

**UNITED STATES SECURITIES AND EXCHANGE COMMISSION**  
**Washington, D.C. 20549**  
**FORM 10-K**

(Mark One)

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 1-4300

**APACHE CORPORATION**

(Exact name of registrant as specified in its charter)

**Delaware**

(State or other jurisdiction of incorporation or organization)

**41-0747868**

(I.R.S. Employer Identification No.)

**One Post Oak Central, 2000 Post Oak Boulevard, Suite 100, Houston, Texas 77056-4400**

(Address of principal executive offices)

Registrant's telephone number, including area code **(713) 296-6000**

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

Title of each class	Name of each exchange on which registered
Common Stock, \$0.625 par value	New York Stock Exchange, Chicago Stock Exchange and NASDAQ Global Select Market
7.75% Notes Due 2029	New York Stock Exchange

**Securities registered pursuant to Section 12(g) of the Act:** Common Stock, \$0.625 par value

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, 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, a smaller reporting company, or emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act. Large accelerated filer  Accelerated filer  Non-accelerated filer  Smaller reporting company  Emerging growth 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 Exchange Act): Yes  No

Aggregate market value of the voting and non-voting common equity held by non-affiliates of registrant as of June 30, 2018 \$ 17,879,965,309

Number of shares of registrant's common stock outstanding as of January 31, 2019 375,405,587

**Documents Incorporated By Reference**

Portions of registrant's proxy statement relating to registrant's 2019 annual meeting of stockholders have been incorporated by reference in Part II and Part III of this annual report on Form 10-K.

## TABLE OF CONTENTS

### DESCRIPTION

Item	Page
<b><u>PART I</u></b>	
1. BUSINESS	<u>1</u>
1A. RISK FACTORS	<u>14</u>
1B. UNRESOLVED STAFF COMMENTS	<u>24</u>
2. PROPERTIES	<u>1</u>
3. LEGAL PROCEEDINGS	<u>24</u>
4. MINE SAFETY DISCLOSURES	<u>24</u>
<b><u>PART II</u></b>	
5. MARKET FOR THE REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS, AND ISSUER PURCHASES OF EQUITY SECURITIES	<u>25</u>
6. SELECTED FINANCIAL DATA	<u>27</u>
7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS	<u>28</u>
7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK	<u>49</u>
8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA	<u>50</u>
9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE	<u>50</u>
9A. CONTROLS AND PROCEDURES	<u>50</u>
9B. OTHER INFORMATION	<u>50</u>
<b><u>PART III</u></b>	
10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE	<u>51</u>
11. EXECUTIVE COMPENSATION	<u>51</u>
12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS	<u>51</u>
13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE	<u>51</u>
14. PRINCIPAL ACCOUNTING FEES AND SERVICES	<u>51</u>
<b><u>PART IV</u></b>	
15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES	<u>52</u>
16. FORM 10-K SUMMARY	<u>52</u>

## FORWARD-LOOKING STATEMENTS AND RISK

This Annual Report on Form 10-K includes “forward-looking statements” within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. All statements other than statements of historical facts included or incorporated by reference in this report, including, without limitation, statements regarding our future financial position, business strategy, budgets, projected revenues, projected costs and plans, and objectives of management for future operations, are forward-looking statements. Such forward-looking statements are based on our examination of historical operating trends, the information that was used to prepare our estimate of proved reserves as of December 31, 2018, and other data in our possession or available from third parties. In addition, forward-looking statements generally can be identified by the use of forward-looking terminology such as “may,” “will,” “could,” “expect,” “intend,” “project,” “estimate,” “anticipate,” “plan,” “believe,” or “continue” or similar terminology. Although we believe that the expectations reflected in such forward-looking statements are reasonable, we can give no assurance that such expectations will prove to have been correct. Important factors that could cause actual results to differ materially from our expectations include, but are not limited to, our assumptions about:

- the market prices of oil, natural gas, NGLs, and other products or services;
- our commodity hedging arrangements;
- the supply and demand for oil, natural gas, NGLs, and other products or services;
- production and reserve levels;
- drilling risks;
- economic and competitive conditions;
- the availability of capital resources;
- capital expenditure and other contractual obligations;
- currency exchange rates;
- weather conditions;
- inflation rates;
- the availability of goods and services;
- legislative, regulatory, or policy changes;
- terrorism or cyber attacks;
- occurrence of property acquisitions or divestitures;
- the integration of acquisitions;
- the securities or capital markets and related risks such as general credit, liquidity, market, and interest-rate risks; and
- other factors disclosed under Items 1 and 2—Business and Properties—Estimated Proved Reserves and Future Net Cash Flows, Item 1A—Risk Factors, Item 7—Management’s Discussion and Analysis of Financial Condition and Results of Operations, Item 7A—Quantitative and Qualitative Disclosures About Market Risk and elsewhere in this Form 10-K.

All subsequent written and oral forward-looking statements attributable to the Company, or persons acting on its behalf, are expressly qualified in their entirety by the cautionary statements. Except as required by law, we assume no duty to update or revise our forward-looking statements based on changes in internal estimates or expectations or otherwise.

## DEFINITIONS

All defined terms under Rule 4-10(a) of Regulation S-X shall have their statutorily prescribed meanings when used in this report. As used in this document:

“3-D” means three-dimensional.

“4-D” means four-dimensional.

“b/d” means barrels of oil or natural gas liquids per day.

“bbl” or “bbls” means barrel or barrels of oil or natural gas liquids.

“bcf” means billion cubic feet of natural gas.

“boe” means barrel of oil equivalent, determined by using the ratio of one barrel of oil or NGLs to six Mcf of gas.

“boe/d” means boe per day.

“Btu” means a British thermal unit, a measure of heating value.

“Liquids” means oil and natural gas liquids.

“LNG” means liquefied natural gas.

“Mb/d” means Mbbls per day.

“Mbbls” means thousand barrels of oil or natural gas liquids.

“Mboe” means thousand boe.

“Mboe/d” means Mboe per day.

“Mcf” means thousand cubic feet of natural gas.

“Mcf/d” means Mcf per day.

“MMbbls” means million barrels of oil or natural gas liquids.

“MMboe” means million boe.

“MMBtu” means million Btu.

“MMBtu/d” means MMBtu per day.

“MMcf” means million cubic feet of natural gas.

“MMcf/d” means MMcf per day.

“NGL” or “NGLs” means natural gas liquids, which are expressed in barrels.

“NYMEX” means New York Mercantile Exchange.

“oil” includes crude oil and condensate.

“PUD” means proved undeveloped.

“SEC” means United States Securities and Exchange Commission.

“Tcf” means trillion cubic feet of natural gas.

“U.K.” means United Kingdom.

“U.S.” means United States.

References to “Apache,” the “Company,” “we,” “us,” and “our” include Apache Corporation and its consolidated subsidiaries unless otherwise specifically stated.

With respect to information relating to our working interest in wells or acreage, “net” oil and gas wells or acreage is determined by multiplying gross wells or acreage by our working interest therein. Unless otherwise specified, all references to wells and acres are gross.

## PART I

### ITEMS 1 and 2. *BUSINESS AND PROPERTIES*

#### GENERAL

Apache Corporation, a Delaware corporation formed in 1954, is an independent energy company that explores for, develops, and produces natural gas, crude oil, and natural gas liquids. Apache currently has exploration and production operations in three geographic areas: the U.S., Egypt, and offshore the U.K. in the North Sea (North Sea). Apache also has exploration interests in Suriname that may, over time, result in a reportable discovery and development opportunity.

Our common stock, par value \$0.625 per share, has been listed on the New York Stock Exchange (NYSE) since 1969, on the Chicago Stock Exchange (CHX) since 1960, and on the NASDAQ Global Select Market (NASDAQ) since 2004. Through our website, [www.apachecorp.com](http://www.apachecorp.com), you can access, free of charge, electronic copies of the charters of the committees of our Board of Directors, other documents related to our corporate governance (including our Code of Business Conduct and Ethics and Apache's Corporate Governance Principles), and documents we file with the SEC, including our annual reports on Form 10-K, quarterly reports on Form 10-Q, and current reports on Form 8-K, as well as any amendments to these reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934. Included in our annual and quarterly reports are the certifications of our principal executive officer and our principal financial officer that are required by applicable laws and regulations. Access to these electronic filings is available as soon as reasonably practicable after we file such material with, or furnish it to, the SEC. You may also request printed copies of our corporate charter, bylaws, committee charters, or other governance documents free of charge by writing to our corporate secretary at the address on the cover of this report. Our reports filed with the SEC are made available on its website at [www.sec.gov](http://www.sec.gov). From time to time, we also post announcements, updates, and investor information on our website in addition to copies of all recent press releases. Information on our website or any other website is not incorporated by reference into, and does not constitute a part of, this Annual Report on Form 10-K.

Properties to which we refer in this document may be held by subsidiaries of Apache Corporation.

#### BUSINESS STRATEGY

Our VISION is to be the premier exploration and production company, contributing to global progress by helping meet the world's energy needs.

Our MISSION is to grow in an innovative, safe, environmentally responsible, and profitable manner for the long-term benefit of our stakeholders.

Our STRATEGY is to take a differentiated approach to the exploration and production of cost-advantaged hydrocarbons through innovation, technology, optimization, continuous improvement, and relentless focus on costs to deliver top-tier, long-term returns.

Rigorous management of the Company's asset portfolio plays a key role in optimizing shareholder value over the long term. Over the past several years, Apache has entered into a series of transactions that have upgraded its portfolio of assets, enhanced its capital allocation process to further optimize investment returns, and increased focus on internally generated exploration with full-cycle, returns-focused growth. These efforts included the monetization of certain non-strategic assets; including exiting operations in Canada and Australia, divesting of its interest in the Scottish Area Gas Evacuation (SAGE) system and pipeline in the North Sea, and selling other non-core leasehold and asset positions. The Company made strategic decisions to allocate the proceeds of these divestitures to more impactful development opportunities, including development of our Alpine High discovery in the Delaware Basin. We now have a diversified portfolio that features strong free cash flow generating assets in Egypt and the North Sea, which benefit from premium Brent crude oil pricing, and top-tier assets in the Permian Basin, the combination of which are the Company's foundation for returns-focused growth.

Additionally, in November 2018 the Company completed a transaction with Kayne Anderson Acquisition Corp. (KAAC) and its then wholly-owned subsidiary Altus Midstream LP (collectively, Altus) to create a publicly traded, pure-play, Permian Basin to Gulf Coast midstream C-corporation anchored by Apache's gathering, processing, and transmission assets at Alpine High. Subsequent to the transaction, KAAC was renamed to Altus Midstream Company (ALTM). This strategic transaction facilitates funding the capital intensive midstream infrastructure and enhances the allocation of Apache's capital to further development of the vast Alpine High upstream resource base, while maintaining control and a significant stake in the contributed assets.

For a more in-depth discussion of the Company's 2018 results, divestitures, strategy, and its capital resources and liquidity, please see Part II, Item 7—Management's Discussion and Analysis of Financial Condition and Results of Operations of this Form 10-K.

## BUSINESS OVERVIEW

Subsequent to the Altus transaction, Apache management has established a new reporting segment for its Altus midstream business separate from upstream oil and gas development activities in the U.S. The following business overviews further describe the operations and activities for the Company's exploration and production properties and Altus midstream properties.

### Exploration and Production Properties and Activities

Apache has exploration and production operations in three geographic areas: the U.S., Egypt, and the North Sea. Apache also has exploration interests in Suriname that may, over time, result in a reportable discovery and development opportunity.

The following table sets out a brief comparative summary of certain key 2018 data for each of Apache's operating areas. Additional data and discussion is provided in Part II, Item 7—Management's Discussion and Analysis of Financial Condition and Results of Operations of this Form 10-K.

	<b>Production</b>	<b>Percentage of Total Production</b>	<b>Production Revenue</b>	<b>Year-End Estimated Proved Reserves</b>	<b>Percentage of Total Estimated Proved Reserves</b>	<b>Gross Wells Drilled</b>	<b>Gross Productive Wells Drilled</b>
	<b>(In MMboe)</b>		<b>(In millions)</b>	<b>(In MMboe)</b>			
United States	95.3	56%	\$ 3,279	892	72%	335	327
Egypt <sup>(1)</sup>	54.4	32	2,748	205	17	115	99
North Sea <sup>(2)</sup>	20.3	12	1,321	137	11	10	9
Total	170.0	100%	\$ 7,348	1,234	100%	460	435

(1) Apache's operations in Egypt, excluding a one-third noncontrolling interest, contributed 24 percent of 2018 production and accounted for 12 percent of year-end estimated proved reserves.

(2) Sales volumes from the North Sea for 2018 were 20.3 MMboe. Sales volumes may vary from production volumes as a result of the timing of liftings in the Beryl field.

#### *United States*

In 2018, Apache's U.S. operations contributed approximately 56 percent of production and 72 percent of estimated year-end proved reserves. Apache has access to significant liquid hydrocarbons across its 6.5 million gross acres in the U.S., 71 percent of which are undeveloped.

In the U.S., Apache has two onshore regions:

- The Permian region located in west Texas and New Mexico includes the Permian sub-basins: the Midland Basin, Central Basin Platform/Northwest Shelf, and Delaware Basin. Examples of shale plays within this region include the Woodford, Barnett, Pennsylvanian, Cline, Wolfcamp, Bone Spring, and Spraberry.
- The Midcontinent/Gulf Coast region includes the Granite Wash, Tonkawa, Marmaton, Cleveland, and other formations of the western Anadarko Basin, the Canyon Lime formation in the Texas panhandle, the Woodford-SCOOP and Stack plays located in central Oklahoma, and the Eagle Ford shale in east Texas.

Apache also has one offshore region in North America, the Gulf of Mexico region, which consists of both shallow and deep water exploration and production activities.

*Permian Region* The Permian region is one of Apache's core growth areas. Highlights of the Company's operations in the region include:

- Over 2.9 million gross acres with exposure to numerous plays focused primarily in the Midland Basin, the Central Basin Platform/Northwest Shelf, and the Delaware Basin.
- Estimated proved reserves of 770 MMboe at year-end 2018, representing 62 percent of the Company's worldwide proved reserves.

- Annual production of 210.9 Mboe/d increased 34 percent from 2017. Fourth-quarter 2018 production increased 6 percent from the prior sequential quarter and 33 percent from the fourth quarter of 2017, a reflection of the success of the Midland Basin drilling program and the continued production ramp up at Alpine High, which first came online in May 2017.
- In 2018, the Permian region averaged 17 rigs and drilled or participated in 284 wells, 238 of which were horizontal, with a 98 percent success rate.

In late 2016, Apache announced the discovery of a significant new resource play, “Alpine High.” Apache’s Alpine High acreage lies in the southern portion of the Delaware Basin, primarily in Reeves County, Texas. Apache has identified over 3,500 economic drilling locations in a wet gas play and over 1,000 locations in a dry gas play at Alpine High. Over the past year, the Company focused on transitioning to full-field development of the Alpine High play, optimizing spacing, patterns, and completions and building efficiencies to reduce drilling and lifting costs. During 2018, Apache drilled 100 wells at Alpine High with a 96 percent success rate, including many concept test wells drilled to verify its understanding of the play. Using data collected from strategic testing and delineation drilling, the Company is now optimizing wells drilled in Alpine High and focusing on economic rich gas development in 2019. Combined with multi-well pad drilling and revenue uplift expected from oil and NGLs present in the wet gas play, Alpine High is anticipated to generate strong cash margins and a competitive recycle ratio when compared to other Permian operations.

In addition to activity in Alpine High, the Permian region drilled or participated in 184 wells in 2018, with a 98 percent success rate.

Apache plans to continue focusing a majority of its capital activity in the Permian region during 2019, balancing capital investments between its larger development project at Alpine High and focused exploration and development programs on other core assets in its Permian region. During 2019, the Company expects to average approximately 12 drilling rigs in the Permian region, which includes five rigs at Alpine High largely focused on development drilling.

*Midcontinent/Gulf Coast Region* Apache’s Midcontinent/Gulf Coast region includes 1.7 million gross acres and over 3,000 producing wells primarily in western Oklahoma, the Texas Panhandle and the Eagle Ford shale in east Texas. In 2018, the region accounted for 10 percent of the Company’s production and approximately 9 percent of the Company’s year-end estimated proved reserves.

In 2018, Apache drilled 15 operated wells running a targeted program in the Woodford-SCOOP play and the Canyon Lime formation, which were all productive. In 2019, the region will continue its focus on high-grading acreage, building its inventory of future drilling locations, and pursuing potential divestiture opportunities for non-core positions.

*Gulf of Mexico Region* The Gulf of Mexico region comprises assets in the offshore waters of the Gulf of Mexico and onshore Louisiana. In addition to its interest in several deepwater exploration and development offshore leases, when the Company sold in 2013 substantially all of its offshore assets in water depths less than 1,000 feet, it retained a 50 percent ownership interest in all exploration blocks and in horizons below production in development blocks, and access to existing infrastructure. Apache’s offshore technical teams continue to focus on evaluating subsalt and other deeper exploration opportunities in water depths less than 1,000 feet, which have been relatively untested by the industry, where high-potential deep hydrocarbon plays may exist. During 2018, Apache’s Gulf of Mexico region participated in 4 non-operated exploratory wells with an average 26 percent working interest, of which three were successful. The region contributed 5.1 Mboe/d to the Company’s total production for the year.

*U.S. Marketing* In general, most of the Company’s U.S. natural gas production is sold at either monthly or daily index-based prices. The tenor of the Company’s sales contracts span from daily to multi-year transactions. Natural gas is sold to a variety of customers that include local distribution, utility, and midstream companies as well as end-users, marketers, and integrated major oil companies. Apache strives to maintain a diverse client portfolio, which is intended to reduce the concentration of credit risk. Beginning in 2017, Apache began selling gas that was consumed in Mexico and to LNG export facilities in the U.S.

Apache primarily markets its U.S. crude oil production to integrated major oil companies, marketing and transportation companies, and refiners based on a West Texas Intermediate (WTI) price or other regional pricing indices (e.g. LLS, WTS, or Midland), adjusted for quality, transportation, and a market-reflective differential.

Apache’s objective is to maximize the value of crude oil sold by identifying the best markets and most economical transportation routes available to move the product. Sales contracts are generally 30-day evergreen contracts that renew automatically until canceled by either party. These contracts provide for sales that are priced daily at prevailing market prices. Also, from time to time, the Company will enter into physical term sales contracts. These term contracts typically have a firm transportation commitment and often provide for the higher of prevailing market prices from multiple market hubs.

Apache's U.S. NGL production is sold under contracts with prices based on local supply and demand conditions, less the costs for transportation and fractionation, or on a weighted-average sales price received by the purchaser.

Apache has contracted takeaway capacity (through a combination of volume commitments and acreage/plant dedications) in the Permian Basin on the following third-party pipelines that are currently under construction and expected to be in operation in 2019 and 2020 as further described under "Altus: Midstream Properties and Activities" below:

- (i) 550,000 dekatherms per day of residue gas for a 10-year term on the Gulf Coast Express Pipeline;
- (ii) 500,000 dekatherms per day of residue gas for a 10-year term on the Permian Highway Pipeline;
- (iii) an acreage dedication of crude oil produced from Alpine High up to 75 MBbl/d of crude oil for a 10-year term on the EPIC Crude pipeline;
- (iv) an acreage dedication to transport NGLs produced from Alpine High to Waha for a 10-year term on the Salt Creek NGL Pipeline; and
- (v) an acreage dedication for a 10-year term on Enterprise Products' Shin Oak NGL Pipeline to transport up to 205 MBbl/d of Alpine High produced NGLs from the Salt Creek NGL Pipeline terminus in Waha to Mont Belvieu.

This takeaway capacity will allow greater flexibility and market optionality for Apache's Permian Basin production, including increasing volumes from Alpine High.

### ***International***

In 2018, international assets contributed 44 percent of Apache's production and 55 percent of oil and gas revenues. Approximately 28 percent of estimated proved reserves at year-end were located outside the U.S.

Apache has two international regions:

- The Egypt region includes onshore conventional assets in Egypt's Western Desert.
- The North Sea region includes offshore assets based in the United Kingdom.

The Company also has an offshore exploration program in Suriname.

*Egypt* Apache has 23 years of exploration, development and operations experience in Egypt and is one of the largest acreage holders in Egypt's Western Desert. At year-end 2018, the Company held 6.2 million gross acres in 25 separate concessions. Development leases within concessions currently have expiration dates ranging from 3 to 20 years, with extensions possible for additional commercial discoveries or on a negotiated basis. Approximately 73 percent of the Company's gross acreage in Egypt is undeveloped, providing us with considerable exploration and development opportunities for the future.

Apache's Egypt operations are conducted pursuant to production sharing contracts (PSCs). Under the terms of the Company's PSCs, the contractor partner (Contractor) bears the risk and cost of exploration, development, and production activities. In return, if exploration is successful, the Contractor receives entitlement to variable physical volumes of hydrocarbons, representing recovery of the costs incurred and a stipulated share of production after cost recovery. Additionally, the Contractor's income taxes, which remain the liability of the Contractor under domestic law, are paid by Egyptian General Petroleum Corporation (EGPC) on behalf of the Contractor out of EGPC's production entitlement. Income taxes paid to the Arab Republic of Egypt on behalf of the Contractor are recognized as oil and gas sales revenue and income tax expense and reflected as production and estimated reserves. Because Contractor cost recovery entitlement and income taxes paid on its behalf are determined as a monetary amount, the quantities of production entitlement and estimated reserves attributable to these monetary amounts will fluctuate with commodity prices. In addition, because the Contractor income taxes are paid by EGPC, the amount of the income tax has no economic impact on Apache's Egypt operations despite impacting Apache's production and reserves.

The Company's estimated proved reserves in Egypt are reported under the economic interest method and exclude the host country's share of reserves. In addition, Sinopec International Petroleum Exploration and Production Corporation (Sinopec) holds a one-third minority participation interest in Apache's oil and gas operations in Egypt. The Egypt region, including the one-third noncontrolling interest, contributed 32 percent of 2018 production and 17 percent of year-end estimated proved reserves. Excluding the noncontrolling interest, Egypt contributed 24 percent of 2018 production and 12 percent of year-end estimated proved reserves.

In 2018, the region drilled 70 development and 45 exploration wells. Approximately 67 percent of the exploration wells were successful, further expanding Apache's presence in the westernmost concessions and unlocking additional opportunities in existing plays. A key component of the region's success has been the ability to acquire and evaluate 3-D seismic surveys that enable Apache's technical teams to consistently high-grade existing prospects and identify new targets across multiple pay horizons in the Cretaceous, Jurassic, and deeper Paleozoic formations. During 2017 and early 2018, Apache began shooting high-resolution 3-D seismic surveys in the West Kalabsha concession, the first of its kind in the Western Desert. The Company has completed seismic surveys covering over 1.25 million acres to date and will ultimately expand the shoot to cover the majority of its acreage in Egypt. The program will provide newer vintage, higher resolution imaging of the substrata across Apache's Western Desert position, allowing the Company to build and high-grade its drilling inventory.

Heading into 2019, the region plans to advance its large-scale seismic shoot and continue to build its prospect inventory. With recent acreage positions added over the past 18 months, the Egypt region will also drill wells in each of the new concession areas, thereby laying a foundation for potential growth.

*Egypt Marketing* Apache's natural gas production in Egypt is sold to EGPC primarily under an industry-pricing formula, a sliding scale based on Dated Brent crude oil with a minimum of \$1.50 per MMBtu and a maximum of \$2.65 per MMBtu, plus an upward adjustment for liquids content.

Crude oil production is sold to third parties in the export market or to EGPC when called upon to supply domestic demand. Oil production sold to third parties is exported from or sold at one of two terminals on the northern coast of Egypt. Oil production sold to EGPC is sold at prices equivalent to the export market.

*North Sea* Apache has interests in approximately 430,000 gross acres in the U.K. North Sea. The region contributed 12 percent of Apache's 2018 production and approximately 11 percent of year-end estimated proved reserves.

Apache entered the North Sea in 2003 after acquiring an approximate 97 percent working interest in the Forties field (Forties). Since acquiring Forties, Apache has actively invested in the region and has established a large inventory of drilling prospects through successful exploration programs and the interpretation of 4-D seismic. Building upon its success in Forties, in 2011 Apache acquired Mobil North Sea Limited, providing the region with additional exploration and development opportunities across numerous fields, including operated interests in the Beryl, Ness, Nevis, Nevis South, Skene, and Buckland fields and a non-operated interest in the Maclure field. Apache also has a non-operated interest in the Nelson field acquired in 2011. The Beryl field, which is a geologically complex area with multiple fields and stacked pay potential, provides for significant exploration opportunity. The North Sea region plays a strategic role in Apache's portfolio by providing competitive investment opportunities and potential reserve upside with high-impact exploration potential.

During 2018, the region drilled 8 development wells with a 100 percent success rate: four at Forties, three at Beryl and one at Callater. In addition, the region drilled two exploration wells, one of which was unsuccessful.

Apache initiated production from its Garten development in the Beryl area in late November 2018, less than eight months after being drilled in March 2018. The discovery well at Garten encountered 778 feet of net oil pay in stacked, high-quality, Jurassic-aged sandstone reservoirs. Two lower zones were also successfully tested, and all three zones will ultimately be commingled to maximize recovery. Apache has a 100 percent working interest in the Garten development.

The Company plans to maintain its activity set in the North Sea for 2019, with two platform rigs (one at Forties and one at Beryl) and a semi-submersible rig.

*North Sea Marketing* Apache has traditionally sold its North Sea crude oil under term contracts, with a market-based index price plus a premium, which reflects the higher market value for term arrangements.

Natural gas from the Beryl field is processed through the SAGE gas plant, which Apache divested to Ancala Midstream Acquisitions Limited in late 2017. The gas is sold to a third party at the St. Fergus entry point of the national grid on a National Balancing Point index price basis. The condensate mix from the SAGE plant is processed further downstream. The split streams

of propane and butane are sold on a monthly entitlement basis, and condensate is sold on a spot basis at the Braefoot Bay terminal using index pricing less transportation.

### **Other Exploration**

*New Ventures* Apache's global New Ventures team provides exposure to new growth opportunities by looking outside of the Company's traditional core areas and targeting higher-risk, higher-reward exploration opportunities located in frontier basins as well as new plays in more mature basins. Apache drilled an exploration well in the first half of 2017 in offshore Suriname, which was unsuccessful, and drilled no additional wells in Suriname during 2018. Plans for 2019 include drilling one well on Block 58 in offshore Suriname.

### **Delivery Commitments**

Over the past two years, the Company has entered into several long-term delivery commitments primarily related to the continued development of Alpine High. These fixed-minimum sales volume commitments coincide with recent firm transportation agreements and takeaway capacity arrangements with third parties in the Permian Basin. The sales commitments require Apache to deliver an average of 260 Bcf of natural gas per year for the period from 2019 through 2029 at variable, market-based pricing.

Apache expects to fulfill the majority of these delivery commitments with production from its proved reserves. Any remaining commitments may be fulfilled with production from continued development and/or spot market purchases as necessary. The Company has not experienced any significant constraints in satisfying the committed quantities required by its sales commitments.

### **Drilling Statistics**

Worldwide in 2018, Apache participated in drilling 460 gross wells, with 435 (95 percent) completed as producers. Historically, Apache's drilling activities in the U.S. have generally concentrated on exploitation and extension of existing producing fields rather than exploration. As a general matter, Apache's operations outside of the U.S. focus on a mix of exploration and development wells. In addition to Apache's completed wells, at year-end a number of wells had not yet reached completion: 125 gross (111.2 net) in the U.S., 16 gross (15.2 net) in Egypt, and 3 gross (2.1 net) in the North Sea.

The following table shows the results of the oil and gas wells drilled and completed for each of the last three fiscal years:

	Net Exploratory			Net Development			Total Net Wells		
	Productive	Dry	Total	Productive	Dry	Total	Productive	Dry	Total
<b>2018</b>									
United States	47.6	5.3	52.9	188.9	2.0	190.9	236.5	7.3	243.8
Egypt	28.2	12.5	40.7	57.9	0.5	58.4	86.1	13.0	99.1
North Sea	1.0	0.5	1.5	6.3	—	6.3	7.3	0.5	7.8
Total	76.8	18.3	95.1	253.1	2.5	255.6	329.9	20.8	350.7
<b>2017</b>									
United States	42.9	4.3	47.2	101.5	1.0	102.5	144.4	5.3	149.7
Canada	—	1.0	1.0	0.2	—	0.2	0.2	1.0	1.2
Egypt	13.7	12.0	25.7	59.3	3.0	62.3	73.0	15.0	88.0
North Sea	0.6	1.9	2.5	6.4	1.0	7.4	7.0	2.9	9.9
Other International	—	0.5	0.5	—	—	—	—	0.5	0.5
Total	57.2	19.7	76.9	167.4	5.0	172.4	224.6	24.7	249.3
<b>2016</b>									
United States	18.9	5.0	23.9	79.5	1.9	81.4	98.4	6.9	105.3
Canada	—	2.0	2.0	10.2	—	10.2	10.2	2.0	12.2
Egypt	7.3	5.1	12.4	40.5	1.0	41.5	47.8	6.1	53.9
North Sea	—	0.9	0.9	8.2	1.6	9.8	8.2	2.5	10.7
Total	26.2	13.0	39.2	138.4	4.5	142.9	164.6	17.5	182.1

## Productive Oil and Gas Wells

The number of productive oil and gas wells, operated and non-operated, in which the Company had an interest as of December 31, 2018, is set forth below:

	Oil		Gas		Total	
	Gross	Net	Gross	Net	Gross	Net
United States	13,240	8,615	3,110	1,610	16,350	10,225
Egypt	1,200	1,130	125	120	1,325	1,250
North Sea	155	115	20	10	175	125
Total	14,595	9,860	3,255	1,740	17,850	11,600
Domestic	13,240	8,615	3,110	1,610	16,350	10,225
Foreign	1,355	1,245	145	130	1,500	1,375
Total	14,595	9,860	3,255	1,740	17,850	11,600

Gross natural gas and crude oil wells include 575 wells with multiple completions.

## Production, Pricing, and Lease Operating Cost Data

The following table describes, for each of the last three fiscal years, oil, NGL, and gas production volumes, average lease operating costs per boe (including transportation costs but excluding severance and other taxes), and average sales prices for each of the countries where the Company has operations:

Year Ended December 31,	Production			Average Lease Operating Cost per Boe	Average Sales Price		
	Oil (MMbbls)	NGL (MMbbls)	Gas (Bcf)		Oil (Per bbl)	NGL (Per bbl)	Gas (Per Mcf)
<b>2018</b>							
United States	38.3	21.0	216.5	\$ 10.01	\$ 59.36	\$ 26.28	\$ 2.12
Egypt <sup>(1)</sup>	34.2	0.3	119.3	8.71	70.09	39.17	2.84
North Sea <sup>(2)</sup>	17.1	0.4	16.6	18.92	69.02	45.84	7.33
Total	89.6	21.7	352.4	10.66	65.30	26.87	2.61
<b>2017</b>							
United States	33.4	17.8	143.9	\$ 8.92	\$ 48.40	\$ 16.14	\$ 2.56
Canada <sup>(3)</sup>	2.4	1.0	48.0	12.01	45.25	16.39	2.17
Egypt <sup>(1)</sup>	35.5	0.3	141.0	6.85	53.57	36.79	2.80
North Sea <sup>(2)</sup>	17.9	0.4	16.6	17.21	53.81	36.22	5.54
Total	89.2	19.5	349.5	9.45	51.46	16.90	2.74
<b>2016</b>							
United States	38.0	19.8	145.0	\$ 7.72	\$ 39.43	\$ 9.28	\$ 2.17
Canada	4.8	2.1	88.8	11.52	37.62	8.15	1.64
Egypt <sup>(1)</sup>	37.9	0.4	143.4	7.86	43.66	28.68	2.71
North Sea <sup>(2)</sup>	20.0	0.6	26.3	13.14	42.93	24.20	4.51
Total	100.7	22.9	403.5	8.90	41.63	9.92	2.40

(1) Includes production volumes attributable to a one-third noncontrolling interest in Egypt.

(2) Sales volumes from the North Sea for 2018, 2017, and 2016 were 20.3 MMboe, 21.2 MMboe, and 24.5 MMboe, respectively. Sales volumes may vary from production volumes as a result of the timing of liftings in the Beryl field.

(3) During the third quarter of 2017, Apache finalized the sale and complete exit of its Canadian operations.

## **Gross and Net Undeveloped and Developed Acreage**

The following table sets out Apache's gross and net acreage position as of December 31, 2018, in each country where the Company has operations:

	<u>Undeveloped Acreage</u>		<u>Developed Acreage</u>	
	<u>Gross Acres</u>	<u>Net Acres</u>	<u>Gross Acres</u>	<u>Net Acres</u>
	(in thousands)			
United States	4,580	2,260	1,904	1,093
Egypt	4,480	4,088	1,686	1,609
North Sea	245	225	186	135
Other International	2,308	1,831	—	—
Total	<u>11,613</u>	<u>8,404</u>	<u>3,776</u>	<u>2,837</u>

As of December 31, 2018, 41 percent of U.S. net undeveloped acreage was held by production.

As of December 31, 2018, Apache had 796,000 net undeveloped acres scheduled to expire by year-end 2019 if production is not established or Apache takes no other action to extend the terms. Additionally, Apache has 2.1 million and 1.5 million net undeveloped acres set to expire in 2020 and 2021, respectively. The Company strives to extend the terms of many of these licenses and concession areas through operational or administrative actions, but cannot assure that such extensions can be achieved on an economic basis or otherwise on terms agreeable to both the Company and third parties, including governments.

Exploration concessions in Apache's Egypt region comprise a significant portion of Apache's net undeveloped acreage expiring over the next three years. Apache has 632,000 net undeveloped acres expiring in Egypt during 2019. Approximately 98,000 and 1.3 million net undeveloped acres are set to expire in 2020 and 2021, respectively. There were no reserves recorded on this undeveloped acreage. Apache will continue to pursue acreage extensions and access to new concessions in areas in which it believes exploration opportunities exist.

Additionally, Apache has exploration interests in Suriname consisting of 1.8 million net undeveloped acres in two offshore blocks set to expire in 2020. Apache has acquired 3-D seismic surveys over all the acreage. No reserves have been booked on this undeveloped acreage.

## **Estimated Proved Reserves and Future Net Cash Flows**

Proved oil and gas reserves are those quantities of natural gas, crude oil, condensate, and NGLs, which by analysis of geoscience 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. Estimated proved developed oil and gas reserves can be expected to be recovered through existing wells with existing equipment and operating methods. The Company reports all estimated proved reserves held under production-sharing arrangements utilizing the "economic interest" method, which excludes the host country's share of reserves.

Estimated reserves that can be produced economically through application of improved recovery techniques are included in the "proved" classification when successful testing by a pilot project or the operation of an active, improved recovery program using reliable technology establishes the reasonable certainty for the engineering analysis on which the project or program is based. Economically producible means a resource that generates revenue that exceeds, or is reasonably expected to exceed, the costs of the operation. Reasonable certainty means a high degree of confidence that the quantities will be recovered. Reliable technology is a grouping of one or more technologies (including computational methods) that has been field-tested and has been demonstrated to provide reasonably certain results with consistency and repeatability in the formation being evaluated or in an analogous formation. In estimating its proved reserves, Apache uses several different traditional methods that can be classified in three general categories: (1) performance-based methods; (2) volumetric-based methods; and (3) analogy with similar properties. Apache will, at times, utilize additional technical analysis, such as computer reservoir models, petrophysical techniques, and proprietary 3-D seismic interpretation methods, to provide additional support for more complex reservoirs. Information from this additional analysis is combined with traditional methods outlined above to enhance the certainty of the Company's reserve 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 recompletion. 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 reserves only if a development plan has been adopted indicating that they are scheduled to be drilled within five years, unless specific circumstances justify a longer time period.

The following table shows proved oil, NGL, and gas reserves as of December 31, 2018, based on average commodity prices in effect on the first day of each month in 2018, held flat for the life of the production, except where future oil and gas sales are covered by physical contract terms. This table shows reserves on a boe basis in which natural gas is converted to an equivalent barrel of oil based on a ratio of 6 Mcf to 1 bbl. This ratio is not reflective of the current price ratio between the two products.

	Oil (MMbbls)	NGL (MMbbls)	Gas (Bcf)	Total (MMboe)
<b>Proved Developed:</b>				
United States	300	198	1,627	769
Egypt <sup>(1)</sup>	110	1	476	190
North Sea	105	1	95	122
Total Proved Developed	515	200	2,198	1,081
<b>Proved Undeveloped:</b>				
United States	45	33	267	123
Egypt <sup>(1)</sup>	10	—	33	15
North Sea	11	1	16	15
Total Proved Undeveloped	66	34	316	153
<b>TOTAL PROVED</b>	<b>581</b>	<b>234</b>	<b>2,514</b>	<b>1,234</b>

(1) Includes total proved developed and total proved undeveloped reserves of 63 MMboe and 5 MMboe, respectively, attributable to a one-third noncontrolling interest in Egypt.

As of December 31, 2018, Apache had total estimated proved reserves of 581 MMbbls of crude oil, 234 MMbbls of NGLs, and 2.5 Tcf of natural gas. Combined, these total estimated proved reserves are the volume equivalent of 1.2 billion barrels of oil or 7.4 Tcf of natural gas, of which oil represents 47 percent. As of December 31, 2018, the Company's proved developed reserves totaled 1,081 MMboe and estimated PUD reserves totaled 153 MMboe, or approximately 12 percent of worldwide total proved reserves. Apache has elected not to disclose probable or possible reserves in this filing.

During 2018, Apache added 303 MMboe of proved reserves through exploration and development activity, partially offset by combined downward revisions of previously estimated reserves of 73 MMboe. Engineering and performance downward revisions accounted for 44 MMboe, changes in product prices accounted for 24 MMboe, and interest revisions accounted for 5 MMboe.

The Company's estimates of proved reserves, proved developed reserves, and PUD reserves as of December 31, 2018, 2017, and 2016, changes in estimated proved reserves during the last three years, and estimates of future net cash flows from proved reserves are contained in Note 15—Supplemental Oil and Gas Disclosures in the Notes to Consolidated Financial Statements set forth in Part IV, Item 15 of this Form 10-K. Estimated future net cash flows were calculated using a discount rate of 10 percent per annum, end of period costs, and an unweighted arithmetic average of commodity prices in effect on the first day of each of the previous 12 months, held flat for the life of the production, except where prices are defined by contractual arrangements.

### ***Proved Undeveloped Reserves***

The Company's total estimated PUD reserves of 153 MMboe as of December 31, 2018, increased by 2 MMboe from 151 MMboe of PUD reserves reported at the end of 2017. During the year, Apache converted 76 MMboe of PUD reserves to proved developed reserves through development drilling activity. In the U.S., Apache converted 57 MMboe, with the remaining 19 MMboe in Apache's international areas. Apache did not sell or acquire any PUD reserves during the year. Apache added 128 MMboe of new PUD reserves through extensions and discoveries. Apache recognized a 10 MMboe downward engineering revision in proved undeveloped reserves during the year. Other downward revisions included 24 MMboe associated with product prices, 11 MMboe associated with revised development plans, and 5 MMboe associated with interest revisions.

During the year, a total of approximately \$446 million was spent on projects associated with reserves that were carried as PUD reserves at the end of 2017. A portion of Apache's costs incurred each year relate to development projects that will be converted to proved developed reserves in future years. Apache spent approximately \$322 million on PUD reserve development activity in the U.S. and \$124 million in the international areas. As of December 31, 2018, Apache had no material amounts of proved undeveloped reserves scheduled to be developed beyond five years from initial disclosure.

### ***Preparation of Oil and Gas Reserve Information***

Apache's reported reserves are reasonably certain estimates which, by their very nature, are subject to revision. These estimates are reviewed throughout the year and revised either upward or downward, as warranted.

Apache's proved reserves are estimated at the property level and compiled for reporting purposes by a centralized group of experienced reservoir engineers that is independent of the operating groups. These engineers interact with engineering and geoscience personnel in each of Apache's operating areas and with accounting and marketing employees to obtain the necessary data for projecting future production, costs, net revenues, and ultimate recoverable reserves. All relevant data is compiled in a computer database application, to which only authorized personnel are given security access rights consistent with their assigned job function. Reserves are reviewed internally with senior management and presented to Apache's Board of Directors in summary form on a quarterly basis. Annually, each property is reviewed in detail by our corporate and operating region engineers to ensure forecasts of operating expenses, netback prices, production trends, and development timing are reasonable.

Apache's Executive Vice President of Planning, Reserves and Fundamentals is the person primarily responsible for overseeing the preparation of our internal reserve estimates and for coordinating any reserves audits conducted by a third-party engineering firm. He has Bachelor of Science and Master of Science degrees in Petroleum Engineering and over 30 years of experience in the energy industry and energy sector of the banking industry. The Executive Vice President of Planning, Reserves and Fundamentals reports directly to our Chief Executive Officer.

The estimate of reserves disclosed in this Annual Report on Form 10-K is prepared by the Company's internal staff, and the Company is responsible for the adequacy and accuracy of those estimates. However, the Company engages Ryder Scott Company, L.P. Petroleum Consultants (Ryder Scott) to review our processes and the reasonableness of our estimates of proved hydrocarbon liquid and gas reserves. The Company selects the properties for review by Ryder Scott based primarily on relative reserve value. The Company also considers other factors such as geographic location, new wells drilled during the year and reserves volume. During 2018, the properties selected for each country ranged from 84 to 91 percent of the total future net cash flows discounted at 10 percent. These properties also accounted for over 88 percent of the reserves value of Apache's international proved reserves and 95 percent of the reserves value of Apache's new wells drilled worldwide. In addition, all fields containing five percent or more of the Company's total proved reserves volume were included in Ryder Scott's review. The review covered 83 percent of total proved reserves by volume.

Ryder Scott's review for the years 2018, 2017, and 2016 covered 86, 92, and 92 percent, respectively, of the value and 83, 84, and 83 percent, respectively, of the volume of the Company's worldwide estimated proved reserves. Ryder Scott's 2018 review covered 82, 85, and 81 percent of the estimated proved reserve volume in the U.S., Egypt, and U.K., respectively.

Ryder Scott's review of 2017 covered 84 percent of U.S., 85 percent of Egypt, and 81 percent of the U.K.'s total proved reserves.

Ryder Scott's review of 2016 covered 81 percent of U.S., 81 percent of Canada, 85 percent of Egypt, and 92 percent of the U.K.'s total proved reserves.

The Company has filed Ryder Scott's independent report as an exhibit to this Form 10-K.

According to Ryder Scott's opinion, based on their review, including the data, technical processes, and interpretations presented by Apache, the overall procedures and methodologies utilized by Apache in determining the proved reserves comply with the current SEC regulations, and the overall proved reserves for the reviewed properties as estimated by Apache are, in aggregate, reasonable within the established audit tolerance guidelines as set forth in the Society of Petroleum Engineers auditing standards.

### **Altus: Midstream Properties and Activities**

In November 2018, Apache completed a previously announced transaction with KAAC and its then wholly-owned subsidiary Altus Midstream LP (collectively, Altus) to create a pure-play, Permian Basin to Gulf Coast midstream C-corporation anchored by Apache's gathering, processing, and transmission assets at Alpine High. Pursuant to the agreement, Apache contributed certain Alpine High midstream assets and options to acquire equity interests in five separate third-party pipeline projects to Altus Midstream LP and/or its subsidiaries. In exchange for the assets, Apache received economic voting and non-economic voting shares in KAAC and limited partner interests in Altus Midstream LP, representing an approximate 79 percent ownership interest in the combined entities. Upon closing, KAAC changed its name to Altus Midstream Company (ALTM).

Apache fully consolidates the assets and liabilities of Altus in its consolidated financial statements, with a corresponding noncontrolling interest reflected separately.

Altus owns, develops, and operates gas gathering, processing, and transmission assets in the Permian Basin of West Texas. Altus primarily generates revenue by providing fee based natural gas gathering, compression, processing, and transportation services for Apache's production from its Alpine High resource play. As of December 31, 2018, Altus's assets included approximately \$1.2 billion of natural gas gathering, transmission, and processing infrastructure. This includes approximately 111 miles natural gas gathering pipelines, approximately 52 miles of residue-gas pipelines, and approximately 26 miles of NGL pipelines. Additionally, Altus owns five rich gas processing facilities consisting of approximately 77,000 horsepower with 380 MMcf/d of rich-gas processing capacity and two lean gas facilities consisting of 75,000 horsepower with 400 MMcf/d of lean-gas treating capacity. Other assets include an NGL truck loading terminal with six lease automatic custody transfer (LACT) units and eight NGL bullet tanks with 90,000 gallon capacity per tank.

Altus continues to invest in the development of its asset base. By the end of 2019, Altus has forecasted the completion of three cryogenic processing plants with combined nameplate capacity of approximately 600 MMcf/d. Additionally, Altus expects to add approximately 50 miles of gathering pipelines with expanded horsepower and compression capacity to service additional market outlets.

#### ***Joint Venture Pipeline Projects***

*Gulf Coast Express* In December 2018, Altus Midstream LP exercised and closed its option with Kinder Morgan Pipeline LLC, thereby acquiring a 15 percent equity interest in the Gulf Coast Express Pipeline Project (GCX). GCX is a long-haul natural gas pipeline that, upon completion, is expected to have capacity of approximately 2.0 Bcf/d and will transport natural gas from the Waha area in northern Pecos County, Texas to the Agua Dulce Hub near the Texas Gulf Coast. GCX will be operated by Kinder Morgan Texas Pipeline LLC and is expected to be operational and in-service in the fourth quarter of 2019.

*EPIC Crude* In February 2019, Altus Midstream LP's subsidiary exercised its option with EPIC Pipeline LP to acquire a 15 percent equity interest in the EPIC crude oil pipeline. The transaction is anticipated to close in the first quarter of 2019. The pipeline is a long-haul crude oil pipeline that, upon completion, is expected to have an initial throughput capacity of approximately 590 MBbl/d from the Permian Basin to Corpus Christi, Texas. The EPIC crude pipeline will be operated by EPIC Consolidated Operations, LLC and is expected to be in service in the first quarter of 2020.

#### ***Pipeline Project Options***

Altus Midstream LP and its subsidiaries also hold additional options to acquire equity interests that have not yet been exercised. These options facilitate participation in the following third-party pipeline projects that are expected to be placed into service in 2019 and 2020:

- Salt Creek NGL Pipeline;
- Shin Oak Pipeline; and
- Permian Highway Pipeline.

*Salt Creek NGL Pipeline* Altus Midstream LP's subsidiary has an option to acquire a 50 percent equity interest in the Salt Creek NGL Pipeline, an intra-basin NGL pipeline that, upon completion, is expected to be capable of transporting approximately 445 MBbl/d to the Waha area in northern Pecos County, Texas. The Salt Creek NGL Pipeline will be operated by ARM Midstream Management LLC and is expected to be operational and in service in the first quarter of 2019. Altus Midstream LP's subsidiary expects to exercise this option in the fourth quarter of 2019 or the first quarter of 2020.

*Shin Oak Pipeline* Altus Midstream LP's subsidiary has an option to acquire up to a 33 percent equity interest in the Shin Oak Pipeline, a long-haul NGL pipeline that, upon completion, is expected to be capable of transporting approximately 550 MBbl/d from northern Reeves County, Texas through the Waha area in northern Pecos County, Texas, and on to Mont Belvieu, Texas. The Shin Oak Pipeline will be operated by Enterprise Products Operating LLC and is expected to be operational and in service in the second quarter of 2019. Altus Midstream LP's subsidiary expects to exercise this option in the second half of 2019.

*Permian Highway Pipeline* Altus Midstream LP's subsidiary has an option to acquire an approximate 27 percent equity interest in the Permian Highway Pipeline, a long-haul natural gas pipeline that, upon completion, is expected to have capacity of approximately 2.1 Bcf/d and will transport natural gas from the Waha area in northern Pecos County, Texas to the Katy, Texas area with connections to U.S. Gulf Coast and Mexico markets. The Permian Highway Pipeline will be operated by Kinder Morgan Texas Pipeline LLC and is expected to be operational and in service during the fourth quarter of 2020. Altus Midstream LP's subsidiary expects to exercise this option in the second half of 2019.

## MAJOR CUSTOMERS

For the years ended 2018, 2017, and 2016, the customers, including their subsidiaries, that represented more than 10 percent of the Company's worldwide oil and gas production revenues were as follows:

	For the Year Ended December 31,		
	2018	2017	2016
BP plc	17%	12%	9%
China Petroleum & Chemical Corporation (Sinopec)	15%	16%	21%
Egyptian General Petroleum Corporation	10%	11%	12%

## EMPLOYEES

On December 31, 2018, the Company had 3,420 employees.

## OFFICES

Our principal executive offices are located at One Post Oak Central, 2000 Post Oak Boulevard, Suite 100, Houston, Texas 77056-4400. At year-end 2018, the Company maintained regional exploration and/or production offices in Midland, Texas; San Antonio, Texas; Houston, Texas; Cairo, Egypt; and Aberdeen, Scotland. Apache leases all of its primary office space. The current lease on our principal executive offices runs through December 31, 2024. The Company has an option to extend the lease through 2029. For information regarding the Company's obligations under its office leases, please see Part II, Item 7—Management's Discussion and Analysis of Financial Condition and Results of Operations—Capital Resources and Liquidity—Contractual Obligations and Note 9—Commitments and Contingencies in the Notes to Consolidated Financial Statements set forth in Part IV, Item 15 of this Form 10-K.

