For purposes of this Agreement, references to "other enterprises" shall include employee benefit plans; references to "fines" shall include any excise taxes assessed on a person with respect to any employee benefit plan; references to "serving at the request of the Company" shall include any service as a director, officer, employee or agent of the Company which imposes duties on, or involves services by, such director, nominee, officer, employee or agent with respect to an employee benefit plan, its participants or beneficiaries; and a person who acted in good faith and in a manner the person reasonably believed to be in the interests of the participants and beneficiaries of an employee benefit plan shall be deemed to have acted in a manner "not opposed to the best interest of the Company" for purposes of this Agreement and the DGCL.

(c) In the event of a merger, consolidation or amalgamation of the Company with or into any other entity, references to the "Company" shall include the entity surviving or resulting from the merger, consolidation or amalgamation as well as the Company, and Indemnitee shall stand in the same position under this Agreement with respect to the surviving or resulting entity as Indemnitee would stand with respect to the Company if its existence had continued upon and after the merger, consolidation or amalgamation.

Section 7.14 Counterparts. This Agreement may be executed in two or more counterparts, each of which shall be deemed to be an original and all of which together shall be deemed to be one and the same instrument, notwithstanding that both parties are not signatories to the original or same counterpart.

Section 7.15 Certain Persons Not Entitled to Indemnification. Notwithstanding any other provision of this Agreement (but subject to Section 7.1), Indemnitee shall not be entitled to indemnification or advancement of Expenses pursuant to the terms of this Agreement with respect to any Proceeding or any Claim, issue or matter therein, brought or made by Indemnitee against the Company, except as specifically provided in Article III, Article IV or Section 7.3. In addition, the Company shall not be obligated pursuant to the terms of this Agreement:

(a) To indemnify Indemnitee if (and to the extent that) a final decision by a court or arbitration body having jurisdiction in the matter shall determine that such indemnification is not lawful; or

(b) To indemnify Indemnitee for the payment to the Company of profits pursuant to Section 16(b) of the Exchange Act, or Expenses incurred by Indemnitee for Proceedings in connection with such payment under Section 16(b) of the Exchange Act.

Section 7.16 Indemnification for Negligence, Gross Negligence, etc. Without limiting the generality of any other provision hereunder, it is the express intent of this Agreement that Indemnitee be indemnified and Expenses be advanced regardless of Indemnitee's acts of negligence, gross negligence, intentional or willful misconduct to the extent that indemnification and advancement of Expenses is allowed pursuant to the terms of this Agreement and under applicable law.

Section 7.17 Mutual Acknowledgments. Both the Company and Indemnitee acknowledge that in certain instances, applicable law (including applicable federal law that may preempt or override applicable state law) or public policy may prohibit the Company from indemnifying the directors, officers, employees, agents or fiduciaries of the Company under this Agreement or otherwise. For example, the Company and Indemnitee acknowledge that the U.S. Securities and Exchange Commission has taken the position that indemnification of directors, officers and controlling Persons of the Company for liabilities arising under federal securities laws is against public policy and, therefore, unenforceable. Indemnitee understands and acknowledges that the Company has undertaken or may be required in the future to undertake with the Securities and Exchange Commission to submit the question of indemnification to a court in certain circumstances for a determination of the Company's right under public policy to indemnify Indemnitee. In addition, the Company and Indemnitee acknowledge that federal law prohibits indemnifications for certain violations of the Employee Retirement Income Security Act of 1974, as amended.

Section 7.18 Enforcement. The Company agrees that its execution of this Agreement shall constitute a stipulation by which it shall be irrevocably bound in any court or arbitration in which a proceeding by Indemnitee for enforcement of Indemnitee's rights hereunder shall have been commenced, continued or appealed, that its obligations set forth in this Agreement are unique and special, and that failure of the Company to comply with the provisions of this Agreement will cause irreparable and irremediable injury to Indemnitee, for which a remedy at law will be inadequate. As a result, in addition to any other right or remedy Indemnitee may have at law or in equity with respect to breach of this Agreement, Indemnitee shall be entitled to injunctive or mandatory relief directing specific performance by the Company of its obligations under this Agreement. The Company agrees not to seek, and agrees to waive any requirement for the securing or posting of, a bond in connection with Indemnitee's seeking or obtaining such relief.

Section 7.19 Successors and Assigns. All of the terms and provisions of this Agreement shall be binding upon, shall inure to the benefit of and shall be enforceable by the parties hereto and their respective successors, assigns, heirs, executors, administrators, legal representatives.

Section 7.20 Period of Limitations. No legal action shall be brought and no cause of action shall be asserted by or on behalf of the Company or any affiliate of the Company against Indemnitee or Indemnitee's spouse, heirs, executors, or personal or legal representatives after the expiration of one year from the date of accrual of that cause of action, and any claim or cause of action of the Company or its affiliate shall be extinguished and deemed released unless asserted by the timely filing of a legal action within that one-year period; provided, however, that for any claim based on Indemnitee's breach of fiduciary duties to the Company or its stockholders, the period set forth in the preceding sentence shall be three years instead of one year; and provided, further, that, if any shorter period of limitations is otherwise applicable to any such cause of action, the shorter period shall govern.

[signatures on following page]

IN WITNESS WHEREOF, this Agreement has been duly executed and delivered to be effective as of the date first above written.

PIONEER NATURAL RESOURCES COMPANY

By: /s/ Mark H. Kleinman

Name: Mark H. Kleinman

Title: Senior Vice President and General Counsel

INDEMNITEE:

/s/ Neal H. Shah

Neal H. Shah

EXHIBIT 10.70

PIONEER NATURAL RESOURCES COMPANY
CHANGE IN CONTROL AGREEMENT

This Change in Control Agreement (***"Agreement"***) is entered into, as of January 1, 2019**,** among Pioneer Natural Resources Company, a Delaware corporation (***"Parent"***), Pioneer Natural Resources USA, Inc., a Delaware corporation that is a wholly-owned subsidiary of Parent (***"Employer"***), and Neal H. Shah (***"Employee"***). As henceforth used in this Agreement, the term ***"Company"*** shall be deemed to include Parent and its direct or indirect majority-owned subsidiaries.

Recitals

Parent and Employer acknowledge that Employee possesses skills and knowledge instrumental to the successful conduct of the Company's business. Parent and Employer are willing to enter into this Agreement with Employee in order to better ensure themselves of access to the continued services of Employee both before and after a Change in Control.

NOW, THEREFORE, for and in consideration of the mutual covenants and agreements set forth herein and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties to this Agreement hereby agree as follows:

1. ***Term***. The term of this Agreement shall commence on the date indicated above (the ***"Effective Date"***) and end on September 30, 2020. Thereafter, on the date on which the term of this Agreement (as it may be extended from time to time under this paragraph 1) would otherwise expire, so long as Employee is still an employee of the Company on such date, such term will be automatically extended for 12 months, unless Parent shall have provided written notice to Employee at least 6 months before the date that the term would otherwise expire that it does not want the term to be extended. Parent may deliver a conditional notice of non-renewal that will be effective only if Employee does not agree, within the time period specified by Parent, to any amendment or modification of this Agreement that Parent shall request be executed as a condition to allowing the term hereof to be extended. Notwithstanding the foregoing, and regardless of whether Parent has theretofore delivered a notice of non-renewal and/or sought agreement from Employee to amendments to this Agreement, if a Potential Change in Control or a Change in Control occurs during the term hereof, the term of this Agreement shall be automatically extended to the second anniversary of the date on which the Change in Control occurs (the ***"Change in Control Date"***); *provided, however, that* if no Change in Control has occurred prior to the first anniversary of the occurrence of a Potential Change in Control and the Board of Directors of Parent (the ***"Board"***), acting in good faith, thereafter adopts a resolution that such Potential Change in Control will not result in the occurrence of a Change in Control, the term of this Agreement shall expire on a date specified by the Board not earlier than the first anniversary of the adoption of such resolution (unless otherwise extended pursuant to the second sentence of this paragraph 1).