## TITLE TO INTERESTS

As is customary in our industry, a preliminary review of title records, which may include opinions or reports of appropriate professionals or counsel, is made at the time we acquire properties. We believe that our title to all of the various interests set forth above is satisfactory and consistent with the standards generally accepted in the oil and gas industry, subject only to immaterial exceptions that do not detract substantially from the value of the interests or materially interfere with their use in our operations. The interests owned by us may be subject to one or more royalty, overriding royalty, or other outstanding interests (including disputes related to such interests) customary in the industry. The interests may additionally be subject to obligations or duties under applicable laws, ordinances, rules, regulations, and orders of arbitral or governmental authorities. In addition, the interests may be subject to burdens such as production payments, net profits interests, liens incident to operating agreements and current taxes, development obligations under oil and gas leases, and other encumbrances, easements, and restrictions, none of which detract substantially from the value of the interests or materially interfere with their use in our operations.

## **ADDITIONAL INFORMATION ABOUT APACHE**

### ***Response Plans and Available Resources***

Apache and its wholly owned subsidiary, Apache Deepwater LLC (ADW), developed Oil Spill Response Plans (the Plans) for their respective Gulf of Mexico operations and offshore operations in the North Sea and Suriname. These plans ensure rapid and effective responses to spill events that may occur on such entities' operated properties. Annually, drills are conducted to measure and maintain the effectiveness of the Plans.

Apache is a member of Oil Spill Response Limited (OSRL), a large international oil spill response cooperative, which entitles any Apache entity worldwide to access OSRL's services. Apache also has a contract for global response resources and services with National Response Corporation (NRC). NRC is the world's largest commercial Oil Spill Response Organization and is the global leader in providing end-to-end environmental, industrial, and emergency response solutions with operating bases in 13 countries.

In the event of a spill in the Gulf of Mexico, Clean Gulf Associates (CGA) is the primary oil spill response association available to Apache and ADW. Both Apache and ADW are members of CGA, a not-for-profit association of producing and pipeline companies operating in the Gulf of Mexico. CGA was created to provide a means of effectively staging response equipment and providing immediate spill response for its member companies' operations in the Gulf of Mexico. In the event of a spill, CGA's equipment, which is positioned at various staging points around the Gulf, is ready to be mobilized.

### ***Competitive Conditions***

The oil and gas business is highly competitive in the exploration for and acquisitions of reserves, the acquisition of oil and gas leases, equipment and personnel required to find and produce reserves, and the gathering and marketing of oil, gas, and natural gas liquids. Our competitors include national oil companies, major integrated oil and gas companies, other independent oil and gas companies, and participants in other industries supplying energy and fuel to industrial, commercial, and individual consumers.

Certain of our competitors may possess financial or other resources substantially larger than we possess or have established strategic long-term positions and maintain strong governmental relationships in countries in which we may seek new entry. As a consequence, we may be at a competitive disadvantage in bidding for leases or drilling rights.

However, we believe our diversified portfolio of core assets, which comprises large acreage positions and well-established production bases across three geographic areas, our balanced production mix between oil and gas, our management and incentive systems, and our experienced personnel give us a strong competitive position relative to many of our competitors who do not possess similar geographic and production diversity. Our global position provides a large inventory of geologic and geographic opportunities in the geographic areas in which we have producing operations to which we can reallocate capital investments in response to changes in commodity prices, local business environments, and markets. It also reduces the risk that we will be materially impacted by an event in a specific area or country.

### ***Environmental Compliance***

As an owner or lessee and operator of oil and gas properties and facilities, we are subject to numerous federal, state, local, and foreign country laws and regulations relating to discharge of materials into, and protection of, the environment. These laws and regulations may, among other things, impose liability on the lessee under an oil and gas lease for the cost of pollution clean-up resulting from operations, subject the lessee to liability for pollution damages and require suspension or cessation of operations in affected areas. Although environmental requirements have a substantial impact upon the energy industry as a whole, we do not believe that these requirements affect us differently, to any material degree, than other companies in our industry.

We have made and will continue to make expenditures in our efforts to comply with these requirements, which we believe are necessary business costs in the oil and gas industry. We have established policies for continuing compliance with environmental laws and regulations, including regulations applicable to our operations in all countries in which we do business. We have established operating procedures and training programs designed to limit the environmental impact of our field facilities and identify and comply with changes in existing laws and regulations. The costs incurred under these policies and procedures are inextricably connected to normal operating expenses such that we are unable to separate expenses related to environmental matters; however, we do not believe expenses related to training and compliance with regulations and laws that have been adopted or enacted to regulate the discharge of materials into the environment will have a material impact on our capital expenditures, earnings, or competitive position.

## ITEM 1A. RISK FACTORS

Our business activities and the value of our securities are subject to significant hazards and risks, including those described below. If any of such events should occur, our business, financial condition, liquidity, and/or results of operations could be materially harmed, and holders and purchasers of our securities could lose part or all of their investments. Additional risks relating to our securities may be included in the prospectuses for securities we issue in the future.

### *Crude oil, natural gas, and NGL price volatility could adversely affect our operating results and the price of our common stock.*

Our revenues, operating results, and future rate of growth depend highly upon the prices we receive for our crude oil, natural gas, and NGL production. Historically, the markets for these commodities have been volatile and are likely to continue to be volatile in the future. For example, the NYMEX daily settlement price for the prompt month oil contract in 2018 ranged from a high of \$76.41 per barrel to a low of \$42.53 per barrel. The NYMEX daily settlement price for the prompt month natural gas contract in 2018 ranged from a high of \$4.84 per MMBtu to a low of \$2.55 per MMBtu. The market prices for crude oil, natural gas, and NGLs depend on factors beyond our control. These factors include demand, which fluctuates with changes in market and economic conditions, and other factors, including:

- worldwide and domestic supplies of crude oil, natural gas, and NGLs;
- actions taken by foreign oil and gas producing nations, including the Organization of the Petroleum Exporting Countries (OPEC);
- political conditions and events (including instability, changes in governments, or armed conflict) in oil and gas producing regions;
- the level of global crude oil and natural gas inventories;
- the price and level of imported foreign crude oil, natural gas, and NGLs;
- the price and availability of alternative fuels, including coal and biofuels;
- the availability of pipeline capacity and infrastructure;
- the availability of crude oil transportation and refining capacity;
- weather conditions;
- domestic and foreign governmental regulations and taxes; and
- the overall economic environment.

Our results of operations, as well as the carrying value of our oil and gas properties, are substantially dependent upon the prices of oil and natural gas, which have declined significantly since June 2014. Despite slight increases in oil and natural gas prices in 2018, prices have remained significantly lower than levels seen in recent years, which has adversely affected our revenues, operating income, cash flow, and proved reserves. Continued low prices could have a material adverse impact on our operations and limit our ability to fund capital expenditures. Without the ability to fund capital expenditures, we would be unable to replace reserves and production. Sustained low prices of crude oil, natural gas, and NGLs may further adversely impact our business as follows:

- limiting our financial condition, liquidity, and/or ability to fund planned capital expenditures and operations;
- reducing the amount of crude oil, natural gas, and NGLs that we can produce economically;
- causing us to delay or postpone some of our capital projects;
- reducing our revenues, operating income, and cash flows;
- limiting our access to sources of capital, such as equity and long-term debt;
- reducing the carrying value of our oil and gas properties, resulting in additional non-cash impairments;
- reducing the carrying value of our gathering, transmission, and processing facilities, resulting in additional impairments; or
- reducing the carrying value of goodwill.

***Our ability to sell crude oil, natural gas, or NGLs and/or receive market prices for these commodities may be adversely affected by pipeline and gathering system capacity constraints and various transportation interruptions.***

A portion of our crude oil, natural gas, and NGL production in any region may be interrupted, limited, or shut in from time to time for numerous reasons, including as a result of weather conditions, accidents, loss of pipeline or gathering system access, field labor issues or strikes, or capital constraints that limit the ability of third parties to construct gathering systems, processing facilities, or interstate pipelines to transport our production, or we might voluntarily curtail production in response to market conditions. If a substantial amount of our production is interrupted at the same time, it could temporarily adversely affect our cash flows.

***Future economic conditions in the U.S. and certain international markets may materially adversely impact our operating results.***

Current global market conditions and uncertainty, including the economic instability in Europe and certain emerging markets, are likely to have significant long-term effects on our operating results. Global economic growth drives demand for energy from all sources, including fossil fuels. A lower future economic growth rate could result in decreased demand growth for our oil and gas production as well as lower commodity prices, which would reduce our cash flows from operations and our profitability.

***Weather and climate may have a significant adverse impact on our revenues and production.***

Demand for oil and gas are, to a significant degree, dependent on weather and climate, which impact the price we receive for the commodities we produce. In addition, our exploration and development activities and equipment can be adversely affected by severe weather, such as freezing temperatures, hurricanes in the Gulf of Mexico, or storms in the North Sea, which may cause a loss of production from temporary cessation of activity or lost or damaged equipment. Our planning for normal climatic variation, insurance programs, and emergency recovery plans may inadequately mitigate the effects of such weather conditions, and not all such effects can be predicted, eliminated, or insured against.

***Our operations involve a high degree of operational risk, particularly risk of personal injury, damage or loss of equipment, and environmental accidents.***

Our operations are subject to hazards and risks inherent in the drilling, production, and transportation of crude oil, natural gas, and NGLs, including:

- well blowouts, explosions, and cratering;
- pipeline or other facility ruptures and spills;
- fires;
- formations with abnormal pressures;
- equipment malfunctions;
- hurricanes, storms, and/or cyclones, which could affect our operations in areas such as on and offshore the Gulf Coast and North Sea, and other natural and anthropogenic disasters and weather conditions; and
- surface spillage and surface or ground water contamination from petroleum constituents, saltwater, or hydraulic fracturing chemical additives.

Failure or loss of equipment, as the result of equipment malfunctions, cyberattacks, or natural disasters such as hurricanes, could result in property damages, personal injury, environmental pollution, and other damages for which we could be liable. Litigation arising from a catastrophic occurrence, such as a well blowout, explosion, fire at a location where our equipment and services are used, or ground water contamination from hydraulic fracturing chemical additives may result in substantial claims for damages. Ineffective containment of a drilling well blowout or pipeline rupture or surface spillage and surface or ground water contamination from petroleum constituents or hydraulic fracturing chemical additives could result in extensive environmental pollution and substantial remediation expenses. If a significant amount of our production is interrupted, our containment efforts prove to be ineffective, or litigation arises as the result of a catastrophic occurrence, our cash flows and, in turn, our results of operations could be materially and adversely affected.

***A terrorist or cyberattack targeting systems and infrastructure used by us or others in the oil and gas industry may adversely impact our operations.***

Our business has become increasingly dependent on digital technologies to conduct certain exploration, development, and production activities. We depend on digital technology to estimate quantities of oil and gas reserves, process and record financial and operating data, analyze seismic and drilling information, communicate with our employees and third party partners, and conduct many of our activities. Unauthorized access to our digital technology could lead to operational disruption, data corruption, communication interruption, loss of intellectual property, loss of confidential and fiduciary data, and loss or corruption of reserves or other proprietary information. Strategic targets, such as energy-related assets, may be at greater risk of future terrorist attacks, environmental activist group activities, or cyberattacks than other targets in the United States. Also, external digital technologies control nearly all of the oil and gas distribution and refining systems in the United States and abroad, which are necessary to transport and market our production. A cyberattack directed at oil and gas distribution systems could damage critical distribution and storage assets or the environment, delay or prevent delivery of production to markets, and make it difficult or impossible to accurately account for production and settle transactions. Any such terrorist attack, environmental activist group activity, or cyberattack that affects the Company or our customers, suppliers, or others with whom we do business could have a material adverse effect on our business, cause it to incur a material financial loss, subject it to possible legal claims and liability, and/or damage our reputation.

While we have experienced cyberattacks in the past, we have not suffered any material losses as a result of such attacks; however, there is no assurance that we will not suffer such losses in the future. Further, as cyberattacks continue to evolve, we may be required to expend significant additional resources to continue to modify or enhance our protective measures or to investigate and remediate any vulnerabilities to cyberattacks. In addition, cyberattacks against us or others in our industry could result in additional regulations, which could lead to increased regulatory compliance costs, insurance coverage cost, or capital expenditures. The Company cannot predict the potential impact to our business or the energy industry resulting from additional regulations.

***Our commodity price risk management and trading activities may prevent us from benefiting fully from price increases and may expose us to other risks.***

To the extent that we engage in price risk management activities to protect ourselves from commodity price declines, we may be prevented from realizing the benefits of price increases above the levels of the derivative instruments used to manage price risk. In addition, our hedging arrangements may expose us to the risk of financial loss in certain circumstances, including instances in which:

- our production falls short of the hedged volumes;
- there is a widening of price-basis differentials between delivery points for our production and the delivery point assumed in the hedge arrangement;
- the counterparties to our hedging or other price risk management contracts fail to perform under those arrangements; or
- an unexpected event materially impacts commodity prices.

***The credit risk of financial institutions could adversely affect us.***

We have exposure to different counterparties, and we have entered into transactions with counterparties in the financial services industry, including commercial banks, investment banks, insurance companies, other investment funds, and other institutions. These transactions expose us to credit risk in the event of default of our counterparty. Deterioration in the credit or financial markets may impact the credit ratings of our current and potential counterparties and affect their ability to fulfill their existing obligations to us and their willingness to enter into future transactions with us. We may also have exposure to financial institutions in the form of derivative transactions in connection with any hedges. We also have exposure to insurance companies in the form of claims under our policies. In addition, if any lender under our credit facilities is unable to fund its commitment, our liquidity will be reduced by an amount up to the aggregate amount of such lender's commitment under our credit facilities.

We are exposed to a risk of financial loss if a counterparty fails to perform under a derivative contract. This risk of counterparty non-performance is of particular concern given the recent volatility of the financial markets and significant decline in commodity prices, which could lead to sudden changes in a counterparty's liquidity and impair its ability to perform under the terms of the derivative contract. We are unable to predict sudden changes in a counterparty's creditworthiness or ability to perform. Even if we do accurately predict sudden changes, our ability to negate the risk may be limited depending upon market conditions. Furthermore, the bankruptcy of one or more of our hedge providers or some other similar proceeding or liquidity constraint might make it unlikely that we would be able to collect all or a significant portion of amounts owed to us by the distressed entity or entities. During periods of falling commodity prices, our hedge receivable positions increase, which increases our exposure. If the creditworthiness of our counterparties deteriorates and results in their nonperformance, we could incur a significant loss.

***The distressed financial conditions of our purchasers and partners could have an adverse impact on us in the event they are unable to pay us for the products or services we provide or to reimburse us for their share of costs.***

Concerns about global economic conditions and the volatility of oil, natural gas, and NGL prices have had a significant adverse impact on the oil and gas industry. We are exposed to risk of financial loss from trade, joint venture, joint interest billing, and other receivables. We sell our crude oil, natural gas, and NGLs to a variety of purchasers. As operator, we pay expenses and bill our non-operating partners for their respective shares of costs. As a result of current economic conditions and the severe decline in commodity prices, some of our customers and non-operating partners may experience severe financial problems that may have a significant impact on their creditworthiness. We cannot provide assurance that one or more of our financially distressed customers or non-operating partners will not default on their obligations to us or that such a default or defaults will not have a material adverse effect on our business, financial position, future results of operations, or future cash flows. Furthermore, the bankruptcy of one or more of our customers or non-operating partners or some other similar proceeding or liquidity constraint might make it unlikely that we would be able to collect all or a significant portion of amounts owed by the distressed entity or entities. Nonperformance by a trade creditor or non-operating partner could result in significant financial losses.

***A downgrade in our credit rating could negatively impact our cost of and ability to access capital.***

We receive debt ratings from the major credit rating agencies in the United States. Factors that may impact our credit ratings include debt levels, planned asset purchases or sales, and near-term and long-term production growth opportunities. Liquidity, asset quality, cost structure, product mix, commodity pricing levels, and other factors are also considered by the rating agencies. A ratings downgrade could adversely impact our ability to access debt markets in the future and increase the cost of future debt; past ratings downgrades have required, and any future downgrades may require, us to post letters of credit or other forms of collateral for certain obligations. Throughout 2018, our credit rating remained unchanged by Moody's at Baa3/Stable and Standard and Poor's at BBB/Stable. Any future downgrades could result in additional postings of collateral ranging from approximately \$700 million to \$1.1 billion, depending upon timing and availability of tax relief.

***Market conditions may restrict our ability to obtain funds for future development and working capital needs, which may limit our financial flexibility.***

The financial markets are subject to fluctuation and are vulnerable to unpredictable shocks. We have a significant development project inventory and an extensive exploration portfolio, which will require substantial future investment. We and/or our partners may need to seek financing in order to fund these or other future activities. Our future access to capital, as well as that of our partners and contractors, could be limited if the debt or equity markets are constrained. This could significantly delay development of our property interests.

***Our ability to declare and pay dividends is subject to limitations.***

The payment of future dividends on our capital stock is subject to the discretion of our board of directors, which considers, among other factors, our operating results, overall financial condition, credit-risk considerations, and capital requirements, as well as general business and market conditions. Our board of directors is not required to declare dividends on our common stock and may decide not to declare dividends.

Any indentures and other financing agreements that we enter into in the future may limit our ability to pay cash dividends on our capital stock, including common stock. In addition, under Delaware law, dividends on capital stock may only be paid from "surplus," which is the amount by which the fair value of our total assets exceeds the sum of our total liabilities, including contingent liabilities, and the amount of our capital; if there is no surplus, cash dividends on capital stock may only be paid from our net profits for the then-current and/or the preceding fiscal year. Further, even if we are permitted under our contractual obligations and Delaware law to pay cash dividends on common stock, we may not have sufficient cash to pay dividends in cash on our common stock.

***Discoveries or acquisitions of additional reserves are needed to avoid a material decline in reserves and production.***

The production rate from oil and gas properties generally declines as reserves are depleted, while related per-unit production costs generally increase as a result of decreasing reservoir pressures and other factors. Therefore, unless we add reserves through exploration and development activities, identify additional behind-pipe zones, secondary recovery reserves, or tertiary recovery reserves through engineering studies, or acquire additional properties containing proved reserves, our estimated proved reserves will decline materially as reserves are produced. Future oil and gas production is, therefore, highly dependent upon our level of success in acquiring or finding additional reserves on an economic basis. Furthermore, if oil or gas prices increase, our cost for additional reserves could also increase.

***We may not realize an adequate return on wells that we drill.***

Drilling for oil and gas involves numerous risks, including the risk that we will not encounter commercially productive oil or gas reservoirs. The wells we drill or participate in may not be productive, and we may not recover all or any portion of our investment in those wells. The seismic data and other technologies we use do not allow us to know conclusively prior to drilling a well that crude or natural gas is present or may be produced economically. The costs of drilling, completing, and operating wells are often uncertain, and drilling operations may be curtailed, delayed, or canceled as a result of a variety of factors including, but not limited to:

- unexpected drilling conditions;
- pressure or irregularities in formations;
- equipment failures or accidents;
- fires, explosions, blowouts, and surface cratering;
- marine risks, such as capsizing, collisions, and hurricanes;
- other adverse weather conditions; and
- increases in the cost of or shortages or delays in the availability of drilling rigs and equipment.

Future drilling activities may not be successful, and, if unsuccessful, this failure could have an adverse effect on our future results of operations and financial condition. While all drilling, whether developmental or exploratory, involves these risks, exploratory drilling involves greater risks of dry holes or failure to find commercial quantities of hydrocarbons.

***Material differences between the estimated and actual timing of critical events or costs may affect the completion and commencement of production from development projects.***

We are involved in several large development projects, and the completion of these projects may be delayed beyond our anticipated completion dates. Our projects may be delayed by project approvals from joint venture partners, timely issuances of permits and licenses by governmental agencies, weather conditions, manufacturing and delivery schedules of critical equipment, and other unforeseen events. Delays and differences between estimated and actual timing of critical events may adversely affect our large development projects and our ability to participate in large-scale development projects in the future. In addition, our estimates of future development costs are based on current expectation of prices and other costs of equipment and personnel we will need to implement such projects. Our actual future development costs may be significantly higher than we currently estimate. If costs become too high, our development projects may become uneconomic to us, and we may be forced to abandon such development projects.

***We may fail to fully identify potential problems related to acquired reserves or to properly estimate those reserves.***

Although we perform a review of properties that we acquire that we believe is consistent with industry practices, such reviews are inherently incomplete. It generally is not feasible to review in-depth every individual property involved in each acquisition. Ordinarily, we will focus our review efforts on the higher-value properties and will sample the remainder. However, even a detailed review of records and properties may not necessarily reveal existing or potential problems, nor will it permit us as a buyer to become sufficiently familiar with the properties to assess fully and accurately their deficiencies and potential. Inspections may not always be performed on every well, and environmental problems, such as groundwater contamination, are not necessarily observable even when an inspection is undertaken. Even when problems are identified, we often assume certain environmental and other risks and liabilities in connection with acquired properties. There are numerous uncertainties inherent in estimating quantities of proved oil and gas reserves and future production rates and costs with respect to acquired properties, and actual results may vary substantially from those assumed in the estimates. In addition, there can be no assurance that acquisitions will not have an adverse effect upon our operating results, particularly during the periods in which the operations of acquired businesses are being integrated into our ongoing operations.

***Our liabilities could be adversely affected in the event one or more of our transaction counterparties become the subject of a bankruptcy case.***

From time to time we have divested noncore or nonstrategic domestic and international assets. The agreements relating to these transactions contain provisions pursuant to which liabilities related to past and future operations have been allocated between the parties by means of liability assumptions, indemnities, escrows, trusts, and similar arrangements. One of the most significant of these liabilities involves the decommissioning of wells and facilities previously owned by us. One or more of the counterparties in these transactions could fail to perform its obligations under these agreements as a result of financial distress. In the event that any such counterparty were to become the subject of a case or proceeding under Title 11 of the United States Code or any other relevant insolvency law or similar law (which we collectively refer to as Insolvency Laws), the counterparty may not perform its obligations under the agreements related to these transactions. In that case, our remedy in the proceeding would be a claim for damages for the breach of the contractual arrangements, which may be either a secured claim or an unsecured claim depending on whether or not we have collateral from the counterparty for the performance of the obligations. Resolution of our claim for damages in such a proceeding may be delayed, and we may be forced to use available cash to cover the costs of the obligations assumed by the counterparties under such agreements should they arise.

Despite the provisions in our agreements requiring purchasers of our state or federal leasehold interests to assume certain liabilities and obligations related to such interests, if a purchaser of such interests becomes the subject of a case or proceeding under relevant Insolvency Laws or becomes unable financially to perform such liabilities or obligations, we would expect the relevant governmental authorities to require us to perform and hold us responsible for such liabilities and obligations. In such event, we may be forced to use available cash to cover the costs of such liabilities and obligations should they arise.

If a court or a governmental authority were to make any of the foregoing determinations or take any of the foregoing actions, or any similar determination or action, it could adversely impact our cash flows, operations, or financial condition.

***Crude oil, natural gas, and NGL reserves are estimates, and actual recoveries may vary significantly.***

There are numerous uncertainties inherent in estimating crude oil, natural gas, and NGL reserves and their value. Reservoir engineering is a subjective process of estimating underground accumulations of crude oil, natural gas, and NGLs that cannot be measured in an exact manner. Because of the high degree of judgment involved, the accuracy of any reserve estimate is inherently imprecise and a function of the quality of available data and the engineering and geological interpretation. Our reserves estimates are based on 12-month average prices, except where contractual arrangements exist; therefore, reserves quantities will change when actual prices increase or decrease. In addition, results of drilling, testing, and production may substantially change the reserve estimates for a given reservoir over time. The estimates of our proved reserves and estimated future net revenues also depend on a number of factors and assumptions that may vary considerably from actual results, including:

- historical production from the area compared with production from other areas;
- the effects of regulations by governmental agencies, including changes to severance and excise taxes;
- future operating costs and capital expenditures; and
- workover and remediation costs.

For these reasons, estimates of the economically recoverable quantities of crude oil, natural gas, and NGLs attributable to any particular group of properties, classifications of those reserves, and estimates of the future net cash flows expected from them prepared by different engineers or by the same engineers but at different times may vary substantially. Accordingly, reserves estimates may be subject to upward or downward adjustment, and actual production, revenue, and expenditures with respect to our reserves likely will vary, possibly materially, from estimates.

Additionally, because some of our reserves estimates are calculated using volumetric analysis, those estimates are less reliable than the estimates based on a lengthy production history. Volumetric analysis involves estimating the volume of a reservoir based on the net feet of pay of the structure and an estimation of the area covered by the structure. In addition, realization or recognition of proved undeveloped reserves will depend on our development schedule and plans. A change in future development plans for proved undeveloped reserves could cause the discontinuation of the classification of these reserves as proved.

***Certain of our undeveloped leasehold acreage is subject to leases that will expire over the next several years unless production is established on units containing the acreage.***

A sizeable portion of our acreage is currently undeveloped. Unless production in paying quantities is established on units containing certain of these leases during their terms, the leases will expire. If our leases expire, we will lose our right to develop the related properties. Our drilling plans for these areas are subject to change based upon various factors, including drilling results, commodity prices, the availability and cost of capital, drilling and production costs, availability of drilling services and equipment, gathering system and pipeline transportation constraints, and regulatory approvals.

***We may incur significant costs related to environmental matters.***

As an owner or lessee and operator of oil and gas properties, we are subject to various federal, state, local, and foreign country laws and regulations relating to the discharge of materials into and protection of the environment. These laws and regulations may, among other things, impose liability on the lessee under an oil and gas lease for the cost of pollution cleanup and other remediation activities resulting from operations, subject the lessee to liability for pollution and other damages, limit or constrain operations in affected areas, and require suspension or cessation of operations in affected areas. Our efforts to limit our exposure to such liability and cost may prove inadequate and result in significant adverse effects to our results of operations. In addition, it is possible that the increasingly strict requirements imposed by environmental laws and enforcement policies could require us to make significant capital expenditures. Such capital expenditures could adversely impact our cash flows and our financial condition.

***Our United States operations are subject to governmental risks.***

Our United States operations have been, and at times in the future may be, affected by political developments and by federal, state, and local laws and regulations such as restrictions on production, changes in taxes, royalties and other amounts payable to governments or governmental agencies, price or gathering rate controls, and environmental protection laws and regulations.

In response to the Deepwater Horizon incident in the U.S. Gulf of Mexico in April 2010 and as directed by the Secretary of the U.S. Department of the Interior, the Bureau of Ocean Energy Management (BOEM) and the Bureau of Safety and Environmental Enforcement (BSEE) issued guidelines and regulations regarding safety, environmental matters, drilling equipment, and decommissioning applicable to drilling in the Gulf of Mexico. These regulations imposed additional requirements and caused delays with respect to development and production activities in the Gulf of Mexico.

With respect to oil and gas operations in the Gulf of Mexico, the BOEM has issued a Notice to Lessees (NTL No. 2016-N01) significantly revising the obligations of companies operating in the Gulf of Mexico to provide supplemental assurances of performance with respect to plugging, abandonment, and decommissioning obligations associated with wells, platforms, structures, and facilities located upon or used in connection with such companies' oil and gas leases. While requirements under the NTL have not yet been fully implemented by BOEM, the NTL will likely require that Apache provide additional security to BOEM with respect to plugging, abandonment, and decommissioning obligations relating to Apache's current ownership interests in various Gulf of Mexico leases. We are working closely with BOEM to make arrangements for the provision of such additional required security, if such security becomes necessary under the NTL. Additionally, we are not able to predict the effect that these changes might have on counterparties to which Apache has sold Gulf of Mexico assets or with whom Apache has joint ownership. Such changes could cause the bonding obligations of such parties to increase substantially, thereby causing a significant impact on the counterparties' solvency and ability to continue as a going concern.

New political developments, the enactment of new or stricter laws or regulations or other governmental actions impacting our United States operations, and increased liability for companies operating in this sector may adversely impact our results of operations.

***Changes to existing regulations related to emissions and the impact of any changes in climate could adversely impact our business.***

Certain countries where we operate, including the United Kingdom, either tax or assess some form of greenhouse gas (GHG) related fees on our operations. Exposure has not been material to date, although a change in existing regulations could adversely affect our cash flows and results of operations. Additionally, there has been discussion in other countries where we operate, including the United States, regarding legislation or regulation of GHG. Any such legislation or regulation, if enacted, could either tax or assess some form of GHG-related fees on our operations and could lead to increased operating expenses or cause us to make significant capital investments for infrastructure modifications.

In the event the predictions for rising temperatures and sea levels suggested by reports of the United Nations Intergovernmental Panel on Climate Change do transpire, we do not believe those events by themselves are likely to impact our assets or operations. However, any increase in severe weather could have a material adverse effect on our assets and operations.

***Negative public perception regarding us and/or our industry could have an adverse effect on our operations.***

Negative public perception regarding us and/or our industry resulting from, among other things, concerns raised by advocacy groups about hydraulic fracturing, waste disposal, oil spills, and explosions of natural gas transmission lines may lead to increased regulatory scrutiny, which may, in turn, lead to new state and federal safety and environmental laws, regulations, guidelines, and enforcement interpretations. These actions may cause operational delays or restrictions, increased operating costs, additional regulatory burdens, and increased risk of litigation. Moreover, governmental authorities exercise considerable discretion in the timing and scope of permit issuance, and the public may engage in the permitting process, including through intervention in the courts. Negative public perception could cause the permits we require to conduct our operations to be withheld, delayed, or burdened by requirements that restrict our ability to profitably conduct our business.

***The present U.S. federal and state income tax laws affecting oil and gas exploration, development, and extraction may be modified by administrative, legislative, or judicial interpretation at any time. Future legislation may result in the elimination of certain U.S. federal income tax deductions currently available with respect to oil and gas exploration and development.***

On December 22, 2017, the Tax Cuts and Jobs Act (the Act) was signed into law. In addition to reducing the U.S. corporate income tax rate from 35 percent to 21 percent effective January 1, 2018, certain provisions in the Act move the U.S. away from a worldwide tax system and closer to a territorial system for earnings of foreign corporations, establishing a participation exemption system for taxation of foreign income. The new law includes a transition rule to effect this participation exemption regime. The Act also includes provisions which could impact or limit the Company's ability to deduct interest expense or utilize net operating losses beginning in 2018.

The U.S. federal and state income tax laws affecting oil and gas exploration, development, and extraction may be further modified by administrative, legislative, or judicial interpretation at any time. Previous legislative proposals, if enacted into law, could make significant changes to such laws, including the elimination of certain key U.S. federal income tax incentives currently available to oil and gas exploration and production companies. These changes include, but are not limited to, (i) the repeal of the percentage depletion allowance for oil and gas properties, (ii) the elimination of current deductions for intangible drilling and development costs, and (iii) an extension of the amortization period for certain geological and geophysical expenditures. The passage or adoption of these changes, or similar changes, could eliminate or postpone certain tax deductions that are currently available with respect to oil and gas exploration and development. We are unable to predict whether any of these changes or other proposals will be enacted. Any such changes could adversely affect our business, financial condition, and results of operations.

***Proposed federal, state, or local regulation regarding hydraulic fracturing could increase our operating and capital costs.***

Several proposals are before the U.S. Congress that, if implemented, would either prohibit or restrict the practice of hydraulic fracturing or subject the process to regulation under the Safe Drinking Water Act. Several states and political subdivisions are considering legislation, ballot initiatives, executive orders, or other actions to regulate hydraulic fracturing practices that could impose more stringent permitting, transparency, and well construction requirements on hydraulic-fracturing operations or otherwise seek to ban fracturing activities altogether. Hydraulic fracturing of wells and subsurface water disposal are also under public and governmental scrutiny due to potential environmental and physical impacts, including possible contamination of groundwater and drinking water and possible links to induced seismicity. In addition, some municipalities have significantly limited or prohibited drilling activities and/or hydraulic fracturing or are considering doing so. We routinely use fracturing techniques in the U.S. and other regions to expand the available space for natural gas and oil to migrate toward the wellbore. It is typically done at substantial depths in formations with low permeability.

Although it is not possible at this time to predict the final outcome of the governmental actions regarding hydraulic fracturing, any new federal, state, or local restrictions on hydraulic fracturing that may be imposed in areas in which we conduct business could result in increased compliance costs or additional operating restrictions in the U.S.

***International operations have uncertain political, economic, and other risks.***

Our operations outside the United States are based primarily in Egypt and the United Kingdom. On a barrel equivalent basis, approximately 44 percent of our 2018 production was outside the United States, and approximately 28 percent of our estimated proved oil and gas reserves on December 31, 2018, were located outside the United States. As a result, a significant portion of our production and resources are subject to the increased political and economic risks and other factors associated with international operations including, but not limited to:

- general strikes and civil unrest;
- the risk of war, acts of terrorism, expropriation and resource nationalization, and forced renegotiation or modification of existing contracts;
- import and export regulations;
- taxation policies, including royalty and tax increases and retroactive tax claims, and investment restrictions;
- price control;
- transportation regulations and tariffs;
- constrained oil or natural gas markets dependent on demand in a single or limited geographical area;
- exchange controls, currency fluctuations, devaluations, or other activities that limit or disrupt markets and restrict payments or the movement of funds;
- laws and policies of the United States affecting foreign trade, including trade sanctions;
- the effects of the U.K.'s potential withdrawal from the European Union, including any resulting instability in global financial markets or the value of foreign currencies such as the British pound;
- the possibility of being subject to exclusive jurisdiction of foreign courts in connection with legal disputes relating to licenses to operate and concession rights in countries where we currently operate;
- the possible inability to subject foreign persons, especially foreign oil ministries and national oil companies, to the jurisdiction of courts in the United States; and
- difficulties in enforcing our rights against a governmental agency because of the doctrine of sovereign immunity and foreign sovereignty over international operations.

Foreign countries have occasionally asserted rights to oil and gas properties through border disputes. If a country claims superior rights to oil and gas leases or concessions granted to us by another country, our interests could decrease in value or be lost. Even our smaller international assets may affect our overall business and results of operations by distracting management's attention from our more significant assets. Certain regions of the world in which we operate have a history of political and economic instability. This instability could result in new governments or the adoption of new policies that might result in a substantially more hostile attitude toward foreign investments such as ours. In an extreme case, such a change could result in termination of contract rights and expropriation of our assets. This could adversely affect our interests and our future profitability.

The impact that future terrorist attacks or regional hostilities, as have occurred in countries and regions in which we operate, may have on the oil and gas industry in general and on our operations in particular is not known at this time. Uncertainty surrounding military strikes or a sustained military campaign may affect operations in unpredictable ways, including disruptions of fuel supplies and markets, particularly oil, and the possibility that infrastructure facilities, including pipelines, production facilities, processing plants, and refineries, could be direct targets or indirect casualties of an act of terror or war. We may be required to incur significant costs in the future to safeguard our assets against terrorist activities.

***A deterioration of conditions in Egypt or changes in the economic and political environment in Egypt could have an adverse impact on our business.***

Deterioration in the political, economic, and social conditions or other relevant policies of the Egyptian government, such as changes in laws or regulations, export restrictions, expropriation of our assets or resource nationalization, and/or forced renegotiation or modification of our existing contracts with EGPC, or threats or acts of terrorism could materially and adversely affect our business, financial condition, and results of operations. Our operations in Egypt, excluding a one-third noncontrolling interest, contributed 24 percent of our 2018 production and accounted for 12 percent of our year-end estimated proved reserves and 20 percent of our estimated discounted future net cash flows.

***Our operations are sensitive to currency rate fluctuations.***

Our operations are sensitive to fluctuations in foreign currency exchange rates, particularly between the U.S. dollar and the British pound. Our financial statements, presented in U.S. dollars, may be affected by foreign currency fluctuations through both translation risk and transaction risk. Volatility in exchange rates may adversely affect our results of operations, particularly through the weakening of the U.S. dollar relative to other currencies.

***We do not always control decisions made under joint operating agreements, and the parties under such agreements may fail to meet their obligations.***

We conduct many of our E&P operations through joint operating agreements with other parties under which we may not control decisions, either because we do not have a controlling interest or are not an operator under the agreement. There is risk that these parties may at any time have economic, business, or legal interests or goals that are inconsistent with ours, and, therefore, decisions may be made which are not what we believe to be in our best interest. Moreover, parties to these agreements may be unable to meet their economic or other obligations, and we may be required to fulfill those obligations alone. In either case, the value of our investment may be adversely affected.

***We face strong industry competition that may have a significant negative impact on our results of operations.***

Strong competition exists in all sectors of the oil and gas E&P industry. We compete with major integrated and other independent oil and gas companies for acquisitions of oil and gas leases, properties, and reserves, equipment and labor required to explore, develop, and operate those properties, and marketing of crude oil, natural gas, and NGL production. Crude oil, natural gas, and NGL prices impact the costs of properties available for acquisition and the number of companies with the financial resources to pursue acquisition opportunities. Many of our competitors have financial and other resources substantially larger than we possess and have established strategic, long-term positions and maintain strong governmental relationships in countries in which we may seek new entry. As a consequence, we may be at a competitive disadvantage in bidding for drilling rights. In addition, many of our larger competitors may have a competitive advantage when responding to factors that affect demand for oil and gas production, such as fluctuating worldwide commodity prices and levels of production, the cost and availability of alternative fuels, and the application of government regulations. We also compete in attracting and retaining personnel, including geologists, geophysicists, engineers, and other specialists. These competitive pressures may have a significant negative impact on our results of operations.

***Our insurance policies do not cover all of the risks we face, which could result in significant financial exposure.***

Exploration for and production of crude oil, natural gas, and NGLs can be hazardous, involving natural disasters and other events such as blowouts, cratering, fires, explosions, and loss of well control, which can result in damage to or destruction of wells or production facilities, injury to persons, loss of life, or damage to property or the environment. Our international operations are also subject to political risk. The insurance coverage that we maintain against certain losses or liabilities arising from our operations may be inadequate to cover any such resulting liability; moreover, insurance is not available to us against all operational risks.

***Certain anti-takeover provisions in our charter and Delaware law could delay or prevent a hostile takeover.***

Our charter authorizes our board of directors to issue preferred stock in one or more series and to determine the voting rights and dividend rights, dividend rates, liquidation preferences, conversion rights, redemption rights, including sinking fund provisions and redemption prices, and other terms and rights of each series of preferred stock. In addition, Delaware law imposes restrictions on mergers and other business combinations between us and any holder of 15 percent or more of our outstanding common stock. These provisions may deter hostile takeover attempts that could result in an acquisition of us that would have been financially beneficial to our shareholders.

*We own an approximate 79 percent interest in Altus, which holds substantially all of our former gathering, processing and transmission assets in Alpine High. Altus may be subject to different risks than those described in this Form 10-K.*

We own an approximate 79 percent interest in Altus, which holds substantially all of our former gathering, processing and transmission assets in Alpine High. Altus owns, develops, and operates a midstream energy asset network in the Permian Basin of West Texas, anchored by midstream service contracts to service Apache's production from its Alpine High resource play. Altus primarily generates revenue by providing fee-based natural gas gathering, compression, processing and transportation services. Given the nature of its business, Altus may be subject to different and additional risks than those described in this Form 10-K. For a description of these risks, please refer to the Form 10-K filed by ALTM.

**ITEM 1B. UNRESOLVED STAFF COMMENTS**

As of December 31, 2018, we did not have any unresolved comments from the SEC staff that were received 180 or more days prior to year-end.

**ITEM 3. LEGAL PROCEEDINGS**

The information set forth under "Legal Matters" and "Environmental Matters" in Note 9—Commitments and Contingencies in the Notes to Consolidated Financial Statements set forth in Part IV, Item 15 of this Form 10-K is incorporated herein by reference.

**ITEM 4. MINE SAFETY DISCLOSURES**

None.

APACHE CORPORATION

PART II

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

During 2018, Apache common stock, par value \$0.625 per share, was traded on the New York and Chicago Stock Exchanges and the NASDAQ Global Select Market under the symbol "APA." The closing price of our common stock, as reported on the New York Stock Exchange Composite Transactions Reporting System for January 31, 2019 (last trading day of the month), was \$32.82 per share. As of January 31, 2019, there were 375,405,587 shares of our common stock outstanding held by approximately 3,800 stockholders of record and 258,000 beneficial owners.

We have paid cash dividends on our common stock for 54 consecutive years through December 31, 2018. When, and if, declared by our Board of Directors, future dividend payments will depend upon our level of earnings, financial requirements, and other relevant factors.

Information concerning securities authorized for issuance under equity compensation plans is set forth under the caption "Equity Compensation Plan Information" in the proxy statement relating to the Company's 2019 annual meeting of stockholders, which is incorporated herein by reference.

**Issuer Purchases of Equity Securities**

The table below sets forth information with respect to shares of common stock repurchased by Apache during 2018.

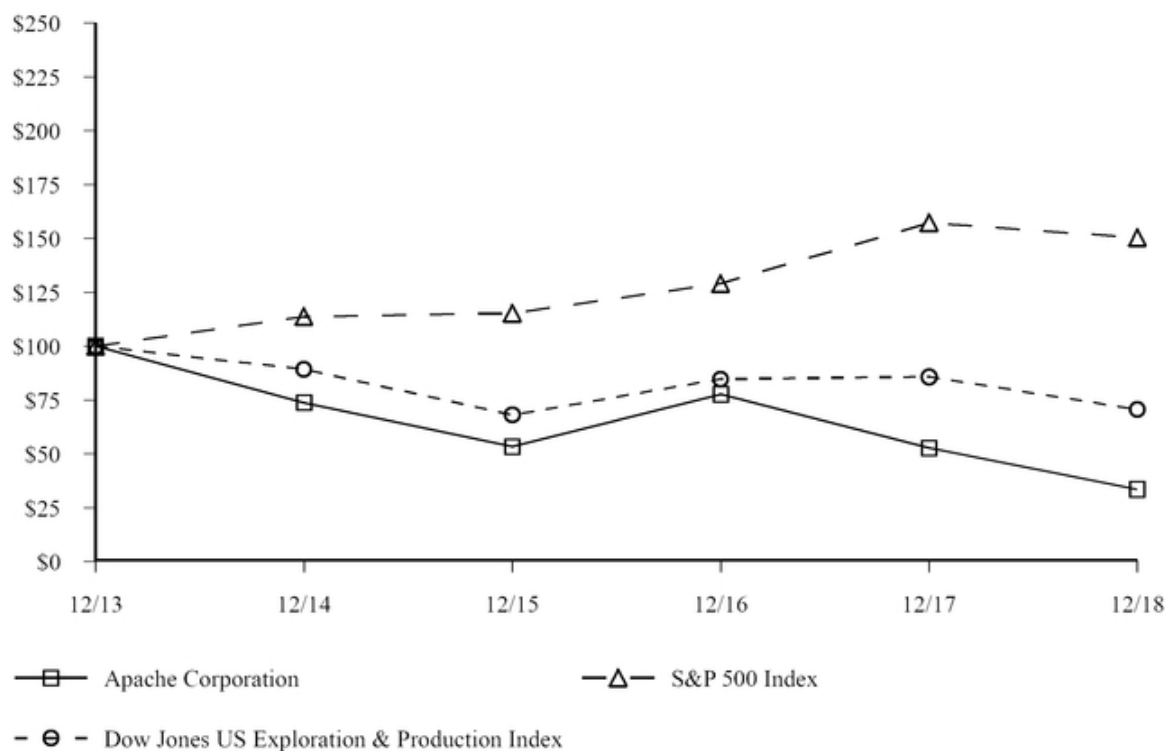
Period	Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs <sup>(1)</sup>	Maximum Number of Shares that May Yet Be Purchased Under the Plans or Programs <sup>(1)</sup>
January 1 to January 31, 2018	—	\$ —	—	7,827,352
February 1 to February 28, 2018	—	—	—	7,827,352
March 1 to March 31, 2018	—	—	—	7,827,352
April 1 to April 30, 2018	—	—	—	7,827,352
May 1 to May 31, 2018	—	—	—	7,827,352
June 1 to June 30, 2018	—	—	—	7,827,352
July 1 to July 31, 2018	—	—	—	7,827,352
August 1 to August 31, 2018	—	—	—	7,827,352
September 1 to September 30, 2018	924,131	46.38	924,131	6,903,221
October 1 to October 31, 2018	2,030,000	44.59	2,030,000	44,873,221
November 1 to November 30, 2018	3,343,800	36.43	3,343,800	41,529,421
December 1 to December 31, 2018	1,529,402	32.70	1,529,402	40,000,019
<b>Total</b>	<b>7,827,333</b>	<b>\$ 38.99</b>		

(1) On May 9, 2013, the Company announced that its Board of Directors authorized the repurchase of up to 30 million shares of the Company's common stock. Additionally, on May 15, 2014, the Company announced that the Board of Directors authorized the repurchase of an additional 10 million shares, supplementing the May 2013 authorization. The Company may buy shares from time to time on the open market, in privately negotiated transactions, or a combination of both. The timing and amounts of any repurchases will be at the discretion of Apache's management and will depend on a variety of factors, including the stock price, corporate and regulatory requirements, and other market and economic conditions. Repurchased shares will be available for general corporate purposes. On October 30, 2018, the Company's Board of Directors authorized the purchase of up to 40 million additional shares of the Company's common stock.

The following stock price performance graph is intended to allow review of stockholder returns, expressed in terms of the appreciation of the Company's common stock relative to two broad-based stock performance indices. The information is included for historical comparative purposes only and should not be considered indicative of future stock performance. The graph compares the yearly percentage change in the cumulative total stockholder return on the Company's common stock with the cumulative total return of the Standard & Poor's Composite 500 Stock Index and of the Dow Jones U.S. Exploration & Production Index (formerly Dow Jones Secondary Oil Stock Index) from December 31, 2013, through December 31, 2018. The stock performance graph and related information shall not be deemed "soliciting material" or to be "filed" with the SEC, nor shall 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.

### COMPARISON OF 5 YEAR CUMULATIVE TOTAL RETURN\*

Among Apache Corporation, S&P 500 Index,  
and the Dow Jones US Exploration & Production Index



\* \$100 invested on 12/31/13 in stock including reinvestment of dividends.  
Fiscal year ending December 31.

	2013	2014	2015	2016	2017	2018
Apache Corporation	\$ 100.00	\$ 73.75	\$ 53.29	\$ 77.62	\$ 52.68	\$ 33.51
S & P's Composite 500 Stock Index	100.00	113.69	115.26	129.05	157.22	150.33
DJ US Expl & Prod Index	100.00	89.23	68.05	84.71	85.81	70.57

**ITEM 6. SELECTED FINANCIAL DATA**

The following table sets forth selected financial data of the Company and its consolidated subsidiaries over the five-year period ended December 31, 2018. This information should be read in connection with, and is qualified in its entirety by, the more detailed information in the Company's financial statements set forth in Part IV, Item 15 of this Form 10-K. Certain amounts for prior years have been reclassified to conform to the current presentation. Factors that materially affect the comparability of this information are disclosed in Management's Discussion and Analysis under Item 7 of this Form 10-K.

	As of or for the Year Ended December 31,				
	2018	2017	2016	2015	2014
(In millions, except per share amounts)					
<b>Income Statement Data</b>					
Oil and gas production revenues	\$ 7,348	\$ 5,887	\$ 5,367	\$ 6,510	\$ 12,795
Net income (loss) from continuing operations attributable to common shareholders	40	1,304	(1,372)	(10,844)	(6,653)
Net income (loss) from continuing operations per share:					
Basic	0.11	3.42	(3.62)	(28.70)	(17.32)
Diluted	0.11	3.41	(3.62)	(28.70)	(17.32)
Cash dividends declared per common share	1.00	1.00	1.00	1.00	1.00
<b>Balance Sheet Data</b>					
Total assets	\$ 21,582	\$ 21,922	\$ 22,519	\$ 25,500	\$ 44,264
Long-term debt	8,054	7,934	8,544	8,716	11,178
Total equity	8,812	8,791	7,679	9,490	20,541
Common shares outstanding	375	381	379	378	377

For a discussion of significant acquisitions and divestitures, see Note 2—Acquisitions and Divestitures in the Notes to Consolidated Financial Statements set forth in Part IV, Item 15 of this Form 10-K.

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

Apache Corporation, a Delaware corporation formed in 1954, is an independent energy company that explores for, develops, and produces natural gas, crude oil, and natural gas liquids (NGL). Apache currently has exploration and production operations in three geographic areas: the U.S., Egypt, and offshore the U.K. in the North Sea (North Sea). Apache also has exploration interests in Suriname that may, over time, result in a reportable discovery and development opportunity.

The following discussion should be read together with the Consolidated Financial Statements and the Notes to Consolidated Financial Statements set forth in Part IV, Item 15 of this Form 10-K, and the risk factors and related information set forth in Part I, Item 1A and Part II, Item 7A of this Form 10-K.

### **Overview of 2018 Results**

Apache's mission is to grow in an innovative, safe, environmentally responsible, and profitable manner for the long-term benefit of our stakeholders. Apache is focused on rigorous portfolio management, disciplined financial structure, and optimization of returns. The Company primarily focused its 2018 capital program on developing Alpine High, building associated Alpine High infrastructure, and increasing production and performance in its other Permian Basin plays.