2. ***Operation of Agreement***. Except as expressly provided below, no benefits shall be payable under this Agreement if Employee is not employed by the Company on the Change in Control Date. Notwithstanding anything else contained herein to the contrary, if Employee's employment is terminated (a) by the Company and such termination is not a Termination for Cause and (b) after the occurrence of a Potential Change in Control but prior to a Change in Control and a Change in Control occurs within 12 months after such termination, Employee shall be deemed, solely for purposes of determining Employee's rights under this Agreement, to have remained employed until the Change in Control Date and to have been terminated by the Company without cause immediately thereafter; *provided, however, that*, in such case, the Separation Payment payable hereunder shall be reduced by the amount of any other cash severance benefits theretofore paid to Employee in connection with such termination. If Employee is still an employee of the Company on the Change in Control Date, or Employee is deemed, for purposes of this Agreement, to continue to be in the employ of the Company until the Change in Control Date pursuant to the immediately preceding sentence, upon the occurrence of a Change in Control this Agreement shall supercede any other individual agreement between Parent and Employer and Employee the primary purpose of which is to provide Employee the right to receive severance benefits and certain other benefits ancillary to such severance benefits in connection with the termination of Employee's employment (the "***Severance Agreement***"), subject, if applicable, to the offset set forth in the immediately preceding sentence.

3. ***Certain Definitions***. As used in this Agreement, the following terms shall have the meanings set forth below:

"Accrued Obligations" shall mean any vested amounts or benefits owing to Employee under any of the Company's employee benefit plans and programs in which Employee has participated, including any compensation previously deferred by Employee (together with any accrued earnings thereon) and not yet paid.

"Base Salary" shall mean Employee's annualized base salary at the rate in effect at the relevant date or event as reflected in Employer's regular payroll records.

"Change in Control" shall mean an event that constitutes a "change in control" as defined in Parent's LTIP, except that, solely for purposes of determining whether Employee is eligible for benefits under this Agreement due to a termination of employment occurring after a Potential Change in Control, but prior to the occurrence of a Change in Control, an event shall only constitute a Change in Control if it both qualifies as such under Parent's LTIP and is a change in the ownership or effective control or in the ownership of a substantial portion of the assets of the Parent for purposes of Section 409A of the Code. Any modification to the definition of "change in control" in Parent's LTIP (including by virtue of the adoption by the Parent of a successor plan thereto setting forth a modified definition of "change in control") adopted after the Effective Date shall apply for purposes of this Agreement, except that any modification to such definition adopted on or after, or within 180 days prior to, a Change in Control or Potential Change in Control shall not apply in determining the definition of such term under this Agreement unless such amendment is favorable to Employee.

"**Code**" shall mean the Internal Revenue Code of 1986, as amended, or any successor provision thereto.

"*Date of Termination*" shall mean

(1) In the case of a termination for which a Notice of Termination is required, the date of receipt of such Notice of Termination or, if later, the date specified therein; and

(2) In all other cases, the actual date on which Employee's employment terminates;

provided, however, that if Employee continues to provide or, in the 12 month period following such termination of employment, Employee is expected to provide, sufficient services that, under the Parent's written and generally applicable policies regarding what constitutes a "separation from service" for purpose of Section 409A of the Code, Employee does not incur a separation of service for purposes of such Section 409A on the date of termination, Employee's Date of Termination for purposes of this Agreement shall be the date on which such Employee incurs a separation from service under such policies.

"Disability" shall mean Employee's physical or mental impairment or incapacity of sufficient severity such that

(1) In the opinion of a qualified physician selected by Parent with the consent of Employee or Employee's legal representative (which consent shall not be unreasonably withheld), after taking into account all reasonable accommodations that the Company has

made or could make, Employee is unable to continue to perform Employee's duties and responsibilities as an employee of the Company; and

(2) Employee's condition entitles Employee to long-term disability benefits under any employee benefit plan maintained by the Company or any of its affiliates that are at least comparable to those made available to Employee by the Company prior to the Change in Control.

For purposes of subparagraph (1) of this definition, Employee agrees to provide such access to Employee's medical records and to submit to such physical examinations and medical tests as, in the opinion of the physician selected by Parent, is reasonably necessary to make the determination required as to Employee's ability to perform Employee's duties and responsibilities.

"Earned Salary" shall mean the Base Salary earned by Employee, but unpaid, through Employee's Date of Termination.

"Normal Retirement Date" shall mean the date on which Employee attains age 60.

"Notice of Termination" shall mean a written notice given, in the case of a Termination for Cause, within 45 days of Parent's or Employer's having actual knowledge of the events giving rise to such termination, and in the case of a Termination for Good Reason, within 90 days of the later to occur of (x) the Change in Control Date or (y) Employee's having actual knowledge of the events giving rise to such termination. Any such Notice of Termination shall

(1) Indicate the specific termination provision in this Agreement relied upon;

(2) Set forth in reasonable detail the facts and circumstances claimed to provide a basis for termination of Employee's employment under the provision so indicated; and

(3) If the Date of Termination is other than the date of receipt of such notice, specify the Date of Termination (which date shall be not more than 30 days after the giving of such notice).

The failure by Employee to set forth in the Notice of Termination any fact or circumstance which contributes to a showing of Termination for Good Reason shall not waive any right of Employee hereunder or preclude Employee from asserting such fact or circumstance in enforcing Employee's rights hereunder.

"***Parent's LTIP***" shall mean the Parent's Amended and Restated 2006 Long Term Incentive Plan, as the same may be amended, modified, supplemented, or restated from time to time, or any successor plan thereto.

"Potential Change in Control" shall mean the occurrence of any of the following events:

(1) Any person or group shall have announced publicly an intention to effect a Change in Control, or commenced any action (such as the commencement of a tender offer for Parent's common stock or the solicitation of proxies for the election of any of Parent's directors) that, if successful, could reasonably be expected to result in the occurrence of a Change in Control;

(2) Parent enters into an agreement the consummation of which would constitute a Change in Control; or

(3) Any other event occurs which the Board declares to be a Potential Change in Control.

"Separation Payment" shall mean any lump sum cash payment in excess of Earned Salary and Accrued Obligations payable to Employee under this Agreement.

"*Target Bonus*" shall mean the greater of

(1) the average of the target bonuses made available to Employee under any Company annual bonus program (which, if not stated as the target for a full year of service, shall be annualized) for the year in which the Change in Control Date occurs and for each of the last 2 years ended prior to the year in which the Change in Control Date occurs (or, if less, the number of years prior to the year in which the Change in Control Date occurs during which Employee was employed by the Company); and

(2) Employee's highest target bonus made available to Employee under the annual bonus program in which Employee participated for services rendered or to be rendered by Employee in any calendar year after the calendar year in which the Change in Control Date occurs;

in either case as reflected in Employer's records.

"Termination for Cause" shall mean a termination of Employee's employment by Parent and Employer due to the occurrence of any of the following

(1) Employee's continued failure (i) to substantially perform Employee's duties and responsibilities (other than any such failure resulting from Employee's physical or mental impairment or incapacity) or (ii) to comply with any material written policy of the Company generally applicable to all officers of the Company and, if applicable, the successor in interest to Parent or, if such successor is a subsidiary of any other entity, the direct or indirect ultimate parent of such successor (such successor or such ultimate parent entity, the ***"Parent Successor"***), which specifically provides that Employee may be dismissed (or Employee's employment terminated) as a consequence of any such failure to comply, in either case more than 10 business days after written demand for substantial performance or compliance with the policy is delivered by Parent specifically identifying the manner in which Parent believes Employee has not substantially performed Employee's duties and responsibilities or not complied with the written policy;

(2) Employee's engaging in an act or acts of gross misconduct which result in, or are intended to result in, material damage to the Company's business or reputation;

(3) Employee's failure, following a written request from Parent, reasonably to cooperate (including, without limitation, the refusal by Employee to be interviewed or deposed, or to give testimony) in connection with any investigation or proceeding, whether internal or external (including, without limitation, by any governmental or quasi-governmental agency), into the business practices or operations of the Company; or

(4) Employee's conviction of (or plea of guilty or *nolo contendere* to a charge of) any felony or any crime or misdemeanor, in either case, involving moral turpitude or financial misconduct which results in significant monetary damage to the Company.

For purposes of subparagraph (2) of this definition, an act, or failure to act, on Employee's part shall only be considered "misconduct" if done, or omitted, by Employee not in good faith and without reasonable belief that such act, or failure to act, was in the best interest of the Company.