Apache's U.S. assets are complemented by its international assets in Egypt and the North Sea, each of which adds to the Company's deep inventory of exploration and development opportunities and generates cash flows in excess of current capital investments, facilitating the Company's ability to develop Alpine High while maintaining financial flexibility.

In November 2018 the Company completed a transaction with Kayne Anderson Acquisition Corp. to create a publicly traded, pure-play, Permian Basin to Gulf Coast midstream C-corporation anchored by Apache's gathering, processing, and transmission assets at Alpine High with ownership or options for participation in five joint venture pipelines. This strategic transaction facilitates funding the capital intensive midstream infrastructure and enhances the allocation of Apache's capital to further development of the vast Alpine High upstream resource base, while maintaining control and a significant stake in the contributed assets. For further information regarding this transaction, please see "Operational Highlights" below, and also refer to Note 2—Acquisitions and Divestitures in the Notes to Consolidated Financial Statements set forth in Part IV, Item 15 of this Form 10-K.

During 2018, Apache reported net income attributable to common stock of \$40 million, or \$0.11 per diluted common share, compared to \$1.3 billion, or \$3.41 per share in 2017. The 2018 results include asset impairments of \$511 million as the Company continues to redirect capital from non-core assets and a \$94 million charge for early extinguishment of debt. These charges directly impact comparability to the prior year and partially offset realized benefits from higher average crude oil and NGL prices and production. Additionally, 2017 results were materially benefited from a \$627 million gain on asset sales.

Daily production in 2018 averaged 466 Mboe/d, an increase of 2 percent from 2017. Excluding asset divestitures, Apache's worldwide equivalent daily production increased 9 percent, driven primarily by activity in the Permian Basin. Realized oil prices in 2018 were considerably higher than the previous year, particularly Dated Brent, which has provided increased operating cash flow to reinvest in the Company's core development areas.

Apache generated \$3.8 billion in cash from operating activities in 2018, up \$1.3 billion from the prior year, \$628 million of cash proceeds from the sale of a noncontrolling interest in its Alpine High midstream assets, and an additional \$138 million of cash proceeds from non-core asset and leasehold divestments. Apache ended the year with \$714 million of cash and cash equivalents, a decrease of \$954 million from year-end 2017. Apache continuously monitors changes in its operating environment and has the ability, with its dynamic capital allocation process, to adjust the Company's capital investment program to levels commensurate with cash from operating activities and to maximize value for Apache's shareholders over the long term. During the year, the Company took several steps to improve its debt portfolio, issuing \$1.0 billion in aggregate principal amount of senior unsecured notes and concurrently repurchasing \$731 million in aggregate principal amount of certain outstanding notes. These transactions extended debt maturities, reduced the Company's cost of debt, modernized its standard indenture terms, and, in conjunction with the repayment of \$550 million of debt that matured during 2018, reduced debt by \$281 million from 2017 year-end levels. In late 2018, the Company re-initiated share repurchase activity under its existing authorization and repurchased over 7.8 million shares. Since the inception of the program in 2013, the Company has purchased approximately 40 million shares through the end of 2018. The Company also obtained authorization from the Company's Board of Directors to purchase an additional 40 million shares of the Company's common stock.

## **Operational Highlights**

Key operational highlights for the year include:

### ***United States***

- U.S. onshore production averaged 256 Mboe/d, up 28 percent relative to 2017, reflecting the success of the Midland Basin drilling program and the continued production ramp-up at Alpine High.
- The Permian region averaged 17 operated rigs during the year, drilling 284 gross wells. Approximately 43 percent of the region's production is crude oil and 21 percent is NGLs. Combined, this represents 44 percent of Apache's worldwide liquids production for 2018. The region averaged 211 Mboe/d and contributed \$2.7 billion of revenues during 2018. Fourth-quarter 2018 production increased 33 percent from the comparative 2017 quarter, a reflection of the success of the Midland Basin drilling program and the continued production ramp-up at Alpine High.
- In the fourth quarter of 2018, the Company completed the previously announced agreement with Kayne Anderson Acquisition Corp. (KAAC) and its then wholly-owned subsidiary Altus Midstream LP (collectively, Altus). Subsequent to the transaction, KAAC was renamed to Altus Midstream Company (ALTM).
  - Upon closing of the transaction, KAAC contributed approximately \$628 million of cash, net of transaction expenses, into Altus Midstream LP. The cash will primarily be used to fund future development of the Alpine High midstream assets.
  - In exchange for the contribution of its Alpine High midstream assets, Apache received an approximate 79 percent ownership interest in Altus.
  - Altus owns gas gathering, processing, and transmission assets in the Permian Basin of West Texas, anchored by midstream contracts to service Apache's production from its Alpine High resource play. Altus primarily generates revenue by providing fee-based natural gas gathering, compression, processing, and transportation services. Additionally, Altus Midstream LP and/or its subsidiaries have equity ownership in third-party pipeline projects and hold options to purchase equity ownerships in other pipeline projects in the region.

### ***International***

- The Egypt region averaged 12 rigs and drilled or participated in drilling 115 gross wells. During 2018, Egypt's gross production and net equivalent production averaged 336 Mboe/d and 149 Mboe/d, respectively. Egypt's gross production increased 1 percent from 2017, while net equivalent production decreased 8 percent from 2017, primarily the result of the impact of higher Brent oil prices on cost recovery volumes as a function of the Company's production sharing contracts. The region contributed \$2.7 billion of revenues during the year.
- The North Sea region averaged 3 rigs during 2018, drilling 10 gross wells. During the year, the region averaged production of 56 Mboe/d and contributed \$1.3 billion of revenues. Production declined 3 percent from 2017, primarily the result of natural decline offset by a development well coming online at the Callater field and initial production at Garten during the fourth quarter of 2018.

For a more detailed discussion related to Apache's various geographic regions, please refer to the "Geographic Area Overviews" section set forth in Part I, Item 1 and 2 of this Form 10-K.

## **Acquisition and Divestiture Activity**

Over Apache's 60-year history, the Company has repeatedly demonstrated its ability to capitalize quickly and decisively on changes in its industry and economic conditions. A key component of this strategy is to continuously review and optimize Apache's portfolio of assets in response to these changes. Most recently, Apache has completed a series of divestitures designed to monetize nonstrategic assets and enhance Apache's portfolio in order to allocate resources to more impactful exploration and development opportunities. These divestments comprised primarily capital intensive projects and assets that were not accretive to earnings in the near-term, and included all of Apache's operations in Canada and Australia. These divestments include:

- *U.S. and North Sea Divestitures* During 2018, in addition to the Altus transaction discussed above, Apache completed the sale of certain non-core assets, primarily leasehold acreage in the U.S. and North Sea regions, in multiple transactions for total cash proceeds of approximately \$138 million.
- *Canadian Operations* On June 30, 2017, Apache completed the sale of its Canadian assets at Midale and House Mountain for total cash proceeds of approximately \$228 million. In August of 2017, Apache completed the sale of its remaining Canadian operations for cash proceeds of approximately \$478 million.

- *U.S. Leasehold Divestitures* During 2017, Apache completed the sale of certain non-core assets, primarily leasehold acreage in the Permian and Midcontinent/Gulf Coast regions, in multiple transactions for total cash proceeds of \$798 million.
- *North Sea Gathering Transportation and Processing (GTP) Facility* In November 2017, Apache completed the sale of its 30.28 percent interest in the SAGE gas plant and its 60.56 percent interest in the Beryl pipeline in the North Sea to Ancala Midstream Acquisitions Limited. A refundable deposit of \$134 million was received in the fourth quarter of 2016 in connection with this transaction, and was recorded in “Other current liabilities” on the consolidated balance sheet as of December 31, 2016. In November 2017, Apache completed the sale and the liability related to the refundable deposit was released. No additional proceeds were received.

For detailed information regarding Apache’s acquisitions and divestitures, please refer to Note 2—Acquisitions and Divestitures in the Notes to Consolidated Financial Statements set forth in Part IV, Item 15 of this Form 10-K.

## Results of Operations

### Oil and Gas Revenues

Apache's oil and gas revenues by region are as follows:

	For the Year Ended December 31,					
	2018		2017		2016	
	\$ Value	% Contribution	\$ Value	% Contribution	\$ Value	% Contribution
(\$ in millions)						
<b>Total Oil Revenues:</b>						
United States	\$ 2,271	39%	\$ 1,616	35%	\$ 1,499	36%
Canada	—	—	110	3%	180	4%
North America	2,271	39%	1,726	38%	1,679	40%
Egypt <sup>(1)</sup>	2,396	41%	1,901	41%	1,657	40%
North Sea	1,179	20%	971	21%	836	20%
International <sup>(1)</sup>	3,575	61%	2,872	62%	2,493	60%
Total <sup>(1)</sup>	\$ 5,846	100%	\$ 4,598	100%	\$ 4,172	100%
<b>Total Natural Gas Revenues:</b>						
United States	\$ 458	50%	\$ 368	38%	\$ 314	33%
Canada	—	—	104	11%	146	15%
North America	458	50%	472	49%	460	48%
Egypt <sup>(1)</sup>	339	37%	395	41%	389	40%
North Sea	122	13%	92	10%	118	12%
International <sup>(1)</sup>	461	50%	487	51%	507	52%
Total <sup>(1)</sup>	\$ 919	100%	\$ 959	100%	\$ 967	100%
<b>Total NGL Revenues:</b>						
United States	\$ 550	94%	\$ 287	87%	\$ 184	81%
Canada	—	—	17	5%	17	7%
North America	550	94%	304	92%	201	88%
Egypt <sup>(1)</sup>	13	2%	11	3%	11	5%
North Sea	20	4%	15	5%	16	7%
International <sup>(1)</sup>	33	6%	26	8%	27	12%
Total <sup>(1)</sup>	\$ 583	100%	\$ 330	100%	\$ 228	100%
<b>Total Oil and Gas Revenues:</b>						
United States	\$ 3,279	45%	\$ 2,271	39%	\$ 1,997	37%
Canada	—	—	231	4%	343	7%
North America	3,279	45%	2,502	43%	2,340	44%
Egypt <sup>(1)</sup>	2,748	37%	2,307	39%	2,057	38%
North Sea	1,321	18%	1,078	18%	970	18%
International <sup>(1)</sup>	4,069	55%	3,385	57%	3,027	56%
Total <sup>(1)</sup>	\$ 7,348	100%	\$ 5,887	100%	\$ 5,367	100%

(1) Amounts include revenue attributable to a noncontrolling interest in Egypt.

Production

The following table presents production volumes by region:

	For the Year Ended December 31,				
	2018	Increase (Decrease)	2017	Increase (Decrease)	2016
<b>Oil Volume – b/d:</b>					
United States	104,800	15%	91,489	(12)%	103,827
Canada	—	NM	6,643	(49)%	13,081
North America	104,800	7%	98,132	(16)%	116,908
Egypt <sup>(1)(2)</sup>	93,656	(4)%	97,242	(6)%	103,719
North Sea	46,953	(4)%	48,889	(11)%	54,630
International	140,609	(4)%	146,131	(8)%	158,349
Total	245,409	—	244,263	(11)%	275,257
<b>Natural Gas Volume – Mcf/d:</b>					
United States	593,254	50%	394,366	—	396,227
Canada	—	NM	131,479	(46)%	242,602
North America	593,254	13%	525,845	(18)%	638,829
Egypt <sup>(1)(2)</sup>	326,811	(15)%	386,194	(1)%	391,968
North Sea	45,466	—	45,521	(37)%	71,751
International	372,277	(14)%	431,715	(7)%	463,719
Total	965,531	1%	957,560	(13)%	1,102,548
<b>NGL Volume – b/d:</b>					
United States	57,451	18%	48,674	(10)%	54,165
Canada	—	NM	2,827	(51)%	5,731
North America	57,451	12%	51,501	(14)%	59,896
Egypt <sup>(1)(2)</sup>	923	13%	816	(25)%	1,084
North Sea	1,189	3%	1,149	(33)%	1,703
International	2,112	7%	1,965	(29)%	2,787
Total	59,563	11%	53,466	(15)%	62,683
<b>BOE per day:<sup>(3)</sup></b>					
United States	261,126	27%	205,891	(8)%	224,029
Canada	—	NM	31,383	(47)%	59,246
North America	261,126	10%	237,274	(16)%	283,275
Egypt <sup>(1)(2)</sup>	149,048	(8)%	162,424	(5)%	170,131
North Sea <sup>(4)</sup>	55,719	(3)%	57,624	(16)%	68,292
International	204,767	(7)%	220,048	(8)%	238,423
Total	465,893	2%	457,322	(12)%	521,698

(1) Gross oil, natural gas, and NGL production in Egypt were as follows:

	2018	2017	2016
Oil (b/d)	206,378	198,335	209,659
Natural Gas (Mcf/d)	769,468	805,478	827,202
NGL (b/d)	1,502	1,353	1,861

(2) Includes net production volumes per day attributable to a noncontrolling interest in Egypt of:

	2018	2017	2016
Oil (b/d)	31,240	32,461	34,530
Natural Gas (Mcf/d)	109,169	128,756	130,856
NGL (b/d)	308	272	361

(3) The table shows production on a barrel of oil equivalent basis (boe) in which natural gas is converted to an equivalent barrel of oil based on a ratio of 6 Mcf to 1 bbl. This ratio is not reflective of the price ratio between the two products.

(4) Average sales volumes from the North Sea were 55,568 boe/d, 58,177 boe/d, and 66,872 boe/d for 2018, 2017, and 2016, respectively. Sales volumes may vary from production volumes as a result of the timing of liftings in the Beryl field.

NM — Not meaningful

## Pricing

The following table presents pricing information by region:

	For the Year Ended December 31,				
	2018	Increase (Decrease)	2017	Increase (Decrease)	2016
<b>Average Oil Price - Per barrel:</b>					
United States	\$ 59.36	23%	\$ 48.40	23%	\$ 39.43
Canada	—	NM	45.25	20%	37.62
North America	59.36	23%	48.18	23%	39.23
Egypt	70.09	31%	53.57	23%	43.66
North Sea	69.02	28%	53.81	25%	42.93
International	69.73	30%	53.65	24%	43.41
Total	65.30	27%	51.46	24%	41.63
<b>Average Natural Gas Price - Per Mcf:</b>					
United States	\$ 2.12	(17)%	\$ 2.56	18%	\$ 2.17
Canada	—	NM	2.17	32%	1.64
North America	2.12	(14)%	2.46	25%	1.97
Egypt	2.84	1%	2.80	3%	2.71
North Sea	7.33	32%	5.54	23%	4.51
International	3.39	10%	3.09	3%	2.99
Total	2.61	(5)%	2.74	14%	2.40
<b>Average NGL Price - Per barrel:</b>					
United States	\$ 26.28	63%	\$ 16.14	74%	\$ 9.28
Canada	—	NM	16.39	101%	8.15
North America	26.28	63%	16.15	76%	9.17
Egypt	39.17	6%	36.79	28%	28.68
North Sea	45.84	27%	36.22	50%	24.20
International	42.93	18%	36.46	41%	25.94
Total	26.87	59%	16.90	70%	9.92

NM — Not meaningful

### Crude Oil Prices

A substantial portion of our crude oil production is sold at prevailing market prices, which fluctuate in response to many factors that are outside of the Company's control. Average realized crude oil prices for 2018 were up 27 percent compared to 2017, a direct result of the rising benchmark oil prices over the past year. Crude oil prices realized in 2018 averaged \$65.30 per barrel.

Continued volatility in the commodity price environment reinforces the importance of our asset portfolio. While the market price received for natural gas varies among geographic areas, crude oil tends to trade within a global market. Price movements for all types and grades of crude oil generally move in the same direction.

### Natural Gas Prices

Natural gas, which currently has a limited global transportation system, is subject to price variances based on local supply and demand conditions. Our primary markets include North America, Egypt, and the U.K. An overview of the market conditions in our primary gas-producing regions follows:

- North America has a common market; most of our gas is sold on a monthly or daily basis at either monthly or daily market prices. Our U.S. regions averaged \$2.12 per Mcf in 2018, down from \$2.56 per Mcf in 2017.
- In Egypt, our gas is sold to Egyptian General Petroleum Corporation (EGPC), primarily under an industry pricing formula indexed to Dated Brent crude oil with a minimum gas price of \$1.50 per MMBtu and a maximum gas price of \$2.65 per MMBtu, plus an upward adjustment for liquids content. Overall, the region averaged \$2.84 per Mcf in 2018, up 1 percent from the prior year.

- Natural gas from the North Sea Beryl field is processed through the SAGE gas plant. The gas is sold to a third party at the St. Fergus entry point of the national grid on a National Balancing Point index price basis. The region averaged \$7.33 per Mcf in 2018, a 32 percent increase from an average of \$5.54 per Mcf in 2017.

#### *NGL Prices*

Apache's NGL production is sold under contracts with prices at market indices based on local supply and demand conditions, less the costs for transportation and fractionation, or on a weighted-average sales price received by the purchaser.

#### *Crude Oil Revenues*

*2018 vs. 2017* Crude oil revenues for 2018 totaled \$5.8 billion, a \$1.2 billion increase from the 2017 total of \$4.6 billion, primarily a result of 27 percent higher average realized prices. Average daily production in 2018 was 245.4 Mb/d, with prices averaging \$65.30 per barrel. Crude oil accounted for 80 percent of Apache's 2018 oil and gas production revenues and 53 percent of its worldwide production.

Worldwide crude oil production increased 1.1 Mb/d compared to 2017, primarily the result of the drilling program in the Permian region offset by the Canada divestitures and natural decline.

*2017 vs. 2016* Crude oil revenues for 2017 totaled \$4.6 billion, a \$426 million increase from the 2016 total of \$4.2 billion. An 11 percent decrease in average daily production reduced 2017 revenues by \$559 million compared to 2016, while 24 percent higher average realized prices increased revenues by \$985 million. Average daily production in 2017 was 244.3 Mb/d, with prices averaging \$51.46 per barrel. Crude oil accounted for 78 percent of Apache's 2017 oil and gas production revenues and 53 percent of its worldwide production.

Worldwide crude oil production decreased 31.0 Mb/d compared to 2016, primarily the result of the Canada divestitures and natural decline.

#### *Natural Gas Revenues*

*2018 vs. 2017* Natural gas revenues for 2018 totaled \$919 million, a \$40 million decrease from the 2017 total of \$959 million. A 1 percent increase in average production increased 2018 revenues by \$7 million compared to 2017, while 5 percent lower average realized prices decreased revenues by \$47 million. Average daily production in 2018 was 966 MMcf/d, with prices averaging \$2.61 per Mcf. Natural gas accounted for 12 percent of Apache's 2018 oil and gas production revenues and 34 percent of its worldwide production.

Worldwide gas production increased 8.0 MMcf/d compared to 2017, primarily the result of the Alpine High development partially offset by the Canada divestitures and natural decline.

*2017 vs. 2016* Natural gas revenues for 2017 totaled \$959 million, an \$8 million decrease from the 2016 total of \$967 million. A 13 percent decrease in average production reduced 2017 revenues by \$148 million compared to 2016, while 14 percent higher average realized prices increased revenues by \$140 million. Average daily production in 2017 was 958 MMcf/d, with prices averaging \$2.74 per Mcf. Natural gas accounted for 16 percent of Apache's 2017 oil and gas production revenues and 35 percent of its worldwide production.

Worldwide gas production decreased 145.0 MMcf/d compared to 2016, primarily the result of the Canada divestitures, maintenance activities in the North Sea, and natural decline.

#### *NGL Revenues*

*2018 vs. 2017* NGL revenues for 2018 totaled \$583 million, a \$253 million increase from 2017. An 11 percent increase in average production increased 2018 revenues by \$59 million compared to 2017, while 59 percent higher average realized prices increased revenues by \$194 million. Average daily production in 2018 was 59.6 Mb/d, with prices averaging \$26.87 per barrel. NGLs accounted for nearly 8 percent of Apache's 2018 oil and gas production revenues and 13 percent of its worldwide production.

*2017 vs. 2016* NGL revenues for 2017 totaled \$330 million, a \$102 million increase from 2016. A 15 percent decrease in average production reduced 2017 revenues by \$58 million compared to 2016, while 70 percent higher average realized prices increased revenues by \$160 million. Average daily production in 2017 was 53.5 Mb/d, with prices averaging \$16.90 per barrel. NGLs accounted for nearly 6 percent of Apache's 2017 oil and gas production revenues and 12 percent of its worldwide production.

## Altus Revenues

Apache is the largest single owner of the voting common stock of ALTM, and has an approximate 79 percent interest in Altus. Altus generates revenue primarily by providing fee-based natural gas gathering, compression, processing, and transportation services. Altus owns, develops, and operates a midstream energy asset network in the Permian Basin of West Texas, anchored by midstream service contracts to service Apache's production from its Alpine High resource play, which commenced production in May 2017. The amount and pace of upstream development activity by Apache of its Alpine High play will impact Altus's aggregate gathering and processing volumes over time. Additionally, other producers are also developing oil and gas plays in surrounding areas that are expected to provide attractive opportunities to enter into third-party processing and gathering agreements.

During 2018 and 2017, midstream services revenues totaling \$77 million and \$15 million, respectively, were generated through fee-based contractual arrangements with Apache and eliminated upon consolidation. Altus did not generate any services revenues in 2016.

## Operating Expenses

The table below presents a comparison of the Company's expenses on an absolute dollar basis. The Company's discussion may reference expenses on a boe basis, on an absolute dollar basis or both, depending on context. All operating expenses include costs attributable to a noncontrolling interest in Egypt and ALTM. Operating expenses for all periods exclude discontinued operations in Australia.

	For the Year Ended December 31,		
	2018	2017	2016
	(In millions)		
Lease operating expenses	\$ 1,439	\$ 1,384	\$ 1,494
Gathering, transmission, and processing	348	195	200
Taxes other than income	215	151	126
Exploration	503	549	473
General and administrative	431	395	410
Transaction, reorganization, and separation	28	16	39
Depreciation, depletion and amortization:			
Oil and gas property and equipment	2,265	2,136	2,460
GTP assets	83	73	69
Other assets	57	71	89
Asset retirement obligation accretion	108	130	156
Impairments	511	8	1,103
Financing costs, net	478	397	417

## Lease Operating Expenses (LOE)

LOE includes several key components, such as direct operating costs, repair and maintenance, and workover costs. Direct operating costs generally trend with commodity prices and are impacted by the type of commodity produced and the location of properties (i.e., offshore, onshore, remote locations, etc.). Fluctuations in commodity prices impact operating cost elements both directly and indirectly. They directly impact costs such as power, fuel, and chemicals, which are commodity price based. Commodity prices also affect industry activity and demand, thus indirectly impacting the cost of items such as rig rates, labor, boats, helicopters, materials, and supplies. Oil, which contributed more than half of Apache's 2018 production, is inherently more expensive to produce than natural gas. Repair and maintenance costs are typically higher on offshore properties.

During 2018, LOE increased \$55 million, or 4 percent, on an absolute dollar basis compared to 2017. On a per-unit basis, LOE increased \$0.19, or 2 percent compared to 2017, from \$8.28 per boe to \$8.47 per boe. The increase in both absolute dollar basis and per-unit basis is primarily a result of rising costs commensurate with higher commodity prices realized during 2018. During 2017, LOE decreased \$110 million, or 7 percent, on an absolute dollar basis compared to 2016. On a per-unit basis, LOE increased \$0.43, or 5 percent, compared to 2016. The per-barrel increase during 2017 is primarily the result of declines in production combined with generally rising costs commensurate with higher commodity prices realized during 2017.

### Gathering, Transmission, and Processing

Gathering, transmission, and processing (GTP) expenses include upstream transmission costs paid to a third-party carrier and to Altus, as well as costs associated with gas processing. GTP expenses also include midstream operating costs incurred by Altus. The following table presents a summary of these expenses:

	For the Year Ended December 31,		
	2018	2017	2016
(In millions)			
Third-party transmission and processing costs	\$ 294	\$ 179	\$ 200
Midstream service affiliate costs	77	15	—
Upstream transmission and processing costs	371	194	200
Midstream operating expenses	54	16	—
Intersegment eliminations	(77)	(15)	—
<b>Total GTP costs</b>	<b>\$ 348</b>	<b>\$ 195</b>	<b>\$ 200</b>

2018 vs. 2017 GTP costs increased \$153 million from 2017. Upstream transmission and processing costs increased from \$1.16 per boe in 2017 to \$2.16 per boe in 2018. The increase is primarily the result of the reclassification of certain transportation charges from revenues to GTP expense as a result of the adoption of new revenue recognition accounting rules effective January 1, 2018, as well as the ramp-up of midstream operations at Alpine High, partially offset by Apache's exit from Canada.

2017 vs. 2016 GTP costs decreased \$5 million from 2016. The decrease was directly related to the Canadian divestitures that closed in August 2017.

### Taxes Other Than Income

Taxes other than income primarily consist of severance taxes on properties onshore and in state waters off the coast of the U.S. and ad valorem taxes on properties in the U.S. Severance taxes are generally based on a percentage of oil and gas production revenues. We are also subject to a variety of other taxes, including U.S. franchise taxes.

2018 vs. 2017 Taxes other than income totaled \$215 million, an increase of \$64 million from 2017. The increase is primarily a result of severance taxes being impacted by higher production in the Permian region and higher commodity prices during 2018 compared to 2017.

2017 vs. 2016 Taxes other than income totaled \$151 million in 2017, an increase of \$25 million from 2016. The increase is primarily a result of higher commodity prices during 2017 compared to 2016.

### Exploration Expense

Exploration expense includes unproved leasehold impairments, exploration dry hole expense, geological and geophysical expense, and the costs of maintaining and retaining unproved leasehold properties. The following table presents a summary of these expenses:

	For the Year Ended December 31,		
	2018	2017	2016
(In millions)			
Unproved leasehold impairments	\$ 214	\$ 246	\$ 272
Dry hole expense	137	183	81
Geological and geophysical expense	55	47	44
Exploration overhead and other	97	73	76
<b>Total Exploration expense</b>	<b>\$ 503</b>	<b>\$ 549</b>	<b>\$ 473</b>

2018 vs. 2017 Unproved leasehold impairments decreased \$32 million and dry hole expense decreased \$46 million compared to 2017, primarily related to higher exploratory well success rates compared to the prior year. Delay rentals and other exploration lease maintenance costs trended higher in 2018 to preserve key acreage holdings, reflecting the increase in "Exploration overhead and other."

2017 vs. 2016 Unproved leasehold impairments decreased \$26 million compared to 2016, primarily a result of stabilized commodity and leasehold prices during 2017. Dry hole expense increased \$102 million compared to 2016, primarily related to unsuccessful international offshore exploration.

#### *General and Administrative (G&A) Expenses*

2018 vs. 2017 G&A expenses increased \$36 million, or 9 percent, from 2017. The increase in G&A expense was primarily related to higher incentive and stock-based compensation in 2018 compared to 2017, slightly offset by the Canadian divestitures during 2017.

2017 vs. 2016 G&A expenses decreased \$15 million, or 4 percent, from 2016. The decrease in G&A expense was primarily related to lower incentive compensation in 2017 compared to 2016, and the Canadian divestitures.

#### *Transaction, Reorganization, and Separation Costs*

Apache recorded \$28 million, \$16 million and \$39 million of expenses during 2018, 2017, and 2016, respectively, primarily related to company reorganization, including separation costs, investment banking fees and other associated costs. The charges for 2018 include \$22 million for consulting and legal fees related to divestitures and the Altus transaction and \$6 million related to employee separation and other reorganization efforts.

#### *Depreciation, Depletion and Amortization (DD&A)*

2018 vs. 2017 Oil and gas property DD&A expense of \$2.3 billion in 2018 increased \$129 million compared to 2017. The Company's oil and gas property DD&A rate increased \$0.55 per boe in 2018 compared to 2017, from \$12.78 to \$13.33. The primary factor driving higher absolute dollar expense was an increase in capital spending primarily in the Permian and Alpine High regions as a result of drilling and development activity. The increase on an absolute dollar basis was partially offset by the sale of Apache's Canadian operations. GTP depreciation increased \$10 million in 2018 compared to 2017, primarily a result of capital spending on Altus infrastructure. Other asset depreciation decreased \$14 million compared to 2017 as a result of the Canadian divestiture.

2017 vs. 2016 Oil and gas property DD&A expense of \$2.1 billion in 2017 decreased \$324 million compared to 2016. The Company's oil and gas property DD&A rate decreased \$0.14 to \$12.78 per boe in 2017 compared to 2016. The primary factor driving lower absolute dollar expense was a decrease in production volumes from the comparative prior-year periods. Other asset depreciation decreased \$18 million compared to 2016 primarily related to Canadian divestitures.

#### *Impairments*

During 2018, the Company recorded asset impairments totaling \$511 million in connection with fair value assessments, including \$328 million for oil and gas proved properties in the U.S. and Egypt, \$56 million impairment of a gathering and processing facility in Oklahoma, \$113 million for the impairment of an equity method investment based on a negotiated sales price, a \$10 million impairment on the carrying values of the associated capitalized exploratory well costs related to the sale of unproved properties in the North Sea, and \$4 million for inventory write-downs.

During 2017, the Company recorded asset impairments in connection with fair value assessments totaling \$8 million for a U.K. Petroleum Revenue Tax (PRT) decommissioning asset that is no longer expected to be realizable from future abandonment activities in the North Sea.

During 2016, the Company recorded asset impairments totaling \$1.1 billion in connection with fair value assessments, including \$486 million for the impairment of the recoverable value of the PRT decommissioning asset, \$427 million impairments of oil and gas proved properties in the U.S. and Canada, \$135 million impairments of certain GTP facilities in the North Sea, and \$55 million for inventory write-downs.

The following table presents a summary of asset impairments recorded for 2018, 2017, and 2016:

	<b>For the Year Ended December 31,</b>		
	<b>2018</b>	<b>2017</b>	<b>2016</b>
	(In millions)		
Oil and gas proved property	\$ 328	\$ —	\$ 427
GTP facilities	56	—	135
Equity method investment	113	—	—
Capitalized exploratory well costs	10	—	—
PRT decommissioning asset	—	8	486
Inventory	4	—	55
<b>Total impairments</b>	<b>\$ 511</b>	<b>\$ 8</b>	<b>\$ 1,103</b>

#### *Financing Costs, Net*

Financing costs incurred during the period comprised the following:

	<b>For the Year Ended December 31,</b>		
	<b>2018</b>	<b>2017</b>	<b>2016</b>
	(In millions)		
Interest expense	\$ 441	\$ 457	\$ 464
Amortization of debt issuance costs	9	9	8
Capitalized interest	(44)	(51)	(48)
Loss on extinguishment of debt	94	1	1
Interest income	(22)	(19)	(8)
<b>Total Financing costs, net</b>	<b>\$ 478</b>	<b>\$ 397</b>	<b>\$ 417</b>

*2018 vs. 2017* Net financing costs increased \$81 million from 2017. The increase is primarily related to a \$94 million loss on extinguishment of debt, an increase of \$3 million in interest income, a decrease of \$7 million in capitalized interest, and a decrease of \$16 million in interest expense.

*2017 vs. 2016* Net financing costs decreased \$20 million from 2016. The decrease is primarily related to an increase of \$11 million in interest income, an increase of \$3 million in capitalized interest, and a decrease of \$7 million in interest expense.

#### *Provision for Income Taxes*

The 2018 income tax expense totaled \$672 million. During 2018, Apache's effective tax rate was impacted primarily by the adjustment to the provisional amounts recorded in 2017 related to the enactment of the Tax Cuts and Jobs Act (the Act) and an increase in the Company's valuation allowance.

On December 22, 2017, the Act was signed into law. In addition to reducing the corporate income tax rate from 35 percent to 21 percent effective January 1, 2018, certain provisions in the Act move the U.S. away from a worldwide tax system and closer to a territorial system for earnings of foreign corporations, establishing a participation exemption system for taxation of foreign income. The new law includes a transition rule to effect this participation exemption regime. As a result of the enacted legislation, taxpayers were required to include in taxable income for the tax year ending December 31, 2017, the pro rata share of deferred income of each specified foreign corporation with respect to which the taxpayer is a U.S. shareholder. In 2017, the Company recorded a \$419 million provisional deferred tax expense attributable to the deemed repatriation of foreign earnings required under the Act.

Also on December 22, 2017, the SEC staff issued Staff Accounting Bulletin No. 118 (SAB 118) which provides guidance for the application of Accounting Standards Codification (ASC) Topic 740, Income Taxes, for the income tax effects of the Act. SAB 118 provides a measurement period which should not extend beyond one year of the enactment date of the Act. In 2018, the Company recorded an additional \$103 million deferred tax expense attributable to the deemed repatriation of foreign earnings. This deferred tax expense combined with the provisional amount recorded in 2017 were fully offset by available foreign tax credits. The Company completed its analysis of the income tax effects of the Act in the fourth quarter of 2018.

The 2017 income tax benefit totaled \$585 million. During 2017, Apache's effective tax rate was impacted primarily by the decrease in deferred taxes associated with its investments in foreign subsidiaries, gains on the sale of oil and gas properties, the increase in the Company's valuation allowance, and a decrease in the U.S. corporate income tax rate causing a remeasurement of the Company's deferred tax asset.

The 2016 income tax benefit from continuing operations totaled \$442 million. During 2016, Apache's effective tax rate was impacted primarily by non-cash impairments of the carrying value of the Company's oil and gas properties, non-cash impairments of the Company's PRT decommissioning asset, the impact of the change in U.K. statutory income tax rate, and an increase in the amount of valuation allowances on U.S. and Canadian deferred tax assets.

In 2016, the U.K. government enacted Finance Bill 2016, which provides income tax relief to Exploration and Production (E&P) companies operating in the North Sea through a reduction of the Supplementary Charge from 20 percent to 10 percent, effective January 1, 2016. As a result of the enacted legislation in the third quarter of 2016, the Company recorded a deferred tax benefit of \$238 million related to the remeasurement of the Company's December 31, 2015, U.K. deferred income tax liability.

Apache recorded a full valuation allowance against its U.S. net deferred tax assets. Apache will continue to maintain a full valuation allowance on its U.S. net deferred tax assets until there is sufficient evidence to support the reversal of all or some portion of this allowance.

For additional information regarding income taxes, please refer to Note 8—Income Taxes in the Notes to Consolidated Financial Statements set forth in Part IV, Item 15 of this Form 10-K.

### **Capital and Operational Outlook**

Apache currently plans to invest \$2.4 billion in its upstream oil and gas activities in 2019, of which 70 to 75 percent will be allocated within the United States. Apache's planned upstream capital investment excludes a one-third noncontrolling interest of capital investment in Egypt for its share of operations. Apache's \$2.4 billion upstream investment plan represents an approximately 22 percent reduction compared to 2018 levels, as well as a significant reduction from the Company's previous 2019 investment guidance. The revised capital outlook was in response to the rapid fourth quarter 2018 decline in oil prices and Apache's decision to lower its U.S. rig count. With this and other activity reductions, Apache believes the current upstream capital spending for the first quarter of 2019 will underpin its efforts to achieve the full-year capital target.

Despite the significant decrease in planned capital spending, production growth will continue as the Company benefits from productivity and efficiency gains in its core areas. Apache projects fourth quarter 2018 to fourth quarter 2019 production growth rates of 6 to 10 percent, adjusted for the noncontrolling interest in Egypt and tax volumes. The Company expects 12 to 16 percent growth for its U.S. regions. Approximately five percent growth is expected to be Permian Basin oil, which is driven by a continued focus in Apache's core Wildfire, Powell and Azalea development fields. As the result of reduced rig activity in the Alpine High play, the Company's new 2019 Alpine High production volume outlook is 85 to 90 Mboe per day on average for the year. Apache's drilling focus will shift away from dry gas drilling to a higher percentage of rich gas development, primarily in the Northern flank of the field. With expected cryogenic processing capacity being brought on-line throughout the second half of 2019, the Company believes significant uplift in cash margins should be realized.

Over the same time period, forecasts show a shallow decline rate for the international regions given planned investment levels. Egypt and the North Sea operations, however, are anticipated to continue generating cash flow in excess of capital investments. The North Sea will maintain a similar activity set to the prior year. Egypt activity will focus on advancing a large-scale seismic shoot and prospect identification program. The region will also be drilling exploration and delineation wells in each of its new concession areas, thereby establishing a foundation for potential growth.

Assuming WTI oil prices in the \$50 to \$55 per barrel range, Apache anticipates an upstream capital program of \$2.5 billion to \$2.8 billion in 2020 and 2021. Management believes this investment level is capable of generating continued production growth, with the U.S. as the primary driver.

Apache also anticipates additional investments in the continued capital development of the assets of Altus of approximately \$325 million in 2019, approximately \$185 million in 2020, and approximately \$200 million in 2021. The investment will primarily be directed toward the construction of additional gathering, compression, processing, and transmission facilities, including three forecasted cryogenic processing plants expected to be in service during 2019 with combined nameplate capacity of approximately 600 MMcf/d. Additional capacity will be added over the next several years to facilitate production increases from Alpine High and potential third-party volumes. Cash from the Altus transaction and future ALTAM and/or Altus Midstream LP financing activities are expected to fund future development of the Altus assets.

Additionally, Altus Midstream LP and/or its subsidiaries obtained the right, but not the obligation, to exercise options to acquire equity interests in five separate joint venture pipelines (Pipeline Options). The option to enter into a 15 percent ownership stake in the Gulf Coast Express Pipeline LLC (GCX) natural gas pipeline was exercised in December 2018 for \$91 million. Apache anticipates Altus Midstream LP and/or its subsidiaries to exercise the remaining four Pipeline Options in 2019 and early 2020. Assuming each Pipeline Option is exercised, approximately \$1.6 billion of total capital spending by Altus Midstream LP and/or its subsidiaries is estimated for the exercise of these remaining options and the associated capital requirements expected to be incurred until the associated pipelines are in service. This includes approximately \$1.3 billion in 2019 and approximately \$340 million in 2020. The following table provides additional information regarding the exercise of the Pipeline Options:

	<b>EPIC Option<sup>(1)</sup></b>	<b>Salt Creek Option</b>	<b>Shin Oak Option</b>	<b>Permian Highway Option<sup>(2)</sup></b>
<b>Expiration Date</b>	February 1, 2019	January 31, 2020	60 days following in-service date	September 4, 2019
<b>Option Percentage</b>	15%	50%	33%	27%
<b>Estimated Exercise Price<sup>(3)</sup></b>	\$52 million	\$51 million	\$500 million	\$232 million

(1) Subsequent to the balance sheet date, the EPIC Option was exercised on February 1, 2019 and is expected to close in the first quarter of 2019.

(2) Upon exercise of the Permian Highway Pipeline Option, Altus Midstream LP may acquire an additional 1 percent interest in GCX.

(3) Estimated exercise price represents Altus Midstream LP's proportionate share of capital expenditures made with respect to the applicable project prior to such exercise, plus financing charges associated with such capital expenditures (exercise price). There are no costs associated with exercising the Options other than the exercise price. However, Altus Midstream LP and/or its subsidiaries will be required to fund its pro rata share of capital expenditures after the exercise date.

### **Capital Resources and Liquidity.**

Operating cash flows are the Company's primary source of liquidity. We may also elect to utilize available cash on hand, committed borrowing capacity, access to both debt and equity capital markets, or proceeds from the sale of nonstrategic assets for all other liquidity and capital resource needs.

Apache's operating cash flows, both in the short-term and the long-term, are impacted by highly volatile oil and natural gas prices, as well as costs and sales volumes. Significant changes in commodity prices impact Apache's revenues, earnings and cash flows. These changes potentially impact Apache's liquidity if costs do not trend with changes in commodity prices. Historically, costs have trended with commodity prices, albeit on a lag. Sales volumes also impact cash flows; however, they have a less volatile impact in the short term.

Apache's long-term operating cash flows are dependent on reserve replacement and the level of costs required for ongoing operations. Cash investments are required to fund activity necessary to offset the inherent declines in production and proved crude oil and natural gas reserves. Future success in maintaining and growing reserves and production is highly dependent on the success of Apache's drilling program and our ability to add reserves economically. Changes in commodity prices also impact estimated quantities of proved reserves.

Apache believes the liquidity and capital resource alternatives available to the Company, combined with proactive measures to adjust its capital budget to reflect volatile commodity prices and anticipated operating cash flows, will be adequate to fund short-term and long-term operations, including Apache's capital spending program, repayment of debt maturities, payment of dividends, and any amount that may ultimately be paid in connection with commitments and contingencies.

For additional information, please see Part I, Items 1 and 2—Business and Properties and Part I, Item 1A—Risk Factors of this Annual Report on Form 10-K.

## Sources and Uses of Cash

The following table presents the sources and uses of the Company's cash and cash equivalents for the years presented:

	<b>For the Year Ended December 31,</b>		
	<b>2018</b>	<b>2017</b>	<b>2016</b>
	(In millions)		
<b>Sources of Cash and Cash Equivalents:</b>			
Net cash provided by continuing operating activities	\$ 3,777	\$ 2,428	\$ 2,453
Proceeds from Altus transaction	628	—	—
Proceeds from asset divestitures, net of cash divested	138	1,419	134
Fixed-rate debt borrowings	992	—	—
Other	—	—	148
	<u>5,535</u>	<u>3,847</u>	<u>2,735</u>
<b>Uses of Cash and Cash Equivalents:</b>			
Capital expenditures <sup>(1)</sup>	\$ 3,771	\$ 2,582	\$ 1,768
Leasehold and property acquisitions	133	178	181
Joint venture equity interest	91	—	—
Payments on fixed-rate debt	1,370	70	181
Dividends paid	382	380	379
Distributions to noncontrolling interest - Egypt	345	265	293
Shares repurchased	305	—	—
Other	92	81	23
	<u>6,489</u>	<u>3,556</u>	<u>2,825</u>
Increase (decrease) in cash and cash equivalents	<u>\$ (954)</u>	<u>\$ 291</u>	<u>\$ (90)</u>

(1) The table presents capital expenditures on a cash basis; therefore, the amounts may differ from those discussed elsewhere in this document, which include accruals.

### Net Cash Provided by Continuing Operating Activities

Operating cash flows are the Company's primary source of capital and liquidity and are impacted, both in the short-term and the long-term, by volatile oil and natural gas prices. The factors that determine operating cash flows are largely the same as those that affect net earnings, with the exception of non-cash expenses such as DD&A, asset retirement obligation (ARO) accretion, exploratory dry hole expense, asset impairments, and deferred income tax expense.

Net cash provided by continuing operating activities for 2018 totaled \$3.8 billion, up \$1.3 billion from 2017. The increase primarily reflects higher commodity prices during 2018 compared to 2017.

For a detailed discussion of commodity prices, production, and expenses, please see "Results of Operations" in this Item 7. For additional detail on the changes in operating assets and liabilities and the non-cash expenses that do not impact net cash provided by operating activities, please see the Statement of Consolidated Cash Flows in the Consolidated Financial Statements set forth in Part IV, Item 15 of this Form 10-K.

### Altus Transaction and Asset Divestitures

In November 2018, Apache and KAAC completed a previously announced transaction to create a pure-play, Permian Basin to Gulf Coast midstream C-corporation. Upon close, KAAC changed its name to Altus Midstream Company (ALTM) and contributed approximately \$628 million of cash, net of transaction expenses, into its then wholly-owned subsidiary Altus Midstream LP. Apache contributed its Alpine High midstream assets into Altus Midstream LP in exchange for an approximate 79 percent ownership interest in ALTM and Altus Midstream LP (collectively, Altus). Apache fully consolidates the assets and liabilities of Altus. Cash from the Altus transaction and future ALTM and/or Altus Midstream LP financing activities are expected to fund future development of the Altus assets.

Also during 2018, 2017, and 2016, Apache recorded proceeds from divestitures totaling \$138 million, \$1.4 billion, and \$134 million, respectively. For information regarding the Company's acquisitions and divestitures, please see Note 2—Acquisitions and Divestitures in the Notes to Consolidated Financial Statements set forth in Part IV, Item 15 of this Form 10-K.

#### *Fixed-Rate Debt Borrowings*

In August 2018, Apache closed an offering of \$1.0 billion in aggregate principal amount of senior unsecured 4.375% notes due October 15, 2028. The notes are redeemable at any time, in whole or in part, at Apache's option, subject to a make-whole premium. The net proceeds from the sale of the notes of \$992 million were used to purchase certain outstanding notes in cash tender offers, repay notes that matured in September 2018, and for general corporate purposes.

#### *Capital Expenditures and Equity Interest*

During 2018, 2017, and 2016, capital spending for exploration and development (E&D) activities totaled \$3.2 billion, \$2.1 billion, and \$1.6 billion, respectively. Apache's E&D capital spending was focused primarily in its North American onshore regions. Apache's investment in gas gathering, transmission, and processing (GTP) facilities totaled \$581 million, \$530 million, and \$158 million during 2018, 2017, and 2016, respectively.

GTP expenditures over the past three years are nearly all comprised of investments in midstream infrastructure for the Alpine High play, which were subsequently contributed to Altus Midstream LP upon closing of the Altus transaction.

Apache also completed leasehold and property acquisitions for cash totaling \$133 million, \$178 million, and \$181 million in 2018, 2017, and 2016, respectively. Acquisition investments continued to focus on adding new leasehold positions to our North American onshore portfolio.

On December 19, 2018, Altus Midstream LP exercised its option to acquire a 15 percent equity interest in Gulf Coast Express Pipeline LLC (GCX), a Delaware limited liability company, for total cash consideration of \$91 million. GCX is a long-haul natural gas pipeline that is expected to be operational and in-service in the fourth quarter of 2019. Apache will consolidate this joint venture equity interest through ALTM.

#### *Payments on Fixed-Rate Debt*

In August 2018, the Company closed cash tender offers for certain outstanding notes. Apache accepted for purchase \$731 million aggregate principal amount of notes for approximately \$828 million, which included principal, the discount to par, and an early tender premium totaling \$820 million, as well as accrued and unpaid interest of \$8 million. The Company recorded a net loss of \$94 million on extinguishment of debt, including \$5 million of unamortized debt issuance costs and discount, in connection with the note purchases. Apache also made repayments of current year note maturities totaling \$550 million during 2018.

#### *Dividends*

The Company has paid cash dividends on its common stock for 54 consecutive years through 2018. Future dividend payments will depend on the Company's level of earnings, financial requirements, and other relevant factors. Common stock dividends paid during 2018 totaled \$382 million, compared with \$380 million in 2017 and \$379 million in 2016.

#### *Egypt Noncontrolling Interest*

Sinopec International Petroleum Exploration and Production Corporation (Sinopec) holds a one-third minority participation interest in Apache's oil and gas business in Egypt. Apache made cash distributions totaling \$345 million, \$265 million, and \$293 million to Sinopec in 2018, 2017, and 2016, respectively.

#### *Shares Repurchased*

In 2013 and 2014, Apache's Board of Directors authorized the purchase of up to 40 million shares of the Company's common stock. Shares may be purchased either in the open market or through privately negotiated transactions. The Company initiated the buyback program on June 10, 2013, and through December 31, 2018, had repurchased a total of 40 million shares at an average price of \$79.18 per share. During 2018, the Company repurchased a total of 7.8 million shares at an average price of \$38.99 per share. During the fourth quarter of 2018, the Company's Board of Directors authorized the purchase of up to 40 million additional shares of the Company's common stock. The Company is not obligated to acquire any specific number of shares.

## Liquidity

	At December 31,	
	2018	2017
	(In millions)	
Cash and cash equivalents	\$ 714	\$ 1,668
Total debt	8,204	8,484
Equity	8,812	8,791
Available committed borrowing capacity	3,857	3,500
Available committed borrowing capacity - Altus	450	—

### Cash and Cash Equivalents

At December 31, 2018, Apache had \$714 million in cash and cash equivalents, of which approximately \$450 million was held by Altus. The majority of the cash is invested in highly liquid, investment-grade instruments with maturities of three months or less at the time of purchase.

### Debt

At December 31, 2018, outstanding debt, which consisted of notes and debentures, totaled \$8.2 billion, of which, \$150 million matures in 2019, \$393 million matures in 2021, \$687 million matures in 2022, and the remaining matures in years 2023 through 2096. At December 31, 2018, \$150 million of 7.625% senior notes due July 1, 2019 is classified as current debt on the consolidated balance sheet.

On August 23, 2018, Apache closed an offering of \$1.0 billion in aggregate principal amount of senior unsecured 4.375% notes due October 15, 2028. The notes are redeemable at any time, in whole or in part, at Apache's option, subject to a make-whole premium. The net proceeds from the sale of the notes of \$992 million were used to purchase certain outstanding notes in cash tender offers, repay notes that matured in September 2018, and for general corporate purposes.

In August 2017, the Company assumed the obligations of Apache Finance Canada Corporation (AFCC) in respect of \$300 million 7.75% notes due in 2029, which AFCC issued and the Company guaranteed pursuant to the governing indenture. The assumption was permitted by the indenture and effected pursuant to a supplemental indenture thereto. As a result of the assumption, the Company is the obligor under the notes and indenture, and AFCC is released from its obligations thereunder. The \$300 million 7.75% notes historically have been included in the Company's long-term debt; accordingly, the assumption did not change the Company's long-term debt or total debt.