"Termination for Good Reason" shall mean a termination of Employee's employment by Employee due to the occurrence of any of the following, without the express written consent of Employee, after the occurrence of a Potential Change in Control or a Change in Control:

(1) (i) The assignment to Employee of any duties inconsistent in any material adverse respect with Employee's position, authority or responsibilities as in effect immediately prior to a Potential Change in Control or a Change in Control, or (ii) any other material adverse change in such position, including (A) titles, authority, responsibilities, status, powers or functions, (B) the position to which Employee reports or the principal departmental functions that report to Employee, or (C) the budget over which Employee retains authority, which, in the case of any officer of Parent, shall be deemed to have occurred unless, following the Change in Control Date, Employee holds such position or positions with the Parent Successor that are substantially comparable to the position or positions held by Employee with Parent immediately prior to the Change in Control Date (or, if higher, immediately prior to the occurrence of a Potential Change in Control); provided that there shall be excluded for the purpose of this subparagraph (1) any isolated, insubstantial and inadvertent action remedied promptly after receipt of notice thereof given by Employee;

(2) Any failure by the Company or the Parent Successor, other than an insubstantial or inadvertent failure remedied promptly after receipt of notice thereof given by Employee, to provide Employee with an annual Base Salary which is at least equal to the Base Salary payable to Employee immediately prior to the Change in Control Date (or, if higher, immediately prior to the occurrence of a Potential Change in Control) or, if more favorable to Employee, at the rate made available to Employee at any time thereafter (the ***"Protected Base Salary"***);

(3) Any failure by the Company or the Parent Successor, other than an insubstantial or inadvertent failure remedied promptly after receipt of notice thereof given by Employee, to provide Employee with a reasonably achievable opportunity (determined in a manner consistent with the Company's practices prior to the Change in Control) to receive an annual bonus ranging from 100%, at targeted levels of performance, to 200%, at superior levels of performance, of Employee's Target Bonus;

(4) Any failure by the Company or the Parent Successor, other than an insubstantial or inadvertent failure remedied promptly after receipt of notice thereof given by Employee, to provide Employee with annual awards of long-term incentive compensation that have a value (using the same valuation methodologies used for valuing long-term incentive compensation awards of a similar type made to senior officers of Parent and, if applicable, the Parent Successor) at least equal to the average dollar value assigned thereto by the Company at the date of grant of the last three annual long-term incentive compensation awards (including, without limitation, equity and equity-based awards) granted to Employee in respect of Employee's employment with the Company (or if Employee has received less than three such annual grants, the average of the value of the number of grants received by Employee prior to the Change in Control Date);

(5) Any failure by the Company or the Parent Successor, other than an insubstantial or inadvertent failure remedied promptly after receipt of notice thereof given by Employee, to permit Employee (and, to the extent applicable, Employee's dependents) to participate in or be covered under all pension, retirement, deferred compensation, savings, medical, dental, health, disability, group life, accidental death and travel accident insurance plans and programs at a level that is at least as favorable, in the aggregate, as the benefits provided under the plans of the Company and its affiliated companies prior to the Change

in Control Date (or, if more favorable to Employee, at the level made available to Employee or other similarly situated officers at any time thereafter); or

(6) If, not later than the Change in Control Date, any Parent Successor shall have failed to agree in writing to assume and perform this Agreement as required by paragraph 7(h) hereof.

For purposes of this definition, any determination made by Employee that an event or events give rise to a right to Termination for Good Reason shall be presumed to be valid unless such determination, pursuant to paragraph 7(b), is deemed by an arbitrator to be unreasonable and not to have been made in good faith by Employee.

4. *Termination of Employment*.

(a) ***Right to Terminate***. Nothing in this Agreement shall be construed in any way to limit the right of the Company to terminate Employee's employment, with or without cause, or for Employee to terminate Employee's employment with the Company, with or without reason; *provided, however, that* the Company and Employee must nonetheless comply with any duty or obligation such party has at law or under any agreement (including paragraph 6 of this Agreement) between the parties.

(b) ***Termination due to Death or Disability***. Employee's employment with the Company shall be terminated upon Employee's death. By written notice to the other party, either the Company or Employee may terminate Employee's employment due to Disability.

5. ***Amounts Payable Upon Termination of Employment***. The following provisions shall apply to any termination of Employee's employment occurring (or which, pursuant to paragraph 2, is deemed to occur) at the time of, or at any time within 2 years following, a Change in Control:

(a) ***Death or Disability***. In the event that Employee's employment terminates due to Employee's death or Disability (regardless of whether such Disability termination is initiated by Employee or the Company) , Parent or Employer shall pay Employee (or, if applicable, Employee's beneficiaries or legal representative(s)):

(1) The Earned Salary, as soon as practicable (but not more than 10 days) following Employee's Date of Termination;

(2) The Accrued Obligations, in accordance with applicable law and the provisions of any applicable plan, program, policy or practice; and

(3) A Separation Payment in an amount equal to Employee's Base Salary, which shall be paid 10 days following Employee's Date of Termination, <u>provided that</u>, if, at the Date of Termination, Employee is a "specified employee" within the meaning of Section 409A of the Code, as determined in accordance with the procedures specified or established by the Parent in accordance with such Section 409A and the regulations thereunder (a "***Specified Employee***"), and the Separation Payment is payable due to Disability, the Separation Payment shall be made six months and one day after Employee's Date of Termination. In the event that the Separation Payment is made six months and one day after the Date of Termination, it shall be paid with interest from the Date of Termination at a rate equal to Employer's cost of borrowing under its principal credit facility as in effect at the Date of Termination, as determined by the Parent's Chief Financial Officer.

(b) ***Cause and Voluntary Termination***. If Employee's employment is terminated by the Company in a Termination for Cause or voluntarily by Employee (which is not a Termination for Good Reason), Parent or Employer shall pay Employee:

(1) The Earned Salary as soon as practicable (but not more than 10 days) following Employee's Date of Termination; and

(2) The Accrued Obligations in accordance with applicable law and the provisions of any applicable plan, program, policy or practice.

(c) ***Termination After Normal Retirement***. If Employee's employment terminates after Employee's Normal Retirement Date due to Employee's voluntary retirement, Parent or Employer shall pay Employee:

(1) The Earned Salary as soon as practicable (but not more than 10 days) following Employee's Date of Termination;

(2) The Accrued Obligations in accordance with applicable law and the provisions of any applicable plan, program, policy or practice; and

(3) a Separation Payment in an amount equal to Employee's Base Salary, which shall be paid 10 days following Employee's Date of Termination, provided that, if, at the Date of Termination, Employee is a Specified Employee, the Separation Payment shall be made six months and one day after Employee's Date of Termination. In the event that the Separation Payment is made six months and one day after the Date of Termination, an amount equal to such Separation Payment shall be contributed by the Company or Employer within five business days following the Date of Termination to a grantor trust in the United States subject to the claims of the grantor's creditors (a "***Grantor Trust***"), with such amount to be invested through the trust in U.S. Treasury securities or money market investments, with the principal investment purpose being to preserve principal ("***Fixed Income Securities***"). When payment of any such deferred portion of the Separation Payment is made in accordance with the second preceding sentence, it shall be increased by an amount equal to the earnings on the amounts contributed to such Grantor Trust in respect of such deferred Separation Payment.

(d) ***Termination for Good Reason or Without Cause***. If Employee terminates Employee's employment in a Termination for Good Reason or the Company terminates Employee's employment for any reason other than those described in paragraphs 5(a) and (b) above, Parent or Employer shall pay or shall provide to Employee the following benefits and compensation:

(1) The Earned Salary, as soon as practicable (but not more than 10 days) following Employee's Date of Termination;

(2) The Accrued Obligations, in accordance with applicable law and the provisions of any applicable plan, program, policy or practice;

(3) Continued coverage following Employee's Date of Termination, at the same costs that apply to similarly situated active employees, for Employee and Employee's eligible dependents under whichever of the Company's group medical plans in which Employee was participating prior to the Date of Termination or, to the extent such continued coverage cannot be provided under such plan without adverse consequences for the Company or Employee due to non-discrimination requirements, then under an individual or group insurance policy that is substantially similar in all material respects to the coverage made available under such group health plan(s), for each of the following two periods (i) from Employee's Date of Termination until and including the 18 month anniversary of such termination; and (ii) from the day after the 18 month anniversary of Employee's Date of Termination and continuing until the day before the second anniversary of the Employee's Date of Termination; provided,

however, that such continued coverage shall cease if and when Employee becomes eligible for comparable coverage under the group health plan(s) of a subsequent employer;

(4) If Employee shall have relocated Employee's principal residence to enter into the Company's employ, or otherwise relocated such residence at the request of the Company, within 1 year of the Change in Control Date, and if Employee elects to relocate to Employee's original location following Employee's Date of Termination, relocation benefits under the same relocation policy as applied to Employee's initial relocation; provided that the benefits provided hereunder shall (i) be paid to Employee not later than the end of the calendar year following the year in which such the corresponding reimbursable relocation expenses are incurred and (ii) not be duplicative of any relocation benefits to which Employee is entitled in connection with the plan, policy, program or practice of any subsequent employer;

(5) To the extent that any award granted to Employee under Parent's LTIP and outstanding on the Change in Control Date shall not have previously become fully vested and, as applicable, exercisable, payable, distributable and free of any transfer restrictions, such award shall be and become fully vested and, as applicable, exercisable, payable or distributable to, and transferable by, Employee on Employee's Date of Termination, without any further action by the Company or any other person(s); provided, however, that (i) in the case of any award that vests upon the attainment of specified performance conditions and the agreement or plan pertaining to such award does not expressly provide for the treatment of such award upon or following a Change in Control, the extent to which such award becomes vested and payable will be contingent (to the extent specified in the applicable award agreement) upon the achievement of such criteria, as measured at the time of the Change in Control and (ii) if the award is deferred compensation subject to Section 409A that does not qualify for an otherwise available exemption from such Section 409A, payment thereof shall be made to Employee at the same time as the Separation Payment referenced in subparagraph 5(d)(6) and, if such payment is delayed for six months and one day following the Date of Termination, the Employer shall be required to contribute the amount payable in respect of such award to the grantor trust referenced in the paragraph following such subparagraph 5(d)(6) at the same time, and subject to the same conditions, as apply with respect to such Separation Payment; and

(6) A Separation Payment in an amount equal to the sum of

(i) the sum of 1 times Employee's Protected Base Salary and 2 times Employee's Target Bonus;

(ii) Employee shall also receive the Separation Payment payable under subparagraph 5(c)(3), on the same basis as though Employee had attained Normal Retirement Date immediately prior to the Date of Termination, regardless of whether Employee shall have attained Normal Retirement Date on or prior to the Date of Termination;

(iii) the product of (A) the amount of the Target Bonus and (B) a fraction, the numerator of which is the number of days in the then current calendar year which have elapsed as of the Date of Termination, and the denominator of which is 365;

(iv) if Employee's employment was terminated prior to the Change in Control Date, but Employee is deemed to have continued in the Company's employment for purposes of this Agreement until the Change in Control Date pursuant to paragraph 2 hereof, an amount equal to the value (as determined based on the fair market value of the Parent's common stock on the Change in Control Date, but debiting therefrom any amount Employee would be required to pay to receive the benefit of such award) of any equity awards (including, without limitation, stock options, restricted stock units and restricted stock) granted to Employee under

Parent's LTIP that were outstanding but unvested (after taking into account any accelerated vesting thereof in connection with such termination of employment) on Employee's Date of Termination; and

(v) if the termination of employment is by the Company and if the Date of Termination is less than 30 days after the date Notice of Termination is given, an amount equal to one-twelfth (1/12) of the Protected Base Salary.

Payment of the Separation Payment shall be made within 10 business days after Employee's Date of Termination, provided that, if, at the Date of Termination, Employee is a Specified Employee, the portion of the Separation Payment described in subclauses (i), (ii), (iv) and (v) above shall be made six months and one day after Employee's Date of Termination. Any such deferred portion of the Separation Payment payable to Employee shall be contributed by the Company or Employer within five business days following the Date of Termination to a Grantor Trust, with such amount to be invested through the trust in Fixed Income Securities. When payment of any such deferred portion of the Separation Payment is made in accordance with the second preceding sentence, it shall be increased by an amount equal to the earnings on the amounts contributed to such Grantor Trust in respect of such deferred Separation Payment.

(e) ***Benefits Payable Due to Forced Relocation.*** If Employee is not otherwise entitled to terminate Employee's employment in a Termination for Good Reason and terminates employment voluntarily because Parent or Parent Successor requires (or notifies Employee in writing that it will require) Employee to be based at any office or location more than 50 miles from that location at which Employee principally performed services for the Company immediately prior to the Change in Control Date, except for travel reasonably required in the performance of Employee's responsibilities to an extent substantially consistent with Employee's business travel obligations immediately prior to the Change in Control, Parent or Employer shall pay or shall provide to Employee the following benefits and compensation:

(1) The Earned Salary, as soon as practicable (but not more than 10 days) following Employee's Date of Termination;

(2) The Accrued Obligations, in accordance with applicable law and the provisions of any applicable plan, program, policy or practice;

(3) Continued coverage, at the same costs that apply to similarly situated active employees, for Employee and Employee's eligible dependents under Employer's group health plan(s) (within the meaning of the Consolidated Omnibus Budget Reconciliation Act of 1985 ("***COBRA***")) in which Employee was participating prior to the Date of Termination for a period of 12 months following Employee's Date of Termination (or, if earlier, until Employee is eligible for comparable coverage under the group health plan(s) of a subsequent employer); and

(4) A Separation Payment in an amount equal to Employee's Protected Base Salary, which shall be payable within 10 business days after Employee's Date of Termination, provided that, if, at the Date of Termination, Employee is a Specified Employee, the portion of the Separation Payment due pursuant to this subparagraph 5(e)(4) shall be made six months and one day after Employee's Date of Termination. Any such deferred portion of the Separation Payment payable to Employee shall be contributed by the Company or Employer within five business days following the Date of Termination to a Grantor Trust, with such amount to be invested through the trust in Fixed Income Securities. When payment of any such deferred portion of the Separation Payment is made in accordance with the second preceding sentence, it shall be increased by an amount equal to the earnings on the amounts contributed to such Grantor Trust in respect of such deferred Separation Payment.

(f) ***Limit on Payments by Parent and Employer***.

(1) Application of this Paragraph 5(f). In the event that

(i) Any amount or benefit paid or distributed to Employee pursuant to this Agreement, taken together with any amounts or benefits otherwise paid or distributed to Employee by the Company or any affiliated company in connection with the Change in Control that are treated as parachute payments under Section 280G of the Code and such payments (collectively, the "***Covered Payments***") would be or become subject to the tax (the "***Excise Tax***") imposed under Section 4999 of the Code or any similar tax that may hereafter be imposed, and

(ii) Employee would receive a greater net-after tax benefit by limiting the Covered Payments, so that the portion thereof that are parachute payments do not exceed the maximum amount of such parachute payments that could be paid to Employee without Employee's being subject to any Excise Tax (the "***Safe Harbor Amount***"),

(iii) then the amounts payable to Employee under this paragraph 5 shall be reduced (but not below zero) so that the aggregate amount of parachute payments that Employee receives does not exceed the Safe Harbor Amount. In the event that Employee receives reduced payments and benefits hereunder, such payments and benefits shall be reduced in connection with the application of the Safe Harbor Amount in the following manner: first, any portion of Employee's Separation Payment payable other than on account of Employee's having attained Normal Retirement Date shall be reduced, followed by, to the extent necessary and in order, any relocation reimbursement payable, the continuation of welfare benefits, any awards under the LTIP in which Employee becomes vested under this Agreement and finally, the Accrued Obligations.

(2) Assumptions for Calculation. For purposes of determining whether any of the Covered Payments will be subject to the Excise Tax,

(i) such Covered Payments will be treated as "parachute payments" within the meaning of Section 280G of the Code, and all "parachute payments" in excess of the "base amount" (as defined under Section 280G(b)(3) of the Code) shall be treated as subject to the Excise Tax, unless, and except to the extent that, in the good faith judgment of a public accounting firm appointed by Parent prior to the Change in Control Date or tax counsel selected by such accounting firm (the "***Accountants***"), the Company has a reasonable basis to conclude that such Covered Payments (in whole or in part) either do not constitute "parachute payments" or represent reasonable compensation for personal services actually rendered (within the meaning of Section 280G(b)(4)(B) of the Code) in excess of the "base amount," or such "parachute payments" are otherwise not subject to such Excise Tax, and

(ii) the value of any non-cash benefits or any deferred payment or benefit shall be determined by the Accountants in accordance with the principles of Section 280G of the Code.