### Available Credit Facilities

In March 2018, Apache entered into a revolving credit facility that matures in March 2023 (subject to Apache's two, one-year extension options) with commitments totaling \$4.0 billion. Apache can increase commitments up to \$5.0 billion by adding new lenders or obtaining the consent of any increasing existing lenders. The facility includes a letter of credit subfacility of up to \$3.0 billion, of which \$2.08 billion was committed as of December 31, 2018. The facility is for general corporate purposes and committed borrowing capacity fully supports Apache's commercial paper program. Letters of credit are available for security needs, including in respect of abandonment obligations assumed in various North Sea acquisitions. As of December 31, 2018, letters of credit aggregating approximately £112.5 million and no borrowings were outstanding under this facility. In February 2019, £109.4 million of these outstanding letters of credit no longer were required and were terminated.

At Apache's option, the interest rate per annum for borrowings under the 2018 facility is either a base rate, as defined, plus a margin, or the London Inter-bank Offered Rate (LIBOR), plus a margin. Apache also pays quarterly a facility fee at a per annum rate on total commitments. The margins and the facility fee vary based upon Apache's senior long-term debt rating. At December 31, 2018, the base rate margin was 0.075 percent, the LIBOR margin was 1.075 percent, and the facility fee was 0.175 percent. A commission is payable quarterly to lenders on the face amount of each outstanding letter of credit at a per annum rate equal to the LIBOR margin then in effect. Customary letter of credit fronting fees and other charges are payable to issuing banks.

The financial covenants of the 2018 credit facility require Apache to maintain an adjusted debt-to-capital ratio of not greater than 60 percent at the end of any fiscal quarter. For purposes of this calculation, capital excludes the effects of non-cash write-downs, impairments, and related charges occurring after June 30, 2015. At December 31, 2018, Apache's debt-to-capital ratio as calculated under the credit facility was 30 percent.

The 2018 facility's negative covenants restrict the ability of Apache and its subsidiaries to create liens securing debt on hydrocarbon-related assets, with exceptions for liens typically arising in the oil and gas industry; liens securing debt incurred to finance the acquisition, construction, improvement, or capital lease of assets, provided that such debt, when incurred, does not exceed the subject purchase price and costs, as applicable, and related expenses; liens on subsidiary assets located outside of the United States and Canada; and liens arising as a matter of law, such as tax and mechanics' liens. Apache also may incur liens on assets if debt secured thereby does not exceed 15 percent of Apache's consolidated net tangible assets, or approximately \$2.9 billion as of December 31, 2018. Negative covenants also restrict Apache's ability to merge with another entity unless it is the surviving entity, dispose of substantially all of its assets, and guarantee debt of non-consolidated entities in excess of the stated threshold.

In November 2018, Altus Midstream LP, an indirectly controlled subsidiary of Apache, entered into a revolving credit facility for general corporate purposes that matures in November 2023 (subject to Altus Midstream LP's two, one-year extension options). The agreement for this facility provides aggregate commitments from a syndicate of banks of \$450 million until (i) the consolidated net income of Altus Midstream LP and its restricted subsidiaries, as adjusted pursuant to the agreement, for three consecutive calendar months equals or exceeds \$175 million on an annualized basis and (ii) Altus Midstream LP has raised at least \$250 million of additional capital (such period, the "Initial Period"). Following the Initial Period, the aggregate commitments equal \$800 million. All aggregate commitments include a letter of credit subfacility of up to \$100 million and a swingline loan subfacility of up to \$100 million. After the Initial Period, Altus Midstream LP may increase commitments up to an aggregate \$1.5 billion by adding new lenders or obtaining the consent of any increasing existing lenders. As of December 31, 2018, no borrowings or letters of credit were outstanding under this facility.

The Altus Midstream LP credit facility is unsecured and is not guaranteed by Apache or any of Apache's other subsidiaries.

There are no clauses in either the agreement for Apache's 2018 credit facility or for Altus Midstream LP's 2018 credit facility that permit the lenders to accelerate payments or refuse to lend based on unspecified material adverse changes. These agreements do not have drawdown restrictions or prepayment obligations in the event of a decline in credit ratings. However, each agreement allows the lenders to accelerate payment maturity and terminate lending and issuance commitments for nonpayment and other breaches, and if a borrower or any of its subsidiaries defaults on other indebtedness in excess of the stated threshold, is insolvent, or has any unpaid, non-appealable judgment against it for payment of money in excess of the stated threshold. Lenders may also accelerate payment maturity and terminate lending and issuance commitments under the applicable agreement if Apache or Altus Midstream LP, as applicable, undergoes a specified change in control or any borrower has specified pension plan liabilities in excess of the stated threshold. Each of Apache and Altus Midstream LP was in compliance with the terms of its 2018 credit facility as of December 31, 2018.

There is no assurance that the financial condition of banks with lending commitments to Apache or Altus Midstream LP will not deteriorate. We closely monitor the ratings of the banks in our bank groups. Having large bank groups allows the Company to mitigate the potential impact of any bank's failure to honor its lending commitment.

#### *Commercial Paper Program*

As of December 31, 2018, Apache has available a \$3.5 billion commercial paper program which, subject to market availability, facilitates Apache borrowing funds for up to 270 days at competitive interest rates. The commercial paper program is fully supported by available borrowing capacity under Apache's 2018 \$4.0 billion committed credit facility. If Apache is unable to issue commercial paper following a significant credit downgrade or dislocation in the market, Apache's 2018 committed credit facility, which matures in 2023, is available as a 100 percent backstop. As of December 31, 2018, Apache had no borrowings under its commercial paper program.

#### *Off-Balance Sheet Arrangements*

Apache enters into customary agreements in the oil and gas industry for drilling rig commitments, firm transportation agreements, and other obligations as described below in "Contractual Obligations" in this Item 7. Other than the off-balance sheet arrangements described herein, Apache does not have any off-balance sheet arrangements with unconsolidated entities that are reasonably likely to materially affect our liquidity or capital resource positions.

## Contractual Obligations

The following table summarizes the Company's contractual obligations as of December 31, 2018. For additional information regarding these obligations, please see Note 7—Debt and Note 9—Commitments and Contingencies in the Notes to Consolidated Financial Statements set forth in Part IV, Item 15 of this Form 10-K.

Contractual Obligations <sup>(1)</sup>	Note Reference	Total	2019	2020-2021	2022-2023	2024 & Beyond
(In millions)						
<b>On-Balance Sheet:</b>						
Debt, at face value	Note 7	\$ 8,299	\$ 150	\$ 393	\$ 1,090	\$ 6,666
Interest payments	Note 7	7,193	407	782	722	5,282
Capital lease <sup>(2)</sup>	Note 9	40	1	3	4	32
<b>Off-Balance Sheet:</b>						
Drilling rigs <sup>(3)</sup>	Note 9	172	102	69	1	—
Purchase obligations <sup>(4)</sup>	Note 9	2,323	220	427	445	1,231
Operating lease obligations <sup>(5)</sup>	Note 9	220	61	64	53	42
<b>Total Contractual Obligations</b>		<b>\$ 18,247</b>	<b>\$ 941</b>	<b>\$ 1,738</b>	<b>\$ 2,315</b>	<b>\$ 13,253</b>

- (1) This table does not include the Company's liability for dismantlement, abandonment, and restoration costs of oil and gas properties or pension or postretirement benefit obligations. For additional information regarding these liabilities, please see Notes 6 and 10, respectively, in the Notes to Consolidated Financial Statements set forth in Part IV, Item 15 of this Form 10-K.
- (2) This represents the Company's capital lease obligation related to its Midland, Texas office building. The imputed interest rate necessary to reduce the net minimum lease payments to present value of the lease term is 4.4 percent or \$16 million as of December 31, 2018.
- (3) Payments associated with the drilling of exploratory wells and development wells net of amounts billed to partners will be capitalized as a component of oil and gas properties, and either depreciated, impaired, or written off as exploration expense.
- (4) Amounts represent any agreements to purchase goods or services that are enforceable and legally binding and that specify all significant terms. These include minimum commitments associated with take-or-pay contracts, NGL processing agreements, drilling work program commitments, and agreements to secure capacity rights on third-party pipelines. Includes amounts related to firm transportation capacity on the Gulf Coast Express Pipeline Project (GCX Project), expected to be in service in the fourth quarter of 2019, and the Permian Highway Pipeline Project, expected to be in service in the fourth quarter of 2020 (refer to Delivery Commitments disclosure in Part I, Items 1 and 2 of this Annual Report on Form 10-K for more information regarding fixed sales contracts related to these pipelines). Amounts exclude certain product purchase obligations related to marketing and trading activities for which there are no minimum purchase requirements or the amounts are not fixed or determinable.
- (5) Amounts include long-term lease payments for office space, aircraft, supply and standby vessels, land leases, and equipment related to exploration, development, and production activities.

As further described above under "Capital and Operational Outlook," Altus Midstream LP and/or its subsidiaries have the right, but not the obligation, to exercise options to acquire equity interest in third-party joint venture pipelines. Upon exercising each individual option, Altus Midstream LP and/or its subsidiaries may be required to fund future capital expenditures for its equity interest share in the development of the pipeline as referenced. In December 2018, Altus Midstream LP exercised its option for a 15 percent equity interest in the GCX Pipeline and estimates it will incur approximately \$175 million of additional capital contributions during 2019 for its associated interest with the remaining construction costs.

Apache is also subject to various contingent obligations that become payable only if certain events or rulings were to occur. The inherent uncertainty surrounding the timing of and monetary impact associated with these events or rulings prevents any meaningful accurate measurement, which is necessary to assess settlements resulting from litigation. Apache's management believes that it has adequately reserved for its contingent obligations, including approximately \$4 million for environmental remediation and approximately \$35 million for various contingent legal liabilities. For a detailed discussion of the Company's environmental and legal contingencies, please see Note 9—Commitments and Contingencies in the Notes to Consolidated Financial Statements set forth in Part IV, Item 15 of this Form 10-K.

In addition to our recorded environmental and legal liabilities, we have potential exposure to future obligations related to divested properties. Apache has divested various leases, wells, and facilities located in the Gulf of Mexico where the purchasers typically assume all obligations to plug, abandon, and decommission the associated wells, structures, and facilities acquired. One or more of the counterparties in these transactions could, either as a result of the severe decline in oil and natural gas prices or other factors related to the historical or future operations of their respective businesses, face financial problems that may have a significant impact on their solvency and ability to continue as a going concern. If a purchaser of our Gulf of Mexico assets becomes the subject of a case or proceeding under relevant insolvency laws or otherwise fails to perform required abandonment obligations, Apache could be required to perform such actions under applicable federal laws and regulations. In such event, we may be forced to use available cash to cover the costs of such liabilities and obligations should they arise.

With respect to oil and gas operations in the Gulf of Mexico, the Bureau of Ocean Energy Management (BOEM) has issued a Notice to Lessees (NTL No. 2016-N01) significantly revising the obligations of companies operating in the Gulf of Mexico to provide supplemental assurances of performance with respect to plugging, abandonment, and decommissioning obligations associated with wells, platforms, structures, and facilities located upon or used in connection with such companies' oil and gas leases. While requirements under the NTL have not yet been fully implemented by BOEM, the NTL will likely require that Apache provide additional security to BOEM with respect to plugging, abandonment, and decommissioning obligations relating to Apache's current ownership interests in various Gulf of Mexico leases. We are working closely with BOEM to make arrangements for the provision of such additional required security, if such security becomes necessary under the NTL. Additionally, we are not able to predict the effect that these changes might have on counterparties to which Apache has sold Gulf of Mexico assets or with whom Apache has joint ownership. Such changes could cause the bonding obligations of such parties to increase substantially, thereby causing a significant impact on the counterparties' solvency and ability to continue as a going concern.

### **Insurance Program**

We maintain insurance policies that include coverage for physical damage to our assets, general liabilities, workers' compensation, employers' liability, sudden and accidental pollution, and other risks. Our insurance coverage is subject to deductibles or retentions that we must satisfy prior to recovering on insurance. Additionally, our insurance is subject to policy exclusions and limitations. There is no assurance that our insurance will adequately protect us against liability from all potential consequences and damages.

Our current insurance policies covering physical damage to our assets provide up to \$1 billion in coverage per occurrence. These policies also provide sudden and accidental pollution coverage. Coverage for Gulf of Mexico named windstorms is excluded from this coverage.

Our current insurance policies covering general liabilities provide approximately \$500 million in coverage, scaled to Apache's interest. Our service agreements, including drilling contracts, generally indemnify Apache for injuries and death of the service provider's employees as well as subcontractors hired by the service provider.

Apache purchases multi-year political risk insurance from the Overseas Private Investment Corporation (OPIC) and highly-rated insurers covering a portion of its investments in Egypt for losses arising from confiscation, nationalization, and expropriation risks. The Islamic Corporation for the Insurance of Investment and Export Credit (ICIEC, an agency of the Islamic Development Bank) reinsures OPIC. In the aggregate, these insurance policies provide up to \$750 million of coverage to Apache, subject to policy terms and conditions and a retention of approximately \$1 billion.

Apache has an additional insurance policy with OPIC, which, subject to policy terms and conditions, provides up to \$300 million of coverage through 2024 for losses arising from (1) non-payment by EGPC of arbitral awards covering amounts owed Apache on past due invoices and (2) expropriation of exportable petroleum in the event that actions taken by the government of Egypt prevent Apache from exporting our share of production. The Multilateral Investment Guarantee Agency (MIGA), a member of the World Bank Group, provides \$150 million in reinsurance to OPIC.

Future insurance coverage for our industry could increase in cost and may include higher deductibles or retentions. In addition, some forms of insurance may become unavailable.

### **Critical Accounting Policies and Estimates**

Apache prepares its financial statements and the accompanying notes in conformity with accounting principles generally accepted in the United States of America, which require management to make estimates and assumptions about future events that affect the reported amounts in the financial statements and the accompanying notes. Apache identifies certain accounting policies as critical based on, among other things, their impact on the portrayal of Apache's financial condition, results of operations, or liquidity and the degree of difficulty, subjectivity, and complexity in their deployment. Critical accounting policies cover accounting matters that are inherently uncertain because the future resolution of such matters is unknown. Management routinely discusses the development, selection, and disclosure of each of the critical accounting policies. The following is a discussion of Apache's most critical accounting policies.

#### ***Reserves Estimates***

Proved oil and gas reserves are the estimated quantities of natural gas, crude oil, condensate, and NGLs that geological and engineering data demonstrate with reasonable certainty to be recoverable in future years from known reservoirs under existing conditions, operating conditions, and government regulations.

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 recompletion. 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 reserves only if a development plan has been adopted indicating that they are scheduled to be drilled within five years, unless specific circumstances justify a longer time.

Despite the inherent imprecision in these engineering estimates, our reserves are used throughout our financial statements. For example, since we use the units-of-production method to amortize our oil and gas properties, the quantity of reserves could significantly impact our DD&A expense. A material adverse change in the estimated volumes of reserves could result in property impairments. Finally, these reserves are the basis for our supplemental oil and gas disclosures.

Reserves are calculated using an unweighted arithmetic average of commodity prices in effect on the first day of each of the previous 12 months, held flat for the life of the production, except where prices are defined by contractual arrangements. Operating costs, production and ad valorem taxes and future development costs are based on current costs with no escalation.

Apache has elected not to disclose probable and possible reserves or reserve estimates in this filing.

#### ***Purchase Price Allocation***

Accounting for the acquisition of a business requires the allocation of the purchase price to the various assets and liabilities of the acquired business and recording deferred taxes for any differences between the allocated values and tax basis of assets and liabilities. Any excess of the purchase price over the amounts assigned to assets and liabilities is recorded as goodwill.

The purchase price allocation is accomplished by recording each asset and liability at its estimated fair value. Estimated deferred taxes are based on available information concerning the tax basis of the acquired company's assets and liabilities and tax-related carryforwards at the merger date, although such estimates may change in the future as additional information becomes known. The amount of goodwill recorded in any particular business combination can vary significantly depending upon the values attributed to assets acquired and liabilities assumed relative to the total acquisition cost.

When estimating the fair values of assets acquired and liabilities assumed, the Company must apply various assumptions. The most significant assumptions relate to the estimated fair values assigned to proved and unproved crude oil and natural gas properties. To estimate the fair values of these properties, the Company prepares estimates of crude oil and natural gas reserves as described above in "Reserve Estimates" of this Item 7. Estimated fair values assigned to assets acquired can have a significant effect on results of operations in the future.

#### ***Oil and Gas Exploration Costs***

Apache accounts for its exploration and production activities using the successful efforts method of accounting. Costs of acquiring unproved and proved oil and gas leasehold acreage are capitalized. Costs of drilling and equipping productive wells, including development dry holes, and related production facilities are also capitalized. Oil and gas exploration costs, other than the costs of drilling exploratory wells, are charged to expense as incurred. Costs associated with drilling an exploratory well are initially capitalized, or suspended, pending a determination as to whether proved reserves have been found. On a quarterly basis, management reviews the status of all suspended exploratory drilling costs in light of ongoing exploration activities and determines whether the Company is making sufficient progress in its ongoing exploration and appraisal efforts. If management determines that future appraisal drilling or development activities are unlikely to occur, associated suspended exploratory well costs are recorded as dry hole expense and reported in exploration expense in the statement of consolidated operations. Otherwise, the costs of exploratory wells remain capitalized.

#### ***Long-Lived Assets***

Long-lived assets used in operations, including proved oil and gas properties, are assessed for impairment whenever changes in facts and circumstances indicate a possible significant deterioration in future cash flows expected to be generated by an asset group. Individual assets are grouped for impairment purposes based on a judgmental assessment of the lowest level for which there are identifiable cash flows that are largely independent of the cash flows of other groups of assets. If there is an indication the carrying amount of an asset may not be recovered, the asset is assessed by management through an established process in which changes to significant assumptions such as prices, volumes, and future development plans are reviewed. If, upon review, the sum of the undiscounted pre-tax cash flows is less than the carrying value of the asset group, the carrying value is written down to estimated fair value. Because there usually is a lack of quoted market prices for long-lived assets, the fair value of impaired assets is assessed by management using the income approach.

Under the income approach, the fair value of each asset group is estimated based on the present value of expected future cash flows. The income approach is dependent on a number of factors including estimates of forecasted revenue and operating costs, proved reserves, the success of future exploration for and development of unproved reserves, discount rates, and other variables. Key assumptions used in developing a discounted cash flow model described above include estimated quantities of crude oil and natural gas reserves; estimates of market prices considering forward commodity price curves as of the measurement date; and estimates of operating, administrative, and capital costs adjusted for inflation. We discount the resulting future cash flows using a discount rate believed to be consistent with those applied by market participants.

To assess the reasonableness of our fair value estimate, when available we use a market approach to compare the fair value to similar assets. This requires management to make certain judgments about the selection of comparable assets, recent comparable asset transactions, and transaction premiums.

Although we base the fair value estimate of each asset group on assumptions we believe to be reasonable, those assumptions are inherently unpredictable and uncertain, and actual results could differ from the estimate. Negative revisions of estimated reserves quantities, increases in future cost estimates, divestiture of a significant component of the asset group, or sustained decreases in crude oil or natural gas prices could lead to a reduction in expected future cash flows and possibly an additional impairment of long-lived assets in future periods.

Over the past several years, the Company has experienced substantial volatility in commodity prices, which impacted our future development plans and operating cash flows. As such, we recorded impairments of certain proved oil and gas properties and gathering, transmission, and processing facilities in 2018 and 2016. For discussion of these impairments, see “Fair Value Measurements” of Note 1—Summary of Significant Accounting Policies in the Notes to Consolidated Financial Statements.

### ***Asset Retirement Obligation (ARO)***

The Company has significant obligations to remove tangible equipment and restore land or seabed at the end of oil and gas production operations. Apache’s removal and restoration obligations are primarily associated with plugging and abandoning wells and removing and disposing of offshore oil and gas platforms in the North Sea and Gulf of Mexico. Estimating the future restoration and removal costs is difficult and requires management to make estimates and judgments. Asset removal technologies and costs are constantly changing, as are regulatory, political, environmental, safety, and public relations considerations.

ARO associated with retiring tangible long-lived assets is recognized as a liability in the period in which the legal obligation is incurred and becomes determinable. The liability is offset by a corresponding increase in the underlying asset. The ARO liability reflects the estimated present value of the amount of dismantlement, removal, site reclamation, and similar activities associated with Apache’s oil and gas properties. The Company utilizes current retirement costs to estimate the expected cash outflows for retirement obligations. Inherent in the present value calculation are numerous assumptions and judgments including the ultimate settlement amounts, inflation factors, credit-adjusted discount rates, timing of settlement, and changes in the legal, regulatory, environmental, and political environments. Accretion expense is recognized over time as the discounted liability is accreted to its expected settlement value.

### ***Income Taxes***

Our oil and gas exploration and production operations are subject to taxation on income in numerous jurisdictions worldwide. We record deferred tax assets and liabilities to account for the expected future tax consequences of events that have been recognized in our financial statements and our tax returns. We routinely assess the ability to realize our deferred tax assets. If we conclude that it is more likely than not that some portion or all of the deferred tax assets will not be realized under accounting standards, the tax asset would be reduced by a valuation allowance. Numerous judgments and assumptions are inherent in the determination of future taxable income, including factors such as future operating conditions (particularly as related to prevailing oil and gas prices).

The Company regularly assesses and, if required, establishes accruals for uncertain tax positions that could result from assessments of additional tax by taxing jurisdictions in countries where the Company operates. The Company recognizes a tax benefit from an uncertain tax position when it is more likely than not that the position will be sustained upon examination, based on the technical merits of the position. These accruals for uncertain tax positions are subject to a significant amount of judgment and are reviewed and adjusted on a periodic basis in light of changing facts and circumstances considering the progress of ongoing tax audits, case law, and any new legislation. The Company believes that its accruals for uncertain tax positions are adequate in relation to the potential for any additional tax assessments.

## **ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK**

The primary objective of the following information is to provide forward-looking quantitative and qualitative information about our exposure to market risk. The term market risk relates to the risk of loss arising from adverse changes in oil, gas, and NGL prices, interest rates, or foreign currency and adverse governmental actions. The disclosures are not meant to be precise indicators of expected future losses, but rather indicators of reasonably possible losses. The forward-looking information provides indicators of how we view and manage our ongoing market risk exposures.

### **Commodity Risk**

The Company's revenues, earnings, cash flow, capital investments and, ultimately, future rate of growth are highly dependent on the prices we receive for our crude oil, natural gas and NGLs, which have historically been very volatile because of unpredictable events such as economic growth or retraction, weather and political climate. The Company's average crude oil realizations have increased 27 percent to \$65.30 per barrel in 2018 from \$51.46 per barrel in 2017. The Company's average natural gas price realizations have decreased 5 percent to \$2.61 per Mcf in 2018 from \$2.74 per Mcf in 2017. Based on average daily production for 2018, a \$1.00 per barrel change in the weighted average realized oil price would have increased or decreased revenues for the year by approximately \$90 million, and a \$0.10 per Mcf change in the weighted average realized price of natural gas would have increased or decreased revenues for the year by approximately \$35 million.

Apache periodically enters into derivative positions on a portion of its projected oil and natural gas production through a variety of financial and physical arrangements intended to manage fluctuations in cash flows resulting from changes in commodity prices. Apache periodically uses futures contracts, swaps, and options to mitigate commodity price risk. Apache does not hold or issue derivative instruments for trading purposes. As of December 31, 2018, the Company had open natural gas derivatives in an asset position with a fair value of \$69 million. A 10 percent increase in gas prices would increase the asset by approximately \$2 million, while a 10 percent decrease in prices would decrease the asset by approximately \$1 million. As of December 31, 2018, the Company had open oil derivatives to protect basis differentials on Permian Basin production. These derivatives were in a liability position with a fair value of \$25 million. A 10 percent increase in oil prices would decrease the liability by approximately \$4 million, while a 10 percent decrease in prices would increase the liability by approximately \$4 million. These fair value changes assume volatility based on prevailing market parameters at December 31, 2018. See Note 4—Derivative Instruments and Hedging Activities in the Notes to Consolidated Financial Statements set forth in Part IV, Item 15 of this Form 10-K for notional volumes and terms with the Company's derivative contracts.

### **Interest Rate Risk**

At December 31, 2018, Apache had approximately \$8.1 billion of long-term debt (excluding capital lease and other obligations) outstanding, all of which was fixed-rate debt, with a weighted average interest rate of 4.89 percent. Although near-term changes in interest rates may affect the fair value of Apache's fixed-rate debt, they do not expose the Company to the risk of earnings or cash flow loss associated with that debt. Apache is also exposed to interest rate risk related to its interest-bearing cash and cash equivalents balances and amounts outstanding under its credit facilities. As of December 31, 2018, the Company's cash and cash equivalents totaled approximately \$714 million, approximately 98 percent of which was invested in money market funds and short-term investments with major financial institutions. A change in the interest rate applicable to the Company's short-term investments would have a de minimis impact on earnings and cash flows but could impact interest costs associated with future debt issuances or any future borrowings under its revolving credit facility and/or money market lines of credit. Apache currently has no interest rate derivative instruments outstanding. However, the Company may enter into interest rate derivative instruments in the future if it determines that it is necessary to invest in such instruments in order to mitigate its interest rate risk.

### **Foreign Currency Risk**

The Company's cash activities relating to certain international operations is based on the U.S. dollar equivalent of cash flows measured in foreign currencies. Our North Sea production is sold under U.S. dollar contracts, and the majority of costs incurred are paid in British pounds. In Egypt, substantially all oil and gas production is sold under U.S. dollar contracts, and the majority of the costs incurred are denominated in U.S. dollars. Revenue and disbursement transactions denominated in British pounds are converted to U.S. dollar equivalents based on the average exchange rates during the period.

Foreign currency gains and losses also arise when monetary assets and monetary liabilities denominated in foreign currencies are translated at the end of each month. Currency gains and losses are included as either a component of "Other" under "Revenues and Other" or, as is the case when we re-measure our foreign tax liabilities, as a component of the Company's provision for income tax expense on the statement of consolidated operations. A 10 percent strengthening or weakening of the British pound against the U.S. dollar as of December 31, 2018, would result in a foreign currency net loss or gain, respectively, of approximately \$1 million.

We have outstanding foreign exchange contracts with a total notional amount of £150 million that are used to reduce our exposure to fluctuating foreign exchange rates for the British pound. A 10 percent strengthening of the British pound against the U.S. dollar would result in a foreign currency net gain of \$6 million, while a 10 percent weakening of the British pound against the U.S. dollar would result in a loss of \$3 million.

#### **ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA**

The financial statements and supplementary financial information required to be filed under this Item 8 are presented on pages F-1 through F-60 in Part IV, Item 15 of this Form 10-K and are incorporated herein by reference.

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

The financial statements for the fiscal years ended December 31, 2018, 2017, and 2016, included in this report, have been audited by Ernst & Young LLP, independent registered public accounting firm, as stated in their audit report appearing herein. There have been no changes in or disagreements with the accountants during the periods presented.

#### **ITEM 9A. CONTROLS AND PROCEDURES**

##### **Disclosure Controls and Procedures**

John J. Christmann IV, the Company's Chief Executive Officer and President, in his capacity as principal executive officer, and Stephen J. Riney, the Company's Executive Vice President and Chief Financial Officer, in his capacity as principal financial officer, evaluated the effectiveness of our disclosure controls and procedures as of December 31, 2018, the end of the period covered by this report. Based on that evaluation and as of the date of that evaluation, these officers concluded that the Company's disclosure controls and procedures were effective, providing effective means to ensure that the information we are required to disclose under applicable laws and regulations is recorded, processed, summarized, and reported within the time periods specified in the Commission's rules and forms and accumulated and communicated to our management, including our principal executive officer and principal financial officer, to allow timely decisions regarding required disclosure. We made no changes in internal controls over financial reporting during the quarter ending December 31, 2018, that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

We periodically review the design and effectiveness of our disclosure controls, including compliance with various laws and regulations that apply to our operations both inside and outside the United States. We make modifications to improve the design and effectiveness of our disclosure controls and may take other corrective action, if our reviews identify deficiencies or weaknesses in our controls.

##### **Management's Annual Report on Internal Control Over Financial Reporting; Attestation Report of the Registered Public Accounting Firm**

The management report called for by Item 308(a) of Regulation S-K is incorporated herein by reference to the "Report of Management on Internal Control Over Financial Reporting," included on Page F-1 in Part IV, Item 15 of this Form 10-K.

The independent auditors attestation report called for by Item 308(b) of Regulation S-K is incorporated herein by reference to the "Report of Independent Registered Public Accounting Firm," included on Page F-3 in Part IV, Item 15 of this Form 10-K.

##### **Changes in Internal Control over Financial Reporting**

There was no change in our internal controls over financial reporting during the quarter ending December 31, 2018, that has materially affected, or is reasonably likely to materially affect, our internal controls over financial reporting.

#### **ITEM 9B. OTHER INFORMATION**

None.

## PART III

### ITEM 10. **DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE**

The information set forth under the captions “Nominees for Election as Directors,” “Continuing Directors,” “Executive Officers of the Company,” and “Securities Ownership and Principal Holders” in the proxy statement relating to the Company’s 2019 annual meeting of shareholders (the Proxy Statement) is incorporated herein by reference.

#### **Code of Business Conduct**

Pursuant to Rule 303A.10 of the NYSE and Rule 4350(n) of the NASDAQ, we are required to adopt a code of business conduct and ethics for our directors, officers, and employees. In February 2004, the Board of Directors adopted the Code of Business Conduct and Ethics (Code of Conduct), and revised it in September 2017. The revised Code of Conduct also meets the requirements of a code of ethics under Item 406 of Regulation S-K. You can access the Company’s Code of Conduct on the Governance page of the Company’s website at [www.apachecorp.com](http://www.apachecorp.com). Any shareholder who so requests may obtain a printed copy of the Code of Conduct by submitting a request to the Company’s corporate secretary at the address on the cover of this Form 10-K. Changes in and waivers to the Code of Conduct for the Company’s directors, chief executive officer and certain senior financial officers will be posted on the Company’s website within five business days and maintained for at least 12 months. Information on our website or any other website is not incorporated by reference into, and does not constitute a part of, this Annual Report on Form 10-K.

### ITEM 11. **EXECUTIVE COMPENSATION**

The information set forth under the captions “Compensation Discussion and Analysis,” “Summary Compensation Table,” “Grants of Plan Based Awards Table,” “Outstanding Equity Awards at Fiscal Year-End Table,” “Option Exercises and Stock Vested Table,” “Non-Qualified Deferred Compensation Table,” “Potential Payments Upon Termination or Change in Control” and “Director Compensation Table” in the Proxy Statement is incorporated herein by reference.

### ITEM 12. **SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS**

The information set forth under the captions “Securities Ownership and Principal Holders” and “Equity Compensation Plan Information” in the Proxy Statement is incorporated herein by reference.

### ITEM 13. **CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE**

The information set forth under the captions “Certain Business Relationships and Transactions” and “Director Independence” in the Proxy Statement is incorporated herein by reference.

### ITEM 14. **PRINCIPAL ACCOUNTING FEES AND SERVICES**

The information set forth under the caption “Ratification of Appointment of Independent Auditors” in the Proxy Statement is incorporated herein by reference.

PART IV

**ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES**

(a) Documents included in this report:

1. Financial Statements

Report of management on internal control over financial reporting	F-1
Report of independent registered public accounting firm	F-2
Report of independent registered public accounting firm	F-3
Statement of consolidated operations for each of the three years in the period ended December 31, 2018	F-4
Statement of consolidated comprehensive income (loss) for each of the three years in the period ended December 31, 2018	F-5
Statement of consolidated cash flows for each of the three years in the period ended December 31, 2018	F-6
Consolidated balance sheet as of December 31, 2018 and 2017	F-7
Statement of consolidated changes in equity for each of the three years in the period ended December 31, 2018	F-8
Notes to consolidated financial statements	F-9

2. Financial Statement Schedules

Financial statement schedules have been omitted because they are either not required, not applicable or the information required to be presented is included in the Company's financial statements and related notes.

3. Exhibits

See Index to Exhibits of this report.

**ITEM 16. FORM 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, hereunto duly authorized.

APACHE CORPORATION

/s/ John J. Christmann IV  
John J. Christmann IV  
*Chief Executive Officer and President*

Dated: February 28, 2019

### POWER OF ATTORNEY

The officers and directors of Apache Corporation, whose signatures appear below, hereby constitute and appoint John J. Christmann IV, Stephen J. Riney, and Rebecca A. Hoyt, and each of them (with full power to each of them to act alone), the true and lawful attorney-in-fact to sign and execute, on behalf of the undersigned, any amendment(s) to this report and each of the undersigned does hereby ratify and confirm all that said attorneys shall do or cause to be done by virtue thereof.

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.

<b><u>Name</u></b>	<b><u>Title</u></b>	<b><u>Date</u></b>
<u>/s/ John J. Christmann IV</u> John J. Christmann IV	Director, Chief Executive Officer, and President (principal executive officer)	February 28, 2019
<u>/s/ Stephen J. Riney</u> Stephen J. Riney	Executive Vice President and Chief Financial Officer (principal financial officer)	February 28, 2019
<u>/s/ Rebecca A. Hoyt</u> Rebecca A. Hoyt	Senior Vice President, Chief Accounting Officer, and Controller (principal accounting officer)	February 28, 2019
<u>/s/ Annell R. Bay</u> Annell R. Bay	Director	February 28, 2019
<u>/s/ Chansoo Joun</u> Chansoo Joun	Director	February 28, 2019
<u>/s/ Rene R. Joyce</u> Rene R. Joyce	Director	February 28, 2019
<u>/s/ George D. Lawrence</u> George D. Lawrence	Director	February 28, 2019
<u>/s/ John E. Lowe</u> John E. Lowe	Director, Non-Executive Chairman of the Board	February 28, 2019
<u>/s/ William C. Montgomery</u> William C. Montgomery	Director	February 28, 2019
<u>/s/ Amy H. Nelson</u> Amy H. Nelson	Director	February 28, 2019
<u>/s/ Daniel W. Rabun</u> Daniel W. Rabun	Director	February 28, 2019
<u>/s/ Peter A. Ragauss</u> Peter A. Ragauss	Director	February 28, 2019

## REPORT OF MANAGEMENT ON INTERNAL CONTROL OVER FINANCIAL REPORTING

Management of the Company is responsible for the preparation and integrity of the consolidated financial statements appearing in this annual report on Form 10-K. The financial statements were prepared in conformity with accounting principles generally accepted in the United States and include amounts that are based on management's best estimates and judgments.

Management of the Company is responsible for establishing and maintaining effective internal control over financial reporting as such term is defined in Rule 13a-15(f) under the Securities Exchange Act of 1934. The Company's internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of the consolidated financial statements. Our internal control over financial reporting is supported by a program of internal audits and appropriate reviews by management, written policies and guidelines, careful selection and training of qualified personnel and a written code of business conduct adopted by our Company's board of directors, applicable to all Company directors and all officers and employees of our Company and subsidiaries.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements and even when determined to be effective, can only provide reasonable assurance with respect to financial statement preparation and presentation. 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.

Management assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2018. In making this assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission in *Internal Control – Integrated Framework (2013)*. Based on our assessment, management believes that the Company maintained effective internal control over financial reporting as of December 31, 2018.

The Company's independent auditors, Ernst & Young LLP, a registered public accounting firm, are appointed by the Audit Committee of the Company's board of directors. Ernst & Young LLP have audited and reported on the consolidated financial statements of Apache Corporation and subsidiaries and the effectiveness of the Company's internal control over financial reporting. The reports of the independent auditors follow this report on pages F-2 and F-3.

/s/ John J. Christmann IV  
*Chief Executive Officer and President*  
*(principal executive officer)*

/s/ Stephen J. Riney  
*Executive Vice President and Chief Financial Officer*  
*(principal financial officer)*

/s/ Rebecca A. Hoyt  
*Senior Vice President, Chief Accounting Officer and Controller*  
*(principal accounting officer)*

Houston, Texas  
February 28, 2019

## REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and the Board of Directors of Apache Corporation:

### Opinion on Internal Control Over Financial Reporting

We have audited Apache Corporation and subsidiaries' 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, Apache Corporation and subsidiaries (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 the Company as of December 31, 2018 and 2017, the related statements of consolidated operations, comprehensive income (loss), cash flows and changes in equity for each of the three years in the period ended December 31, 2018, and the related notes and our report dated February 28, 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 Report of Management 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

Houston, Texas  
February 28, 2019

## REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and the Board of Directors of Apache Corporation:

### Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Apache Corporation and subsidiaries (the Company) as of December 31, 2018 and 2017, the related statements of consolidated operations, comprehensive income (loss), cash flows, and changes in equity 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 28, 2019 expressed an unqualified opinion thereon.

### 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 2002.

Houston, Texas  
February 28, 2019

**APACHE CORPORATION AND SUBSIDIARIES**  
**STATEMENT OF CONSOLIDATED OPERATIONS**

	<b>For the Year Ended December 31,</b>		
	<b>2018</b>	<b>2017</b>	<b>2016</b>
	<b>(In millions, except per common share data)</b>		
<b>REVENUES AND OTHER:</b>			
Oil and gas production revenues:			
Oil revenues	\$ 5,846	\$ 4,598	\$ 4,172
Natural gas revenues	919	959	967
Natural gas liquids revenues	583	330	228
	<u>7,348</u>	<u>5,887</u>	<u>5,367</u>
Derivative instrument losses, net	(17)	(135)	—
Gain on divestitures	23	627	21
Other	70	44	(34)
	<u>7,424</u>	<u>6,423</u>	<u>5,354</u>
<b>OPERATING EXPENSES:</b>			
Lease operating expenses	1,439	1,384	1,494
Gathering, transmission, and processing	348	195	200
Taxes other than income	215	151	126
Exploration	503	549	473
General and administrative	431	395	410
Transaction, reorganization, and separation	28	16	39
Depreciation, depletion, and amortization	2,405	2,280	2,618
Asset retirement obligation accretion	108	130	156
Impairments	511	8	1,103
Financing costs, net	478	397	417
	<u>6,466</u>	<u>5,505</u>	<u>7,036</u>
<b>NET INCOME (LOSS) FROM CONTINUING OPERATIONS BEFORE INCOME TAXES</b>	<b>958</b>	<b>918</b>	<b>(1,682)</b>
Current income tax provision	894	595	391
Deferred income tax benefit	(222)	(1,180)	(833)
<b>NET INCOME (LOSS) FROM CONTINUING OPERATIONS INCLUDING NONCONTROLLING INTEREST</b>	<b>286</b>	<b>1,503</b>	<b>(1,240)</b>
Net loss from discontinued operations, net of tax	—	—	(33)
<b>NET INCOME (LOSS) INCLUDING NONCONTROLLING INTEREST</b>	<b>286</b>	<b>1,503</b>	<b>(1,273)</b>
Net income attributable to noncontrolling interest - Egypt	245	199	132
Net income attributable to noncontrolling interest - Altus	1	—	—
<b>NET INCOME (LOSS) ATTRIBUTABLE TO COMMON STOCK</b>	<b>\$ 40</b>	<b>\$ 1,304</b>	<b>\$ (1,405)</b>
<b>NET INCOME (LOSS) ATTRIBUTABLE TO COMMON SHAREHOLDERS:</b>			
Net income (loss) from continuing operations attributable to common shareholders	\$ 40	\$ 1,304	\$ (1,372)
Net loss from discontinued operations	—	—	(33)
<b>Net income (loss) attributable to common shareholders</b>	<b>\$ 40</b>	<b>\$ 1,304</b>	<b>\$ (1,405)</b>
<b>NET INCOME (LOSS) PER COMMON SHARE:</b>			
Basic net income (loss) from continuing operations per share	\$ 0.11	\$ 3.42	\$ (3.62)
Basic net loss from discontinued operations per share	—	—	(0.09)
<b>Basic net income (loss) per share</b>	<b>\$ 0.11</b>	<b>\$ 3.42</b>	<b>\$ (3.71)</b>
<b>DILUTED NET INCOME (LOSS) PER COMMON SHARE:</b>			
Diluted net income (loss) from continuing operations per share	\$ 0.11	\$ 3.41	\$ (3.62)
Diluted net loss from discontinued operations per share	—	—	(0.09)
<b>Diluted net income (loss) per share</b>	<b>\$ 0.11</b>	<b>\$ 3.41</b>	<b>\$ (3.71)</b>
<b>WEIGHTED-AVERAGE NUMBER OF COMMON SHARES OUTSTANDING:</b>			
Basic	382	381	379
Diluted	384	383	379
<b>DIVIDENDS DECLARED PER COMMON SHARE</b>	<b>\$ 1.00</b>	<b>\$ 1.00</b>	<b>\$ 1.00</b>

The accompanying notes to consolidated financial statements are an integral part of this statement.

**APACHE CORPORATION AND SUBSIDIARIES**  
**STATEMENT OF CONSOLIDATED COMPREHENSIVE INCOME (LOSS)**

	<b>For the Year Ended December 31,</b>		
	<b>2018</b>	<b>2017</b>	<b>2016</b>
	(In millions)		
NET INCOME (LOSS) INCLUDING NONCONTROLLING INTEREST	\$ 286	\$ 1,503	\$ (1,273)
OTHER COMPREHENSIVE INCOME (LOSS):			
Pension and postretirement benefit plan, net of tax	—	7	7
Currency translation adjustment	—	109	—
	—	116	7
COMPREHENSIVE INCOME (LOSS) INCLUDING NONCONTROLLING INTEREST	286	1,619	(1,266)
Comprehensive income attributable to noncontrolling interest - Egypt	245	199	132
Comprehensive income attributable to noncontrolling interest - Altus	1	—	—
COMPREHENSIVE INCOME (LOSS) ATTRIBUTABLE TO COMMON STOCK	\$ 40	\$ 1,420	\$ (1,398)

The accompanying notes to consolidated financial statements are an integral part of this statement.

**APACHE CORPORATION AND SUBSIDIARIES**  
**STATEMENT OF CONSOLIDATED CASH FLOWS**

	For the Year Ended December 31,		
	2018	2017	2016
(In millions)			
<b>CASH FLOWS FROM OPERATING ACTIVITIES:</b>			
Net income (loss) including noncontrolling interest	\$ 286	\$ 1,503	\$ (1,273)
Adjustments to reconcile net income (loss) to net cash provided by operating activities:			
Loss from discontinued operations	—	—	33
Unrealized derivative instrument losses (gains), net	(103)	59	—
Gain on divestitures	(23)	(627)	(21)
Exploratory dry hole expense and unproved leasehold impairments	351	429	353
Depreciation, depletion, and amortization	2,405	2,280	2,618
Asset retirement obligation accretion	108	130	156
Impairments	511	8	1,103
Benefit from deferred income taxes	(222)	(1,180)	(833)
Loss from extinguishment of debt	94	1	1
Other	125	145	163
Changes in operating assets and liabilities:			
Receivables	150	(270)	126
Inventories	(6)	32	(27)
Drilling advances	(11)	(128)	91
Deferred charges and other	83	(58)	115
Accounts payable	77	63	(63)
Accrued expenses	5	4	(9)
Deferred credits and noncurrent liabilities	(53)	37	(80)
NET CASH PROVIDED BY CONTINUING OPERATING ACTIVITIES	3,777	2,428	2,453
NET CASH USED IN DISCONTINUED OPERATIONS	—	—	(23)
NET CASH PROVIDED BY OPERATING ACTIVITIES	3,777	2,428	2,430
<b>CASH FLOWS FROM INVESTING ACTIVITIES:</b>			
Additions to oil and gas property	(3,190)	(2,052)	(1,610)
Additions to gas gathering, transmission, and processing facilities	(581)	(530)	(158)
Leasehold and property acquisitions	(133)	(178)	(181)
Joint venture equity interest	(91)	—	—
Proceeds from sale of Canadian assets, net of cash divested	—	661	—
Proceeds from sale of oil and gas properties, other	138	758	134
Other, net	(87)	(75)	155
NET CASH USED IN INVESTING ACTIVITIES	(3,944)	(1,416)	(1,660)
<b>CASH FLOWS FROM FINANCING ACTIVITIES:</b>			
Fixed rate debt borrowings	992	—	—
Payments on fixed-rate debt	(1,370)	(70)	(181)
Proceeds from Altus transaction	628	—	—
Distributions to noncontrolling interest - Egypt	(345)	(265)	(293)
Dividends paid	(382)	(380)	(379)
Treasury stock activity, net	(305)	—	—
Other	(5)	(6)	(7)
NET CASH USED IN FINANCING ACTIVITIES	(787)	(721)	(860)
NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS	(954)	291	(90)
CASH AND CASH EQUIVALENTS AT BEGINNING OF YEAR	1,668	1,377	1,467
CASH AND CASH EQUIVALENTS AT END OF PERIOD	\$ 714	\$ 1,668	\$ 1,377
<b>SUPPLEMENTARY CASH FLOW DATA:</b>			
Interest paid, net of capitalized interest	\$ 402	\$ 405	\$ 413
Income taxes paid, net of refunds	\$ 867	\$ 516	\$ 305

The accompanying notes to consolidated financial statements are an integral part of this statement.

**APACHE CORPORATION AND SUBSIDIARIES**  
**CONSOLIDATED BALANCE SHEET**

	December 31,	
	2018	2017
(In millions)		
<b>ASSETS</b>		
<b>CURRENT ASSETS:</b>		
Cash and cash equivalents	\$ 714	\$ 1,668
Receivables, net of allowance	1,194	1,345
Inventories	401	368
Drilling advances	218	207
Prepaid assets and other	160	137
	2,687	3,725
<b>PROPERTY AND EQUIPMENT:</b>		
Oil and gas, on the basis of successful efforts accounting:		
Proved properties	42,345	39,197
Unproved properties	1,435	1,783
Gathering, transmission, and processing facilities	1,856	1,376
Other	1,120	1,046
	46,756	43,402
Less: Accumulated depreciation, depletion, and amortization	(28,335)	(25,643)
	18,421	17,759
<b>OTHER ASSETS:</b>		
Deferred charges and other	474	438
	\$ 21,582	\$ 21,922
<b>LIABILITIES AND EQUITY</b>		
<b>CURRENT LIABILITIES:</b>		
Accounts payable	\$ 709	\$ 641
Current debt	150	550
Other current liabilities (Note 5)	1,342	1,373
	2,201	2,564
<b>LONG-TERM DEBT</b>		
	8,054	7,934
<b>DEFERRED CREDITS AND OTHER NONCURRENT LIABILITIES:</b>		
Income taxes	391	545
Asset retirement obligation	1,866	1,792
Other	258	296
	2,515	2,633
<b>COMMITMENTS AND CONTINGENCIES (Note 9)</b>		
<b>EQUITY:</b>		
Common stock, \$0.625 par, 860,000,000 shares authorized, 415,692,116 and 414,125,879 shares issued, respectively	260	259
Paid-in capital	12,106	12,128
Accumulated deficit	(2,048)	(2,088)
Treasury stock, at cost, 40,995,894 and 33,171,015 shares, respectively	(3,192)	(2,887)
Accumulated other comprehensive income	4	4
<b>APACHE SHAREHOLDERS' EQUITY</b>	7,130	7,416
Noncontrolling interest - Egypt	1,275	1,375
Noncontrolling interest - Altus	407	—
<b>TOTAL EQUITY</b>	8,812	8,791
	\$ 21,582	\$ 21,922

The accompanying notes to consolidated financial statements are an integral part of this statement.

**APACHE CORPORATION AND SUBSIDIARIES**  
**STATEMENT OF CONSOLIDATED CHANGES IN EQUITY**

	Common Stock	Paid-In Capital	Retained Earnings (Accumulated Deficit)	Treasury Stock	Accumulated Other Comprehensive Income (Loss)	APACHE SHAREHOLDERS' EQUITY	Noncontrolling Interest	TOTAL EQUITY
(In millions)								
BALANCE AT DECEMBER 31, 2015	\$ 257	\$ 12,619	\$ (1,980)	\$ (2,889)	\$ (119)	\$ 7,888	\$ 1,602	\$ 9,490
Net income (loss)	—	—	(1,405)	—	—	(1,405)	132	(1,273)
Distributions to noncontrolling interest	—	—	—	—	—	—	(293)	(293)
Pension & Postretirement benefit plans, net of tax	—	—	—	—	7	7	—	7
Common dividends (\$1.00 per share)	—	(379)	—	—	—	(379)	—	(379)
Common stock activity, net	1	(39)	—	—	—	(38)	—	(38)
Treasury stock activity, net	—	(1)	—	2	—	1	—	1
Compensation expense	—	164	—	—	—	164	—	164
BALANCE AT DECEMBER 31, 2016	\$ 258	\$ 12,364	\$ (3,385)	\$ (2,887)	\$ (112)	\$ 6,238	\$ 1,441	\$ 7,679
Net income	—	—	1,304	—	—	1,304	199	1,503
Distributions to noncontrolling interest	—	—	—	—	—	—	(265)	(265)
Pension & Postretirement benefit plans, net of tax	—	—	—	—	7	7	—	7
Common dividends (\$1.00 per share)	—	(381)	—	—	—	(381)	—	(381)
Common stock activity, net	1	(40)	—	—	—	(39)	—	(39)
Compensation expense	—	174	—	—	—	174	—	174
Other	—	11	(7)	—	109	113	—	113
BALANCE AT DECEMBER 31, 2017	\$ 259	\$ 12,128	\$ (2,088)	\$ (2,887)	\$ 4	\$ 7,416	\$ 1,375	\$ 8,791
Net income attributable to common stock	—	—	40	—	—	40	—	40
Net income attributable to noncontrolling interest - Egypt	—	—	—	—	—	—	245	245
Net income attributable to noncontrolling interest - Altus	—	—	—	—	—	—	1	1
Distributions to noncontrolling interest - Egypt	—	—	—	—	—	—	(345)	(345)
Common dividends (\$1.00 per share)	—	(380)	—	—	—	(380)	—	(380)
Common stock activity, net	1	(29)	—	—	—	(28)	—	(28)
Treasury stock activity, net	—	—	—	(305)	—	(305)	—	(305)
Proceeds from Altus transaction	—	222	—	—	—	222	406	628
Compensation expense	—	160	—	—	—	160	—	160
Other	—	5	—	—	—	5	—	5
BALANCE AT DECEMBER 31, 2018	\$ 260	\$ 12,106	\$ (2,048)	\$ (3,192)	\$ 4	\$ 7,130	\$ 1,682	\$ 8,812

The accompanying notes to consolidated financial statements are an integral part of this statement.

**APACHE CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

**Nature of Operations**

Apache Corporation (Apache or the Company) is an independent energy company that explores for, develops, and produces natural gas, crude oil, and natural gas liquids. The Company has exploration and production operations in three geographic areas: the United States (U.S.), Egypt, and offshore the U.K. in the North Sea (North Sea). Apache also has exploration interests in Suriname that may, over time, result in a reportable discovery and development opportunity.

**1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES**

Accounting policies used by Apache and its subsidiaries reflect industry practices and conform to accounting principles generally accepted in the U.S. (GAAP). The Company's financial statements for prior periods include reclassifications that were made to conform to the current-year presentation. Significant accounting policies are discussed below.

**Principles of Consolidation**

The accompanying consolidated financial statements include the accounts of Apache and its subsidiaries after elimination of intercompany balances and transactions. The Company's undivided interests in oil and gas exploration and production ventures and partnerships are proportionately consolidated. The Company consolidates all other investments in which, either through direct or indirect ownership, Apache has more than a 50 percent voting interest or controls the financial and operating decisions. Noncontrolling interests represent third-party ownership in the net assets of a consolidated Apache subsidiary and are reflected separately in the Company's financial statements. Sinopec International Petroleum Exploration and Production Corporation (Sinopec) owns a one-third minority participation in Apache's Egypt oil and gas business as a noncontrolling interest, which is reflected as a separate component of equity in Apache's consolidated balance sheet.

Additionally, third-party investors own a minority interest of approximately 21 percent of Altus Midstream Company (ALTM), which is reflected as a separate noncontrolling interest component of equity in Apache's consolidated balance sheet. Apache consolidates the activities of ALTM, which qualifies as a variable interest entity (VIE) under GAAP. Apache has concluded that it is the primary beneficiary of the VIE, as defined in the accounting standards, since Apache has the power, through its ownership, to direct those activities that most significantly impact the economic performance of and the obligation to absorb losses or the right to receive benefits that could be potentially significant to ALTM. This conclusion was based on a qualitative analysis that considered ALTM's governance structure, the commercial agreements between ALTM, Altus Midstream LP (collectively, Altus), and Apache, and the voting rights established between the members, which provide Apache with the ability to control the operations of Altus. For additional information regarding this transaction, please refer to Note 2—Acquisitions and Divestitures.

Investments in which Apache holds less than 50 percent of the voting interest are typically accounted for under the equity method of accounting, with the balance recorded as a component of "Deferred charges and other" in Apache's consolidated balance sheet and results of operations recorded as a component of "Other" under "Revenues and Other" in the Company's statement of consolidated operations.

**Use of Estimates**

Preparation of financial statements in conformity with GAAP and disclosure of contingent assets and liabilities requires management to make estimates and assumptions that affect reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. The Company bases its estimates on historical experience and various other assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about carrying values of assets and liabilities that are not readily apparent from other sources. Apache evaluates its estimates and assumptions on a regular basis. Actual results may differ from these estimates and assumptions used in preparation of its financial statements and changes in these estimates are recorded when known. Significant estimates with regard to these financial statements include the fair value determination of acquired assets and liabilities (see Note 2—Acquisitions and Divestitures), the estimate of proved oil and gas reserves and related present value estimates of future net cash flows therefrom (see Note 15—Supplemental Oil and Gas Disclosures), the assessment of asset retirement obligations (see Note 6—Asset Retirement Obligation), the estimates of fair value for long-lived assets (see "Fair Value Measurements" and "Property and Equipment" sections in this Note 1 below), and the estimate of income taxes (see Note 8—Income Taxes).

**APACHE CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)**

**Fair Value Measurements**

Certain assets and liabilities are reported at fair value on a recurring basis in Apache's consolidated balance sheet. Accounting Standards Codification (ASC) 820-10-35, "Fair Value Measurement" (ASC 820), provides a hierarchy that prioritizes and defines the types of inputs used to measure fair value. The fair value hierarchy gives the highest priority to Level 1 inputs, which consist of unadjusted quoted prices for identical instruments in active markets. Level 2 inputs consist of quoted prices for similar instruments. Level 3 valuations are derived from inputs that are significant and unobservable; hence, these valuations have the lowest priority.

The valuation techniques that may be used to measure fair value include a market approach, an income approach, and a cost approach. A market approach uses prices and other relevant information generated by market transactions involving identical or comparable assets or liabilities. An income approach uses valuation techniques to convert future amounts to a single present amount based on current market expectations, including present value techniques, option-pricing models, and the excess earnings method. The cost approach is based on the amount that currently would be required to replace the service capacity of an asset (replacement cost).

Recurring fair value measurements are presented in further detail in Note 4—Derivative Instruments and Hedging Activities, Note 7—Debt, and Note 10—Retirement and Deferred Compensation Plans.

Apache also uses fair value measurements on a nonrecurring basis when certain qualitative assessments of its assets indicate a potential impairment. For the year ended December 31, 2018, the Company recorded asset impairments totaling \$511 million in connection with fair value assessments. Impairments totaling \$328 million and \$56 million were recorded for proved properties, and a gathering and processing facility in Oklahoma, respectively, which were written down to their fair values. These impairments are discussed in further detail below in "Property and Equipment." During the third quarter of 2018, Apache agreed to sell certain of its unproved properties in the North Sea. As a result, the Company performed a fair value assessment of the properties and recorded a \$10 million impairment on the carrying values of the associated capitalized exploratory well costs. The fair value of the impaired assets was determined using the negotiated sales price, a Level 1 fair value measurement. Also in 2018, the Company recorded \$113 million for the impairment of an equity method investment in the U.S. based on a negotiated sales price and \$4 million for inventory write-downs in the U.S. for obsolescence.

For the year ended December 31, 2017, the Company recorded asset impairments totaling \$8 million in connection with fair value assessments. In 2016, the U.K. government enacted Finance Bill 2016, providing tax relief to exploration and production (E&P) companies operating in the U.K. North Sea. Under the enacted legislation, the U.K. Petroleum Revenue Tax (PRT) rate was reduced to zero from the previously enacted 35 percent rate in effect from January 1, 2016. PRT expense ceased prospectively from that date. During 2017, the Company fully impaired the aggregate remaining value of the recoverable PRT decommissioning asset of \$8 million that would have been realized from future abandonment activities. The recoverable value of the PRT decommissioning asset was estimated using the income approach. The expected future cash flows used in the determination were based on anticipated spending and timing of planned future abandonment activities for applicable fields, considering all available information at the date of review. Apache has classified this fair value measurement as Level 3 in the fair value hierarchy.

For the year ended December 31, 2016, the Company recorded asset impairments totaling \$1.1 billion in connection with fair value assessments. Impairments totaling \$427 million and \$135 million were recorded for proved properties and GTP facilities, respectively, which were written down to their fair values. These impairments are discussed in further detail below in "Property and Equipment." Also in 2016, the Company recorded \$486 million for the impairment of the recoverable value of the PRT decommissioning asset and \$55 million for inventory write-downs.

**Cash and Cash Equivalents**

The Company considers all highly liquid short-term investments with a maturity of three months or less at the time of purchase to be cash equivalents. These investments are carried at cost, which approximates fair value. As of December 31, 2018 and 2017, Apache had \$714 million and \$1.7 billion, respectively, of cash and cash equivalents. As of December 31, 2018, and 2017, the Company had no restricted cash. Approximately \$450 million of the year-end 2018 balance was cash and cash equivalents of Altus.

**APACHE CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)**

**Accounts Receivable and Allowance for Doubtful Accounts**

Accounts receivable are stated at the historical carrying amount net of write-offs and an allowance for doubtful accounts. The carrying amount of Apache's accounts receivable approximates fair value because of the short-term nature of the instruments. The Company routinely assesses the collectability of all material trade and other receivables. Many of Apache's receivables are from joint interest owners on properties Apache operates. The Company may have the ability to withhold future revenue disbursements to recover any non-payment of these joint interest billings. The Company accrues a reserve on a receivable when, based on the judgment of management, it is probable that a receivable will not be collected and the amount of any reserve may be reasonably estimated. As of December 31, 2018, 2017, and 2016, the Company had an allowance for doubtful accounts of \$92 million, \$84 million, and \$93 million, respectively.

The following table describes changes to the Company's allowance for doubtful accounts for 2018, 2017, and 2016:

	2018	2017	2016
	(In millions)		
Allowance for doubtful accounts at beginning of year	\$ 84	\$ 93	\$ 103
Additional provisions for the year	9	4	14
Uncollectible accounts written off net of recoveries	(1)	(13)	(24)
Allowance for doubtful accounts at end of year	<u>\$ 92</u>	<u>\$ 84</u>	<u>\$ 93</u>

**Inventories**

Inventories consist principally of tubular goods and equipment, stated at weighted-average cost, and oil produced but not sold, stated at the lower of cost or net realizable value.

**Property and Equipment**

The carrying value of Apache's property and equipment represents the cost incurred to acquire the property and equipment, including capitalized interest, net of any impairments. For business combinations, property and equipment cost is based on the fair values at the acquisition date.

***Oil and Gas Property***

The Company follows the successful efforts method of accounting for its oil and gas property. Under this method of accounting, exploration costs such as exploratory geological and geophysical costs, delay rentals, and exploration overhead are expensed as incurred. All costs related to production, general corporate overhead, and similar activities are expensed as incurred. If an exploratory well provides evidence to justify potential development of reserves, drilling costs associated with the well are initially capitalized, or suspended, pending a determination as to whether a commercially sufficient quantity of proved reserves can be attributed to the area as a result of drilling. This determination may take longer than one year in certain areas depending on, among other things, the amount of hydrocarbons discovered, the outcome of planned geological and engineering studies, the need for additional appraisal drilling activities to determine whether the discovery is sufficient to support an economic development plan, and government sanctioning of development activities in certain international locations. At the end of each quarter, management reviews the status of all suspended exploratory well costs in light of ongoing exploration activities; in particular, whether the Company is making sufficient progress in its ongoing exploration and appraisal efforts or, in the case of discoveries requiring government sanctioning, whether development negotiations are underway and proceeding as planned. If management determines that future appraisal drilling or development activities are unlikely to occur, associated suspended exploratory well costs are expensed.

Acquisition costs of unproved properties are assessed for impairment at least annually and are transferred to proved oil and gas properties to the extent the costs are associated with successful exploration activities. Significant undeveloped leases are assessed individually for impairment based on the Company's current exploration plans. Unproved oil and gas properties with individually insignificant lease acquisition costs are amortized on a group basis over the average lease term at rates that provide for full amortization of unsuccessful leases upon lease expiration or abandonment. Costs of expired or abandoned leases are charged to exploration expense, while costs of productive leases are transferred to proved oil and gas properties. Costs of maintaining and retaining unproved properties, as well as amortization of individually insignificant leases and impairment of unsuccessful leases, are included in exploration costs in the statement of consolidated operations.

**APACHE CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)**

Costs to develop proved reserves, including the costs of all development wells and related equipment used in the production of crude oil and natural gas, are capitalized. Depreciation of the cost of proved oil and gas properties is calculated using the unit-of-production (UOP) method. The UOP calculation multiplies the percentage of estimated proved reserves produced each quarter by the carrying value of associated proved oil and gas properties. The reserve base used to calculate depreciation for leasehold acquisition costs and the cost to acquire proved properties is the sum of proved developed reserves and proved undeveloped reserves. The reserve base used to calculate the depreciation for capitalized costs for exploratory and development wells is the sum of proved developed reserves only. Estimated future dismantlement, restoration and abandonment costs, net of salvage values, are included in the depreciable cost.

Oil and gas properties are grouped for depreciation in accordance with ASC 932 “Extractive Activities—Oil and Gas.” The basis for grouping is a reasonable aggregation of properties with a common geological structural feature or stratigraphic condition, such as a reservoir or field.

When circumstances indicate that the carrying value of proved oil and gas properties may not be recoverable, the Company compares unamortized capitalized costs to the expected undiscounted pre-tax future cash flows for the associated assets grouped at the lowest level for which identifiable cash flows are independent of cash flows of other assets. If the expected undiscounted pre-tax future cash flows, based on Apache’s estimate of future crude oil and natural gas prices, operating costs, anticipated production from proved reserves and other relevant data, are lower than the unamortized capitalized cost, the capitalized cost is reduced to fair value. Fair value is generally estimated using the income approach described in the ASC 820. If applicable, the Company utilizes prices and other relevant information generated by market transactions involving assets and liabilities that are identical or comparable to the item being measured as the basis for determining fair value. The expected future cash flows used for impairment reviews and related fair value calculations are typically based on judgmental assessments of future production volumes, commodity prices, operating costs, and capital investment plans, considering all available information at the date of review. These assumptions are applied to develop future cash flow projections that are then discounted to estimated fair value, using a discount rate believed to be consistent with those applied by market participants. Apache has classified these fair value measurements as Level 3 in the fair value hierarchy.

The following table represents non-cash impairments of the carrying value of the Company’s proved and unproved property and equipment for 2018, 2017, and 2016:

	<b>For the Year Ended December 31,</b>		
	<b>2018</b>	<b>2017</b>	<b>2016</b>
	<b>(In millions)</b>		
<b>Proved Properties:</b>			
U.S.	\$ 265	\$ —	\$ 61
Canada	—	—	366
Egypt	63	—	—
Total Proved	<u>\$ 328</u>	<u>\$ —</u>	<u>\$ 427</u>
<b>Unproved Properties:</b>			
U.S.	\$ 96	\$ 244	\$ 200
Canada	—	2	72
North Sea	128	—	—
Total Unproved	<u>\$ 224</u>	<u>\$ 246</u>	<u>\$ 272</u>

Proved properties impaired had aggregate fair values as of the most recent date of impairment of \$323 million and \$306 million for 2018 and 2016, respectively.

On the statement of consolidated operations, unproved leasehold impairments are recorded as a component of “Exploration” expense, and all other impairments of proved and unproved properties are recorded separately in “Impairments.”

Gains and losses on significant divestitures are recognized in the statement of consolidated operations. See Note 2—Acquisitions and Divestitures for more detail.

**APACHE CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)**

***Gathering, Transmission, and Processing Facilities***

GTP facilities totaled \$1.9 billion and \$1.4 billion at December 31, 2018 and 2017, respectively, with accumulated depreciation for these assets totaling \$264 million and \$194 million for the respective periods. GTP facilities are depreciated on a straight-line basis over the estimated useful lives of the assets. The estimation of useful life takes into consideration anticipated production lives from the fields serviced by the GTP assets, whether Apache-operated or third party, as well as potential development plans by Apache for undeveloped acreage within or in close proximity to those fields.

The Company assesses the carrying amount of its GTP facilities whenever events or changes in circumstances indicate that their carrying amount may not be recoverable. If the carrying amount of these facilities is more than the sum of the undiscounted cash flows, an impairment loss is recognized for the excess of the carrying value over its fair value. During 2018, the Company recorded impairments of the entire net book value of certain GTP assets in the U.S. in the amount of \$56 million. During 2017, the Company recorded no impairments on GTP assets. During 2016, the Company recorded impairments of \$135 million on certain GTP assets in the North Sea, which were written down to their fair values of \$142 million. The fair values of the impaired assets were determined using a combination of the income approach and the market approach. The income approach considers internal estimates of future throughput volumes, processing rates, and costs. These assumptions were applied to develop future cash flow projections that were then discounted to estimated fair value, using a discount rate believed to be consistent with those applied by market participants. Apache has classified these non-recurring fair value measurements as Level 3 in the fair value hierarchy.

The costs of GTP facilities retired or otherwise disposed of and associated accumulated depreciation are removed from Apache's consolidated financial statements, and the resulting gain or loss is reflected in "Gain on divestitures" under "Revenues and Other" in the Company's statement of consolidated operations. During 2017, Apache recorded a gain totaling \$6 million associated with the Company's divestiture of its 30.28 percent interest in the Scottish Area Gas Evacuation system (SAGE) and its 60.56 percent interest in the Beryl pipeline in the North Sea. For more information regarding this transaction, please refer to Note 2—Acquisitions and Divestitures. No gain or loss on the sales of GTP facilities was recognized during 2018 or 2016. Approximately \$1.3 billion and \$705 million of the net carrying values of GTP at December 31, 2018 and 2017, respectively, was related to Altus.

***Other Property and Equipment***

Other property and equipment includes computer software and equipment, buildings, vehicles, furniture and fixtures, land, and other equipment. These assets are depreciated on a straight-line basis over the estimated useful lives of the assets, which range from 3 to 20 years. Other property and equipment totaled \$1.1 billion and \$1.0 billion at December 31, 2018 and 2017, respectively, with accumulated depreciation for these assets totaling \$786 million and \$739 million at December 31, 2018 and 2017, respectively.

***Asset Retirement Costs and Obligations***

The initial estimated asset retirement obligation related to property and equipment and subsequent revisions are recorded as a liability at fair value, with an offsetting asset retirement cost recorded as an increase to the associated property and equipment on the consolidated balance sheet. Revisions in estimated liabilities can result from changes in estimated inflation rates, changes in service and equipment costs and changes in the estimated timing of an asset's retirement. Asset retirement costs are depreciated using a systematic and rational method similar to that used for the associated property and equipment. Accretion expense on the liability is recognized over the estimated productive life of the related assets.

***Capitalized Interest***

For significant projects, interest is capitalized as part of the historical cost of developing and constructing assets. Significant oil and gas investments in unproved properties actively being explored, significant exploration and development projects that have not commenced production, significant midstream development activities that are in progress, and investments in equity method affiliates that are undergoing the construction of assets that have not commenced principal operations qualify for interest capitalization. Interest is capitalized until the asset is ready for service. Capitalized interest is determined by multiplying the Company's weighted-average borrowing cost on debt by the average amount of qualifying costs incurred. Once an asset subject to interest capitalization is completed and placed in service, the associated capitalized interest is expensed through depreciation or impairment.

**APACHE CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)**

**Goodwill**

Goodwill represents the excess of the purchase price of an entity over the estimated fair value of the assets acquired and liabilities assumed, and it is recorded in “Deferred charges and other” in the Company’s consolidated balance sheet. The Company assesses the carrying amount of goodwill by testing for impairment annually and when impairment indicators arise. The impairment test requires allocating goodwill and all other assets and liabilities to assigned reporting units. As of December 31, 2018, Apache assesses each country as a reporting unit, with Egypt being the only reporting unit to have associated goodwill. The fair value of the reporting unit is determined and compared to the book value of the reporting unit. If the fair value of the reporting unit is less than the book value, including goodwill, then goodwill is written down to the implied fair value of the goodwill through a charge to expense.

When there is a disposal of a reporting unit or a portion of a reporting unit that constitutes a business, goodwill associated with that business is included in the carrying amount to determine the gain or loss on disposal. The amount of goodwill allocated to the carrying amount of a business can significantly impact the amount of gain or loss recognized on the sale of that business. The amount of goodwill to be included in that carrying amount is based on the relative fair value of the business to be disposed of and the portion of the reporting unit that will be retained. There were no changes to goodwill for the years ended 2018, 2017, and 2016.

**Accounts Payable**

Included in accounts payable at December 31, 2018 and 2017, are liabilities of approximately \$66 million and \$76 million, respectively, representing the amount by which checks issued but not presented to the Company’s banks for collection exceeded balances in applicable bank accounts.

**Commitments and Contingencies**

Accruals for loss contingencies arising from claims, assessments, litigation, environmental and other sources are recorded when it is probable that a liability has been incurred and the amount can be reasonably estimated. These accruals are adjusted as additional information becomes available or circumstances change. For more information regarding loss contingencies, please refer to Note 9—Commitments and Contingencies.

**Revenue Recognition**

On January 1, 2018, Apache adopted ASU 2014-09, “Revenue from Contracts with Customers (ASC 606),” using the modified retrospective method. The Company elected to evaluate all contracts at the date of initial application. While there was no impact to the opening balance of retained earnings as a result of the adoption, certain items previously netted in revenue are now recognized as “Gathering, transmission, and processing” in the Company’s statement of consolidated operations. The amounts reclassified are immaterial to the financial statements, and prior comparative periods have not been restated and continue to be reported under the accounting standards in effect for those periods. Adoption of the new standard is not anticipated to have a material impact on the Company’s net earnings on an ongoing basis.

The Company applies the provisions of ASC 606 for revenue recognition to contracts with customers. Sales of crude oil, natural gas, and NGLs are included in revenue when production is sold to a customer in fulfillment of performance obligations under the terms of agreed contracts. Performance obligations primarily comprise delivery of oil, gas, or NGLs at a delivery point, as negotiated within each contract. Each barrel of oil, million Btu (MMBtu) of natural gas, or other unit of measure is separately identifiable and represents a distinct performance obligation to which the transaction price is allocated. Performance obligations are satisfied at a point in time once control of the product has been transferred to the customer. The Company considers a variety of facts and circumstances in assessing the point of control transfer, including but not limited to: whether the purchaser can direct the use of the hydrocarbons, the transfer of significant risks and rewards, the Company’s right to payment, and transfer of legal title. In each case, the term between delivery and when payments are due is not significant.

Apache markets its own U.S. natural gas and crude oil production based on market-priced contracts. Typically, these contracts are adjusted for quality, transportation, and other market-reflective differentials. Since the Company’s production fluctuates because of operational issues, it is occasionally necessary to purchase third-party oil and gas to fulfill sales obligations and commitments. Sales proceeds related to third-party oil and gas purchases have been determined to be revenue from a customer. Proceeds for these volumes totaled \$357 million, \$248 million, and \$152 million, for 2018, 2017, and 2016, respectively. Associated purchase costs for these volumes totaled \$340 million, \$254 million, and \$159 million, for 2018, 2017, and 2016, respectively. Proceeds and costs are both recorded as “Other” under “Revenues and Other” in the statement of consolidated operations.

**APACHE CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)**

Internationally, Apache sells its North Sea crude oil under contracts with a market-based index price. Natural gas from the North Sea Beryl field is processed through the SAGE gas plant. The gas is sold to a third party at the St. Fergus entry point of the national grid on a National Balancing Point index price basis. Apache's gas production in Egypt is sold primarily under an industry-pricing formula, a sliding scale based on Dated Brent crude oil with a minimum of \$1.50 per MMBtu and a maximum of \$2.65 per MMBtu, plus an upward adjustment for liquids content. The Company's Egypt oil production is sold at prices equivalent to the export market.

The Company's Egyptian operations are conducted pursuant to production sharing contracts under which contractor partners pay all operating and capital costs for exploring and developing the concessions. A percentage of the production, generally up to 40 percent, is available to contractor partners to recover these operating and capital costs over contractually defined periods. The balance of the production is split among the contractor partners and the Egyptian General Petroleum Corporation on a contractually defined basis. Additionally, the contractor partner's income taxes, which remain the liability of the contractor partners under domestic law, are paid by EGPC on behalf of the contractor partners out of EGPC's production entitlement. Income taxes paid to the Arab Republic of Egypt on behalf of Apache as contract partner are recognized as oil and gas sales revenue and income tax expense and reflected as production and estimated reserves. Revenues related to Egypt's tax volumes are considered revenue from a non-customer.

For the year ended December 31, 2018, revenues from customers and non-customers were \$7.1 billion and \$652 million, respectively.

Apache records trade accounts receivable for its unconditional rights to consideration arising under sales contracts with customers. The carrying value of such receivables, net of the allowance for doubtful accounts, represents estimated net realizable value. The Company routinely assesses the collectability of all material trade and other receivables. The Company accrues a reserve on a receivable when, based on the judgment of management, it is probable that a receivable will not be collected and the amount of any reserve may be reasonably estimated. Receivables from contracts with customers, net of allowance for doubtful accounts, totaled \$1.0 billion and \$1.1 billion as of December 31, 2018 and 2017, respectively.

Apache has concluded that disaggregating revenue by geographic area and by product appropriately depicts how the nature, amount, timing, and uncertainty of revenue and cash flows are affected by economic factors. Please refer to Note 14—Business Segment Information for a disaggregation of revenue by each product sold.

***Practical Expedients and Exemptions***

Apache does not disclose the value of unsatisfied performance obligations for contracts with an original expected length of one year or less, or contracts for which variable consideration is allocated entirely to a wholly unsatisfied performance obligation.

Apache will utilize the practical expedient to expense incremental costs of obtaining a contract if the expected amortization period is one year or less. Costs to obtain a contract with expected amortization periods of greater than one year will be recorded as an asset and will be recognized in accordance with ASC 340, "Other Assets and Deferred Costs." Currently, the Company does not have contract assets related to incremental costs to obtain a contract.

**Derivative Instruments and Hedging Activities**

Apache periodically enters into derivative contracts to manage its exposure to commodity price, interest rate, and/or foreign exchange risk. These derivative contracts, which are generally placed with major financial institutions, may take the form of forward contracts, futures contracts, swaps, or options.

Apache records all derivative instruments, other than those that meet the normal purchases and sales exception, on the balance sheet as either an asset or liability measured at fair value. Changes in fair value are recognized currently in earnings unless specific hedge accounting criteria are met. Gains and losses from the change in fair value of derivative instruments that do not qualify for hedge accounting are reported in current-period income as "Derivative instrument losses, net" under "Revenues and Other" in the statement of consolidated operations. Hedge accounting treatment allows unrealized gains and losses on cash flow hedges to be deferred in other comprehensive income. For more information, please refer to Note 4—Derivative Instruments and Hedging Activities.

**APACHE CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)**

**Income Taxes**

Apache records deferred tax assets and liabilities to account for the expected future tax consequences of events that have been recognized in the financial statements and tax returns. The Company routinely assesses the ability to realize its deferred tax assets. If the Company concludes that it is more likely than not that some or all of the deferred tax assets will not be realized, the tax asset is reduced by a valuation allowance. Numerous judgments and assumptions are inherent in the determination of future taxable income, including factors such as future operating conditions (particularly as related to prevailing oil and gas prices) and changing tax laws.

**Foreign Currency Transaction Gains and Losses**

The U.S. dollar is the functional currency for each of Apache's international operations. The functional currency is determined country-by-country based on relevant facts and circumstances of the cash flows, commodity pricing environment and financing arrangements in each country. Foreign currency transaction gains and losses arise when monetary assets and liabilities denominated in foreign currencies are remeasured to their U.S. dollar equivalent at the exchange rate in effect at the end of each reporting period. Foreign currency gains and losses also arise when revenue and disbursement transactions denominated in a country's local currency are converted to a U.S. dollar equivalent based on the average exchange rates during the reporting period.

Foreign currency transaction gains and losses related to current taxes payable and deferred tax assets and liabilities are recorded as components of the provision for income taxes. For further discussion, please refer to Note 8—Income Taxes. All other foreign currency transaction gains and losses are reflected in "Other" under "Revenues and Other" in the statement of consolidated operations. The Company's other foreign currency gains and losses netted to losses of \$1 million, \$11 million, and \$25 million in 2018, 2017, and 2016, respectively.

**Insurance Coverage**

The Company recognizes an insurance receivable when collection of the receivable is deemed probable. Any recognition of an insurance receivable is recorded by crediting and offsetting the original charge. Any differential arising between insurance recoveries and insurance receivables is recorded as a capitalized cost or as an expense, consistent with its original treatment.

**Earnings Per Share**

The Company's basic earnings per share (EPS) amounts have been computed based on the weighted-average number of shares of common stock outstanding for the period. Diluted EPS reflects potential dilution, using the treasury stock method, which assumes that options were exercised and restricted stock was fully vested.

**Stock-Based Compensation**

Apache grants various types of stock-based awards including stock options, nonvested restricted stock units, and performance-based awards. Stock compensation awards granted are valued on the date of grant and are expensed over the required service period. The Company has elected to account for forfeitures as they occur rather than estimate expected forfeitures. The Company's stock-based compensation plans and related accounting policies are defined and described more fully in Note 11—Capital Stock.

**Treasury Stock**

The Company follows the weighted-average-cost method of accounting for treasury stock transactions.

**New Pronouncements Issued But Not Yet Adopted**

In February 2016, the Financial Accounting Standards Board (FASB) issued ASU 2016-02, “Leases (Topic 842),” requiring lessees to recognize lease assets and lease liabilities for most leases classified as operating leases under previous GAAP. The guidance is effective for fiscal years beginning after December 15, 2018. In January 2018, the FASB issued ASU 2018-01, which permits an entity an optional election to not evaluate under ASU 2016-02 those existing or expired land easements that were not previously accounted for as leases prior to the adoption of ASU 2016-02. In July 2018, the FASB issued ASU 2018-11, which adds a transition option permitting entities to apply the provisions of the new standard at its adoption date instead of the earliest comparative period presented in the consolidated financial statements. Under this transition option, comparative reporting would not be required, and the provisions of the standard would be applied prospectively to leases in effect at the date of adoption. Apache elected both transitional practical expedients. As allowed under the standard, the Company also applied practical expedients to carry forward its historical assessments of whether existing agreements contain a lease, classification of existing lease agreements, and treatment of initial direct lease costs. Apache also elected to exclude short-term leases (those with terms of 12 months or less) from the balance sheet presentation and will account for non-lease and lease components as a single lease component for all asset classes.

The Company has adopted this guidance as of January 1, 2019. In the normal course of business, the Company enters into various lease agreements for real estate, aircraft, and equipment related to its exploration and development activities that are accounted for as operating leases. To track these lease arrangements and facilitate compliance with this ASU, the Company implemented a third-party lease accounting software solution and designed processes and internal controls to identify, track, and record applicable leases. The Company trained departments affected by the standard, implemented changes to the relevant business processes, and continues to evaluate new contracts. The Company’s adoption and implementation of this ASU significantly impacted its balance sheet, resulting in an increase in both right of use assets and liabilities relating to its leasing activities. The Company has estimated an increase to right of use assets with a corresponding and approximate increase in lease liabilities between \$350 million and \$400 million upon adoption. These amounts are expected to change after adoption for new leases entered into subsequent to year-end, amortization on existing lease assets, and continued analysis. The impact to the Company’s consolidated statement of operations and consolidated statement of cash flows is not expected to be material.

In June 2016, the FASB issued ASU 2016-13, “Financial Instruments-Credit Losses.” The standard changes the impairment model for most financial assets and certain other instruments, including trade and other receivables, held-to-maturity debt securities and loans, and requires entities to use a new forward-looking expected loss model that will result in the earlier recognition of allowance for losses. This update is effective for fiscal years beginning after December 15, 2019, including interim periods within those fiscal years. Early adoption is permitted for a fiscal year beginning after December 15, 2018, including interim periods within that fiscal year. The Company does not expect to adopt the guidance early. Entities will apply the standard’s provisions as a cumulative-effect adjustment to retained earnings as of the beginning of the first reporting period in which the guidance is adopted. The Company is evaluating the new guidance and does not believe this standard will have a material impact on its consolidated financial statements.

In June 2018, the FASB issued ASU 2018-07, “Improvements to Nonemployee Share-Based Payment Accounting,” to simplify the accounting for share-based transactions by expanding the scope of Topic 718 from only being applicable to share-based payments to employees to also include share-based payment transactions for acquiring goods and services from nonemployees. As a result, the same guidance that provides for employee share-based payments, including most of the requirements related to classification and measurement, applies to nonemployee share-based payment arrangements. The Company adopted this guidance in the first quarter of 2019 with no material impact to its consolidated financial statements.

In August 2018, the FASB issued ASU 2018-13, “Disclosure Framework: Changes to the Disclosure Requirements for Fair Value Measurement,” which changes the disclosure requirements for fair value measurements by removing, adding, and modifying certain disclosures. ASU 2018-13 is effective for financial statements issued for annual periods beginning after December 15, 2019, and interim periods within those annual periods. Early adoption is permitted. The Company is currently evaluating the impact of adoption of this ASU on its related disclosures and does not expect it to have a material impact on its financial statements.

In August 2018, the FASB issued ASU 2018-14, “Disclosure Framework: Changes to the Disclosure Requirements for Defined Benefit Plans,” which eliminates, modifies, and adds disclosure requirements for defined benefit plans. The ASU is effective for financial statements issued for fiscal years ending after December 15, 2020. Early adoption is permitted. The Company is currently evaluating the impact of adoption of this ASU on its related disclosures and does not expect it to have a material impact on its financial statements.

**APACHE CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)**

In August 2018, the FASB issued ASU 2018-15, “Customer’s Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That is a Service Contract.” This pronouncement clarifies the requirements for capitalizing implementation costs in cloud computing arrangements and aligns them with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use software. This pronouncement is effective for fiscal years, and for interim periods within those fiscal years, beginning after December 15, 2019. Early adoption is permitted, including adoption in any interim period for which financial statements have not been issued. The Company is currently evaluating the impact of adoption of this ASU on its consolidated financial statements and does not expect it to have a material impact.

## **2. ACQUISITIONS AND DIVESTITURES**

### **2018 Activity**

#### ***Altus Transaction***

In November 2018, Apache completed a previously announced transaction with Kayne Anderson Acquisition Corp. (KAAC) to create a publicly traded, pure-play, Permian Basin to Gulf Coast midstream C-corporation anchored by Apache’s gathering, processing, and transmission assets at Alpine High. Pursuant to the agreement, Apache contributed certain Alpine High midstream assets and options to acquire equity interests in five separate third-party pipeline projects to a then wholly-owned subsidiary of KAAC, Altus Midstream LP and/or its subsidiaries. KAAC contributed approximately \$628 million of cash, net of transaction expenses, into Altus Midstream LP. The transaction was accounted for as a reverse recapitalization by KAAC. Under this method of accounting, KAAC was treated as the “acquired” company and Apache’s contributed assets of approximately \$1.1 billion remained at historical cost, with no goodwill or other intangible assets recorded.

The partnership is jointly owned by Apache and KAAC, which was renamed to Altus Midstream Company upon closing. Apache owns an approximate 79 percent ownership interest in Altus.

Apache fully consolidates the assets and liabilities of Altus in its consolidated financial statements, with a corresponding noncontrolling interest reflected separately. Apache recorded a noncontrolling interest of \$406 million upon closing, which is reflected as a separate component of equity in the Company’s consolidated balance sheet. This represents approximately 21 percent third party ownership of the net assets in Altus at the time of the transaction. The cash contributions in excess of the noncontrolling interest were recognized as additional paid-in capital.

#### ***Other Activity***

During 2018, Apache completed the sale of certain non-core assets and leasehold, primarily in the North Sea and Permian regions, in multiple transactions for total cash proceeds of \$138 million. The Company recognized gains of approximately \$23 million during 2018 upon the closing of these transactions.

Apache completed \$133 million of leasehold and property acquisitions during 2018, primarily in its U.S. onshore regions.

In December 2018, Altus Midstream LP’s subsidiary exercised its option to acquire a 15 percent equity interest in Gulf Coast Express Pipeline LLC (GCX), a Delaware limited liability company, for total cash consideration of \$91 million. GCX is a long-haul natural gas pipeline that, upon completion, is expected to have capacity of approximately 2.0 Bcf/d and will transport natural gas from the Waha area in northern Pecos County, Texas to the Agua Dulce Hub near the Texas Gulf Coast. GCX will be operated by Kinder Morgan Texas Pipeline LLC and is expected to be operational and in-service in the fourth quarter of 2019. Upon exercising the GCX option, Altus Midstream LP has estimated it will incur an additional \$175 million of capital contributions for its equity interest in 2019. The joint venture equity interest in GCX is included in “Deferred charges and other” on Apache’s consolidated balance sheet.

Subsequent to the balance sheet date, Altus Midstream LP’s subsidiary exercised the option with EPIC Pipeline LP in February 2019, to acquire a 15 percent equity interest in the EPIC Crude pipeline. The transaction is anticipated to close in the first quarter of 2019, with an anticipated exercise price of approximately \$52 million. The pipeline is a long-haul crude oil pipeline that, upon completion, is expected to have an initial throughput capacity of approximately 590 MBbl/d from the Permian Basin to Corpus Christi, Texas. The EPIC Crude pipeline will be operated by EPIC Consolidated Operations, LLC and is expected to be operational and in service in the first quarter of 2020.

**APACHE CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)**

**2017 Activity**

***Canada Divestitures***

During 2017, Apache announced the sale of its subsidiary Apache Canada Ltd. (ACL) and complete exit of its Canadian operations. On June 30, 2017, Apache completed the sale of its Canadian assets at Midale and House Mountain, located in Saskatchewan and Alberta, for aggregate cash proceeds of approximately \$228 million. The Company recognized a \$52 million loss during the second quarter of 2017 in association with this sale.

In August of 2017, Apache completed the sale of its remaining Canadian operations for aggregate cash proceeds of approximately \$478 million. The Company recognized a \$74 million gain upon closing of these transactions in the third quarter of 2017. A summary of the Company's Canadian assets and liabilities at the time of close is detailed below:

		(In millions)
<b>ASSETS</b>		
Cash	\$	46
Other current assets		64
Property, plant & equipment		1,132
Total Assets	\$	1,242
<b>LIABILITIES</b>		
Current liabilities, excluding asset retirement obligation	\$	120
Asset retirement obligation		780
Other long-term liabilities		46
Total Liabilities	\$	946

The net carrying value of the assets disposed included a currency translation loss of \$109 million, which was recorded in "Accumulated other comprehensive income (loss)" on the Company's consolidated balance sheet at December 31, 2016. The currency translation loss was recognized as a reduction of the net gain on sale during the third quarter of 2017 upon closing of the transactions.

Apache's Canadian operations recorded pretax losses of \$141 million and \$684 million for the years ended 2017 and 2016, respectively.

***U.S. Divestitures***

During 2017, Apache completed the sale of certain non-core assets, primarily leasehold acreage in the Permian and Midcontinent/Gulf Coast regions, in multiple transactions for cash proceeds of \$798 million, subject to customary closing adjustments. Refundable deposits totaling \$40 million were received in the fourth quarter of 2016 in connection with certain of these transactions and were recorded in "Other current liabilities" on the consolidated balance sheet as of December 31, 2016. In the first quarter of 2017, Apache completed these transactions, and the liabilities related to the refundable deposits were released. The Company recognized gains of approximately \$599 million during 2017 in connection with these transactions.

***North Sea GTP Divestiture***

During the fourth quarter of 2016, Apache entered into an agreement to sell its 30.28 percent interest in the SAGE gas plant and its 60.56 percent interest in the Beryl pipeline in the North Sea to Ancala Midstream Acquisitions Limited. A refundable deposit of \$134 million was received in the fourth quarter of 2016 in connection with this transaction and was recorded in "Other current liabilities" on the consolidated balance sheet as of December 31, 2016. In November 2017, Apache completed the sale, and the liability related to the refundable deposit was released. No additional proceeds were received, and the Company recognized a \$6 million gain upon closing of this transaction.

***Leasehold and Property Acquisitions***

Apache completed \$188 million of leasehold and property acquisitions during 2017, primarily in its North America onshore regions.

**APACHE CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)**

**2016 Activity**

***Leasehold and Property Acquisitions***

Apache completed \$181 million of leasehold and property acquisitions during 2016, primarily in its North America onshore regions.

***Divestiture of Other Oil and Gas Properties***

Apache recorded \$134 million of proceeds from the divestiture of other oil and gas properties during 2016. An associated \$21 million of gain was recorded in 2016.

***Discontinued Operations***

Apache sold its operations in Argentina and Australia in 2014 and 2015, respectively. The results of operations related to the Argentina and Australia dispositions and the losses on disposals were classified as discontinued operations in the Company's financial statements. During 2016, the Company incurred additional losses on these dispositions. The components of the Company's loss from discontinued operations were as follows:

	<b>For the Year Ended December 31,</b>		
	<b>2018</b>	<b>2017</b>	<b>2016</b>
	<b>(In millions)</b>		
Loss on Woodside sale	\$ —	\$ —	\$ (23)
Loss from Argentina divestiture	—	—	(10)
Income (loss) from discontinued operations, net of tax	\$ —	\$ —	\$ (33)

**Transaction, Reorganization, and Separation**

Apache recorded \$28 million, \$16 million, and \$39 million of expenses during 2018, 2017, and 2016, respectively, primarily related to company reorganization, including separation costs, investment banking fees and other associated costs. The charges for 2018 include \$22 million for consulting and legal fees related to divestitures and the Altus transaction, and \$6 million related to employee separation and other reorganization efforts.

**APACHE CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)**

**3. CAPITALIZED EXPLORATORY WELL COSTS**

The following summarizes the changes in capitalized exploratory well costs for each of the last three years ended December 31, 2018, 2017, and 2016. Additions pending the determination of proved reserves excludes amounts capitalized and subsequently charged to expense within the same year.

	<b>2018</b>	<b>2017</b>	<b>2016</b>
	<b>(In millions)</b>		
Balance at January 1	\$ 350	\$ 264	\$ 245
Additions pending determination of proved reserves	602	477	249
Divestitures and other	(82)	(3)	—
Reclassifications to proved properties	(647)	(373)	(211)
Charged to exploration expense	(64)	(15)	(19)
Balance at December 31	<u>\$ 159</u>	<u>\$ 350</u>	<u>\$ 264</u>

The following provides an aging of capitalized exploratory well costs and the number of projects for which exploratory well costs have been capitalized for a period greater than one year since the completion of drilling:

	<b>2018</b>	<b>2017</b>	<b>2016</b>
	<b>(In millions)</b>		
Exploratory well costs capitalized for a period of one year or less	\$ 126	\$ 160	\$ 119
Exploratory well costs capitalized for a period greater than one year	33	190	145
Balance at December 31	<u>\$ 159</u>	<u>\$ 350</u>	<u>\$ 264</u>

Number of projects with exploratory well costs capitalized for a period greater than one year	2	4	3
---	---	---	---

The following summarizes a further aging by geographic area of those exploratory well costs that have been capitalized for a period greater than one year since the completion of drilling at December 31, 2018:

	<b>Total</b>	<b>2017</b>	<b>2016</b>	<b>2015 and Prior</b>
	<b>(In millions)</b>			
Suriname	28	—	—	28
Other Regions	5	5	—	—
	<u>\$ 33</u>	<u>\$ 5</u>	<u>\$ —</u>	<u>\$ 28</u>

Projects with suspended exploratory well costs capitalized for a period greater than one year since the completion of drilling are those identified by management as exhibiting sufficient quantities of hydrocarbons to justify potential development. Management is actively pursuing efforts to assess whether reserves can be attributed to these projects.

Suspended exploratory well costs capitalized at December 31, 2018 for a period greater than one year since the completion of drilling primarily relate to exploratory drilling in Suriname. Suriname well costs have been suspended pending ongoing activities, including analysis of well results and geologic and geophysical studies of nearby blocks. Remaining activities required to classify the associated reserves as proved include additional exploratory and appraisal drilling, geologic and geophysical studies, reservoir modeling and simulation, economic modeling, pre-development studies, approval of development plans, and project sanctioning. Exploratory well costs as of December 31, 2017 were \$190 million, of which \$160 million related to three separate projects in the North Sea. The Seagull assets with exploratory costs of \$82 million were divested during 2018, and the remaining two projects were reclassified to proved properties or charged to exploration expense based on management's assessment and development efforts through year-end.

#### 4. DERIVATIVE INSTRUMENTS AND HEDGING ACTIVITIES

##### Objectives and Strategies

Apache is exposed to fluctuations in crude oil and natural gas prices on the majority of its worldwide production, as well as transactions denominated in foreign currencies. The Company manages the variability in its cash flows by occasionally entering into derivative transactions on a portion of its crude oil and natural gas production and foreign currency transactions. The Company utilizes various types of derivative financial instruments to manage fluctuations in cash flows resulting from changes in commodity prices or foreign currency values.

##### Counterparty Risk

The use of derivative instruments exposes the Company to credit loss in the event of nonperformance by the counterparty. To reduce the concentration of exposure to any individual counterparty, Apache utilizes a diversified group of investment-grade rated counterparties, primarily financial institutions, for its derivative transactions. As of December 31, 2018, Apache had derivative positions with 12 counterparties. The Company monitors counterparty creditworthiness on an ongoing basis; however, it cannot predict sudden changes in counterparties' creditworthiness. In addition, even if such changes are not sudden, the Company may be limited in its ability to mitigate an increase in counterparty credit risk. Should one of these counterparties not perform, Apache may not realize the benefit of some of its derivative instruments resulting from lower commodity prices.

##### Derivative Instruments

As of December 31, 2018, Apache had the following open crude oil financial basis swap contracts:

<b>Production Period</b>	<b>Settlement Index</b>	<b>Mbbls</b>	<b>Weighted Average Price Differential</b>
January—September 2019	Midland-WTI/Cushing-WTI	7,371	\$(8.60)
October—December 2019	Midland-WTI/Cushing-WTI	1,380	\$(3.72)

As of December 31, 2018, Apache had the following open natural gas derivative positions:

<b>Production Period</b>	<b>Settlement Index</b>	<b>Collars</b>		
		<b>MMBtu (in 000's)</b>	<b>Weighted Average Floor Price</b>	<b>Weighted Average Ceiling Price</b>
January—June 2019	NYMEX Henry Hub	18,100	\$3.00	\$3.92

As of December 31, 2018, Apache had the following open natural gas financial basis swap contracts:

<b>Production Period</b>	<b>Settlement Index</b>	<b>MMBtu (in 000's)</b>	<b>Weighted Average Price Differential</b>
January—March 2019	NYMEX Henry Hub/Waha	1,350	\$(0.54)
January—June 2019	NYMEX Henry Hub/Waha	32,580	\$(0.53)
January—December 2019	NYMEX Henry Hub/Waha	14,600	\$(0.45)

Apache has open foreign currency costless collar contracts in GBP/USD for £150 million per month for the calendar year 2019 with a weighted average floor and ceiling price of \$1.20 and \$1.35, respectively.

##### Fair Value Measurements

Apache's commodity derivative instruments consist of variable-to-fixed price commodity swaps, options, and collars. The fair values of the Company's derivatives are not actively quoted in the open market. The Company uses a market approach to estimate the fair values of its derivative instruments on a recurring basis, utilizing commodity futures pricing for the underlying commodities provided by a reputable third party, a Level 2 fair value measurement.

**APACHE CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)**

The following table presents the Company's derivative assets and liabilities measured at fair value on a recurring basis:

	Fair Value Measurements Using			Total Fair Value	Netting <sup>(1)</sup>	Carrying Amount
	Quoted Price in Active Markets (Level 1)	Significant Other Inputs (Level 2)	Significant Unobservable Inputs (Level 3)			
(In millions)						
<b>December 31, 2018</b>						
Assets:						
Commodity Derivative Instruments	\$ —	\$ 69	\$ —	\$ 69	\$ (14)	\$ 55
Liabilities:						
Commodity Derivative Instruments	—	25	—	25	(14)	11
<b>December 31, 2017</b>						
Assets:						
Commodity Derivative Instruments	\$ —	\$ 67	\$ —	\$ 67	\$ (43)	\$ 24
Liabilities:						
Commodity Derivative Instruments	—	107	—	107	(43)	64

(1) The derivative fair values are based on analysis of each contract on a gross basis, excluding the impact of netting agreements with counterparties.

All derivative instruments are reflected as either assets or liabilities at fair value in the consolidated balance sheet. These fair values are recorded by netting asset and liability positions where counterparty master netting arrangements contain provisions for net settlement. The carrying value of the Company's derivative assets and liabilities and their locations on the consolidated balance sheet are as follows:

	December 31, 2018	December 31, 2017
(In millions)		
Current Assets: Prepaid assets and other	\$ 55	\$ 8
Other Assets: Deferred charges and other	—	16
<b>Total Assets</b>	<b>\$ 55</b>	<b>\$ 24</b>
Current Liabilities: Other current liabilities	\$ 11	\$ 64
<b>Total Liabilities</b>	<b>\$ 11</b>	<b>\$ 64</b>

The fair values and carrying values of the Company's foreign currency swaps were nil as of December 31, 2018.