(3) Adjustments in Respect of the Safe Harbor Amount. If Employee receives reduced payments and benefits under this paragraph 5(f) (or this paragraph 5(f) is determined not to be applicable to Employee because the Accountants conclude that Employee is not subject to any Excise Tax) and it is established pursuant to a final determination of a court or an Internal Revenue Service proceeding (a "***Final Determination***") that, notwithstanding

the good faith of Employee and the Company in applying the terms of this Agreement, the aggregate "parachute payments" within the meaning of Section 280G of the Code paid to Employee or for Employee's benefit exceed the Safe Harbor Amount and the provisions of this paragraph 5(f) would otherwise have applied, then the amount of such parachute payment in excess of such Safe Harbor Amount shall be deemed for all purposes to be a loan to Employee made on the date of receipt of such excess payments, which Employee shall have an obligation to repay to the Company on demand, together with interest on such amount at the applicable Federal rate (as defined in Section 1274(d) of the Code) from the date of the payment hereunder to the date of repayment by Employee.

6. *Nonpublic Information*.

(a) ***Acknowledgement of Access***. Employee hereby acknowledges that, in connection with Employee's employment with the Company, Employee has received, and will continue to receive, various information regarding the Company and its business, operations and affairs (***"Nonpublic Information"***). Nonpublic Information shall not include information that (A) is already properly in the public domain or enters the public domain with the express consent of the Company, or (B) is intentionally made available by the Company to third parties without any expectation of confidentiality.

(b) ***Agreement to Keep Confidential***. Employee hereby agrees that, from and after the Effective Date and continuing until 3 years following Employee's Date of Termination, Employee will keep all Nonpublic Information confidential and will not, without the prior written consent of the Board, Chief Executive Officer or the President of Parent, disclose any Nonpublic Information in any manner whatsoever or use any Nonpublic Information other than in connection with the performance of Employee's services to the Company; *provided, however, that* the provisions of this paragraph shall not prevent Employee from

(1) Disclosing any Nonpublic Information to any other employee of the Company or to any representative or agent of the Company (such as an independent accountant, engineer, attorney or financial advisor) when such disclosure is reasonably necessary or appropriate (in Employee's judgment) in connection with the performance by Employee of Employee's duties and responsibilities;

(2) Disclosing any Nonpublic Information as required by applicable law, rule, regulation or legal process (but only after compliance with the provisions of paragraph (c) of this paragraph); and

(3) Disclosing any information about this Agreement and Employee's other compensation arrangement to Employee's spouse, financial advisors or attorneys, or to enforce any of Employee's rights under this Agreement.

(c) ***Commitment to Seek Protective Order***. If Employee is requested pursuant to, or required by, applicable law, rule, regulation or legal process to disclose any Nonpublic Information, Employee will notify Parent promptly so that the Company may seek a protective order or other appropriate remedy or, in Parent's sole discretion, waive compliance with the terms of this paragraph, and Employee will fully cooperate in any attempt by the Company to obtain any such protective order or other remedy. If no such protective order or other remedy is obtained, or Parent waives compliance with the terms of this paragraph, Employee will furnish or disclose only that portion of the Nonpublic Information as is legally required and will exercise all reasonable efforts to obtain reliable assurance that confidential treatment will be accorded the Nonpublic Information that is so disclosed.

(d) ***Protective Provisions.*** Nothing in paragraph 6 or any other provision of this Agreement shall prevent or restrict in any way (1) Employee from exercising any rights that cannot be lawfully waived or restricted, (2) Employee from testifying at a hearing, deposition, or in court in response to a lawful subpoena or (3) Employee's ability to file a charge or complaint with the Equal Employment Opportunity Commission, the Occupational Safety and Health Administration, the Securities and Exchange Commission, the United States Department of Justice, Congress, any agency Inspector General or any other federal, state or local governmental agency or commission ("***Government Agencies***"). Further, nothing in paragraph 6 or any other provision of this Agreement shall prevent or restrict in any way (i) Employee's ability to communicate with any Government Agencies or otherwise participate in any investigation or proceeding that may be conducted by any Government Agency, including providing documents or other information, without notice to the Company or the Company, or (ii) the right of Employee to receive an award from a Government Agency for information provided to any Government Agencies.

7. ***Miscellaneous Provisions***.

(a) ***No Mitigation, No Offset***. Employee shall not be required to mitigate the amount of any payment provided for in this Agreement by seeking other employment or otherwise, and the amount of any payment provided for in this Agreement shall not be reduced by any compensation earned by Employee as the result of employment by another employer after the Date of Termination. Except as provided in subparagraph 5(d)(3), Parent's or Employer's obligation to make the payments provided for in this Agreement and otherwise to perform its obligations hereunder shall not be affected by any circumstances, including, without limitation, any set-off, counterclaim, recoupment, defense or other right which the Company may have against Employee or others whether by reason of the subsequent employment of Employee or otherwise.

(b) ***Arbitration***. Except to the extent provided in paragraph 7(d), any dispute or controversy arising under or in connection with this Agreement shall be resolved by binding arbitration. The arbitration shall be held in Dallas, Texas and except to the extent inconsistent with this Agreement, shall be conducted in accordance with the Expedited Employment Arbitration Rules of the American Arbitration Association then in effect at the time of the arbitration, and otherwise in accordance with principles which would be applied by a court of law or equity. The arbitrator shall be acceptable to both Parent and Employee. If the parties cannot agree on an acceptable arbitrator, the dispute shall be heard by a panel of three arbitrators, one appointed by each of the parties and the third appointed by the other two arbitrators.

(c) ***Interest***. Until paid, all past due amounts required to be paid to Employee under any provision of this Agreement shall bear interest at the per annum rate equal to the higher of (1) 12% or (2) the prime rate announced from time to time by the Company's primary bank lender, plus 3%, in either case subject to the maximum rate allowed by law.

(d) ***Equitable Relief Available***. Employee acknowledges that remedies at law may be inadequate to protect the Company against any actual or threatened breach of the provisions of paragraph 6 by Employee. Accordingly, without prejudice to any other rights or remedies otherwise available to the Company, Employee agrees that the Company shall have the right to equitable and injunctive relief to prevent any breach of the provisions of paragraph 6 (without the requirement to post any bond), as well as to such damages or other relief as may be available to the Company by reason of any such breach as does occur.

(e) ***Not A Contract of Employment***. Employee acknowledges that this Agreement is ***not*** an "employment agreement" or "employment contract" (written or otherwise), as either term is used or defined in, or contemplated by or under

(1) Parent's LTIP;

(2) Any other plan or agreement to which the Company is a party; or

(3) Applicable statutory, common or case law.

(f) ***Breach Not a Defense***. The representations and covenants on the part of Employee contained in paragraph 6 shall be construed as ancillary to and independent of any other provision of this Agreement, and the existence of any claim or cause of action of Employee against the Company or any officer, director, stockholder or representative of the Company, whether predicated on this Agreement or otherwise, shall not constitute a defense to the enforcement by the Company of the covenants on the part of Employee contained in paragraph 6.

(g) ***Notices***. Any Notice of Termination or other communication called for by the terms of this Agreement shall be in writing and either delivered personally or by registered or certified mail (postage prepaid and return receipt requested) and shall be deemed given when received at the following addresses (or at such other address for a party as shall be specified by like notice):

(1) If to Parent, Employer or the Company, 5205 North O'Connor Boulevard, Suite 200, Irving, Texas 75039, Attention: General Counsel.

(2) If to Employee, the address of Employee set forth below Employee's signature on the signature page of this Agreement.

(h) ***Assumption by Parent Successor***. Parent shall require any Parent Successor (regardless of whether the Parent Successor is the direct or indirect successor to all or substantially all of the business or assets of Parent and regardless of whether it became the Parent Successor by purchase of securities, merger, consolidation, sale of assets or otherwise), to expressly assume and agree to perform the obligations to be performed by the Company under this Agreement in the same manner and to the same extent that the Company would be required to perform if no such succession had taken place.

(i) ***Assignment***. Employer may assign its duties and obligations hereunder to any other direct or indirect majority-owned subsidiary of Parent, but shall remain secondarily liable for the performance of this Agreement by Parent and/or any such assignee. Except pursuant to either the immediately preceding sentence or an assumption by a Parent Successor, the rights and obligations of Parent and Employer pursuant to this Agreement may not be assigned, in whole or in part, by Parent or Employer to any other person or entity without the express written consent of Employee. The rights and obligations of Employee pursuant to this Agreement may not be assigned, in whole or in part, by Employee to any other person or entity without the express written consent of the Board.

(j) ***Successors***. This Agreement shall be binding on, and shall inure to the benefit of, Parent, Employer, the Company, Employee and their respective successors, permitted assigns, personal and legal representatives, executors, administrators, heirs, distributees, devisees and legatees, as applicable.

(k) ***Amendments and Waivers***. No provision of this Agreement may be amended or otherwise modified, and no right of any party to this Agreement may be waived, unless such amendment, modification or waiver is agreed to in a written instrument signed by Employee, Parent and Company. No waiver by either party hereto of, or compliance with, any condition or provision of this Agreement to be performed by the other party hereto shall be deemed a waiver of similar or dissimilar provisions or conditions at the same or at any prior or subsequent time.

(l) ***Complete Agreement***. This Agreement replaces and supersedes all prior agreements, if any, among the parties with respect to the payments to be made to Employee upon termination of employment following a Change in Control, including, but not limited to, the Change in Control Agreement between Parent, Employer and Employee, as in effect immediately prior to the date hereof, and the provisions of this Agreement constitute the complete understanding and agreement among the parties with respect to the subject matter hereof. Nothing in this paragraph (l) is intended to, or shall be construed to, (1) supercede the Severance Agreement at any time prior to the time expressly provided in paragraph 2 hereof or (2) limit Employee's rights upon the occurrence of a Change in Control under Parent's LTIP or any other Company plan, policy, program or practice (other than any plan, policy, program or practice primarily providing severance or other termination benefits) generally applicable to similarly situated employees.

(m) ***Governing Law***. **THIS AGREEMENT IS BEING MADE AND EXECUTED IN, AND IS INTENDED TO BE PERFORMED IN, THE STATE OF TEXAS AND SHALL BE GOVERNED, CONSTRUED, INTERPRETED AND ENFORCED IN ACCORDANCE WITH THE SUBSTANTIVE LAWS OF THE STATE OF TEXAS.**

(n) ***Attorney Fees***. All legal fees and other costs incurred by Employee in connection with the resolution of any dispute or controversy under or in connection with this Agreement shall be reimbursed by Parent and Employer to Employee, on a quarterly basis, upon presentation of proof of such expenses, but in no event later than the end of the calendar year following the calendar year in which such legal fees and expenses are incurred; *provided, however, that* if Employee asserts any claim in any contest and Employee shall not prevail, in whole or in part, as to at least one material issue as to the validity, enforceability or interpretation of any provision of this Agreement, Employee shall reimburse Parent and Employer for such amounts, plus simple interest thereon at the 90-day United States Treasury Bill rate as in effect from time to time, compounded annually. The Company shall be responsible for, and shall pay, all legal fees and other costs incurred by the Company in connection with the resolution of any dispute or controversy under or in connection with this Agreement, regardless of whether such dispute or controversy is resolved in favor of the Company or Employee.

(o) ***Counterparts***. This Agreement may be executed in several counterparts, each of which shall be deemed to be an original, but all of which together will constitute one and the same agreement.

(p) ***Construction***. The captions of the paragraphs, subparagraphs and sections of this Agreement have been inserted as a matter of convenience of reference only and shall not affect the meaning or construction of any of the terms or provisions of this Agreement. Unless otherwise specified, references in this Agreement to a "paragraph," "subparagraph," "section," "subsection," or "schedule" shall be considered to be references to the appropriate paragraph, subparagraph, section, subsection, or schedule, respectively, of this Agreement. As used in this Agreement, the term "including" shall mean "including, but not limited to."

(q) ***Validity and Severability***. If any term or provision of this Agreement is held to be illegal, invalid or unenforceable under the present or future laws effective during the term of this Agreement, (1) such term or provision shall be fully severable, (2) this Agreement shall be construed and enforced as if such term or provision had never comprised a part of this Agreement and (3) the remaining terms and provisions of this Agreement shall remain in full force and effect and shall not be affected by the illegal, invalid or unenforceable term or provision or by its severance from this Agreement. Furthermore, in lieu of such illegal, invalid or unenforceable term or provision, there shall be added automatically as a part of this Agreement, a term or provision as similar to such illegal, invalid or unenforceable term or provision as may be possible and be legal, valid and enforceable.

(r) ***Survival***. Notwithstanding anything else in this Agreement to the contrary (including, without limitation, the termination of this Agreement in accordance with paragraph 1), paragraphs 6 and 7, and, to the extent that any of Parent's and Employer's obligations thereunder have not theretofore been satisfied, paragraph 5 of this Agreement shall survive the termination hereof.

(s) ***Joint and Several Liability***. Parent and Employer (or any assignee of Employer pursuant to paragraph 7(i)) shall each be jointly and severally liable to Employee hereunder with regard to any obligation imposed by the terms hereof on Parent or Employer.

[SIGNATURE PAGE ATTACHED]

In witness whereof, the parties have executed this Agreement effective as of the date first written above.

PIONEER NATURAL RESOURCES COMPANY

By: /s/ Teresa A. Fairbrook
Name: Teresa A. Fairbrook
Title: Vice President and Chief Human Resources Officer

PIONEER NATURAL RESOURCES USA, INC.

By: /s/ Teresa A. Fairbrook
Name: Teresa A. Fairbrook
Title: Vice President and Chief Human Resources Officer

EMPLOYEE:

/s/ Neal H. Shah
Neal H. Shah
806 Shadow Glen Drive
Southlake, TX 76092

EXHIBIT 21.1

SUBSIDIARIES OF THE COMPANY

Subsidiaries	State or Jurisdiction of Organization
Pioneer Natural Resources USA, Inc.	Delaware
DMLP CO.	Delaware
Mesa Environmental Ventures Co.	Delaware
Petroleum South Cape (Pty) Ltd.	South Africa
Pioneer Hutt Wind Energy LLC	Delaware
Pioneer Natural Gas Company	Texas
Pioneer Natural Resources Foundation	Texas
Pioneer Natural Resources Pumping Services LLC	Delaware
Industrial Sands Holding Company	Delaware
Pioneer Sands LLC	California
Pioneer Natural Resources South Africa (Pty) Limited	South Africa
Pioneer Natural Resources (Tierra del Fuego) S.R.L.	Argentina
Pioneer Natural Resources Well Services LLC	Delaware
Pioneer Resources Gabon Limited	Bahamas
Pioneer Water Management LLC	Delaware
Pioneer Uravan, Inc.	Texas
PNR Acquisitions LLC	Delaware
Pioneer International Resources Company	Delaware
LF Holding Company LDC	Cayman Islands
Parker & Parsley Argentina, Inc.	Delaware
TDF Holding Company LDC	Cayman Islands

Note: Inclusion in the list is not a representation that the subsidiary is a significant subsidiary.

EXHIBIT 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in the following Registration Statements:

(1) Registration Statement (Form S-3 No. 333-218255) of Pioneer Natural Resources Company and Pioneer Natural Resources USA, Inc. and in the related Prospectus,

(2) Registration Statement (Form S-8 No. 333-136488) pertaining to the Pioneer Natural Resources Company Executive Deferred Compensation Plan,

(3) Registration Statement (Form S-8 No. 333-136489) pertaining to the Pioneer Natural Resources Company 2006 Long-Term Incentive Plan,

(4) Registration Statement (Form S-8 No. 333-136490) pertaining to the Pioneer Natural Resources Company Long-Term Incentive Plan,

(5) Registration Statement (Form S-8 No. 333-88438) pertaining to the Pioneer Natural Resources Company Long-Term Incentive Plan,

(6) Registration Statement (Form S-8 No. 333-39153) pertaining to the Pioneer Natural Resources Company Deferred Compensation Retirement Plan,

(7) Registration Statement (Form S-8 No. 333-39249) pertaining to the Pioneer Natural Resources USA, Inc. Profit Sharing 401(k) Plan,

(8) Registration Statement (Form S-8 No. 333-35087) pertaining to the Pioneer Natural Resources Company Long-Term Incentive Plan,

(9) Registration Statement (Form S-8 No. 333-161283) pertaining to the Pioneer Natural Resources Company 2006 Long Term Incentive Plan,

(10) Registration Statement (Form S-8 No. 333-176712) pertaining to the Pioneer Natural Resources Company Employee Stock Purchase Plan,

(11) Registration Statement (Form S-8 No. 333-178671) pertaining to the Pioneer Natural Resources USA, Inc. 401(k) and Matching Plan, the Pioneer Natural Resources Company 2006 Long-Term Incentive Plan and the Pioneer Natural Resources Company Executive Deferred Compensation Plan,

(12) Registration Statement (Form S-8 No. 333-183379) pertaining to the Pioneer Natural Resources Company Employee Stock Purchase Plan, and

(13) Registration Statement (Form S-8 No. 333-212774) pertaining to the Pioneer Natural Resources Company Amended and Restated 2006 Long Term Incentive Plan;

of our reports dated February 26, 2019, with respect to the consolidated financial statements of Pioneer Natural Resources Company and the effectiveness of internal control over financial reporting of Pioneer Natural Resources Company included in this Annual Report (Form 10-K) of Pioneer Natural Resources Company for the year ended December 31, 2018.