**APACHE CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)**

**Derivative Activity Recorded in the Statement of Consolidated Operations**

The following table summarizes the effect of derivative instruments on the Company’s statement of consolidated operations:

	<b>For the Year Ended December 31,</b>		
	<b>2018</b>	<b>2017</b>	<b>2016</b>
	<b>(In millions)</b>		
Realized gain (loss):			
Derivative settlements, realized gain (loss)	\$ (81)	\$ 24	\$ —
Amortization of put premium, realized loss	(39)	(100)	—
Unrealized gain (loss)	103	(59)	—
Derivative instrument gains (losses), net	<u>\$ (17)</u>	<u>\$ (135)</u>	<u>\$ —</u>

Derivative instrument gains and losses are recorded in “Derivative instrument losses, net” under “Revenues and Other” in the Company’s statement of consolidated operations. Unrealized gains and losses for derivative activity recorded in the statement of consolidated operations are reflected in the statement of consolidated cash flows separately as “Unrealized derivative instrument losses (gains), net” in “Adjustments to reconcile net income (loss) to net cash provided by operating activities.”

**5. OTHER CURRENT LIABILITIES**

The following table provides detail of the Company’s other current liabilities at December 31, 2018 and 2017:

	<b>December 31,</b>	
	<b>2018</b>	<b>2017</b>
	<b>(In millions)</b>	
Accrued operating expenses	\$ 65	\$ 72
Accrued exploration and development	667	802
Accrued compensation and benefits	177	115
Accrued interest	137	145
Accrued income taxes	58	55
Current asset retirement obligation	66	43
Other	172	141
Total Other current liabilities	<u>\$ 1,342</u>	<u>\$ 1,373</u>

**APACHE CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)**

**6. ASSET RETIREMENT OBLIGATION**

The following table describes changes to the Company’s asset retirement obligation (ARO) liability for the years ended December 31, 2018 and 2017:

	2018	2017
	(In millions)	
Asset retirement obligation at beginning of year	\$ 1,835	\$ 2,498
Liabilities incurred	51	58
Liabilities divested	—	(818)
Liabilities settled	(52)	(45)
Accretion expense	108	130
Revisions in estimated liabilities	(10)	12
Asset retirement obligation at end of year	1,932	1,835
Less current portion	(66)	(43)
Asset retirement obligation, long-term	\$ 1,866	\$ 1,792

The ARO liability reflects the estimated present value of the amount of dismantlement, removal, site reclamation, and similar activities associated with Apache’s oil and gas properties. The Company utilizes current retirement costs to estimate the expected cash outflows for retirement obligations. The Company estimates the ultimate productive life of the properties, a risk-adjusted discount rate, and an inflation factor in order to determine the current present value of this obligation. To the extent future revisions to these assumptions impact the present value of the existing ARO liability, a corresponding adjustment is made to the oil and gas property balance.

During 2018 and 2017, the Company recorded \$51 million and \$58 million, respectively, in abandonment liabilities resulting from Apache’s exploration and development capital program. Liabilities settled primarily relate to individual properties, platforms, and facilities plugged and abandoned during the period. During 2018, approximately \$10 million net abandonment costs were revised downward to reflect changes in estimates of timing and costs in the U.S. and North Sea. During 2017, approximately \$12 million of abandonment costs were revised upward, primarily in the U.S.

**7. DEBT AND FINANCING COSTS**

**Overview**

All of the Company’s debt is senior unsecured debt and has equal priority with respect to the payment of both principal and interest. All indentures for the notes and debentures described below place certain restrictions on the Company, including limits on Apache’s ability to incur debt secured by certain liens. Certain of these indentures also restrict the Company’s ability to enter into certain sale and leaseback transactions and give holders the option to require the Company to repurchase outstanding notes and debentures upon certain changes in control. None of the indentures contain prepayment obligations in the event of a decline in credit ratings.

In November 2016, the Company initiated a program to purchase in the open market up to \$250 million in aggregate principal amount of senior notes issued under its indentures. In the fourth quarter of 2016, Apache purchased and canceled \$181 million aggregate principal amount of its senior notes through open market repurchases for \$182 million in cash, including accrued interest and \$0.5 million of premium. These repurchases resulted in a \$1 million net loss on extinguishment of debt, which is included in “Financing costs, net” in Apache’s consolidated statement of operations. The net loss includes an acceleration of related discount and deferred financing costs.

In January 2017, the Company purchased and canceled an additional \$69 million aggregate principal amount of senior notes for \$71 million in cash, including accrued interest and \$1 million of premium, which completed the open market repurchase program. These repurchases resulted in a \$1 million net loss on extinguishment of debt, which is included in “Financing costs, net” in the Company’s consolidated statement of operations. The net loss includes an acceleration of related discount and deferred financing costs.

**APACHE CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)**

In August 2017, Apache Corporation assumed the obligations of Apache Finance Canada Corporation (AFCC) in respect of \$300 million 7.75% notes due in 2029, which AFCC issued and the Company guaranteed pursuant to the governing indenture. The assumption was permitted by the indenture and effected pursuant to a supplemental indenture thereto. As a result of the assumption, the Company is the obligor under the notes and indenture, and AFCC is released from its obligations thereunder. The \$300 million 7.75% notes historically have been included in the Company's long-term debt; accordingly, the assumption did not change the Company's long-term debt or total debt.

In August 2018, Apache closed an offering of \$1.0 billion in aggregate principal amount of senior unsecured 4.375% notes due October 15, 2028. The notes are redeemable at any time, in whole or in part, at Apache's option, subject to a make-whole premium. The net proceeds from the sale of the notes were used to purchase certain outstanding notes in cash tender offers, repay notes that matured in September 2018, and for general corporate purposes.

Also in August 2018, Apache closed cash tender offers for certain outstanding notes. Apache accepted for purchase \$731 million aggregate principal amount of certain notes covered by the tender offers. Apache paid holders an aggregate of approximately \$828 million reflecting principal, the discount to par, early tender premium, and accrued and unpaid interest. The Company recorded a net loss of \$94 million on extinguishment of debt, including \$5 million of unamortized debt issuance costs and discount, in connection with the note purchases.

The following table presents the carrying value of the Company's debt at December 31, 2018 and 2017:

	December 31,	
	2018	2017
	(In millions)	
Commercial paper	\$ —	\$ —
6.9% notes due 2018 <sup>(1)</sup>	—	400
7.0% notes due 2018 <sup>(2)</sup>	—	150
7.625% notes due 2019	150	150
3.625% notes due 2021 <sup>(3)</sup>	393	493
3.25% notes due 2022 <sup>(3)</sup>	687	814
2.625% notes due 2023 <sup>(3)</sup>	403	528
7.7% notes due 2026	79	100
7.95% notes due 2026	133	180
4.375% notes due 2028 <sup>(3)</sup>	1,000	—
7.75% notes due 2029 <sup>(4)</sup>	300	300
6.0% notes due 2037 <sup>(3)</sup>	800	1,000
5.1% notes due 2040 <sup>(3)</sup>	1,499	1,499
5.25% notes due 2042 <sup>(3)</sup>	500	500
4.75% notes due 2043 <sup>(3)</sup>	1,413	1,413
4.25% notes due 2044 <sup>(3)</sup>	753	753
7.375% debentures due 2047	150	150
7.625% debentures due 2096	39	150
Debt before unamortized discount and debt issuance costs	8,299	8,580
Unamortized discount	(44)	(47)
Debt issuance costs	(51)	(49)
Total debt	8,204	8,484
Current maturities	(150)	(550)
Long-term debt	\$ 8,054	\$ 7,934

(1) On September 15, 2018, Apache's 6.9% notes due 2018 in original principal amount of \$400 million matured and were repaid.

(2) On February 1, 2018, Apache's 7.0% notes due 2018 in original principal amount of \$150 million matured and were repaid.

(3) These notes are redeemable, as a whole or in part, at Apache's option, subject to a make-whole premium. The remaining notes and debentures are not redeemable.

(4) Assumed in August 2017 as permitted by terms of these notes originally issued by a subsidiary and guaranteed by Apache. Since these notes historically have been included in Apache's long-term debt, the assumption did not change Apache's long-term debt or total debt.

**APACHE CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)**

Debt maturities as of December 31, 2018, excluding discounts and debt issuance costs, are as follows:

	<b>(In millions)</b>
2019	\$ 150
2020	—
2021	393
2022	687
2023	403
Thereafter	6,666
<b>Total Debt, excluding discounts and debt issuance costs</b>	<b>\$ 8,299</b>

**Fair Value**

Apache's debt is recorded at the carrying amount, net of unamortized discount and debt issuance costs, on the Company's consolidated balance sheet. The carrying amount, if any, of the Company's commercial paper and uncommitted credit facilities and overdraft lines approximate fair value because the interest rates are variable and reflective of market rates. Apache uses a market approach to determine the fair value of its fixed-rate debt using estimates provided by an independent investment financial data services firm (a Level 2 fair value measurement).

	<b>December 31, 2018</b>		<b>December 31, 2017</b>	
	<b>Carrying Amount</b>	<b>Fair Value</b>	<b>Carrying Amount</b>	<b>Fair Value</b>
	<b>(In millions)</b>			
Commercial paper	\$ —	\$ —	\$ —	\$ —
Notes and debentures	8,204	7,805	8,484	9,244
<b>Total Debt</b>	<b>\$ 8,204</b>	<b>\$ 7,805</b>	<b>\$ 8,484</b>	<b>\$ 9,244</b>

**Money Market and Overdraft Lines of Credit**

The Company has certain uncommitted money market and overdraft lines of credit that are used from time to time for working capital purposes. As of December 31, 2018 and 2017, there were no outstanding balances on Apache's lines of credit.

**Unsecured Committed Bank Credit Facilities**

In March 2018, Apache entered into a revolving credit facility that matures in March 2023 (subject to Apache's two, one-year extension options) with commitments totaling \$4.0 billion. Apache can increase commitments up to \$5.0 billion by adding new lenders or obtaining the consent of any increasing existing lenders. The facility includes a letter of credit subfacility of up to \$3.0 billion, of which \$2.08 billion was committed as of December 31, 2018. The facility is for general corporate purposes and committed borrowing capacity fully supports Apache's commercial paper program. Letters of credit are available for security needs, including in respect of abandonment obligations assumed in various North Sea acquisitions. As of December 31, 2018, letters of credit aggregating approximately £112.5 million and no borrowings were outstanding under this facility. In February 2019, £109.4 million of these outstanding letters of credit no longer were required and were terminated. In connection with entry into this facility, Apache terminated \$3.5 billion and £900 million in commitments under two former credit facilities and wrote off \$4 million of associated debt issuance costs, which is included in "Financing costs, net" in the Company's consolidated statement of operations.

At Apache's option, the interest rate per annum for borrowings under the 2018 facility is either a base rate, as defined, plus a margin or the London Inter-bank Offered Rate (LIBOR), plus a margin. Apache also pays quarterly a facility fee at a per annum rate on total commitments. The margins and the facility fee vary based upon the Company's senior long-term debt rating. At December 31, 2018, the base rate margin was 0.075 percent, the LIBOR margin was 1.075 percent, and the facility fee was 0.175 percent. A commission is payable quarterly to lenders on the face amount of each outstanding letter of credit at a per annum rate equal to the LIBOR margin then in effect. Customary letter of credit fronting fees and other charges are payable to issuing banks.

The financial covenants of the 2018 credit facility require Apache to maintain an adjusted debt-to-capital ratio of not greater than 60 percent at the end of any fiscal quarter. For purposes of this calculation, capital excludes the effects of non-cash write-downs, impairments, and related charges occurring after June 30, 2015.

**APACHE CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)**

The 2018 facility's negative covenants restrict the ability of Apache and its subsidiaries to create liens securing debt on its hydrocarbon-related assets, with exceptions for liens typically arising in the oil and gas industry; liens securing debt incurred to finance the acquisition, construction, improvement, or capital lease of assets, provided that such debt, when incurred, does not exceed the subject purchase price and costs, as applicable, and related expenses; liens on subsidiary assets located outside of the United States and Canada; and liens arising as a matter of law, such as tax and mechanics' liens. Apache also may incur liens on assets if debt secured thereby does not exceed 15 percent of Apache's consolidated net tangible assets, or approximately \$2.9 billion as of December 31, 2018. Negative covenants also restrict Apache's ability to merge with another entity unless it is the surviving entity, dispose of substantially all of its assets, and guarantee debt of non-consolidated entities in excess of the stated threshold.

In November 2018, Altus Midstream LP, an indirectly controlled subsidiary of Apache, entered into a revolving credit facility for general corporate purposes that matures in November 2023 (subject to Altus Midstream LP's two, one-year extension options). The agreement for this facility provides aggregate commitments from a syndicate of banks of \$450 million until (i) the consolidated net income of Altus Midstream LP and its restricted subsidiaries, as adjusted pursuant to the agreement, for three consecutive calendar months equals or exceeds \$175 million on an annualized basis and (ii) Altus Midstream LP has raised at least \$250 million of additional capital (such period, the "Initial Period"). Following the Initial Period, the aggregate commitments equal \$800 million. All aggregate commitments include a letter of credit subfacility of up to \$100 million and a swingline loan subfacility of up to \$100 million. After the Initial Period, Altus Midstream LP may increase commitments up to an aggregate \$1.5 billion by adding new lenders or obtaining the consent of any increasing existing lenders. As of December 31, 2018, no borrowings or letters of credit were outstanding under this facility.

The Altus Midstream LP credit facility is unsecured and is not guaranteed by Apache or any of Apache's other subsidiaries.

There are no clauses in either the agreement for Apache's 2018 credit facility or for Altus Midstream LP's 2018 credit facility that permit the lenders to accelerate payments or refuse to lend based on unspecified material adverse changes. These agreements do not have drawdown restrictions or prepayment obligations in the event of a decline in credit ratings. However, each agreement allows the lenders to accelerate payment maturity and terminate lending and issuance commitments for nonpayment and other breaches, and if a borrower or any of its subsidiaries defaults on other indebtedness in excess of the stated threshold, is insolvent, or has any unpaid, non-appealable judgment against it for payment of money in excess of the stated threshold. Lenders may also accelerate payment maturity and terminate lending and issuance commitments under the applicable agreement if Apache or Altus Midstream LP, as applicable, undergoes a specified change in control or any borrower has specified pension plan liabilities in excess of the stated threshold. Each of Apache and Altus Midstream LP was in compliance with the terms of its 2018 credit facility as of December 31, 2018.

**Commercial Paper Program**

Apache has available a \$3.5 billion commercial paper program which, subject to market availability, facilitates Apache borrowing funds for up to 270 days at competitive interest rates. The commercial paper program is fully supported by available borrowing capacity under Apache's 2018 committed credit facility. At December 31, 2018 and 2017, Apache had no commercial paper outstanding.

**APACHE CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)**

**Financing Costs, Net**

The following table presents the components of Apache's financing costs, net:

	<b>For the Year Ended December 31,</b>		
	<b>2018</b>	<b>2017</b>	<b>2016</b>
	(In millions)		
Interest expense	\$ 441	\$ 457	\$ 464
Amortization of debt issuance costs	9	9	8
Capitalized interest	(44)	(51)	(48)
Loss on extinguishment of debt	94	1	1
Interest income	(22)	(19)	(8)
Financing costs, net	<u>\$ 478</u>	<u>\$ 397</u>	<u>\$ 417</u>

As of December 31, 2018, the Company has \$44 million of debt discounts, which will be charged to interest expense over the life of the related debt issuances. Discount amortization of \$3 million was recorded as interest expense in each of 2018, 2017, and 2016.

**8. INCOME TAXES**

Income (loss) from continuing operations before income taxes is composed of the following:

	<b>For the Year Ended December 31,</b>		
	<b>2018</b>	<b>2017</b>	<b>2016</b>
	(In millions)		
U.S.	\$ (723)	\$ (3,620)	\$ (997)
Foreign	1,681	4,538	(685)
Total	<u>\$ 958</u>	<u>\$ 918</u>	<u>\$ (1,682)</u>

The total income tax provision (benefit) from continuing operations consists of the following:

	<b>For the Year Ended December 31,</b>		
	<b>2018</b>	<b>2017</b>	<b>2016</b>
	(In millions)		
Current income taxes:			
Federal	\$ (1)	\$ (38)	\$ (14)
State	—	(8)	(30)
Foreign	895	641	435
	<u>894</u>	<u>595</u>	<u>391</u>
Deferred income taxes:			
Federal	(65)	(1,010)	(257)
State	2	—	—
Foreign	(159)	(170)	(576)
	<u>(222)</u>	<u>(1,180)</u>	<u>(833)</u>
Total	<u>\$ 672</u>	<u>\$ (585)</u>	<u>\$ (442)</u>

**APACHE CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)**

The total income tax provision (benefit) differs from the amounts computed by applying the U.S. statutory income tax rate to income (loss) before income taxes. A reconciliation of the tax on the Company's income (loss) from continuing operations before income taxes and total tax expense is shown below:

	<b>For the Year Ended December 31,</b>		
	<b>2018</b>	<b>2017</b>	<b>2016</b>
	<b>(In millions)</b>		
Income tax expense (benefit) at U.S. statutory rate	\$ 201	\$ 321	\$ (589)
State income tax, less federal effect <sup>(1)</sup>	2	(6)	(19)
Taxes related to foreign operations	436	(105)	303
Tax credits	(13)	(33)	(1)
Tax on distributed foreign earnings	—	—	80
Tax on deemed repatriation of foreign earnings	103	419	—
Foreign tax credits	(336)	(201)	(136)
Deferred tax on undistributed foreign earnings	—	(1,872)	(31)
Change in U.K. tax rate	—	—	(238)
Change in U.S. tax rate	161	516	—
Net change in tax contingencies	(2)	(1)	(19)
Canadian USD functional currency election	—	—	158
Sale of Canadian assets	—	279	—
Sale of North Sea assets	(30)	(48)	—
Valuation allowances <sup>(1)</sup>	118	161	10
All other, net	32	(15)	40
	<u>\$ 672</u>	<u>\$ (585)</u>	<u>\$ (442)</u>

(1) The change in state valuation allowance is included as a component of state income tax.

**APACHE CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)**

The net deferred income tax liability reflects the net tax impact of temporary differences between the asset and liability amounts carried on the balance sheet under GAAP and amounts utilized for income tax purposes. The net deferred income tax liability consists of the following:

	<b>December 31,</b>	
	<b>2018</b>	<b>2017</b>
<b>(In millions)</b>		
<b>Deferred tax assets:</b>		
Deferred income	\$ —	\$ 13
U.S. and state net operating losses	1,633	1,230
Capital losses	636	620
Foreign net operating losses	—	6
Tax credits and other tax incentives	39	28
Foreign tax credits	2,241	2,427
Accrued expenses and liabilities	117	110
Asset retirement obligation	649	629
Equity investments	4	—
Net interest expense limitation	65	—
Other	97	42
Total deferred tax assets	5,481	5,105
Valuation allowance	(3,947)	(3,816)
Net deferred tax assets	1,534	1,289
<b>Deferred tax liabilities:</b>		
Deferred income	10	—
Equity investments	—	18
Investment in Altus Midstream LP	73	—
Property and equipment	1,747	1,798
Other	4	—
Total deferred tax liabilities	1,834	1,816
Net deferred income tax liability	\$ 300	\$ 527

Net deferred tax assets and liabilities are included in the consolidated balance sheet as follows:

	<b>December 31,</b>	
	<b>2018</b>	<b>2017</b>
<b>(In millions)</b>		
<b>Assets:</b>		
Deferred charges and other	\$ 91	\$ 18
<b>Liabilities:</b>		
Deferred income taxes	391	545
Net deferred income tax liability	\$ 300	\$ 527

**APACHE CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)**

On December 22, 2017, the Tax Cuts and Jobs Act (the Act) was signed into law. In addition to reducing the corporate income tax rate from 35 percent to 21 percent effective January 1, 2018, certain provisions in the Act move the U.S. away from a worldwide tax system and closer to a territorial system for earnings of foreign corporations, establishing a participation exemption system for taxation of foreign income. The new law includes a transition rule to effect this participation exemption regime. As a result of the enacted legislation, taxpayers were required to include in taxable income for the tax year ending December 31, 2017, the pro rata share of deferred income of each specified foreign corporation with respect to which the taxpayer is a U.S. shareholder. In 2017, the Company recorded a \$419 million provisional deferred tax expense attributable to the deemed repatriation of foreign earnings required under the Act.

Also on December 22, 2017, the SEC staff issued Staff Accounting Bulletin No. 118 (SAB 118) which provides guidance for the application of ASC Topic 740, Income Taxes, for the income tax effects of the Act. SAB 118 provides a measurement period which should not extend beyond one year of the enactment date of the Act. In 2018, the Company recorded an additional \$103 million deferred tax expense attributable to the deemed repatriation of foreign earnings. This deferred tax expense combined with the provisional amount recorded in 2017 were fully offset by available foreign tax credits. Additional guidance issued by the Internal Revenue Service in 2018 clarified, among other things, the ability for taxpayers generating current tax losses to utilize foreign tax credits to fully offset taxes attributable to the deemed repatriation of foreign earnings, rather than utilizing 2017 current year losses. In light of the new guidance, the Company increased its 2017 net operating losses by \$1.2 billion, which resulted in incremental \$161 million deferred tax expense associated with the remeasurement of the 2017 net operating loss deferred tax asset from 35 percent to 21 percent. The Company completed its analysis of the income tax effects of the Act in the fourth quarter of 2018.

In 2016, the U.K. government enacted Finance Bill 2016, which provides tax relief to E&P companies operating in the North Sea through a reduction of Supplementary Charge from 20 percent to 10 percent, effective January 1, 2016. As a result of the enacted legislation, in 2016, Apache recorded a deferred tax benefit of \$238 million related to the remeasurement of the Company's December 31, 2015 U.K. deferred income tax liability.

The Company has recorded an increase in valuation allowance against certain deferred tax assets, primarily driven by asset impairments. The Company has assessed the future potential to realize these deferred tax assets and has concluded that it is more likely than not that these deferred tax assets will not be realized based on current economic conditions and expectations for the future.

In 2018, 2017, and 2016, the Company's valuation allowance increased by \$131 million, decreased by \$1.6 billion, and decreased by \$33 million, respectively, as detailed in the table below:

	2018	2017	2016
	(In millions)		
Balance at beginning of year	\$ 3,816	\$ 5,401	\$ 5,434
State <sup>(1)</sup>	15	139	(43)
U.S.	124	905	139
Foreign <sup>(2)</sup>	(8)	(2,629)	(129)
Balance at end of year	\$ 3,947	\$ 3,816	\$ 5,401

(1) Reported as a component of state income taxes.

(2) In 2017, the Company completed the sale of its Canadian assets. As such, except for capital losses incurred on the sale, the deferred tax assets, liabilities, and valuation allowance related to these assets were removed for 2017.

On December 31, 2018, the Company had net operating losses as follows:

	Amount	Expiration
	(In millions)	
Net operating losses:		
U.S.	\$ 5,888	2018 - Indefinite
State	5,664	Various

**APACHE CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)**

The Company has a U.S. net operating loss carryforward of \$5.9 billion, which includes \$197 million of net operating loss subject to annual limitation under Section 382 of the Internal Revenue Code (Code). Net operating losses generated in tax years beginning after 2017 are subject to an 80 percent taxable income limitation under the Act. The Company also has a net interest expense carryover of \$289 million under Section 163(j) of the Code subject to indefinite carryover, a U.S. capital loss carryforward of \$1.8 billion, which has a five year carryover period and a Canadian capital loss carryforward of \$836 million which has an indefinite carryover. The Company has recorded a full valuation allowance against the U.S. net operating losses, the state net operating losses, the net interest expense carryover, the U.S. capital loss, and the Canadian capital loss because it is probable that these attributes will not be realized.

On December 31, 2018, the Company had foreign tax credits as follows:

	<u>Amount</u>	<u>Expiration</u>
	(In millions)	
Foreign tax credits	\$ 2,241	2025-2026

The Company has a \$2.2 billion U.S. foreign tax credit carryforward. The Company has recorded a full valuation allowance against the U.S. foreign tax credits listed above because it is probable that these attributes will expire unutilized.

The Company accounts for income taxes in accordance with ASC Topic 740, "Income Taxes," which prescribes a minimum recognition threshold a tax position must meet before being recognized in the financial statements. Tax positions generally refer to a position taken in a previously filed income tax return or expected to be included in a tax return to be filed in the future that is reflected in the measurement of current and deferred income tax assets and liabilities. A reconciliation of the beginning and ending amount of unrecognized tax benefits is as follows:

	<u>2018</u>	<u>2017</u>	<u>2016</u>
	(In millions)		
Balance at beginning of year	\$ 26	\$ 15	\$ 19
Additions based on tax positions related to the current year	—	12	15
Reductions for tax positions of prior years	(2)	(1)	(19)
Balance at end of year	<u>\$ 24</u>	<u>\$ 26</u>	<u>\$ 15</u>

The Company records interest and penalties related to unrecognized tax benefits as a component of income tax expense. Each quarter the Company assesses the amounts provided for and, as a result, may increase or reduce the amount of interest and penalties. During the years ended December 31, 2018, 2017, and 2016, the Company recorded tax expense of \$1 million, nil, and nil, respectively, for interest and penalties. At December 31, 2018, 2017, and 2016, the Company had an accrued liability for interest and penalties of \$1 million, nil, and nil, respectively.

In 2018, 2017, and 2016, the Company recorded a \$2 million net reduction, \$11 million net increase, and a \$4 million net reduction in its reserve for uncertain tax positions, respectively. The Company is currently under IRS audit for the 2014, 2015, and 2016 tax years.

Apache and its subsidiaries are subject to U.S. federal income tax as well as income tax in various states and foreign jurisdictions. The Company's uncertain tax positions are related to tax years that may be subject to examination by the relevant taxing authority. Apache's earliest open tax years in its key jurisdictions are as follows:

**Jurisdiction**

U.S.	2014
Egypt	2005
U.K.	2017

## 9. COMMITMENTS AND CONTINGENCIES

### Legal Matters

Apache is party to various legal actions arising in the ordinary course of business, including litigation and governmental and regulatory controls. The Company has an accrued liability of approximately \$35 million for all legal contingencies that are deemed to be probable of occurring and can be reasonably estimated. Apache's estimates are based on information known about the matters and its experience in contesting, litigating, and settling similar matters. Although actual amounts could differ from management's estimate, none of the actions are believed by management to involve future amounts that would be material to Apache's financial position, results of operations, or liquidity after consideration of recorded accruals. For material matters that Apache believes an unfavorable outcome is reasonably possible, the Company has disclosed the nature of the matter and a range of potential exposure, unless an estimate cannot be made at this time. It is management's opinion that the loss for any other litigation matters and claims that are reasonably possible to occur will not have a material adverse effect on the Company's financial position, results of operations, or liquidity.

#### *Argentine Claims*

On March 12, 2014, the Company and its subsidiaries completed the sale of all of the Company's subsidiaries' operations and properties in Argentina to YPF Sociedad Anonima (YPF). As part of that sale, YPF assumed responsibility for all of the past, present, and future litigation in Argentina involving Company subsidiaries, except that Company subsidiaries have agreed to indemnify YPF for certain environmental, tax, and royalty obligations capped at an aggregate of \$100 million. The indemnity is subject to specific agreed conditions precedent, thresholds, contingencies, limitations, claim deadlines, loss sharing, and other terms and conditions. On April 11, 2014, YPF provided its first notice of claims pursuant to the indemnity. Company subsidiaries have not paid any amounts under the indemnity but will continue to review and consider claims presented by YPF. Further, Company subsidiaries retain the right to enforce certain Argentina-related indemnification obligations against Pioneer Natural Resources Company (Pioneer) in an amount up to \$67.5 million pursuant to the terms and conditions of stock purchase agreements entered in 2006 between Company subsidiaries and subsidiaries of Pioneer.

#### *Louisiana Restoration*

Louisiana surface owners often file lawsuits or assert claims against oil and gas companies, including Apache, claiming that operators and working interest owners in the chain of title are liable for environmental damages on the leased premises, including damages measured by the cost of restoration of the leased premises to its original condition, regardless of the value of the underlying property. From time to time restoration lawsuits and claims are resolved by the Company for amounts that are not material to the Company, while new lawsuits and claims are asserted against the Company. With respect to each of the pending lawsuits and claims, the amount claimed is not currently determinable or is not material, except as noted. Further, the overall exposure related to these lawsuits and claims is not currently determinable. While an adverse judgment against Apache is possible, Apache intends to actively defend these lawsuits and claims.

Starting in November of 2013 and continuing into 2017, several parishes in Louisiana have pending lawsuits against many oil and gas producers, including Apache. These cases have all been removed to federal courts in Louisiana. In these cases, the Parishes, as plaintiffs, allege that defendants' oil and gas exploration, production, and transportation operations in specified fields were conducted in violation of the State and Local Coastal Resources Management Act of 1978, as amended, and applicable regulations, rules, orders, and ordinances promulgated or adopted thereunder by the Parish or the State of Louisiana. Plaintiffs allege that defendants caused substantial damage to land and water bodies located in the coastal zone of Louisiana. Plaintiffs seek, among other things, unspecified damages for alleged violations of applicable law within the coastal zone, the payment of costs necessary to clear, re-vegetate, detoxify, and otherwise restore the subject coastal zone as near as practicable to its original condition, and actual restoration of the coastal zone to its original condition. While an adverse judgment against Apache might be possible, Apache intends to vigorously oppose these claims.

#### *Apollo Exploration Lawsuit*

In a case captioned *Apollo Exploration, LLC, Cogent Exploration, Ltd. Co. & SellmoCo, LLC v. Apache Corporation*, Cause No. CV50538 in the 385th Judicial District Court, Midland County, Texas, plaintiffs alleged damages in excess of \$200 million (having previously claimed in excess of \$1.1 billion) relating to purchase and sale agreements, mineral leases, and areas of mutual interest agreements concerning properties located in Hartley, Moore, Potter, and Oldham Counties, Texas. The Court granted motions filed by Apache reducing the plaintiffs' alleged damages to an amount that is not material to the Company. Apache believes that plaintiffs' claims lack merit and will vigorously oppose the claims.

***Castex Lawsuit***

In a case styled Apache Corporation v. Castex Offshore, Inc, et. al., Cause No. 2015-48580, in the 113rd Judicial District Court of Harris County, Texas, Castex filed claims for alleged damages which they recently disclosed to be approximately \$200 million, relating to overspend on the Belle Isle Gas Facility upgrade, and the drilling of five sidetracks on the Potomac #3 Well. A portion of the alleged damages are subject to set off for claims brought by Apache. Trial is set for March 4, 2019. Apache believes Castex's claims have no merit and will vigorously oppose the claims.

***Australian Operations Divestiture Dispute***

By a Sale and Purchase Agreement dated April 9, 2015 (SPA), the Company and its subsidiaries divested their remaining Australian operations to Quadrant Energy Pty Ltd (Quadrant). Closing occurred on June 5, 2015. In April 2017, Apache filed suit against Quadrant for breach of the SPA. In its suit, Apache seeks approximately AUD \$80 million. In December 2017, Quadrant filed a defense of equitable set-off to Apache's claim and a counterclaim seeking approximately AUD \$200 million in the aggregate. The Company believes that Quadrant's claims lack merit and will not have a material adverse effect on the Company's financial position, results of operation, or liquidity.

***California Litigation***

On July 17, 2017, in three separate actions, San Mateo County, California, Marin County, California, and the City of Imperial Beach, California, all filed suit individually and on behalf of the people of the state of California against over 30 oil, gas, and coal companies alleging damages as a result of global warming. Plaintiffs seek unspecified damages and abatement under various tort theories. On December 20, 2017, in two separate actions, the City of Santa Cruz and Santa Cruz County and in a separate action on January 22, 2018, the City of Richmond, filed similar lawsuits against many of the same defendants. On November 14, 2018, the Pacific Coast Federation of Fishermen's Associations, Inc. also filed a similar lawsuit against many of the same defendants. Apache believes that the claims made against it are baseless and intends to vigorously defend these lawsuits.

**Environmental Matters**

The Company, as an owner or lessee and operator of oil and gas properties, is subject to various federal, state, local, and foreign country laws and regulations relating to discharge of materials into, and protection of, the environment. These laws and regulations may, among other things, impose liability on the lessee under an oil and gas lease for the cost of pollution clean-up resulting from operations and subject the lessee to liability for pollution damages. In some instances, the Company may be directed to suspend or cease operations in the affected area. The Company maintains insurance coverage, which it believes is customary in the industry, although the Company is not fully insured against all environmental risks.

Apache manages its exposure to environmental liabilities on properties to be acquired by identifying existing problems and assessing the potential liability. The Company also conducts periodic reviews, on a Company-wide basis, to identify changes in its environmental risk profile. These reviews evaluate whether there is a probable liability, the amount, and the likelihood that the liability will be incurred. The amount of any potential liability is determined by considering, among other matters, incremental direct costs of any likely remediation and the proportionate cost of employees who are expected to devote a significant amount of time directly to any possible remediation effort. As it relates to evaluations of purchased properties, depending on the extent of an identified environmental problem, the Company may exclude a property from the acquisition, require the seller to remediate the property to Apache's satisfaction, or agree to assume liability for the remediation of the property. The Company's general policy is to limit any reserve additions to any incidents or sites that are considered probable to result in an expected remediation cost exceeding \$300,000. Any environmental costs and liabilities that are not reserved for are treated as an expense when actually incurred. In Apache's estimation, neither these expenses nor expenses related to training and compliance programs are likely to have a material impact on its financial condition.

As of December 31, 2018, the Company had an undiscounted reserve for environmental remediation of approximately \$4 million. Apache is not aware of any environmental claims existing as of December 31, 2018 that have not been provided for or would otherwise have a material impact on its financial position or results of operations. There can be no assurance however, that current regulatory requirements will not change or past non-compliance with environmental laws will not be discovered on the Company's properties.

**APACHE CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)**

**Contractual Obligations**

At December 31, 2018, contractual obligations for long-term operating leases, capital leases, and purchase obligations are as follows:

<b>Net Minimum Commitments</b>	<b>Total</b>	<b>2019</b>	<b>2020-2021</b>	<b>2022-2023</b>	<b>2024 &amp; Beyond</b>
(In millions)					
Drilling rigs <sup>(1)</sup>	\$ 172	\$ 102	\$ 69	\$ 1	\$ —
Purchase obligations <sup>(2)</sup>	2,323	220	427	445	1,231
Operating lease obligations <sup>(3)</sup>	220	61	64	53	42
Capital lease obligations <sup>(4)</sup>	\$ 40	\$ 1	\$ 3	\$ 4	\$ 32
<b>Total Net Minimum Commitments<sup>(5)</sup></b>	<b>\$ 2,755</b>	<b>\$ 384</b>	<b>\$ 563</b>	<b>\$ 503</b>	<b>\$ 1,305</b>

- (1) Payments associated with the drilling of exploratory wells and development wells net of amounts billed to partners will be capitalized as a component of oil and gas properties, and either depreciated, impaired, or written off as exploration expense.
- (2) Amounts represent any agreements to purchase goods or services that are enforceable and legally binding and that specify all significant terms. These include minimum commitments associated with take-or-pay contracts, NGL processing agreements, drilling work program commitments, and agreements to secure capacity rights on third-party pipelines. Includes amounts related to firm transportation capacity on the Gulf Coast Express Pipeline Project (GCX Project), expected to be in service in the fourth quarter of 2019, and the Permian Highway Pipeline Project, expected to be in service in the fourth quarter of 2020. Amounts exclude certain product purchase obligations related to marketing and trading activities for which there are no minimum purchase requirements or the amounts are not fixed or determinable.
- (3) Amounts include long-term lease payments for office space, aircraft, supply and standby vessels, land leases, and equipment related to exploration, development, and production activities.
- (4) This represents the Company's capital lease obligation related to its Midland, Texas office building. The imputed interest rate necessary to reduce the net minimum lease payments to present value of the lease term is 4.4 percent or \$16 million as of December 31, 2018.
- (5) Excludes purchase commitments for jointly owned fields and facilities for which the Company is not the operator.

The table above includes leases for buildings, facilities, and related equipment with varying expiration dates through 2042. Total rent expense, net of amounts capitalized and sublease income, for continuing operations was \$76 million, \$82 million, and \$59 million for 2018, 2017, and 2016, respectively. Costs incurred under take-or-pay and throughput obligations were \$132 million, \$134 million, and \$86 million for 2018, 2017, and 2016, respectively.

## **10. RETIREMENT AND DEFERRED COMPENSATION PLANS**

Apache Corporation provides retirement benefits to its U.S. employees through the use of multiple plans: a 401(k) savings plan, a money purchase retirement plan, a non-qualified retirement/savings plan, and a non-qualified restorative retirement savings plan. The 401(k) savings plan provides participating employees the ability to elect to contribute up to 50 percent of eligible compensation, as defined, to the plan with the Company making matching contributions up to a maximum of 8 percent of each employee's annual eligible compensation. In addition, the Company annually contributes 6 percent of each participating employee's annual eligible compensation to a money purchase retirement plan. The 401(k) savings plan and the money purchase retirement plan are subject to certain annually-adjusted, government-mandated restrictions that limit the amount of employee and Company contributions. For certain eligible employees, the Company also provides a non-qualified retirement/savings plan or a non-qualified restorative retirement savings plan. These plans allow the deferral of up to 50 percent of each employee's base salary, up to 75 percent of each employee's annual bonus (that accepts employee contributions) and the Company's matching contributions in excess of the government mandated limitations imposed in the 401(k) savings plan and money purchase retirement plan.

Vesting in the Company's contributions in the 401(k) savings plan, the money purchase retirement plan, the non-qualified retirement savings plan and the non-qualified restorative retirement savings plan occurs at the rate of 20 percent for every completed year of employment. Upon a change in control of ownership of Apache Corporation, immediate and full vesting occurs.

Additionally, Apache North Sea Limited maintains a separate retirement plan, as required under the laws of the U.K.

The aggregate annual cost to Apache of all U.S. and international savings plans, the money purchase retirement plan, non-qualified retirement/savings plan, and non-qualified restorative retirement savings plan was \$52 million, \$55 million, and \$52 million for 2018, 2017, and 2016, respectively.

Apache also provides a funded noncontributory defined benefit pension plan (U.K. Pension Plan) covering certain employees of the Company's North Sea operations in the U.K. The plan provides defined pension benefits based on years of service and final salary. The plan applies only to employees who were part of BP North Sea's pension plan as of April 2, 2003, prior to the acquisition of BP North Sea by the Company effective July 1, 2003.

Additionally, the Company offers postretirement medical benefits to U.S. employees who meet certain eligibility requirements. Eligible participants receive medical benefits up until the age of 65 or at the date they become eligible for Medicare, provided the participant remits the required portion of the cost of coverage. The plan is contributory with participants' contributions adjusted annually. The postretirement benefit plan does not cover benefit expenses once a covered participant becomes eligible for Medicare.

**APACHE CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)**

The following tables set forth the benefit obligation, fair value of plan assets and funded status as of December 31, 2018, 2017, and 2016, and the underlying weighted average actuarial assumptions used for the U.K. Pension Plan and U.S. postretirement benefit plan. Apache uses a measurement date of December 31 for its pension and postretirement benefit plans.

	2018		2017		2016	
	Pension Benefits	Postretirement Benefits	Pension Benefits	Postretirement Benefits	Pension Benefits	Postretirement Benefits
(In millions)						
<b>Change in Projected Benefit Obligation</b>						
Projected benefit obligation at beginning of year	\$ 216	\$ 27	\$ 202	\$ 26	\$ 202	\$ 26
Service cost	4	2	4	2	4	2
Interest cost	5	1	6	1	7	1
Foreign currency exchange rates	(11)	—	20	—	(39)	—
Actuarial losses (gains)	(11)	(2)	(4)	1	32	(2)
Plan settlements	(11)	—	—	—	—	—
Benefits paid	(5)	(3)	(12)	(4)	(4)	(3)
Retiree contributions	—	2	—	1	—	2
Projected benefit obligation at end of year	187	27	216	27	202	26
<b>Change in Plan Assets</b>						
Fair value of plan assets at beginning of year	238	—	206	—	197	—
Actual return on plan assets	(6)	—	17	—	46	—
Foreign currency exchange rates	(13)	—	22	—	(39)	—
Employer contributions	5	2	5	3	6	1
Plan settlements	(11)	—	—	—	—	—
Benefits paid	(5)	(4)	(12)	(4)	(4)	(3)
Retiree contributions	—	2	—	1	—	2
Fair value of plan assets at end of year	208	—	238	—	206	—
<b>Funded status at end of year</b>	<b>\$ 21</b>	<b>\$ (27)</b>	<b>\$ 22</b>	<b>\$ (27)</b>	<b>\$ 4</b>	<b>\$ (26)</b>
<b>Amounts recognized in Consolidated Balance Sheet</b>						
Current liability	\$ —	\$ (2)	\$ —	\$ (2)	\$ —	\$ (2)
Non-current asset (liability)	21	(25)	22	(25)	4	(24)
	<u>\$ 21</u>	<u>\$ (27)</u>	<u>\$ 22</u>	<u>\$ (27)</u>	<u>\$ 4</u>	<u>\$ (26)</u>
<b>Pre-tax Amounts Recognized in Accumulated Other Comprehensive Income (Loss)</b>						
Accumulated gain (loss)	\$ (13)	\$ 10	\$ (11)	\$ 8	\$ (25)	\$ 9
<b>Weighted Average Assumptions used as of December 31</b>						
Discount rate	2.90%	4.13%	2.60%	3.44%	2.70%	3.76%
Salary increases	4.70%	N/A	4.70%	N/A	4.80%	N/A
Expected return on assets	2.80%	N/A	2.90%	N/A	3.40%	N/A
Healthcare cost trend						
Initial	N/A	6.50%	N/A	6.75%	N/A	7.00%
Ultimate in 2025	N/A	5.00%	N/A	5.00%	N/A	5.00%

**APACHE CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)**

As of December 31, 2018, 2017, and 2016, the accumulated benefit obligation for the U.K. Pension Plan was \$167 million, \$193 million, and \$181 million, respectively.

Apache's defined benefit pension plan assets are held by a non-related trustee who has been instructed to invest the assets in a blend of equity securities and low-risk debt securities. The Company intends that this blend of investments will provide a reasonable rate of return such that the benefits promised to members are provided. The U.K. Pension Plan policy is to target an ongoing funding level of 100 percent through prudent investments and includes policies and strategies such as investment goals, risk management practices, and permitted and prohibited investments. A breakout of previous allocations for plan asset holdings and the target allocation for the Company's plan assets are summarized below:

<b>Asset Category</b>	<b>Target Allocation</b>	<b>Percentage of Plan Assets at Year-End</b>	
	<b>2018</b>	<b>2018</b>	<b>2017</b>
Equity securities:			
Overseas quoted equities	22%	22%	26%
Total equity securities	22%	22%	26%
Debt securities:			
U.K. Government bonds	62%	62%	58%
U.K. corporate bonds	16%	15%	14%
Debt securities	78%	77%	72%
Cash	—	1%	2%
Total	100%	100%	100%

**APACHE CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)**

The plan's assets do not include any direct ownership of equity or debt securities of Apache. The fair value of plan assets is based upon unadjusted quoted prices for identical instruments in active markets, which is a Level 1 fair value measurement. The following tables present the fair values of plan assets for each major asset category based on the nature and significant concentration of risks in plan assets at December 31, 2018 and December 31, 2017:

<b>Fair Value Measurements Using:</b>				
	<b>Quoted Price in Active Markets (Level 1)</b>	<b>Significant Other Inputs (Level 2)</b>	<b>Unobservable Inputs (Level 3)</b>	<b>Total Fair Value</b>
(In millions)				
<b>December 31, 2018</b>				
Equity securities:				
Overseas quoted equities <sup>(1)</sup>	\$ 46	\$ —	\$ —	\$ 46
Total equity securities	46	—	—	46
Debt securities:				
U.K. Government bonds <sup>(2)</sup>	129	—	—	129
U.K. corporate bonds <sup>(3)</sup>	32	—	—	32
Total debt securities	161	—	—	161
Cash	1	—	—	1
Fair value of plan assets	\$ 208	\$ —	\$ —	\$ 208
<b>December 31, 2017</b>				
Equity securities:				
Overseas quoted equities <sup>(1)</sup>	\$ 61	\$ —	\$ —	\$ 61
Total equity securities	61	—	—	61
Debt securities:				
U.K. Government bonds <sup>(2)</sup>	138	—	—	138
U.K. corporate bonds <sup>(3)</sup>	33	—	—	33
Total debt securities	171	—	—	171
Cash	6	—	—	6
Fair value of plan assets	\$ 238	\$ —	\$ —	\$ 238

(1) This category includes overseas equities, which comprises 20 percent passive global equities benchmarked against the MSCI World (NDR) Index, 25 percent passive global equities (hedged) benchmarked against the MSCI World (NDR) Hedged Index, 20 percent fundamental indexation global equities benchmarked against the FTSE RAFI Developed 1000 index, 25 percent fundamental indexation global equities (hedged) benchmarked against the FTSE RAFI Developed 1000 Hedge Index, and 10 percent emerging markets benchmarked against the MSCI Emerging Markets (NDR) Index, which has a performance target of 2 percent per annum over the benchmark over a rolling three-year period.

(2) This category includes U.K. Government bonds, which comprises 61 percent index-linked gilts benchmarked against the FTSE Actuaries Government Securities Index-Linked Over 5 Years Index, 8 percent sterling nominal LDI bonds, and 31 percent sterling inflation linked LDI bonds, both benchmarked against ILIM Custom Benchmark index.

(3) This category comprises U.K. corporate bonds benchmarked against the BofAML Sterling Corporate & Collateralised (excluding Subordinated) Index.

(4) This category comprises U.K. passive equities, which are benchmarked against the FTSE 350 Index.

The expected long-term rate of return on assets assumptions are derived relative to the yield on long-dated fixed-interest bonds issued by the U.K. government (gilts). For equities, outperformance relative to gilts is assumed to be 3.5 percent per year.

**APACHE CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)**

The following tables set forth the components of the net periodic cost and the underlying weighted average actuarial assumptions used for the pension and postretirement benefit plans as of December 31, 2018, 2017, and 2016:

	2018		2017		2016	
	Pension Benefits	Postretirement Benefits	Pension Benefits	Postretirement Benefits	Pension Benefits	Postretirement Benefits
(In millions)						
<b>Components of Net Periodic Benefit Cost</b>						
Service cost	\$ 4	\$ 2	\$ 4	\$ 2	\$ 4	\$ 2
Interest cost	5	1	6	1	7	1
Expected return on assets	(7)	—	(8)	—	(7)	—
Amortization of actuarial (gain) loss	—	—	—	(1)	1	(1)
Settlement loss	1	—	—	—	—	—
Net periodic benefit cost	<u>\$ 3</u>	<u>\$ 3</u>	<u>\$ 2</u>	<u>\$ 2</u>	<u>\$ 5</u>	<u>\$ 2</u>

**Weighted Average Assumptions Used to Determine Net Periodic Benefit Cost for the Years Ended December 31**

Discount rate	2.60%	3.44%	2.70%	3.76%	3.90%	3.95%
Salary increases	4.70%	N/A	4.80%	N/A	4.60%	N/A
Expected return on assets	2.90%	N/A	3.40%	N/A	4.10%	N/A
Healthcare cost trend						
Initial	N/A	6.75%	N/A	7.00%	N/A	7.00%
Ultimate in 2025	N/A	5.00%	N/A	5.00%	N/A	5.00%

Assumed health care cost trend rates affect amounts reported for postretirement benefits. A one-percentage-point change in assumed health care cost trend rates would have the following effects:

	Postretirement Benefits	
	1% Increase	1% Decrease
(In millions)		
Effect on service and interest cost components	\$ 1	\$ (1)
Effect on postretirement benefit obligation	5	(4)

Apache expects to contribute approximately \$5 million to its pension plan and \$2 million to its postretirement benefit plan in 2019. The following benefit payments, which reflect expected future service, as appropriate, are expected to be paid:

	Pension Benefits	Postretirement Benefits
	(In millions)	
2019	\$ 4	\$ 2
2020	4	2
2021	8	2
2022	4	2
2023	4	2
Years 2024-2028	23	8

**APACHE CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)**

**11. CAPITAL STOCK**

**Common Stock Outstanding**

A summary of the shares issued and outstanding for the years ended December 31, 2018, 2017, and 2016 is presented in the table below.