/s/ Ernst & Young LLP

Dallas, Texas
February 26, 2019

NSAI NETHERLAND, SEWELL & ASSOCIATES, INC.

EXHIBIT 23.2

CONSENT OF INDEPENDENT PETROLEUM ENGINEERS AND GEOLOGISTS

We hereby consent to the references to our firm, in the context in which they appear, and to the references to and the incorporation by reference of our audit letter dated January 31, 2019, included in the Annual Report on Form 10-K of Pioneer Natural Resources Company (the "Company") for the fiscal year ended December 31, 2018, as well as in the notes to the financial statements included therein. We also hereby consent to the incorporation by reference of the references to our firm, in the context in which they appear, and to our audit letter dated January 31, 2019, into the Company's previously filed Registration Statements on Form S-8 (No. 333-176712, No. 333-178671, No. 333-35087, No. 333-39153, No. 333-39249, No. 333-88438, No. 333-136488, No. 333-136489, No. 333-136490, No. 333-161283, No. 333-183379 and No. 333-212774) and on Form S-3 (No. 333-218255) in accordance with the requirements of the Securities Act of 1933, as amended.

NETHERLAND, SEWELL & ASSOCIATES, INC.

By: /s/ C.H. (Scott) Rees III
C.H. (Scott) Rees III, P.E.
Chairman and Chief Executive Officer

Dallas, Texas
February 26, 2019

EXHIBIT 31.1

CHIEF EXECUTIVE OFFICER CERTIFICATION

I, Scott D. Sheffield, certify that:

1. I have reviewed this Annual Report on Form 10-K of Pioneer Natural Resources Company;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

February 26, 2019

/s/ Scott D. Sheffield

Scott D. Sheffield, President and Chief Executive Officer

EXHIBIT 31.2

CHIEF FINANCIAL OFFICER CERTIFICATION

I, Richard P. Dealy, certify that:

1. I have reviewed this Annual Report on Form 10-K of Pioneer Natural Resources Company;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

February 26, 2019

/s/ Richard P. Dealy

Richard P. Dealy, Executive Vice President
and Chief Financial Officer

EXHIBIT 32.1

CERTIFICATION OF
CHIEF EXECUTIVE OFFICER
OF PIONEER NATURAL RESOURCES COMPANY
PURSUANT TO 18 U.S.C. § 1350

I, Scott D. Sheffield, President and Chief Executive Officer of Pioneer Natural Resources Company (the "Company"), hereby certify that the accompanying Annual Report on Form 10-K for the year ended December 31, 2018 and filed with the Securities and Exchange Commission pursuant to Section 13(a) of the Securities Exchange Act of 1934 (the "Report") by the Company fully complies with the requirements of that section.

I further certify that the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

	/s/ Scott D. Sheffield
Name:	Scott D. Sheffield, President and Chief Executive Officer
Date:	February 26, 2019

EXHIBIT 32.2

CERTIFICATION OF
CHIEF FINANCIAL OFFICER
OF PIONEER NATURAL RESOURCES COMPANY
PURSUANT TO 18 U.S.C. § 1350

I, Richard P. Dealy, Executive Vice President and Chief Financial Officer of Pioneer Natural Resources Company (the "Company"), hereby certify that the accompanying Annual Report on Form 10-K for the year ended December 31, 2018 and filed with the Securities and Exchange Commission pursuant to Section 13(a) of the Securities Exchange Act of 1934 (the "Report") by the Company fully complies with the requirements of that section.

I further certify that the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

	/s/ Richard P. Dealy
Name:	Richard P. Dealy, Executive Vice President and Chief Financial Officer
Date:	February 26, 2019

EXHIBIT 95.1

Mine Safety Disclosure

The following disclosures are provided pursuant to the Dodd-Frank Wall Street Reform and Consumer Protection Act (the "Act") and Item 104 of Regulation S-K, which requires certain disclosures by companies required to file periodic reports under the Securities Exchange Act of 1934, as amended, that operate mines regulated under the Federal Mine Safety and Health Act of 1977 (the "Mine Act").

Whenever the Federal Mine Safety and Health Administration ("MSHA") believes a violation of the Mine Act, any health or safety standard or any regulation has occurred, it may issue a citation which describes the alleged violation and fixes a time within which the U.S. mining operator must abate the alleged violation. In some situations, such as when MSHA believes that conditions pose a hazard to miners, MSHA may issue an order removing miners from the area of the mine affected by the condition until the alleged hazards are corrected. When MSHA issues a citation or order, it generally proposes a civil penalty, or fine, as a result of the alleged violation, that the operator is ordered to pay. Citations and orders can be contested and appealed, and as part of that process, are often reduced in severity and amount, and are sometimes dismissed. The number of citations, orders and proposed assessments vary depending on the size and type (underground or surface) of the mine as well as by the MSHA inspector(s) assigned.

The table below sets forth for the year ended December 31, 2018 for each sand mine of Pioneer Natural Resources Company or its subsidiaries (the "Company"), (i) the total number of citations for violations of mandatory health or safety standards that could significantly and substantially contribute to the cause and effect of mine safety or health hazard under section 104 of the Mine Act for which the operator received a citation from MSHA; (ii) the total number of orders issued under section 104(b) of the Mine Act; (iii) the total number of citations and orders for unwarrantable failure of the mine operator to comply with mandatory health or safety standards under section 104(d) of the Mine Act; (iv) the total number of flagrant violations under section 110(b)(2) of the Mine Act; (v) the total number of imminent danger orders issued under section 107(a) of the Mine Act; (vi) the total dollar value of proposed assessments from MSHA; (vii) the total number of mining-related fatalities; (viii) whether or not the mine has received any notices from MSHA of a pattern of violations of mandatory health or safety standards that are of such nature as could have significantly and substantially contributed to the cause and effect of mine health or safety hazards under section 104(e) of the Mine Act; (ix) whether or not the mine has received any notices from MSHA regarding the potential to have a pattern of violations as referenced in (viii) above; and (x) the total number of pending legal actions before the Federal Mine Safety and Health Review Commission as of December 31, 2018 involving such mine, as well as the aggregate number of legal actions instituted and the aggregate number of legal actions resolved during the reporting period. The MSHA citations, orders and assessments are those initially issued or proposed by MSHA. They do not reflect any subsequent changes in the level of severity of a citation or order or the value of an assessment that may occur as a result of proceedings conducted in accordance with MSHA rules.

Mine/MSHA Identification Number(1)	Section 104 S&S Citations	Section 104(b) Orders	Section 104(d) Citations and Orders	Section 110(b)(2) Violations	Section 107(a) Orders	Total Dollar Value of Proposed Assessments	Mining Related Fatalities	Received Notice of Pattern of Violations under Section 104(e) (yes/no)	Received Notice of Potential to have Pattern under Section 104(e) (yes/no)	Legal Actions Pending as of Last Day of Period	Legal Actions Initiated During Period	Legal Actions Resolved During Period
Voca Pit and Plant / 4101003	1	—	—	—	—	$ 2,668	—	No	No	—	—	—
Voca West / 4103618	—	—	—	—	—	$ 708	—	No	No	—	—	—
Brady Plant / 4101371	—	—	—	—	—	$ 590	—	No	No	—	—	—
Millwood Operation / 3301355	—	—	—	—	—	$ 118	—	No	No	—	—	—

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(1) The definition of mine under section three of the Mine Act includes the mine, as well as other items used in, or to be used in, or resulting from, the work of extracting minerals, such as land, structures, facilities, equipment, machines, tools and minerals preparation facilities. Unless otherwise indicated, any of these other items associated with a single mine have been aggregated in the totals for that mine. MSHA assigns an identification number to each mine and may or may not assign separate identification numbers to related facilities such as preparation facilities.