	<b>2018</b>	<b>2017</b>	<b>2016</b>
Balance, beginning of year	380,954,864	379,439,676	378,034,175
Shares issued for stock-based compensation plans:			
Treasury shares issued	2,454	1,411	11,504
Common shares issued	1,566,237	1,513,777	1,393,997
Treasury shares acquired	(7,827,333)	—	—
Balance, end of year	<u>374,696,222</u>	<u>380,954,864</u>	<u>379,439,676</u>

**Net Income (Loss) per Common Share**

A reconciliation of the components of basic and diluted net income (loss) per common share for the years ended December 31, 2018, 2017, and 2016 is presented in the table below:

	<b>2018</b>			<b>2017</b>			<b>2016</b>		
	<b>Income</b>	<b>Shares</b>	<b>Per Share</b>	<b>Income</b>	<b>Shares</b>	<b>Per Share</b>	<b>Loss</b>	<b>Shares</b>	<b>Per Share</b>
<b>(In millions, except per share amounts)</b>									
<b>Basic:</b>									
Income (loss) from continuing operations	\$ 40	382	\$ 0.11	\$ 1,304	381	\$ 3.42	\$ (1,372)	379	\$ (3.62)
Income (loss) from discontinued operations	—	382	—	—	381	—	(33)	379	(0.09)
Income (loss) attributable to common stock	<u>\$ 40</u>	<u>382</u>	<u>\$ 0.11</u>	<u>\$ 1,304</u>	<u>381</u>	<u>\$ 3.42</u>	<u>\$ (1,405)</u>	<u>379</u>	<u>\$ (3.71)</u>
<b>Effect of Dilutive Securities:</b>									
Stock options and other	\$ —	2	\$ —	\$ —	2	\$ (0.01)	\$ —	—	\$ —
<b>Diluted:</b>									
Income (loss) from continuing operations	\$ 40	384	\$ 0.11	\$ 1,304	383	\$ 3.41	\$ (1,372)	379	\$ (3.62)
Income (loss) from discontinued operations	—	384	—	—	383	—	(33)	379	(0.09)
Income (loss) attributable to common stock	<u>\$ 40</u>	<u>384</u>	<u>\$ 0.11</u>	<u>\$ 1,304</u>	<u>383</u>	<u>\$ 3.41</u>	<u>\$ (1,405)</u>	<u>379</u>	<u>\$ (3.71)</u>

The diluted EPS calculation excludes options and restricted shares that were anti-dilutive totaling 5.6 million, 7.3 million, and 4.7 million for the years ended December 31, 2018, 2017, and 2016, respectively.

**Stock Repurchase Program**

In 2013 and 2014, Apache's Board of Directors authorized the purchase of up to 40 million shares of the Company's common stock. Shares may be purchased either in the open market or through privately held negotiated transactions. The Company initiated the buyback program on June 10, 2013, and through December 31, 2018, had repurchased a total of 40 million shares at an average price of \$79.18 per share. During 2018, the Company repurchased a total of 7.8 million shares at an average price of \$38.99 per share. During the fourth quarter of 2018, the Company's Board of Directors authorized the purchase of up to 40 million additional shares of the Company's common stock. The Company is not obligated to acquire any specific number of shares.

**APACHE CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)**

**Common Stock Dividend**

For each of the years ended December 31, 2018, 2017, and 2016, the Company paid common stock dividends of \$1.00 per share.

**Stock Compensation Plans**

The Company has several stock-based compensation plans, which include stock options, restricted stock, and conditional restricted stock unit plans. On May 12, 2016, the Company's shareholders approved the 2016 Omnibus Compensation Plan (the 2016 Plan), which is intended to provide eligible employees with equity-based incentives. The 2016 Plan provides for the granting of Incentive Stock Options, Non-Qualified Stock Options, Performance Awards, Restricted Stock Awards, Restricted Stock Units, Stock Appreciation Rights, Cash Awards, or any combination of the foregoing. A total of 16.2 million shares were authorized and available for grant under the 2016 Plan as of December 31, 2018. Previously approved plans remain in effect solely for the purpose of governing grants still outstanding that were issued prior to approval of the 2016 Plan. All new grants are issued from the 2016 Plan. In 2018, the Company began issuing cash-settled awards (phantom units) under the restricted stock and conditional restricted stock unit plans. The phantom units represent a hypothetical interest in the Company's stock and, once vested, are settled in cash. The compensation expense related to the phantom stock units is classified as a liability and remeasured at the end of each reporting period based on the change in fair value of one share of the Company's common stock up to the settlement date.

Costs related to the plans are capitalized or expensed based on the nature of each employee's activities. A description of the Company's stock-settled and cash-settled units compensation plans and related costs follows:

	<b>For the Year Ended December 31,</b>		
	<b>2018</b>	<b>2017</b>	<b>2016</b>
	<b>(In millions)</b>		
Stock-settled and cash-settled compensation expensed	\$ 157	\$ 142	\$ 131
Stock-settled and cash-settled compensation capitalized	37	41	40
<b>Total stock-settled and cash-settled compensation costs</b>	<b>\$ 194</b>	<b>\$ 183</b>	<b>\$ 171</b>

***Stock Options***

As of December 31, 2018, the Company had issued options to purchase shares of the Company's common stock under the 2007 Omnibus Equity Compensation Plan, the 2011 Omnibus Equity Compensation Plan (2011 Plan), and the 2016 Plan (together, the Omnibus Plans). New shares of Company stock will be issued for employee stock option exercises. Under the Omnibus Plans, the exercise price of each option equals the closing price of Apache's common stock on the date of grant. Options issued prior to 2016 generally become exercisable ratably over a four-year period and expire 10 years after granted. Options granted in or after 2016 become exercisable ratably over a three-year period and expire 10 years after granted. The Omnibus Plans were submitted to and approved by the Company's shareholders.

A summary of stock options issued and outstanding under the Omnibus Plans is presented in the table and narrative below:

	<b>2018</b>	
	<b>Shares Under Option</b>	<b>Weighted Average Exercise Price</b>
	<b>(In thousands)</b>	
Outstanding, beginning of year	4,593	\$ 83.36
Granted	812	45.93
Exercised	(29)	41.79
Forfeited	(121)	74.58
Expired	(383)	104.21
Outstanding, end of year <sup>(1)</sup>	4,872	75.95
Expected to vest <sup>(2)</sup>	1,274	48.74
Exercisable, end of year <sup>(3)</sup>	3,598	85.59

- (1) As of December 31, 2018, options outstanding had a weighted average remaining contractual life of 4.8 years and no intrinsic value.  
(2) As of December 31, 2018, options expected to vest had a weighted average remaining contractual life of 8.5 years and no intrinsic value.  
(3) As of December 31, 2018, options exercisable had a weighted average remaining contractual life of 3.5 years and no intrinsic value.

**APACHE CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)**

The fair value of each stock option award is estimated on the date of grant using the Black-Scholes option pricing model. Assumptions used in the valuation are disclosed in the following table. Expected volatilities are based on historical volatility of the Company's common stock and other factors. The expected dividend yield is based on historical yields on the date of grant. The expected term of stock options granted represents the period of time that the stock options are expected to be outstanding and is derived from historical exercise behavior, current trends, and values derived from lattice-based models. The risk-free rate is based on the U.S. Treasury yield curve in effect at the time of grant.

	<b>2018</b>	<b>2017</b>	<b>2016</b>
Expected volatility	33.47%	34.58%	32.72%
Expected dividend yields	2.16%	1.58%	2.42%
Expected term (in years)	6	6	6
Risk-free rate	2.42%	2.02%	1.44%
Weighted-average grant-date fair value	\$ 13.15	\$ 19.38	\$ 10.38

The intrinsic values of options exercised during 2018 and 2017 were approximately \$0.1 million and \$0.2 million, respectively. There were no options exercised during 2016. As of December 31, 2018, the total compensation cost related to non-vested options not yet recognized was \$6 million, which will be recognized over the remaining vesting period of the options.

***Restricted Stock and Restricted Stock Phantom Units***

The Company has restricted stock and restricted stock unit plans for eligible employees including officers. The programs created under the Omnibus Plans have been approved by Apache's Board of Directors. In 2018, the Company awarded 608,236 units of stock-settled awards at a weighted-average per-share market price of \$45.59. In 2017 and 2016, the Company awarded 1,947,506 and 4,049,023 stock-based restricted stock units at a weighted-average per-share market price of \$62.74 and \$47.37, respectively. The value of the stock-settled awards issued was established by the market price on the date of grant and is being recorded as compensation expense ratably over the vesting terms. Also during 2018, the Company awarded 1,973,360 phantom units of cash-settled awards. The cash-settled awards compensation expense is recorded as a liability and remeasured at the end of each reporting period over the vesting terms based on the per-share market price of Apache's common stock. During 2018, 2017, and 2016, compensation-expense related to restricted stock units and cash-based units was \$101 million, \$108 million, and \$113 million, respectively. In 2018, 2017, and 2016, \$29 million, \$35 million, and \$35 million were capitalized, respectively.

As of December 31, 2018, there was \$47 million of total unrecognized compensation cost related to 3,152,801 unvested stock-settled restricted stock units. The weighted-average remaining life of unvested stock-settled restricted stock units is approximately 0.7 years. The fair values of the stock-settled awards vested during 2018, 2017, and 2016 were approximately \$111 million, \$135 million, and \$151 million, respectively. A summary of stock-settled restricted stock unit activity for the year ended December 31, 2018, is presented below.

<b>Stock-settled Restricted Stocks Units</b>	<b>Shares</b>	<b>Weighted-Average Grant-Date Fair Value</b>
	<b>(In thousands)</b>	
Non-vested at January 1, 2018	4,920	\$ 56.67
Granted	608	45.59
Vested	(2,023)	55.10
Forfeited	(352)	56.69
Non-vested at December 31, 2018	<u>3,153</u>	<u>55.54</u>

**APACHE CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)**

The outstanding liability for the unvested cash-settled restricted stock phantom units as of December 31, 2018 was approximately \$25 million. A summary of cash-settled restricted stock unit activity for the year ended December 31, 2018, is presented below.

<b>Cash-settled Restricted Stock Phantom Units</b>	<b>Phantom Units</b>
	<b>(In thousands)</b>
Non-vested at January 1, 2018	59
Granted	1,973
Vested	(38)
Forfeited	(176)
Non-vested at December 31, 2018	1,818

In January 2019, the Company awarded 920,043 restricted stock units and 3,393,772 phantom units at a weighted-average per-share market price of \$27.21 under the 2016 Plan to eligible employees. The phantom units represent a hypothetical interest in the Company's stock and, once vested, are settled in cash. Total compensation cost for restricted stock units and phantom units absent any forfeitures, is estimated to be \$25 million and \$92 million, respectively, and was calculated based on the fair market value of a share of the Company's common stock as of the grant date. Compensation cost will be recognized over a three-year vesting period for both plans. The phantom units will be classified as a liability and remeasured at the end of each reporting period based on the change in fair value of one share of the Company's common stock.

Also during January 2019, the Company awarded 1,394,526 phantom units based on Altus Midstream Company's weighted-average per-share market price of \$7.51. The phantom units represent a hypothetical interest in ALTM's common stock and, once vested, are settled in cash. Total compensation cost for restricted stock units and phantom units, absent any forfeitures, is estimated to be \$10 million and was calculated based on the fair market value of ALTM's common stock as of the grant date. The phantom units will be classified as a liability and remeasured at the end of each reporting period based on the change in fair value of one share of ALTM's common stock.

***Performance Program***

To provide long-term incentives for Apache employees to deliver competitive returns to the Company's stockholders, the Company has granted conditional restricted stock units to eligible employees. Apache has a performance program for certain eligible employees with payout for 50 percent of the shares based upon measurement of total shareholder return (TSR) of Apache common stock as compared to a designated peer group during a three-year performance period. Payout for the remaining 50 percent of the shares is based on performance and financial objectives as defined in the plan. The overall results of the objectives are calculated at the end of the award's stated performance period and, if a payout is warranted, applied to the target number of restricted stock units awarded. The performance shares will immediately vest 50 percent at the end of the three-year performance period, with the remaining 50 percent vesting at the end of the following year. Grants from the performance programs outstanding at December 31, 2018, are as described below:

- In February 2015, the Company's Board of Directors approved the 2015 Performance Program, pursuant to the 2011 Plan. Eligible employees received initial stock-settled conditional restricted stock unit awards totaling 602,304 units. The results for the performance period ending December 31, 2017, yielded a payout of 100 percent of target. A total of 179,229 units were outstanding as of December 31, 2018.
- In January 2016, the Company's Board of Directors approved the 2016 Performance Program, pursuant to the 2011 Plan. Eligible employees received initial stock-settled conditional restricted stock unit awards totaling 871,369. The results for the performance period ending December 31, 2018, yielded a payout of 100 percent of target. A total of 667,617 units were outstanding as of December 31, 2018.
- In January 2017, the Company's Board of Directors approved the 2017 Performance Program, pursuant to the 2016 Plan. Eligible employees received initial stock-settled conditional restricted stock unit awards totaling 620,885 units. The actual amount of shares awarded will be between zero and 200 percent of target. A total of 499,795 units were outstanding as of December 31, 2018, from which a minimum of zero to a maximum of 999,590 units could be awarded.

**APACHE CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)**

- In January 2018, the Company's Board of Directors approved the 2018 Performance Program, pursuant to the 2016 Plan. Eligible employees received initial cash-settled conditional phantom units totaling 931,049 units during 2018. A total of 890,171 phantom units were outstanding as of December 31, 2018, from which a minimum of zero to a maximum of 1,780,342 phantom units could be awarded.

The fair value cost of the stock-settled awards was estimated on the date of grant and is being recorded as compensation expense ratably over the vesting terms. The fair value of the cash-settled awards are remeasured at the end of each reporting period over the vesting terms. During 2018, 2017, and 2016, \$38 million, \$23 million, and \$14 million, respectively, were charged to expense. During 2018, 2017, and 2016, \$7 million, \$4 million, and \$2 million were capitalized, respectively.

As of December 31, 2018, there was \$10 million of total unrecognized compensation cost related to 1,346,641 unvested stock-settled conditional restricted stock units. The weighted-average remaining life of the unvested stock-settled conditional restricted stock units is approximately 0.8 years. A summary of stock-settled conditional restricted stock unit activity for the year ended December 31, 2018, is presented below:

<b>Stock-settled Conditional Restricted Stock Units</b>	<b>Shares</b>	<b>Weighted Average Grant- Date Fair Value<sup>(1)</sup></b>
	<b>(In thousands)</b>	
Non-vested at January 1, 2018	1,694	\$ 52.39
Granted	19	34.78
Vested	(193)	66.63
Forfeited	(173)	48.01
Non-vested at December 31, 2018	<u>1,347</u>	<u>50.68</u>

- (1) The fair value of each conditional restricted stock unit award is estimated as of the date of grant using a Monte Carlo simulation with the following assumptions used for all grants made under the plan: (i) a three-year continuous risk-free interest rate; (ii) a constant volatility assumption based on the historical realized stock price volatility of the Company and the designated peer group; and (iii) the historical stock prices and expected dividends of the common stock of the Company and its designated peer group.

The outstanding liability for the unvested cash-settled conditional restricted stock units as of December 31, 2018 was approximately \$16 million. A summary of cash-settled conditional restricted stock unit activity for the year ended December 31, 2018, is presented below:

<b>Cash-settled Conditional Restricted Stock Phantom Units</b>	<b>Phantom Units</b>
	<b>(In thousands)</b>
Non-vested at January 1, 2018	—
Granted	931
Vested	—
Forfeited	(41)
Non-vested at December 31, 2018	<u>890</u>

In January 2019, the Company's Board of Directors approved the 2019 Performance Program, pursuant to the 2016 Plan, with terms similar to the 2018 Performance Program described above. Eligible employees received the initial cash-settled conditional phantom units totaling 1,677,281 units, with the ultimate number of phantom units to be awarded ranging from zero to a maximum of 3,354,562 units. These phantom units represent a hypothetical interest in the Company's stock, and, once vested, are settled in cash. The TSR component of the award had a grant date fair value per award of \$30.72 based on a Monte Carlo simulation. The grant date fair value per award for the remaining 50 percent was \$27.21 based on the weighted-average fair market value of a share of common stock of the Company as of the grant date. These phantom units will be classified as a liability and remeasured at the end of each reporting period.

**APACHE CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)**

**12. ACCUMULATED OTHER COMPREHENSIVE INCOME (LOSS)**

Components of accumulated other comprehensive income (loss) include the following:

	<b>For the Year Ended December 31,</b>		
	<b>2018</b>	<b>2017</b>	<b>2016</b>
	<b>(In millions)</b>		
Currency translation adjustment <sup>(1)</sup>	\$ —	\$ —	\$ (109)
Pension and postretirement benefit plan (Note 10)	4	4	(3)
Accumulated other comprehensive income (loss)	\$ 4	\$ 4	\$ (112)

(1) Currency translation adjustments resulting from translating Apache's Canadian subsidiaries' financial statements into U.S. dollar equivalents, prior to adoption of the U.S. dollar as their functional currency, were reported separately and accumulated in other comprehensive loss. This currency translation loss was recognized as a reduction of the net gain on divestiture during the third quarter of 2017 in connection with the Canada divestitures. For more information regarding these divestitures, please refer to Note 2—Acquisitions and Divestitures.

**13. MAJOR CUSTOMERS**

For the years ended 2018, 2017, and 2016, the customers, including their subsidiaries, that represented more than 10 percent of the Company's worldwide oil and gas production revenues were as follows:

	<b>For the Year Ended December 31,</b>		
	<b>2018</b>	<b>2017</b>	<b>2016</b>
BP plc	17%	12%	9%
China Petroleum & Chemical Corporation (Sinopec)	15%	16%	21%
Egyptian General Petroleum Corporation	10%	11%	12%

**APACHE CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)**

**14. BUSINESS SEGMENT INFORMATION**

As of December 31, 2018, Apache is engaged in exploration and production (Upstream) activities across three operating segments: Egypt, North Sea, and the U.S. Apache also has exploration interests in Suriname that may, over time, result in a reportable discovery and development opportunity. Apache's Upstream business explores for, develops, and produces natural gas, crude oil and natural gas liquids. During 2018, Apache established a new reporting segment for its U.S. midstream business separate from its upstream oil and gas development activities. The midstream business is operated by Altus, which owns, develops, and operates a midstream energy asset network in the Permian Basin of West Texas, anchored by midstream service contracts to Apache's production from its Alpine High resource play. Altus primarily generates revenue by providing fee-based natural gas gathering, compression, processing, and transportation services. Financial information for each segment is presented below:

	Egypt <sup>(2)</sup>	North Sea Upstream	U.S.	Altus Midstream	Intersegment Eliminations & Other	Total <sup>(1)</sup>
(In millions)						
<b>2018</b>						
Oil revenues	\$ 2,396	\$ 1,179	\$ 2,271	\$ —	\$ —	\$ 5,846
Natural gas revenues	339	122	458	—	—	919
Natural gas liquids revenues	13	20	550	—	—	583
Oil and gas production revenues	2,748	1,321	3,279	—	—	7,348
Midstream service affiliate revenues	—	—	—	77	(77)	—
Operating Expenses:						
Lease operating expenses	428	341	670	—	—	1,439
Gathering, transmission, and processing	47	42	282	54	(77)	348
Taxes other than income	—	—	207	8	—	215
Exploration	88	192	219	—	4	503
Depreciation, depletion, and amortization	745	375	1,266	19	—	2,405
Asset retirement obligation accretion	—	75	32	1	—	108
Impairments	63	10	438	—	—	511
	1,371	1,035	3,114	82	(73)	5,529
Operating Income (Loss)	\$ 1,377	\$ 286	\$ 165	\$ (5)	\$ (4)	1,819
Other Income (Expense):						
Gain on divestitures, net						23
Derivative instrument gains (losses), net						(17)
Other <sup>(3)</sup>						70
General and administrative						(431)
Transaction, reorganization, and separation						(28)
Financing costs, net						(478)
Income Before Income Taxes						\$ 958
Net Property and Equipment	\$ 2,856	\$ 2,148	\$ 12,145	\$ 1,227	\$ 45	\$ 18,421
Total Assets	\$ 4,260	\$ 2,456	\$ 12,962	\$ 1,857	\$ 47	\$ 21,582
Additions to Net Property and Equipment	\$ 594	\$ 223	\$ 2,544	\$ 545	\$ 8	\$ 3,914

**APACHE CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)**

	Egypt	North Sea	Canada <sup>(4)</sup>	U.S.	Altus Midstream	Intersegment Eliminations & Other	Total <sup>(4)</sup>
	Upstream						
	(In millions)						
<b>2017</b>							
Oil revenues	\$ 1,901	\$ 971	\$ 110	\$ 1,616	\$ —	\$ —	\$ 4,598
Natural gas revenues	395	92	104	368	—	—	959
Natural gas liquids revenues	11	15	17	287	—	—	330
Oil and gas production revenues	2,307	1,078	231	2,271	—	—	5,887
Midstream service affiliate revenues	—	—	—	—	15	(15)	—
Operating Expenses:							
Lease operating expenses	362	335	103	584	—	—	1,384
Gathering, transmission, and processing	44	30	34	86	16	(15)	195
Taxes other than income	—	(14)	12	153	—	—	151
Exploration	62	86	11	363	—	27	549
Depreciation, depletion, and amortization	758	446	76	994	6	—	2,280
Asset retirement obligation accretion	—	72	27	31	—	—	130
Impairments	—	8	—	—	—	—	8
	1,226	963	263	2,211	22	12	4,697
Operating Income (Loss)	<u>\$ 1,081</u>	<u>\$ 115</u>	<u>\$ (32)</u>	<u>\$ 60</u>	<u>\$ (7)</u>	<u>\$ (27)</u>	<u>1,190</u>
Other Income (Expense):							
Gain on divestitures, net							627
Derivative instrument gains (losses), net							(135)
Other							44
General and administrative							(395)
Transaction, reorganization, and separation							(16)
Financing costs, net							(397)
Income Before Income Taxes							<u>\$ 918</u>
Net Property and Equipment	<u>\$ 3,099</u>	<u>\$ 2,553</u>	<u>\$ —</u>	<u>\$ 11,370</u>	<u>\$ 700</u>	<u>\$ 37</u>	<u>\$ 17,759</u>
Total Assets	<u>\$ 4,658</u>	<u>\$ 2,977</u>	<u>\$ —</u>	<u>\$ 13,522</u>	<u>\$ 706</u>	<u>\$ 59</u>	<u>\$ 21,922</u>
Additions to Net Property and Equipment	<u>\$ 517</u>	<u>\$ 374</u>	<u>\$ —</u>	<u>\$ 1,847</u>	<u>\$ 550</u>	<u>\$ 14</u>	<u>\$ 3,302</u>

**APACHE CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)**

	Egypt	North Sea	Canada <sup>(4)</sup>	U.S.	Altus Midstream	Intersegment Eliminations & Other	Total <sup>(1)</sup>
	Upstream						
	(In millions)						
<b>2016</b>							
Oil revenues	\$ 1,657	\$ 836	\$ 180	\$ 1,499	\$ —	\$ —	\$ 4,172
Natural gas revenues	389	118	146	314	—	—	967
Natural gas liquids revenues	11	16	17	184	—	—	228
Oil and gas production revenues	2,057	970	343	1,997	—	—	5,367
Midstream service affiliate revenues	—	—	—	—	—	—	—
Operating Expenses:							
Lease operating expenses	446	314	181	553	—	—	1,494
Gathering, transmission, and processing	44	8	68	80	—	—	200
Taxes other than income	—	(33)	20	139	—	—	126
Exploration	48	37	88	285	—	15	473
Depreciation, depletion, and amortization	778	519	183	1,138	—	—	2,618
Asset retirement obligation accretion	—	75	47	34	—	—	156
Impairments	1	655	367	80	—	—	1,103
	1,317	1,575	954	2,309	—	15	6,170
Operating Income (Loss)	\$ 740	\$ (605)	\$ (611)	\$ (312)	\$ —	\$ (15)	(803)
Other Income (Expense):							
Gain on divestitures, net							21
Other							(34)
General and administrative							(410)
Transaction, reorganization, and separation							(39)
Financing costs, net							(417)
Net Loss From Continuing Operations Before Income Taxes							\$ (1,682)
Net Property and Equipment	\$ 3,362	\$ 2,834	\$ 1,464	\$ 11,012	\$ 156	\$ 39	\$ 18,867
Total Assets	\$ 4,893	\$ 3,584	\$ 1,591	\$ 12,247	\$ 156	\$ 48	\$ 22,519
Additions to Net Property and Equipment	\$ 459	\$ 260	\$ 34	\$ 770	\$ 156	\$ 2	\$ 1,681

(1) Includes a noncontrolling interest in Egypt for years 2018, 2017, and 2016, and Altus for the year 2018.

(2) Includes revenue from non-customers of \$592 million, \$58 million, and \$2 million for oil, natural gas, and natural gas liquids, respectively, for the year ended 2018.

(3) Included in Other are sales proceeds related to U.S. third-party purchased oil and gas totaling \$357 million for the year ended 2018, which is determined to be revenue from customers.

(4) During 2017, Apache completed the sale of its Canadian operations. For more information regarding this divestiture, please refer to Note 2—Acquisitions and Divestitures.

**APACHE CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)**

**15. SUPPLEMENTAL OIL AND GAS DISCLOSURES (Unaudited)**

**Oil and Gas Operations**

The following table sets forth revenue and direct cost information relating to the Company's oil and gas exploration and production activities. Apache has no long-term agreements to purchase oil or gas production from foreign governments or authorities.

	United States	Canada <sup>(3)</sup>	Egypt <sup>(4)</sup>	North Sea	Other International	Total <sup>(4)</sup>
(In millions, except per boe)						
<b>2018</b>						
Oil and gas production revenues	\$ 3,279	\$ —	\$ 2,748	\$ 1,321	\$ —	\$ 7,348
Operating cost:						
Depreciation, depletion, and amortization <sup>(1)</sup>	1,206	—	688	371	—	2,265
Asset retirement obligation accretion	32	—	—	75	—	107
Lease operating expenses	670	—	428	341	—	1,439
Gathering, transmission, and processing	282	—	47	42	—	371
Exploration expenses	219	—	88	192	4	503
Impairments related to oil and gas properties	265	—	63	10	—	338
Production taxes <sup>(2)</sup>	203	—	—	—	—	203
Income tax	87	—	645	116	—	848
	<u>2,964</u>	<u>—</u>	<u>1,959</u>	<u>1,147</u>	<u>4</u>	<u>6,074</u>
Results of operation	\$ 315	\$ —	\$ 789	\$ 174	\$ (4)	\$ 1,274
<b>2017</b>						
Oil and gas production revenues	\$ 2,271	\$ 231	\$ 2,307	\$ 1,078	\$ —	\$ 5,887
Operating cost:						
Depreciation, depletion, and amortization <sup>(1)</sup>	924	72	707	433	—	2,136
Asset retirement obligation accretion	31	27	—	72	—	130
Lease operating expenses	584	103	362	335	—	1,384
Gathering, transmission, and processing	86	34	44	30	—	194
Exploration expenses	363	11	62	86	27	549
Production taxes <sup>(2)</sup>	153	11	—	(14)	—	150
Income tax	45	(7)	509	54	—	601
	<u>2,186</u>	<u>251</u>	<u>1,684</u>	<u>996</u>	<u>27</u>	<u>5,144</u>
Results of operation	\$ 85	\$ (20)	\$ 623	\$ 82	\$ (27)	\$ 743
<b>2016</b>						
Oil and gas production revenues	\$ 1,997	\$ 343	\$ 2,057	\$ 970	\$ —	\$ 5,367
Operating cost:						
Depreciation, depletion, and amortization <sup>(1)</sup>	1,055	174	733	498	—	2,460
Asset retirement obligation accretion	34	47	—	75	—	156
Lease operating expenses	553	181	446	314	—	1,494
Gathering, transmission, and processing	80	68	44	8	—	200
Exploration expenses	285	88	48	37	15	473
Impairments related to oil and gas properties	61	366	—	—	—	427
Production taxes <sup>(2)</sup>	135	18	—	(33)	—	120
Income tax	(72)	(162)	354	28	—	148
	<u>2,131</u>	<u>780</u>	<u>1,625</u>	<u>927</u>	<u>15</u>	<u>5,478</u>
Results of operation	\$ (134)	\$ (437)	\$ 432	\$ 43	\$ (15)	\$ (111)

(1) This amount only reflects DD&A of capitalized costs of oil and gas properties and, therefore, does not agree with DD&A reflected on Note 14—Business Segment Information.

(2) Only reflects amounts directly related to oil and gas producing properties and, therefore, does not agree with taxes other than income reflected on Note 14—Business Segment Information.

(3) During the third quarter of 2017, Apache completed the sale of its Canadian operations. For more information regarding this divestiture, please refer to Note 2—Acquisitions and Divestitures

(4) Includes noncontrolling interest in Egypt.

**APACHE CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)**

**Costs Incurred in Oil and Gas Property Acquisitions, Exploration, and Development Activities**

	United States	Canada	Egypt <sup>(2)</sup>	North Sea	Other International	Total <sup>(2)</sup>
(In millions)						
<b>2018</b>						
Acquisitions:						
Proved	\$ —	\$ —	\$ 6	\$ —	\$ —	\$ 6
Unproved	111	—	16	—	—	127
Exploration	640	—	175	113	12	940
Development	1,791	—	457	133	—	2,381
Costs incurred <sup>(1)</sup>	<u>\$ 2,542</u>	<u>\$ —</u>	<u>\$ 654</u>	<u>\$ 246</u>	<u>\$ 12</u>	<u>\$ 3,454</u>
<sup>(1)</sup> Includes capitalized interest and asset retirement costs as follows:						
Capitalized interest	\$ 23	\$ —	\$ —	\$ 11	\$ 2	\$ 36
Asset retirement costs	93	—	—	(62)	—	31
<b>2017</b>						
Acquisitions:						
Proved	\$ 3	\$ —	\$ 4	\$ —	\$ —	\$ 7
Unproved	136	5	40	—	—	181
Exploration	602	11	122	131	25	891
Development	1,118	52	387	250	—	1,807
Costs incurred <sup>(1)</sup>	<u>\$ 1,859</u>	<u>\$ 68</u>	<u>\$ 553</u>	<u>\$ 381</u>	<u>\$ 25</u>	<u>\$ 2,886</u>
<sup>(1)</sup> Includes capitalized interest and asset retirement costs as follows:						
Capitalized interest	\$ 23	\$ 2	\$ —	\$ 17	\$ 2	\$ 44
Asset retirement costs	15	—	—	55	—	70
<b>2016</b>						
Acquisitions:						
Proved	\$ —	\$ 1	\$ 6	\$ 38	\$ —	\$ 45
Unproved	110	7	49	4	—	170
Exploration	278	23	67	84	18	470
Development	420	27	353	150	—	950
Costs incurred <sup>(1)</sup>	<u>\$ 808</u>	<u>\$ 58</u>	<u>\$ 475</u>	<u>\$ 276</u>	<u>\$ 18</u>	<u>\$ 1,635</u>
<sup>(1)</sup> Includes capitalized interest and asset retirement costs as follows:						
Capitalized interest	\$ 21	\$ 6	\$ —	\$ 21	\$ —	\$ 48
Asset retirement costs	(51)	(13)	—	(128)	—	(192)
<sup>(2)</sup> Includes a noncontrolling interest in Egypt.						

**APACHE CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)**

**Capitalized Costs**

The following table sets forth the capitalized costs and associated accumulated depreciation, depletion, and amortization relating to the Company's oil and gas acquisition, exploration, and development activities:

	United States	Egypt <sup>(1)</sup>	North Sea	Other International	Total <sup>(1)</sup>
(In millions)					
<b>2018</b>					
Proved properties	\$ 22,699	\$ 11,184	\$ 8,462	\$ —	\$ 42,345
Unproved properties	1,275	110	5	45	1,435
	23,974	11,294	8,467	45	43,780
Accumulated DD&A	(12,217)	(8,736)	(6,332)	—	(27,285)
	<u>\$ 11,757</u>	<u>\$ 2,558</u>	<u>\$ 2,135</u>	<u>\$ 45</u>	<u>\$ 16,495</u>
<b>2017</b>					
Proved properties	\$ 20,408	\$ 10,590	\$ 8,199	\$ —	\$ 39,197
Unproved properties	1,312	137	297	37	1,783
	21,720	10,727	8,496	37	40,980
Accumulated DD&A	(10,766)	(7,985)	(5,960)	—	(24,711)
	<u>\$ 10,954</u>	<u>\$ 2,742</u>	<u>\$ 2,536</u>	<u>\$ 37</u>	<u>\$ 16,269</u>

<sup>(1)</sup> Includes a noncontrolling interest in Egypt.

**Oil and Gas Reserve Information**

Proved oil and gas reserves are the estimated quantities of natural gas, crude oil, condensate, and natural gas liquids (NGLs) that geological and engineering data demonstrate with reasonable certainty to be recoverable in future years from known reservoirs under existing conditions, operating conditions, and government regulations. Estimated proved developed oil and gas reserves can be expected to be recovered through existing wells with existing equipment and operating methods. The Company reports all estimated proved reserves held under production-sharing arrangements utilizing the "economic interest" method, which excludes the host country's share of reserves.

Estimated reserves that can be produced economically through application of improved recovery techniques are included in the "proved" classification when successful testing by a pilot project or the operation of an active, improved recovery program using reliable technology establishes the reasonable certainty for the engineering analysis on which the project or program is based. Economically producible means a resource which generates revenue that exceeds, or is reasonably expected to exceed, the costs of the operation. Reasonable certainty means a high degree of confidence that the quantities will be recovered. Reliable technology is a grouping of one or more technologies (including computational methods) that has been field-tested and has been demonstrated to provide reasonably certain results with consistency and repeatability in the formation being evaluated or in an analogous formation. In estimating its proved reserves, Apache uses several different traditional methods that can be classified in three general categories: 1) performance-based methods; 2) volumetric-based methods; and 3) analogy with similar properties. Apache will, at times, utilize additional technical analysis such as computer reservoir models, petrophysical techniques, and proprietary 3-D seismic interpretation methods to provide additional support for more complex reservoirs. Information from this additional analysis is combined with traditional methods outlined above to enhance the certainty of Apache's reserve estimates.

There are numerous uncertainties inherent in estimating quantities of proved reserves and projecting future rates of production and timing of development expenditures. The reserve data in the following tables only represent estimates and should not be construed as being exact.

**APACHE CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)**

	<b>Crude Oil and Condensate</b>				<b>Total<sup>(1)</sup></b>
	<b>(Thousands of barrels)</b>				
	<b>United States</b>	<b>Canada</b>	<b>Egypt<sup>(1)</sup></b>	<b>North Sea</b>	
<b>Proved developed reserves:</b>					
December 31, 2015	348,797	67,847	144,164	104,255	665,063
December 31, 2016	300,900	51,508	138,771	91,138	582,317
December 31, 2017	304,279	—	124,568	92,598	521,445
December 31, 2018	300,484	—	110,014	104,491	514,989
<b>Proved undeveloped reserves:</b>					
December 31, 2015	60,505	38,326	17,856	11,309	127,996
December 31, 2016	21,088	7,906	20,187	10,784	59,965
December 31, 2017	31,904	—	16,198	14,013	62,115
December 31, 2018	45,182	—	9,484	11,278	65,944
<b>Total proved reserves:</b>					
Balance December 31, 2015	409,302	106,173	162,020	115,564	793,059
Extensions, discoveries and other additions	9,614	3,372	17,599	9,766	40,351
Purchases of minerals in-place	21	—	—	438	459
Revisions of previous estimates	(58,882)	(43,282)	17,301	(3,851)	(88,714)
Production	(38,000)	(4,787)	(37,962)	(19,995)	(100,744)
Sales of minerals in-place	(67)	(2,062)	—	—	(2,129)
Balance December 31, 2016	321,988	59,414	158,958	101,922	642,282
Extensions, discoveries and other additions	48,391	14,025	27,140	16,023	105,579
Purchases of minerals in-place	46	375	—	—	421
Revisions of previous estimates	825	1,829	(9,839)	6,510	(675)
Production	(33,394)	(2,425)	(35,493)	(17,844)	(89,156)
Sales of minerals in-place	(1,673)	(73,218)	—	—	(74,891)
Balance December 31, 2017	336,183	—	140,766	106,611	583,560
Extensions, discoveries and other additions	61,976	—	22,473	15,682	100,131
Purchases of minerals in-place	140	—	—	—	140
Revisions of previous estimates	(14,334)	—	(9,556)	10,613	(13,277)
Production	(38,252)	—	(34,185)	(17,137)	(89,574)
Sales of minerals in-place	(47)	—	—	—	(47)
Balance December 31, 2018	345,666	—	119,498	115,769	580,933

(1) 2018, 2017, 2016, and 2015 includes proved reserves of 40 MMbbls, 47 MMbbls, 53 MMbbls, and 54 MMbbls, respectively, attributable to a noncontrolling interest in Egypt.

**APACHE CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)**

	<b>Natural Gas Liquids</b>				<b>Total<sup>(1)</sup></b>
	<b>(Thousands of barrels)</b>				
	<b>United States</b>	<b>Canada</b>	<b>Egypt<sup>(1)</sup></b>	<b>North Sea</b>	
<b>Proved developed reserves:</b>					
December 31, 2015	150,265	15,246	1,491	1,784	168,786
December 31, 2016	155,124	13,866	1,266	1,627	171,883
December 31, 2017	171,005	—	685	2,025	173,715
December 31, 2018	197,574	—	502	1,938	200,014
<b>Proved undeveloped reserves:</b>					
December 31, 2015	24,939	4,839	78	295	30,151
December 31, 2016	17,311	2,473	131	646	20,561
December 31, 2017	29,559	—	39	353	29,951
December 31, 2018	33,796	—	60	631	34,487
<b>Total proved reserves:</b>					
Balance December 31, 2015	175,204	20,085	1,569	2,079	198,937
Extensions, discoveries and other additions	10,238	755	208	671	11,872
Purchases of minerals in-place	2	—	—	5	7
Revisions of previous estimates	6,824	(1,355)	17	141	5,627
Production	(19,824)	(2,098)	(397)	(623)	(22,942)
Sales of minerals in-place	(9)	(1,048)	—	—	(1,057)
Balance December 31, 2016	172,435	16,339	1,397	2,273	192,444
Extensions, discoveries and other additions	33,806	1,794	50	845	36,495
Purchases of minerals in-place	206	199	—	—	405
Revisions of previous estimates	12,982	(1,060)	(425)	(321)	11,176
Production	(17,766)	(1,032)	(298)	(419)	(19,515)
Sales of minerals in-place	(1,099)	(16,240)	—	—	(17,339)
Balance December 31, 2017	200,564	—	724	2,378	203,666
Extensions, discoveries and other additions	60,990	—	144	1,444	62,578
Purchases of minerals in-place	40	—	—	—	40
Revisions of previous estimates	(9,250)	—	31	(819)	(10,038)
Production	(20,969)	—	(337)	(434)	(21,740)
Sales of minerals in-place	(5)	—	—	—	(5)
Balance December 31, 2018	231,370	—	562	2,569	234,501

(1) 2018, 2017, 2016, and 2015 includes proved reserves of 187 Mbbls, 241 Mbbls, 466 Mbbls, and 523 Mbbls, respectively, attributable to a noncontrolling interest in Egypt.

**APACHE CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)**

	<b>Natural Gas</b>				
	<b>(Millions of cubic feet)</b>				
	<b>United States</b>	<b>Canada</b>	<b>Egypt<sup>(1)</sup></b>	<b>North Sea</b>	<b>Total<sup>(1)</sup></b>
<b>Proved developed reserves:</b>					
December 31, 2015	1,364,174	759,321	776,263	85,532	2,985,290
December 31, 2016	1,200,379	553,724	675,559	86,948	2,516,610
December 31, 2017	1,347,009	—	540,667	83,342	1,971,018
December 31, 2018	1,626,403	—	476,132	95,347	2,197,882
<b>Proved undeveloped reserves:</b>					
December 31, 2015	208,594	162,809	53,969	19,760	445,132
December 31, 2016	231,304	45,312	42,109	23,813	342,538
December 31, 2017	297,226	—	47,255	11,063	355,544
December 31, 2018	267,090	—	33,006	15,804	315,900
<b>Total proved reserves:</b>					
Balance December 31, 2015	1,572,768	922,130	830,232	105,292	3,430,422
Extensions, discoveries and other additions	219,633	30,234	35,202	20,814	305,883
Purchases of minerals in-place	7	—	—	6,677	6,684
Revisions of previous estimates	(215,378)	(242,080)	(4,305)	4,239	(457,524)
Production	(145,019)	(88,792)	(143,461)	(26,261)	(403,533)
Sales of minerals in-place	(328)	(22,456)	—	—	(22,784)
Balance December 31, 2016	1,431,683	599,036	717,668	110,761	2,859,148
Extensions, discoveries and other additions	378,747	49,780	81,245	17,646	527,418
Purchases of minerals in-place	4,434	4,319	—	—	8,753
Revisions of previous estimates	(5,431)	92,207	(70,030)	(17,387)	(641)
Production	(143,943)	(47,990)	(140,961)	(16,615)	(349,509)
Sales of minerals in-place	(21,255)	(697,352)	—	—	(718,607)
Balance December 31, 2017	1,644,235	—	587,922	94,405	2,326,562
Extensions, discoveries and other additions	704,135	—	79,394	55,274	838,803
Purchases of minerals in-place	906	—	—	—	906
Revisions of previous estimates	(239,204)	—	(38,892)	(21,933)	(300,029)
Production	(216,538)	—	(119,286)	(16,595)	(352,419)
Sales of minerals in-place	(41)	—	—	—	(41)
Balance December 31, 2018	1,893,493	—	509,138	111,151	2,513,782

(1) 2018, 2017, 2016, and 2015 include proved reserves of 170 Bcf, 196 Bcf, 239 Bcf, and 277 Bcf, respectively, attributable to a noncontrolling interest in Egypt.

**APACHE CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)**

	<b>Total Equivalent Reserves</b>				<b>Total<sup>(1)</sup></b>
	<b>(Thousands barrels of oil equivalent)</b>				
	<b>United States</b>	<b>Canada</b>	<b>Egypt<sup>(1)</sup></b>	<b>North Sea</b>	
<b>Proved developed reserves:</b>					
December 31, 2015	726,424	209,647	275,033	120,293	1,331,397
December 31, 2016	656,087	157,662	252,630	107,256	1,173,635
December 31, 2017	699,786	—	215,364	108,513	1,023,663
December 31, 2018	769,125	—	189,871	122,320	1,081,316
<b>Proved undeveloped reserves:</b>					
December 31, 2015	120,210	70,300	26,929	14,897	232,336
December 31, 2016	76,950	17,931	27,336	15,399	137,616
December 31, 2017	111,001	—	24,112	16,210	151,323
December 31, 2018	123,493	—	15,045	14,543	153,081
<b>Total proved reserves:</b>					
Balance December 31, 2015	846,634	279,947	301,962	135,190	1,563,733
Extensions, discoveries and other additions	56,458	9,166	23,674	13,906	103,204
Purchases of minerals in-place	24	—	—	1,556	1,580
Revisions of previous estimates	(87,954)	(84,984)	16,599	(3,002)	(159,341)
Production	(81,994)	(21,684)	(62,269)	(24,995)	(190,942)
Sales of minerals in-place	(131)	(6,852)	—	—	(6,983)
Balance December 31, 2016	733,037	175,593	279,966	122,655	1,311,251
Extensions, discoveries and other additions	145,322	24,115	40,731	19,809	229,977
Purchases of minerals in-place	991	1,294	—	—	2,285
Revisions of previous estimates	12,903	16,136	(21,936)	3,291	10,394
Production	(75,151)	(11,455)	(59,285)	(21,032)	(166,923)
Sales of minerals in-place	(6,315)	(205,683)	—	—	(211,998)
Balance December 31, 2017	810,787	—	239,476	124,723	1,174,986
Extensions, discoveries and other additions	240,322	—	35,849	26,338	302,509
Purchases of minerals in-place	331	—	—	—	331
Revisions of previous estimates	(63,451)	—	(16,007)	6,139	(73,319)
Production	(95,312)	—	(54,402)	(20,337)	(170,051)
Sales of minerals in-place	(59)	—	—	—	(59)
Balance December 31, 2018	892,618	—	204,916	136,863	1,234,397

(1) 2018, 2017, 2016, and 2015 include total proved reserves of 68 MMboe, 80 MMboe, 93MMboe, and 101 MMboe, respectively, attributable to a noncontrolling interest in Egypt.

During 2018, Apache added approximately 303 MMboe from extensions, discoveries, and other additions. The Company recorded 240 MMboe of exploration and development adds in the United States, primarily associated with Woodford, Bone Springs, Yeso, Barnett, and Wolfcamp drilling programs in the Permian Basin (217 MMboe), and Woodford and Austin Chalk drilling activity in the Midcontinent region (20 MMboe).

The international regions contributed 62 MMboe of exploration and development adds during 2018, with Egypt contributing 36 MMboe from onshore exploration and appraisal activity in the Khalda Extension 2, Khalda, Khalda Extension 3, Matruh, and West Kalabsha concessions. The North Sea contributed 26 MMboe from drilling success in the Beryl and Forties fields.

During 2018, Apache also had combined downward revisions of previously estimated reserves of 73 MMboe. Downward revisions related to changes in product prices accounted for 24 MMboe, interest revisions accounted for 5 MMboe, and engineering and performance downward revisions accounted for 44 MMboe.

**APACHE CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)**

Approximately 8 percent of Apache’s year-end 2018 estimated proved developed reserves are classified as proved not producing. These reserves relate to zones that are either behind pipe, or that have been completed but not yet produced, or zones that have been produced in the past, but are not now producing because of mechanical reasons. These reserves are considered to be a lower tier of reserves than producing reserves because they are frequently based on volumetric calculations rather than performance data. Future production associated with behind pipe reserves is scheduled to follow depletion of the currently producing zones in the same wellbores. Additional capital may have to be spent to access these reserves. The capital and economic impact of production timing are reflected in this Note 15, under “Future Net Cash Flows.”

**Future Net Cash Flows**

Future cash inflows as of December 31, 2018 and 2017 were calculated using an unweighted arithmetic average of oil and gas prices in effect on the first day of each month in the respective year, except where prices are defined by contractual arrangements. Operating costs, production and ad valorem taxes and future development costs are based on current costs with no escalation.

The following table sets forth unaudited information concerning future net cash flows for proved oil and gas reserves, net of income tax expense. Income tax expense has been computed using expected future tax rates and giving effect to tax deductions and credits available, under current laws, and which relate to oil and gas producing activities. This information does not purport to present the fair market value of the Company’s oil and gas assets, but does present a standardized disclosure concerning possible future net cash flows that would result under the assumptions used.

	United States	Egypt <sup>(2)</sup>	North Sea	Total <sup>(2)</sup>
(In millions)				
<b>2018</b>				
Cash inflows	\$ 29,906	\$ 9,866	\$ 9,206	\$ 48,978
Production costs	(13,699)	(1,799)	(2,588)	(18,086)
Development costs	(2,150)	(792)	(2,714)	(5,656)
Income tax expense	(19)	(2,455)	(1,352)	(3,826)
Net cash flows	14,038	4,820	2,552	21,410
10 percent discount rate	(6,516)	(1,066)	(107)	(7,689)
Discounted future net cash flows <sup>(1)</sup>	\$ 7,522	\$ 3,754	\$ 2,445	\$ 13,721
<b>2017</b>				
Cash inflows	\$ 24,271	\$ 9,254	\$ 6,230	\$ 39,755
Production costs	(10,618)	(1,749)	(2,459)	(14,826)
Development costs	(1,659)	(1,052)	(2,795)	(5,506)
Income tax expense	(42)	(2,078)	(353)	(2,473)
Net cash flows	11,952	4,375	623	16,950
10 percent discount rate	(6,080)	(1,034)	247	(6,867)
Discounted future net cash flows <sup>(1)</sup>	\$ 5,872	\$ 3,341	\$ 870	\$ 10,083

(1) Estimated future net cash flows before income tax expense, discounted at 10 percent per annum, totaled approximately \$16.9 billion and \$12.2 billion as of December 31, 2018 and 2017, respectively.

(2) Includes discounted future net cash flows of approximately \$1.3 billion and \$1.1 billion in 2018 and 2017, respectively, attributable to a noncontrolling interest in Egypt.

**APACHE CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)**

The following table sets forth the principal sources of change in the discounted future net cash flows:

	<b>For the Year Ended December 31,</b>		
	<b>2018</b>	<b>2017</b>	<b>2016</b>
	<b>(In millions)</b>		
Sales, net of production costs	\$ (5,335)	\$ (4,158)	\$ (3,479)
Net change in prices and production costs	3,902	3,651	(3,835)
Discoveries and improved recovery, net of related costs	3,889	2,273	1,153
Change in future development costs	47	(279)	309
Previously estimated development costs incurred during the period	910	719	986
Revision of quantities	(648)	(344)	(574)
Purchases of minerals in-place	6	9	8
Accretion of discount	1,216	952	1,313
Change in income taxes	(1,125)	(617)	1,070
Sales of minerals in-place	(1)	(809)	(52)
Change in production rates and other	777	626	567
	<u>\$ 3,638</u>	<u>\$ 2,023</u>	<u>\$ (2,534)</u>

**APACHE CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)**

**16. SUPPLEMENTAL QUARTERLY FINANCIAL DATA (Unaudited)**

The following table summarizes quarterly financial data for 2018 and 2017:

	<b>First</b>	<b>Second</b>	<b>Third</b>	<b>Fourth</b>
<b>(In millions, except per share amounts)</b>				
<b>2018</b>				
Oil and gas production revenues	\$ 1,733	\$ 1,936	\$ 1,976	\$ 1,703
Gain on divestitures	7	2	1	13
Net income (loss) before income taxes	388	508	406	(344)
Net income (loss) including noncontrolling interest <sup>(1)</sup>	206	269	161	(350)
Net income (loss) attributable to common stock	145	195	81	(381)
Net income (loss) per common share <sup>(2)</sup> :				
Basic	\$ 0.38	\$ 0.51	\$ 0.21	\$ (1.00)
Diluted	\$ 0.38	\$ 0.51	\$ 0.21	\$ (1.00)
<b>2017</b>				
Oil and gas production revenues	\$ 1,512	\$ 1,346	\$ 1,389	\$ 1,640
Gain (loss) on divestitures	341	(21)	296	11
Net income before income taxes	538	9	93	278
Net loss including noncontrolling interest <sup>(1)</sup>	267	613	105	518
Net loss attributable to common stock	213	572	63	456
Net income per common share <sup>(2)</sup> :				
Basic	\$ 0.56	\$ 1.50	\$ 0.16	\$ 1.20
Diluted	\$ 0.56	\$ 1.50	\$ 0.16	\$ 1.19

(1) Operating expenses for 2018 include asset and leasehold impairments totaling \$16 million, \$21 million, \$49 million, and \$639 million in the first, second, third, and fourth quarters of 2018, respectively. Operating expenses for 2017 include asset and leasehold impairments totaling \$23 million, \$39 million, \$160 million, and \$32 million in the first, second, third, and fourth quarters of 2017, respectively.