NETHERLAND, SEWELL & ASSOCIATES, INC.
WORLDWIDE PETROLEUM CONSULTANTS
ENGINEERING • GEOLOGY • GEOPHYSICS • PETROPHYSICS

January 31, 2019

Mr. Kerry D. Scott
Pioneer Natural Resources Company
5205 N. O'Connor Boulevard, Suite 200
Irving, Texas 75039-3746

Dear Mr. Scott:

In accordance with your request, we have audited the estimates prepared by Pioneer Natural Resources Company (Pioneer), as of December 31, 2018, of the proved reserves and future revenue to the Pioneer interest in certain oil and gas properties located in Colorado, New Mexico, North Dakota, and Texas. It is our understanding that the proved reserves estimates shown herein constitute all of the proved reserves owned by Pioneer. We have examined the estimates with respect to reserves quantities, reserves categorization, future producing rates, future net revenue, and the present value of such future net revenue, using the definitions set forth in U.S. Securities and Exchange Commission (SEC) Regulation S-X Rule 4-10(a). The estimates of reserves and future revenue have been prepared in accordance with the definitions and regulations of the SEC and, with the exception of the exclusion of future income taxes, conform to the FASB Accounting Standards Codification Topic 932, Extractive Activities-Oil and Gas. We completed our audit on or about the date of this letter. This report has been prepared for Pioneer's use in filing with the SEC; in our opinion the assumptions, data, methods, and procedures used in the preparation of this report are appropriate for such purpose.

The following table sets forth Pioneer's estimates of the net reserves and future net revenue, as of December 31, 2018, for the audited properties:

	Net Reserves			Future Net Revenue (M$)	
Category	Oil (MBBL)	NGL (MBBL)	Gas (MMCF)	Total	Present Worth at 10%
Proved Developed Producing	509,619	216,437	1,316,131	22,238,325	11,708,146
Proved Developed Non-Producing	11,960	3,294	12,721	626,009	364,407
Proved Undeveloped	43,431	21,184	127,722	1,778,899	721,077
Total Proved	565,010	240,914	1,458,574	24,643,230	12,793,630

Totals may not add because of rounding.

The oil volumes shown include crude oil and condensate. Oil and natural gas liquids (NGL) volumes are expressed in thousands of barrels (MBBL); a barrel is equivalent to 42 United States gallons. Gas volumes are expressed in millions of cubic feet (MMCF) at standard temperature and pressure bases.

When compared on a lease-by-lease basis, some of the estimates of Pioneer are greater and some are less than the estimates of Netherland, Sewell & Associates, Inc. (NSAI). However, in our opinion the estimates shown herein of Pioneer's reserves and future revenue are reasonable when aggregated at the proved level and have been prepared in accordance with the Standards Pertaining to the Estimating and Auditing of Oil and Gas Reserves Information promulgated by the Society of Petroleum Engineers (SPE Standards). Additionally, these estimates are within the recommended 10 percent tolerance threshold set forth in the SPE Standards. We are satisfied with the methods and procedures used by Pioneer in preparing the December 31, 2018, estimates of reserves and future revenue, and we saw nothing of an unusual nature that would cause us to take exception with the estimates, in the aggregate, as prepared by Pioneer.

Reserves categorization conveys the relative degree of certainty; reserves subcategorization is based on development and production status. The estimates of reserves and future revenue included herein have not been adjusted for risk. Pioneer's estimates do not include probable or possible reserves that may exist for these properties, nor do they include any value for undeveloped acreage beyond those tracts for which undeveloped reserves have been estimated.

Prices used by Pioneer are based on the 12-month unweighted arithmetic average of the first-day-of-the-month price for each month in the period January through December 2018. For oil and NGL volumes, the average West Texas Intermediate spot price of $65.57 per barrel is adjusted by property group for quality, transportation fees, and market differentials. For gas volumes, the average Henry Hub spot price of $3.10 per MMBTU is adjusted by property group for energy content, transportation fees, and market differentials. All prices are held constant throughout the lives of the properties. The average adjusted product prices weighted by production over the remaining lives of the properties are $57.02 per barrel of oil, $30.53 per barrel of NGL, and $2.58 per MCF of gas.

Operating costs used by Pioneer are based on historical operating expense records. For the nonoperated properties, these costs include the per-well overhead expenses allowed under joint operating agreements along with estimates of costs to be incurred at and below the district and field levels. Operating costs for the operated properties are limited to direct lease- and field-level costs and Pioneer's estimate of the portion of its headquarters general and administrative overhead (G&A) expenses necessary to operate the properties. Pioneer's estimate of G&A expenses is included at the field area level. Capital costs used by Pioneer are based on authorizations for expenditure and actual costs from recent activity. Capital costs are included as required for workovers, new development wells, and production equipment. Abandonment costs used are Pioneer's estimates of the costs to abandon the wells and production facilities, net of any salvage value. Abandonment costs are included for economic wells and shut-in wells; these costs are not included for wells that are currently producing below their economic limit. Operating, capital, and abandonment costs are not escalated for inflation.

The reserves shown in this report are estimates only and should not be construed as exact quantities. Proved reserves are those quantities of oil and gas which, by analysis of engineering and geoscience data, can be estimated with reasonable certainty to be economically producible; probable and possible reserves are those additional reserves which are sequentially less certain to be recovered than proved reserves. Estimates of reserves may increase or decrease as a result of market conditions, future operations, changes in regulations, or actual reservoir performance. In addition to the primary economic assumptions discussed herein, estimates of Pioneer and NSAI are based on certain assumptions including, but not limited to, that the properties will be developed consistent with current development plans as provided to us by Pioneer, that the properties will be operated in a prudent manner, that no governmental regulations or controls will be put in place that would impact the ability of the interest owner to recover the reserves, and that projections of future production will prove consistent with actual performance. If the reserves are recovered, the revenues therefrom and the costs related thereto could be more or less than the estimated amounts. Because of governmental policies and uncertainties of supply and demand, the sales rates, prices received for the reserves, and costs incurred in recovering such reserves may vary from assumptions made while preparing these estimates.

It should be understood that our audit does not constitute a complete reserves study of the audited oil and gas properties. Our audit consisted primarily of substantive testing, wherein we conducted a detailed review of major properties making up approximately 79 percent of Pioneer's total proved reserves and accounting for approximately 95 percent of the present worth for those reserves. In the conduct of our audit, we have not independently verified the accuracy and completeness of information and data furnished by Pioneer with respect to ownership interests, oil and gas production, well test data, historical costs of operation and development, product prices, or any agreements relating to current and future operations of the properties and sales of production. However, if in the course of our examination something came to our attention that brought into question the validity or sufficiency of any such information or data, we did not rely on such information or data until we had satisfactorily resolved our questions relating thereto or had independently verified such information or data. Our audit did not include a review of Pioneer's overall reserves management processes and practices.

We used standard engineering and geoscience methods, or a combination of methods, including performance analysis and analogy, that we considered to be appropriate and necessary to establish the conclusions set forth herein. As in all aspects of oil and gas evaluation, there are uncertainties inherent in the interpretation of engineering and geoscience data; therefore, our conclusions necessarily represent only informed professional judgment.

Supporting data documenting this audit, along with data provided by Pioneer, are on file in our office. The technical person primarily responsible for conducting this audit meets the requirements regarding qualifications, independence, objectivity, and confidentiality set forth in the SPE Standards. G. Lance Binder, a Licensed Professional Engineer in the State of Texas, has been practicing consulting petroleum engineering at NSAI since 1983 and has over 5 years of prior industry experience. We are independent petroleum engineers, geologists, geophysicists, and petrophysicists; we do not own an interest in these properties nor are we employed on a contingent basis.

Sincerely,

NETHERLAND, SEWELL & ASSOCIATES, INC.
Texas Registered Engineering Firm F-2699

/s/ C.H. (Scott) Rees III

By:

C.H. (Scott) Rees III, P.E.
Chairman and Chief Executive Officer

/s/ G. Lance Binder

By:

G. Lance Binder, P.E. 61794 Executive Vice President

Date Signed: January 31, 2019

GLB:CLH