(2) The sum of the individual quarterly net income (loss) per common share amounts may not agree with full-year net income (loss) per common share as each quarterly computation is based on the weighted-average number of common shares outstanding during that period.

## INDEX TO EXHIBITS

EXHIBIT NO.	DESCRIPTION
3.1	– <a href="#"><u>Restated Certificate of Incorporation of Registrant, dated September 19, 2013, as filed with the Secretary of State of Delaware on September 19, 2013 (incorporated by reference to Exhibit 3.2 to Registrant's Current Report on Form 8-K filed September 20, 2013, SEC File No. 001-4300).</u></a>
3.2	– <a href="#"><u>Certificate of Amendment of Restated Certificate of Incorporation of Registrant, dated May 14, 2015, as filed with the Secretary of State of Delaware on May 14, 2015 (incorporated by reference to Exhibit 3.2 to Registrant's Current Report on Form 8-K filed May 20, 2015, SEC File No. 001-04300).</u></a>
3.3	– <a href="#"><u>Bylaws of Registrant, as amended May 11, 2017, (incorporated by reference to Exhibit 3.1 to Registrant's Current Report on Form 8-K filed May 16, 2017, SEC File No. 001-4300).</u></a>
4.1	– <a href="#"><u>Form of Certificate for Registrant's Common Stock (incorporated by reference to Exhibit 4.1 to Registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2014, SEC File No. 001-4300).</u></a>
4.2	– <a href="#"><u>Form of 3.625% Notes due 2021 (incorporated by reference to Exhibit 4.1 to Registrant's Current Report on Form 8-K, dated November 30, 2010, filed on December 3, 2010, SEC File No. 001-4300).</u></a>
4.3	– <a href="#"><u>Form of 5.250% Notes due 2042 (incorporated by reference to Exhibit 4.2 to Registrant's Current Report on Form 8-K, dated November 30, 2010, filed on December 3, 2010, SEC File No. 001-4300).</u></a>
4.4	– <a href="#"><u>Form of 5.100% Notes due 2040 (incorporated by reference to Exhibit 4.1 to Registrant's Current Report on Form 8-K, dated August 17, 2010, filed on August 20, 2010, SEC File No. 001-4300).</u></a>
4.5	– <a href="#"><u>Form of 3.25% Note due 2022 (incorporated by reference to Exhibit 4.2 to Registrant's Current Report on Form 8-K, dated April 3, 2012, filed on April 9, 2012, SEC File No. 001-4300).</u></a>
4.6	– <a href="#"><u>Form of 4.75% Notes due 2043 (incorporated by reference to Exhibit 4.3 to Registrant's Current Report on Form 8-K, dated April 3, 2012, filed on April 9, 2012, SEC File No. 001-4300).</u></a>
4.7	– <a href="#"><u>Form of 2.625% Notes due 2023 (incorporated by reference to Exhibit 4.1 to Registrant's Current Report on Form 8-K, dated November 28, 2012, filed on December 4, 2012, SEC File No. 001-4300).</u></a>
4.8	– <a href="#"><u>Form of 4.250% Notes due 2044 (incorporated by reference to Exhibit 4.2 to Registrant's Current Report on Form 8-K, dated November 28, 2012, filed on December 4, 2012, SEC File No. 001-4300).</u></a>
4.9	– <a href="#"><u>Form of 4.375% Notes due 2028 (incorporated by reference to Exhibit 4.1 to Registrant's Current Report on Form 8-K, filed on August 16, 2018, SEC File No. 001-4300).</u></a>
4.10	– <a href="#"><u>Rights Agreement, dated January 31, 1996, between Registrant and Wells Fargo Bank, N.A. (as successor-in-interest to Norwest Bank Minnesota, N.A.), rights agent, relating to the declaration of a rights dividend to Registrant's common shareholders of record on January 31, 1996 (incorporated by reference to Exhibit (a) to Registrant's Registration Statement on Form 8-A, dated January 24, 1996, SEC File No. 001-4300).</u></a>
4.11	– <a href="#"><u>Amendment No. 1, dated as of January 31, 2006, to the Rights Agreement dated as of January 31, 1996 between Registrant and Wells Fargo Bank, N.A. (as successor-in-interest to Norwest Bank Minnesota, N.A.) (incorporated by reference to Exhibit 4.4 to Registrant's Amendment No. 1 to Registration Statement on Form 8-A, dated January 31, 2006, SEC File No. 001-4300).</u></a>
4.12	– <a href="#"><u>Amendment No. 2, dated March 10, 2014, to the Rights Agreement by and between Registrant and Wells Fargo Bank, N.A. (incorporated by reference to Exhibit 4.3 to Amendment No. 2 to Registrant's Registration Statement on Form 8-A, filed March 10, 2014, SEC File No. 001-4300).</u></a>
4.13	– <a href="#"><u>Senior Indenture, dated February 15, 1996, between Registrant and The Bank of New York Mellon Trust Company, N.A. (formerly known as the Bank of New York Trust Company, N.A., as successor-in-interest to JPMorgan Chase Bank, formerly known as The Chase Manhattan Bank), as trustee, governing the senior debt securities and guarantees (incorporated by reference to Exhibit 4.6 to Registrant's Registration Statement on Form S-3, dated May 23, 2003, Reg. No. 333-105536).</u></a>
4.14	– <a href="#"><u>First Supplemental Indenture to the Senior Indenture, dated as of November 5, 1996, between Registrant and The Bank of New York Mellon Trust Company, N.A. (formerly known as the Bank of New York Trust Company, N.A., as successor-in-interest to JPMorgan Chase Bank, formerly known as The Chase Manhattan Bank), as trustee, governing the senior debt securities and guarantees (incorporated by reference to Exhibit 4.7 to Registrant's Registration Statement on Form S-3, dated May 23, 2003, Reg. No. 333-105536).</u></a>
4.15	– <a href="#"><u>Form of Indenture among Registrant, Apache Finance Canada Corporation and The Bank of New York Mellon Trust Company, N.A. (formerly known as the Bank of New York Trust Company, N.A., as successor-in-interest to The Chase Manhattan Bank), as trustee, governing the debt securities and guarantees (incorporated by reference to Exhibit 4.1 to Amendment No. 1 to Registrant's Registration Statement on Form S-3, dated November 12, 1999, Reg. No. 333-90147).</u></a>
4.16	– <a href="#"><u>Supplemental Indenture, dated as of August 14, 2017, among Apache Finance Canada Corporation, Apache Corporation, and The Bank of New York Mellon Trust Company, N.A. (as successor to JPMorgan Chase Bank, N.A., formerly The Chase Manhattan Bank), as trustee (incorporated by reference to Exhibit 4.1 to Registrant's Quarterly Report on Form 10-Q filed November 3, 2017, SEC File No. 001-04300).</u></a>

INDEX TO EXHIBITS

EXHIBIT NO.	DESCRIPTION
4.17	– <a href="#">Form of Indenture among Apache Finance Pty Ltd, Registrant and The Bank of New York Mellon Trust Company, N.A. (formerly known as the Bank of New York Trust Company, N.A., as successor-in-interest to The Chase Manhattan Bank), as trustee, governing the debt securities and guarantees (incorporated by reference to Exhibit 4.1 to Registrant’s Registration Statement on Form S-3, dated November 12, 1997, Reg. No. 333-339973).</a>
4.18	– <a href="#">Senior Indenture, dated May 19, 2011, between Registrant and Wells Fargo Bank, National Association, as trustee, governing the senior debt securities of Apache Corporation (incorporated by reference to Exhibit 4.14 to Registrant’s Registration Statement on Form S-3, dated May 23, 2011, Reg. No. 333-174429).</a>
4.19	– <a href="#">Indenture, dated August 14, 2018, by and between Apache Corporation and Wells Fargo Bank, National Association, as trustee (incorporated by reference to Exhibit 4.5 to Registrant’s Post-Effective Amendment No. 1 to Registration Statement on Form S-3 filed August 14, 2018, SEC File No. 333-219345).</a>
†4.20	– <a href="#">Form of Apache Corporation November 10, 2010 First Non-Qualified Stock Option Agreement for Certain Employees of Apache Corporation (incorporated by reference to Exhibit 4.6 to Registrant’s Registration Statement on Form S-8 filed on November 10, 2010, Reg. No. 333-170533).</a>
†4.21	– <a href="#">Form of Apache Corporation November 10, 2010 Second Non-Qualified Stock Option Agreement for Certain Employees of Apache Corporation (incorporated by reference to Exhibit 4.7 to Registrant’s Registration Statement on Form S-8 filed on November 10, 2010, Reg. No. 333-170533).</a>
†4.22	– <a href="#">Form of Apache Corporation November 10, 2010 Non-Statutory Stock Option Agreement for Certain Employees of Apache Corporation (incorporated by reference to Exhibit 4.8 to Registrant’s Registration Statement on Form S-8 filed on November 10, 2010, Reg. No. 333-170533).</a>
10.1	– <a href="#">Credit Agreement, dated as of March 14, 2018, among Apache Corporation, the lenders party thereto, the issuing banks party thereto, JPMorgan Chase Bank, N.A., as Administrative Agent, Bank of America, N.A., as Syndication Agent, Citibank, N.A., Royal Bank of Canada, HSBC Bank USA, National Association, The Bank of Tokyo-Mitsubishi UFJ, Ltd, Wells Fargo Bank, National Association, Goldman Sachs Bank USA, The Toronto-Dominion Bank, New York Branch, and Mizuho Bank, Ltd., as Co-Documentation Agents (incorporated by reference to Exhibit 10.1 to Registrant’s Current Report on Form 8-K filed March 19, 2018).</a>
†10.2	– <a href="#">Apache Corporation Corporate Incentive Compensation Plan A (Senior Officers' Plan), dated July 16, 1998 (incorporated by reference to Exhibit 10.13 to Registrant's Annual Report on Form 10-K for year ended December 31, 1998, SEC File No. 001-4300).</a>
†10.3	– <a href="#">First Amendment to Apache Corporation Corporate Incentive Compensation Plan A, dated November 20, 2008, effective as of January 1, 2005 (incorporated by reference to Exhibit 10.17 to Registrant’s Annual Report on Form 10-K for year ended December 31, 2008, SEC File No. 001-4300).</a>
†10.4	– <a href="#">Apache Corporation Corporate Incentive Compensation Plan B (Strategic Objectives Format), dated July 16, 1998 (incorporated by reference to Exhibit 10.14 to Registrant's Annual Report on Form 10-K for year ended December 31, 1998, SEC File No. 001-4300).</a>
†10.5	– <a href="#">First Amendment to Apache Corporation Corporate Incentive Compensation Plan B, dated November 20, 2008, effective as of January 1, 2005 (incorporated by reference to Exhibit 10.19 to Registrant’s Annual Report on Form 10-K for year ended December 31, 2008, SEC File No. 001-4300).</a>
†10.6	– <a href="#">Apache Corporation 401(k) Savings Plan, as amended and restated, dated March 17, 2015, effective January 31, 2014 (incorporated by reference to Exhibit 10.15 to Registrant's Annual Report on Form 10-K for year ended December 31, 2015, SEC File No. 001-4300).</a>
†10.7	– <a href="#">Amendment to Apache Corporation 401(k) Savings Plan, dated April 17, 2014 (incorporated by reference to Exhibit 10.1 to Registrant’s Quarterly Report on Form 10-Q for the quarter ended March 31, 2014, SEC File No. 001-4300).</a>
†10.8	– <a href="#">Amendment to Apache Corporation 401(k) Savings Plan, dated May 16, 2014 (incorporated by reference to Exhibit 10.1 to Registrant’s Quarterly Report on Form 10-Q for the quarter ended June 30, 2014, SEC File No. 001-4300).</a>
†10.9	– <a href="#">Amendment to Apache Corporation 401(k) Savings Plan, effective February 3, 2016 (incorporated by reference to Exhibit 10.18 to Registrant's Annual Report on Form 10-K for year ended December 31, 2015, SEC File No. 001-4300).</a>
†10.10	– <a href="#">Non-Qualified Retirement/Savings Plan of Apache Corporation, as amended and restated, dated July 16, 2014, effective January 1, 2015 (incorporated by reference to Exhibit 10.2 to Registrant’s Quarterly Report on Form 10-Q for the quarter ended June 30, 2014, SEC File No. 001-4300).</a>
†10.11	– <a href="#">Non-Qualified Restorative Retirement Savings Plan of Apache Corporation, as amended and restated, dated July 16, 2014, effective January 1, 2015 (incorporated by reference to Exhibit 10.3 to Registrant’s Quarterly Report on Form 10-Q for the quarter ended June 30, 2014, SEC File No. 001-4300).</a>

**INDEX TO EXHIBITS**

<b>EXHIBIT NO.</b>	<b>DESCRIPTION</b>
†10.12	– <a href="#"><u>Apache Corporation 2016 Omnibus Compensation Plan, dated February 3, 2016, effective May 12, 2016 (incorporated by reference to Exhibit 10.1 to Registrant’s Current Report on Form 8-K filed May 16, 2016, SEC File No. 001-4300).</u></a>
†10.13	– <a href="#"><u>Apache Corporation 2011 Omnibus Equity Compensation Plan, as amended and restated May 12, 2016 (incorporated by reference to Exhibit 10.1 to Registrant’s Quarterly Report on Form 10-Q for the quarter ended June 30, 2016, SEC File No. 001-4300).</u></a>
†10.14	– <a href="#"><u>Apache Corporation 2007 Omnibus Equity Compensation Plan, as amended and restated May 4, 2011 (incorporated by reference to Exhibit 10.1 to Registrant’s Quarterly Report on Form 10-Q for the quarter ended March 31, 2011, SEC File No. 001-4300).</u></a>
†10.15	– <a href="#"><u>Apache Corporation 2005 Stock Option Plan, as amended and restated September 16, 2013 (incorporated by reference to Exhibit 10.3 to Registrant’s Quarterly Report on Form 10-Q for the quarter ended September 30, 2013, File No. 001-4300).</u></a>
†10.16	– <a href="#"><u>Apache Corporation Income Continuance Plan, as amended and restated July 14, 2010, effective January 1, 2009 (incorporated by reference to Exhibit 10.5 to Registrant’s Quarterly Report on Form 10-Q for the quarter ended June 30, 2010, SEC File No. 001-4300).</u></a>
†10.17	– <a href="#"><u>Apache Corporation Deferred Delivery Plan, as amended and restated May 12, 2016 (incorporated by reference to Exhibit 10.3 to Registrant’s Quarterly Report on Form 10-Q for the quarter ended June 30, 2016, SEC File No. 001-4300).</u></a>
†10.18	– <a href="#"><u>Apache Corporation Non-Employee Directors’ Compensation Plan, as amended and restated July 13, 2017 (incorporated by reference to Exhibit 10.1 to Registrant’s Quarterly Report on Form 10-Q for the quarter ended June 30, 2017, SEC File No. 001-4300).</u></a>
†10.19	– <a href="#"><u>Apache Corporation Outside Directors’ Retirement Plan, as amended and restated July 16, 2014, effective June 30, 2014 (incorporated by reference to Exhibit 10.5 to Registrant’s Quarterly Report on Form 10-Q for the quarter ended June 30, 2014, SEC File No. 001-4300).</u></a>
†10.20	– <a href="#"><u>Apache Corporation Equity Compensation Plan for Non-Employee Directors, as amended and restated February 8, 2007 (incorporated by reference to Exhibit 10.2 to Registrant’s Quarterly Report on Form 10-Q for the quarter ended March 31, 2007, SEC File No. 001-4300).</u></a>
†10.21	– <a href="#"><u>Apache Corporation Non-Employee Directors’ Restricted Stock Units Program, as amended and restated May 14, 2015 (incorporated by reference to Exhibit 10.6 to Registrant’s Quarterly Report on Form 10-Q for the quarter ended June 30, 2015, SEC File No. 001-4300).</u></a>
†10.22	– <a href="#"><u>Apache Corporation Non-Employee Directors’ Restricted Stock Units Program, effective May 12, 2016, pursuant to Apache Corporation 2016 Omnibus Compensation Plan (incorporated by reference to Exhibit 10.4 to Registrant’s Quarterly Report on Form 10-Q for the quarter ended June 30, 2016, SEC File No. 001-4300).</u></a>
†10.23	– <a href="#"><u>Apache Corporation Outside Directors’ Deferral Program, effective May 12, 2016, pursuant to Apache Corporation 2016 Omnibus Compensation Plan (incorporated by reference to Exhibit 10.5 to Registrant’s Quarterly Report on Form 10-Q for the quarter ended June 30, 2016, SEC File No. 001-4300).</u></a>
†10.24	– <a href="#"><u>Apache Corporation Outside Directors’ Deferral Program, effective July 16, 2014, pursuant to Apache Corporation 2011 Omnibus Equity Compensation Plan (incorporated by reference to Exhibit 10.7 to Registrant’s Quarterly Report on Form 10-Q for the quarter ended June 30, 2014, SEC File No. 001-4300).</u></a>
†10.25	– <a href="#"><u>Employment Agreement between Registrant and G. Steven Farris, dated June 6, 1988, and First Amendment, dated November 20, 2008, effective as of January 1, 2005 (incorporated by reference to Exhibit 10.44 to Registrant’s Annual Report on Form 10-K for year ended December 31, 2008, SEC File No. 001-4300).</u></a>
†10.26	– <a href="#"><u>Retirement Agreement, dated January 19, 2015, between Registrant and G. Steven Farris (incorporated by reference to Exhibit 10.39 to Registrant’s Annual Report on Form 10-K for the year ended December 31, 2014, SEC File No. 001-4300).</u></a>
†10.27	– <a href="#"><u>Apache Corporation Executive Termination Policy (incorporated by reference to Exhibit 10.2 to Registrant’s Quarterly Report on Form 10-Q for the quarter ended September 30, 2015, SEC File No. 001-4300).</u></a>
†10.28	– <a href="#"><u>2016 Employee Release and Settlement Agreement between Registrant and Thomas E. Voytovich, effective November 30, 2015 (incorporated by reference to Exhibit 10.41 to Registrant’s Annual Report on Form 10-K for year ended December 31, 2015, SEC File No. 001-4300).</u></a>
†10.29	– <a href="#"><u>2018 Employee Release and Benefits Agreement between Registrant and W. Kregg Olson, effective August 1, 2018 (incorporated by reference to Exhibit 10.1 to Registrant’s Quarterly Report on Form 10-Q for the quarter ended June 30, 2018, SEC File No. 001-4300).</u></a>
†10.30	– <a href="#"><u>Form of Stock Option Award Agreement, dated May 6, 2009 (incorporated by reference to Exhibit 10.39 to Registrant’s Annual Report on Form 10-K for year ended December 31, 2009, SEC File No. 001-4300).</u></a>

INDEX TO EXHIBITS

EXHIBIT NO.	DESCRIPTION
†10.31	– <a href="#">Form of 2014 Performance Agreement (Total Shareholder Return), dated January 9, 2014 (incorporated by reference to Exhibit 10.46 to Registrant’s Annual Report on Form 10-K for year ended December 31, 2013, SEC File No. 001-4300).</a>
†10.32	– <a href="#">Form of 2014 Performance Agreement (Business Performance), dated February 3, 2014 (incorporated by reference to Exhibit 10.47 to Registrant’s Annual Report on Form 10-K for year ended December 31, 2013, SEC File No. 001-4300).</a>
†10.33	– <a href="#">Form of 2015 Performance Share Program Award Notice and Agreement, dated February 19, 2015 (incorporated by reference to Exhibit 10.1 to Registrant’s Quarterly Report on Form 10-Q for the quarter ended March 31, 2015, SEC File No. 001-4300).</a>
†10.34	– <a href="#">Restricted Stock Unit Award Agreement between Registrant and John J. Christmann, dated February 18, 2015 (incorporated by reference to Exhibit 10.7 to Registrant’s Quarterly Report on Form 10-Q for the quarter ended March 31, 2015, SEC File No. 001-4300).</a>
†10.35	– <a href="#">2015 Long Term Cash Performance Program Award Notice and Agreement between Registrant and Stephen J. Riney, dated April 8, 2015 (incorporated by reference to Exhibit 10.2 to Registrant’s Quarterly Report on Form 10-Q for the quarter ended March 31, 2015, SEC File No. 001-4300).</a>
†10.36	– <a href="#">Form of 2016 Performance Share Program Award Notice and Agreement, dated January 7, 2016 (incorporated by reference to Exhibit 10.59 to Registrant’s Annual Report on Form 10-K for year ended December 31, 2015, SEC File No. 001-4300).</a>
†10.37	– <a href="#">Form of 2017 Performance Share Program Award Notice and Agreement, dated December 13, 2016 (incorporated by reference to Exhibit 10.45 to Registrant’s Annual Report on Form 10-K for year ended December 31, 2016, SEC File No. 001-4300).</a>
†10.38	– <a href="#">Form of Restricted Stock Unit Award Agreement, dated February 3, 2016 (incorporated by reference to Exhibit 10.60 to Registrant’s Annual Report on Form 10-K for year ended December 31, 2015, SEC File No. 001-4300).</a>
†10.39	– <a href="#">Form of Restricted Stock Unit Award Agreement dated September 14, 2016 (2016 Omnibus Compensation Plan) (incorporated by reference to Exhibit 10.1 to Registrant’s Quarterly Report on Form 10-Q for the quarter ended September 30, 2016, SEC File No. 001-4300).</a>
†10.40	– <a href="#">Form of Stock Option Grant Agreement, dated December 13, 2016 (2016 Omnibus Compensation Plan) (incorporated by reference to Exhibit 10.48 to Registrant’s Annual Report on Form 10-K for year ended December 31, 2016, SEC File No. 001-4300).</a>
†10.41	– <a href="#">Form of 2018 Restricted Stock Unit Award Agreement dated January 16, 2018 (2016 Omnibus Compensation Plan) (incorporated by reference to Exhibit 10.43 to Registrant’s Annual Report on Form 10-K for the year ended December 31, 2017, SEC File No. 001-04300).</a>
†10.42	– <a href="#">Form of 2018 Cash-Settled Restricted Stock Unit Award Agreement dated January 16, 2018 (2016 Omnibus Compensation Plan) (incorporated by reference to Exhibit 10.44 to Registrant’s Annual Report on Form 10-K for the year ended December 31, 2018, SEC File No. 001-04300).</a>
†10.43	– <a href="#">Form of 2018 Performance Share Grant Agreement (2016 Omnibus Compensation Plan), dated January 16, 2018 (incorporated by reference to Exhibit 10.1 to Registrant’s Current Report on Form 8-K filed January 19, 2018, SEC File No. 001-04300).</a>
†10.44	– <a href="#">Form of 2018 Stock Option Grant Agreement (2016 Omnibus Compensation Plan), dated January 16, 2018 (incorporated by reference to Exhibit 10.2 to Registrant’s Current Report on Form 8-K filed January 19, 2018, SEC File No. 001-04300).</a>
†10.45	– <a href="#">Form of 2019 Performance Share Program (2016 Omnibus Compensation Plan), dated January 3, 2019 (incorporated by reference to Exhibit 10.1 to Registrant’s Current Report on Form 8-K filed January 7, 2019, SEC File No. 001-04300).</a>
†10.46	– <a href="#">Form of 2019 Cash-Based Restricted Stock Unit Grant Agreement (2016 Omnibus Compensation Plan), dated January 3, 2019 (incorporated by reference to Exhibit 10.2 to Registrant’s Current Report on Form 8-K filed January 7, 2019, SEC File No. 001-04300).</a>
*†10.47	– <a href="#">Form of 2019 Restricted Stock Unit Award Agreement dated (2016 Omnibus Compensation Plan), dated January 3, 2019.</a>
*†10.48	– <a href="#">Form of 2019 Cash-Based Restricted Stock Unit Grant Agreement (2016 Omnibus Compensation Plan), dated January 3, 2019.</a>
†10.49	– <a href="#">Form of Stock Option Award Agreement, dated February 3, 2016 (incorporated by reference to Exhibit 10.61 to Registrant’s Annual Report on Form 10-K for year ended December 31, 2015, SEC File No. 001-4300).</a>
*21.1	– <a href="#">Subsidiaries of Registrant.</a>
*23.1	– <a href="#">Consent of Ernst &amp; Young LLP.</a>

## INDEX TO EXHIBITS

EXHIBIT NO.	DESCRIPTION
*23.2	– <a href="#">Consent of Ryder Scott Company, L.P., Petroleum Consultants.</a>
*24.1	– <a href="#">Power of Attorney (included as a part of the signature pages to this report).</a>
*31.1	– <a href="#">Certification (pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the Exchange Act) by Principal Executive Officer.</a>
*31.2	– <a href="#">Certification (pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the Exchange Act) by Principal Financial Officer.</a>
*32.1	– <a href="#">Section 1350 Certification (pursuant to Sarbanes-Oxley Section 906) by Principal Executive Officer and Principal Financial Officer.</a>
*99.1	– <a href="#">Report of Ryder Scott Company, L.P., Petroleum Consultants.</a>
*101.INS	– XBRL Instance Document.
*101.SCH	– XBRL Taxonomy Schema Document.
*101.CAL	– XBRL Calculation Linkbase Document.
*101.DEF	– XBRL Definition Linkbase Document.
*101.LAB	– XBRL Label Linkbase Document.
*101.PRE	– XBRL Presentation Linkbase Document.

\* Filed herewith.

† Management contracts or compensatory plans or arrangements required to be filed herewith pursuant to Item 15 hereof.

NOTE: Debt instruments of the Registrant defining the rights of long-term debt holders in principal amounts not exceeding 10 percent of the Registrant's consolidated assets have been omitted and will be provided to the Commission upon request.

**SCHEDULE A****Apache Corporation****Restricted Stock Unit Award Agreement****GRANT NOTICE**

**Recipient Name:** [Name]

**Company:** Apache Corporation

**Notice:** A summary of the terms of your grant of Restricted Stock Units (“RSUs”) is set out in this notice (the “Grant Notice”) but subject always to the terms of the Apache Corporation 2016 Omnibus Compensation Plan (the “Plan”) and the Restricted Stock Unit Award Agreement (the “Agreement”). In the event of any inconsistency between the terms of this Grant Notice, the terms of the Plan and the Agreement, the terms of the Plan and the Agreement shall prevail.

You have been awarded a grant of Apache Corporation RSUs in accordance with the terms of the Plan and the Agreement.

Details of the RSUs which you are entitled to receive is provided to you in this Grant Notice and maintained on your account at [netbenefits.fidelity.com](http://netbenefits.fidelity.com)

**Type of Award:** Restricted Stock Unit(s)

**Restricted Stock Unit:** A Restricted Stock Unit (“RSU”) as defined in the Plan and meaning the right granted to the Recipient to receive one share of Stock for each RSU at the end of the specified Vesting Period.

**Stock:** The \$0.625 par value common stock of the Company or as otherwise defined in the Plan.

**Grant:** A Grant related to \_\_\_\_\_ Restricted Stock Units

**Grant Date:** [Date]

**Conditions:** The Recipient may elect, at the time of the grant, to have his or her RSUs deferred into the Deferred Delivery Plan (the "DDP") when the RSUs vest, in which case the Recipient will receive the value of the RSUs at the times specified pursuant to the DDP. For RSUs that are not deferred, once the RSU vests, the Recipient shall be paid the

value of his or her RSUs in shares of Stock (net of shares withheld for applicable tax withholdings).

**Vesting Period:**

RSUs granted shall vest (i.e., restrictions shall lapse) in accordance with the following schedule (the "Vesting Period"), provided that the Recipient remains employed as an Eligible Person as of such vesting date:

First day of the month following the first anniversary of the Grant Date - 1/3 vested.

Second anniversary of the Grant Date - an additional 1/3 vested.

Third anniversary of the Grant Date - an additional 1/3 vested.

Notwithstanding the foregoing, if the Recipient's termination of employment from the Company and the Affiliates occurs by reason of his or her Retirement, the Recipient shall be deemed to continue to be employed as an Eligible Person for purposes of this Grant and shall continue to vest with respect to a specified percentage of RSUs over the Vesting Period set forth above provided that the Recipient meets the Retirement Conditions set forth in section 5 of the Agreement.

Upon vesting (other than upon death or Disability), the applicable shares of Stock, subject to required tax withholding, shall be transferred by the Company to the Recipient within thirty (30) days of the vesting date, unless the Recipient had elected to defer such RSUs into the DDP, in which case the RSUs shall be transferred to the DDP on the vesting date and paid out according to the provisions of the DDP.

Vesting is accelerated to 100% upon the Recipient's death or cessation of employment by reason of Disability while an Eligible Person (or, only in the case of death, while treated as an Eligible Person following Retirement as described above) during the Vesting Period. Upon vesting, the applicable shares of Stock, subject to required tax withholding, shall be transferred by the Company to the Recipient's designated beneficiary, legal representatives, heirs, or legatees, as applicable, in accordance with the terms of the Plan and this Agreement. The Recipient can name a beneficiary on a form approved by the Committee.

Vesting is accelerated to 100% upon the Recipient's Involuntary Termination or Voluntary Termination with Cause occurring on or after a 409A Change of Control that occurs during the Vesting Period.

With respect to a Recipient who continues to vest following his or her termination due to Retirement, vesting is accelerated to 100% upon a 409A Change of Control that occurs during the Vesting Period and on or after such termination due to Retirement. Upon such vesting, the applicable shares of Stock, subject to required tax withholding, shall be transferred by the Company to the Recipient within thirty (30) days of the vesting date, unless the Recipient had elected to defer such RSUs into the DDP, in which case the RSUs shall be transferred to the DDP on the vesting date and paid out according to the provisions of the DDP.

**Withholding:**

The Company and the Recipient will comply with all federal and state laws and regulations respecting the required withholding, deposit, and payment of any income, employment, or other taxes relating to the Grant.

**Dividends:**

The Company will credit each of the Recipient's RSUs with Dividend Equivalents. For purposes of this Grant, a Dividend Equivalent is an amount equal to the cash dividend payable per share of Stock multiplied by the number of shares of Stock then underlying such outstanding RSUs. Such amount will be credited to a book entry account on Recipient's behalf at the time the Company pays any cash dividend on its Stock. The Recipient's rights in any such Dividend Equivalents will vest at the same time as, and only to the extent that, the underlying RSUs vest and will be distributed at the same time in cash (subject to applicable withholdings), and only to the extent, as the related RSUs are to be distributed to the Recipient as provided in the Agreement and to which such Dividend Equivalents apply.

**Acceptance:**

Please complete the on-line grant acceptance as promptly as possible to accept or reject your Grant. You can access this through your account at [netbenefits.fidelity.com](http://netbenefits.fidelity.com). By accepting your Grant, you will have agreed to the terms and conditions set forth in the Agreement, including, but not limited to, the non-compete and non-disparagement provisions set forth in sections 5 and 6 of the Agreement, and the terms and conditions of the Plan. If you do not accept your Grant, your RSUs will not vest and you will be unable to receive your RSUs.

## Apache Corporation

### Restricted Stock Unit Award Agreement

This Restricted Stock Unit Award Agreement (the "Agreement") relating to a grant of Restricted Stock Units (as defined in the definition section of the Apache Corporation 2016 Omnibus Compensation Plan (the "Plan")) (the "Grant"), dated as of the Grant Date set forth in the Notice of Award under the Agreement attached as Schedule A hereto (the "Grant Notice"), is made between Apache Corporation (together with its Affiliates, the "Company") and each Recipient. The Grant Notice is included in and made part of this Agreement.

In this Agreement and each Grant Notice, unless the context otherwise requires, words and expressions shall have the meanings given to them in the Plan except as herein defined.

#### **Definitions**

"Disability" or "Disabled" means the Recipient is unable to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment which can be expected to result in death or which has lasted or can be expected to last for a continuous period of not less than 12 months. Recipient agrees that a final and binding determination of "Disability" will be made by the Company's representative under the Company's group long-term disability plan or any successor thereto or, if there is no such representative and there is a dispute as to the determination of "Disability," it will be decided in a court of law in Harris County, Texas.

"Grant Notice" means the separate notice given to each Recipient specifying the number of RSUs granted to the Recipient (the "Grant").

"Fair Market Value" means the fair market value of a share of the Stock as determined by the Committee by the reasonable application of such reasonable valuation method, consistently applied, as the Committee deems appropriate; provided, however, that if the Committee has not made such determination, such fair market value shall be the per share closing price of the Stock as reported on The New York Stock Exchange, Inc. Composite Transactions Reporting System ("Composite Tape") for a particular date or, if the Stock is not so listed on such date, as reported on NASDAQ or on such other exchange or electronic trading system as, on the date in question, reports the largest number of traded shares of stock; provided further, however, that if there are no Stock transactions on such date, the Fair Market Value shall be determined as of the immediately preceding date on which there were Stock transactions.

"Involuntary Termination" means the termination of employment of the Recipient by the Company or its successor for any reason on or after a 409A Change of Control; provided, that the termination does not result from an act of the Recipient that constitutes common-law fraud, a felony, or a gross malfeasance of duty.

"Payout Amount" means the vested portion of the Grant, along with any Dividend Equivalents related thereto as specified in the Grant Notice, expressed as shares of Stock underlying the RSUs and related Dividend Equivalents.

“Recipient” means an Eligible Person designated by the Committee at the Grant Date to receive one or more Grants under the Plan.

“Retirement” means, with respect to a Recipient and for purposes of this Agreement, the date the Recipient terminates employment with the Company after attaining (i) age 55 and (ii) a certain combination of age and Years of Service set forth in the Matrix in Exhibit “A” attached hereto.

“Years of Service” means the total number of months from the Recipient’s date of hire by the Company to the date of termination of employment, plus any months required to be recognized under an appropriate acquisition agreement, divided by 12.

“Voluntary Termination with Cause” occurs upon a Recipient’s separation from service of his own volition and one or more of the following conditions occurs without the Recipient’s consent on or after a 409A Change of Control:

- (a) There is a material diminution in the Recipient’s base compensation, compared to his rate of base compensation on the date of the 409A Change of Control.
- (b) There is a material diminution in the Recipient’s authority, duties or responsibilities.
- (c) There is a material diminution in the authority, duties or responsibilities of the Recipient’s supervisor, such as a requirement that the Recipient (or his supervisor) report to a corporate officer or employee instead of reporting directly to the board of directors.
- (d) There is a material diminution in the budget over which the Recipient retains authority.
- (e) There is a material change in the geographic location at which the Recipient must perform his service, including, for example the assignment of the Recipient to a regular workplace that is more than 50 miles from his regular workplace on the date of the 409A Change of Control.

The Recipient must notify the Company of the existence of one or more adverse conditions specified in clauses (a) through (e) above within 90 days of the initial existence of the adverse condition. The notice must be provided in writing to Apache Corporation’s Senior Vice President, Human Resources, or his or her delegate. The notice may be provided by personal delivery or it may be sent by email, inter-office mail, regular mail (whether or not certified), fax, or any similar method. Apache Corporation’s Senior Vice President, Human Resources, or his or her delegate shall acknowledge receipt of the notice within 5 business days; the acknowledgement shall be sent to the Recipient by certified mail. Notwithstanding the foregoing provisions of this definition, if the Company remedies the adverse condition within 30 days of being notified of the adverse condition, no Voluntary Termination with Cause shall occur.

## **Terms**

1. Grant of RSUs. Subject to the provisions of this Agreement and the provisions of the Plan and Grant Notice, the Company shall grant to the Recipient, pursuant to the Plan, a right to receive the number of RSUs set forth in the Recipient's Grant Notice. The Grant shall give the Recipient the right, upon vesting, to an equal number of shares of \$0.625 par value common stock of the Company ("Stock"). At the time of the Grant, the Recipient may elect to defer all or any portion of the RSUs in the Deferred Delivery Plan (the "DDP").

2. Vesting and Payment of Stock. Subject to the provisions of sections 3 and 4 of this Agreement, the entitlement to receive the number of shares of Stock pursuant to the RSUs comprising the Grant Amount shall vest in accordance with the schedule set forth in the Grant Notice (the "Vesting Period"); provided that the Recipient remains employed as an Eligible Person on such applicable vesting dates. Unless the Recipient elected to defer the RSU into the DDP, such Stock, subject to applicable withholding, shall be transferred by the Company to the Recipient within thirty (30) days of the vesting date (other than upon death or Disability). To the extent that the Recipient elected to defer the RSUs into the DDP and sections 3 and 4 do not apply, when the RSUs vest, they shall be transferred to the DDP and paid thereafter to the Recipient as specified under the terms of the DDP.

3. Termination of Employment, Retirement, Death, or Disability. Except as set forth below in this section 3 and in section 4 of this Agreement, each Grant shall be subject to the condition that the Recipient has remained an Eligible Person from the award of the Grant of RSUs until the applicable vesting date as follows:

(a) If the Recipient voluntarily leaves the employment of the Company (other than for reason of Retirement), or if the employment of the Recipient is terminated by the Company for any reason or no reason, any RSUs granted to the Recipient pursuant to the Grant Notice not previously vested shall thereafter be void and forfeited for all purposes.

(b) If the Recipient leaves the employment of the Company by reason of Retirement, the RSUs granted to the Recipient pursuant to the Grant Notice not previously vested shall continue to vest following the Recipient's termination of employment by reason of Retirement as if the Recipient remained an Eligible Person in the employ of the Company, provided that such Recipient shall be entitled to continue vesting only if such Recipient satisfies the Retirement Conditions set forth in section 5 below (except in the case of death) and only with respect to the specified percentage of such unvested RSUs set forth in Exhibit "A" for a certain combination of age and Years of Service attained by the Recipient as of the Recipient's Retirement under the Matrix set forth in Exhibit "A".

(c) A Recipient shall become 100% vested in all RSUs under the Grant Notice on the date the Recipient dies while employed by the Company regardless whether Recipient has accepted the Grant, or on the date the Recipient is no longer employed by the Company by reason of Disability, or, only in the case of death, while continuing to vest pursuant to section 3(b) of this Agreement. Payment shall be made as soon as administratively practicable, but in no event (i) in the case of death, shall the payment occur later than the last day of the calendar year following the calendar year in which such death occurs or (ii) in the case of cessation of employment by reason of Disability, shall the payment occur later than thirty (30) days following the date the Recipient is determined to be Disabled and is no longer employed by the Company. If clause (ii) is applicable and the period

from the date on which the Recipient is determined to be Disabled and is no longer employed by the Company to the date under clause (ii) spans two consecutive calendar years, payment shall be made in the second calendar year of such consecutive calendar years. Such payment shall be made to the Recipient's designated beneficiary, legal representatives, heirs, or legatees, as applicable. Each Recipient may designate a beneficiary on a form approved by the Committee.

4. Change of Control. Pursuant to Section 13.1(d) of the Plan, the following provisions of this section 4 of the Agreement shall supersede Sections 13.1(a), (b) and (c) of the Plan. Without any further action by the Committee or the Board, in the event of a Recipient's Involuntary Termination or Voluntary Termination with Cause occurring on or after a Change of Control of Apache Corporation that constitutes, with respect to Apache Corporation, a "change of ownership or effective control of the corporation, or in the ownership of a substantial portion of the assets of the corporation" within the meaning of Section 409A(a)(2)(A)(v) of the Internal Revenue Code of 1986, as amended (the "Code") and Treasury Regulations Section 1.409A-3(i)(5) (a "409A Change of Control") during the Vesting Period, the Recipient shall become 100% fully vested in the unvested RSUs granted to the Recipient pursuant to the Grant Notice as of the date of his Involuntary Termination or Voluntary Termination with Cause. Further, in the event of a 409A Change of Control of Apache Corporation following the Recipient's termination of employment by reason of Retirement while the Recipient is continuing to vest in the RSUs pursuant to section 3(b) of this Agreement, the Recipient shall become 100% fully vested in the unvested RSUs granted to the Recipient pursuant to the Grant Notice as of the date of the 409A Change of Control. Subject to section 12(d) of this Agreement, payment shall occur within thirty (30) days following the date of such Involuntary Termination or Voluntary Termination with Cause (or, if the Recipient is continuing to vest pursuant to section 3(b) of this Agreement, the date of the 409A Change of Control).

5. Conditions to Post-Retirement Vesting. If the Recipient has attained age 55 and a certain combination of age and Years of Service set forth in the Matrix in Exhibit "A" attached hereto and terminates employment with the Company and the Affiliates by reason of Retirement, it is agreed by the Company and the Recipient that:

(a) subject to the provisions of this section 5(a) and sections 5(b) and 5(c), such Recipient shall continue to vest in the specified percentage of unvested RSUs set forth in Exhibit "A", for the combination of age and Years of Service attained by such Recipient as of his or her Retirement under the Matrix set forth in Exhibit "A", following the date of his or her termination by reason of Retirement as if the Recipient continued in employment as an Eligible Person provided that the Grant Date of the unvested RSUs is prior to such termination date in an amount of time which allows the Recipient to provide the written notice as follows and the Recipient has provided advance written notice not before three (3) months following the Grant Date and not less than the number of months prior to such termination date as set forth in the Schedule below to Apache Corporation's Senior Vice President, Human Resources, or his or her delegate, and to his or her direct manager, regarding the Recipient's intent to terminate employment for reason of Retirement; provided, however, a Recipient who is at least age 55 and attained the necessary combination of age and Years of Service under the Matrix set forth in Exhibit "A" for Retirement need not provide such advance written notice of his or her intent to terminate employment by reason of Retirement if the Company elects to require such Recipient to, or (as part of a reduction in force or otherwise in writing in

exchange for a written release) offers such Recipient the opportunity to, terminate employment with the Company by reason of Retirement:

Age	Advance Written Notice
65 or older	3 months
between (and including) 55 and 64	6 months

; and it is further agreed that

(b) in consideration for the continued vesting treatment afforded to the Recipient under section 5(a), Recipient shall, during the continuing Vesting Period after Retirement (the "Continued Vesting Period"), refrain from becoming employed by, or consulting with, or becoming substantially involved in the business of, any business that competes with the Company or its Affiliate in the business of exploration or production of oil or natural gas wherever from time to time conducted throughout the world (a "Competitive Business") and Recipient shall provide to the Company, upon Company's request, (x) a written certification, in a form provided by or satisfactory to the Company, as to Recipient's compliance with the foregoing conditions and/or (y) his/her U.S. Individual Income Tax Return for any return filed by the Recipient which relates to any time during the Continued Vesting Period to allow the Company to verify that Recipient has complied with the foregoing conditions; provided, that the Recipient may purchase and hold for investment purposes less than five percent (5%) of the shares of any Competitive Business whose shares are regularly traded on a national securities exchange or inter-dealer quotation system, and provided further, that the Recipient may provide services solely as a director of any Competitive Business whose shares are regularly traded on a national securities exchange or inter-dealer quotation system if, during the Continued Vesting Period, (i) the Recipient only attends board and board committee meetings, votes on recommendations of management, and discharges his/her fiduciary obligations under the law and (ii) the Recipient is not involved in, and does not advise or consult on, the marketing, government relations, customer relations, or the day-to-day management, supervision, or operations of such Competitive Business; and it is further agreed that

(c) in consideration for the continued vesting treatment afforded to the Recipient under section 5(a), Recipient shall, during the Continued Vesting Period, refrain from making, or causing or assisting any other person to make, any oral or written communication to any third party about the Company, any Affiliate and/or any of the employees, officers or directors of the Company or any Affiliate which impugns or attacks, or is otherwise critical of, the reputation, business or character of such entity or person; or that discloses private or confidential information about their business affairs; or that constitutes an intrusion into their seclusion or private lives; or that gives rise to unreasonable publicity about their private lives; or that places them in a false light before the public; or that constitutes a misappropriation of their name or likeness.

Notwithstanding the foregoing provisions of this section 5 of the Agreement, (i) in the event that the Recipient fails to satisfy any of the conditions set forth in sections 5(a), (b) and (c) above, the Recipient shall not be entitled to vest in any unvested RSUs after the date of Retirement and the unvested RSUs subject to this Agreement shall be forfeited and (ii) the Recipient shall not have any

right to continue to vest upon Retirement in any future awards granted under the Plan once the Recipient provides the notice of Retirement as set forth in section 5(a) above.

6. Prohibited Activity. In consideration for this Grant and except as permitted under section 5(b) above, the Recipient agrees not to engage in any “Prohibited Activity” while employed by the Company or within three years after the date of the Recipient’s termination of employment. A “Prohibited Activity” will be deemed to have occurred, as determined by the Committee in its sole and absolute discretion, if the Recipient (i) divulges any non-public, confidential or proprietary information of the Company, but excluding information that (a) becomes generally available to the public other than as a result of the Recipient’s public use, disclosure, or fault, or (b) becomes available to the Recipient on a non-confidential basis after the Recipient’s employment termination date from a source other than the Company prior to the public use or disclosure by the Recipient, provided that such source is not bound by a confidentiality agreement or otherwise prohibited from transmitting the information by contractual, legal or fiduciary obligation; (ii) directly or indirectly, consults with or becomes affiliated with, participate or engage in, or becomes employed by any business that is competitive with the Company, wherever from time to time conducted throughout the world, including situations where the Recipient solicits or participates in or assists in any way in the solicitation or recruitment, directly or indirectly, of any employees of the Company; or (iii) engages in publishing any oral or written statements about the Company, and/or any of its directors, officers, or employees that are disparaging, slanderous, libelous, or defamatory; or that disclose private or confidential information about their business affairs; or that constitute an intrusion into their seclusion or private lives; or that give rise to unreasonable publicity about their private lives; or that place them in a false light before the public; or that constitute a misappropriation of their name or likeness.

7. Payment and Tax Withholding. Upon receipt of any entitlement to Stock under this Agreement and, if applicable, upon the Recipient’s attainment of eligibility to terminate employment by reason of Retirement pursuant to section 3(b), the Recipient shall make appropriate arrangements with the Company to provide for the amount of minimum tax and social security withholding, if any, required by law, including without limitation Sections 3102 and 3402 or any successor section(s) of the Internal Revenue Code and applicable state and local income and other tax laws. Upon receipt of entitlement to Stock under this Agreement, each payment of the Payout Amount shall be made in shares of Stock, determined by the Committee, such that the withheld number of shares of Stock shall be sufficient to cover the withholding amount required by this section (including any amount to cover benefit tax charges arising thereon). The payment of a Payout Amount shall be based on the Fair Market Value of the shares of Stock on the applicable date of vesting to which such tax withholding relates. Where appropriate, shares of Stock shall be withheld by the Company to satisfy applicable tax withholding requirements rather than paid directly to the Recipient.

8. No Ownership Rights Prior to Issuance of Stock. Neither the Recipient nor any other person shall become the beneficial owner of the Stock underlying the Grant, nor have any rights of a shareholder (including, without limitation, dividend and voting rights) with respect to any such Stock, unless and until and after such Stock has been actually issued to the Recipient and transferred on the books and records of the Company or its agent in accordance with the terms of the Plan and this Agreement.

9. Non-Transferability of Grant. A Grant shall not be transferable otherwise than by testamentary will or the laws of descent and distribution, or in accordance with a valid beneficiary designation on a form approved by the Committee, subject to the conditions and exceptions set forth in Section 15.2 of the Plan.

10. No Right to Continued Employment. Neither the RSUs or Stock issued pursuant to a Grant nor any terms contained in this Agreement shall confer upon the Recipient any express or implied right to be retained in the employment or service of the Company for any period, nor restrict in any way the right of the Company, which right is hereby expressly reserved, to terminate the Recipient's employment or service at any time for any reason or no reason. The Recipient acknowledges and agrees that any right to receive RSUs or Stock pursuant to a Grant is earned only by continuing as an employee of the Company at the will of the Company, or satisfaction of any other applicable terms and conditions contained in the Plan and this Agreement, and not through the act of being hired, being granted the Grant, or acquiring RSUs or Stock pursuant to the Grant hereunder.

11. The Plan. In consideration for this Grant, the Recipient agrees to comply with the terms of the Plan and this Agreement. This Agreement is subject to all the terms, provisions and conditions of the Plan, which are incorporated herein by reference, and to such regulations as may from time to time be adopted by the Committee. Unless defined herein, capitalized terms are used herein as defined in the Plan. In the event of any conflict between the provisions of the Plan and this Agreement, the provisions of the Plan shall control, and this Agreement shall be deemed to be modified accordingly. The Plan and the prospectus describing the Plan can be found on the Company's HR intranet and the Plan document can be found on Fidelity's website (netbenefits.fidelity.com). A paper copy of the Plan and the prospectus shall be provided to the recipient upon the Recipient's written request to the Company at 2000 Post Oak Blvd., Suite 100, Houston, Texas 77056-4400, Attention: Corporate Secretary.

12. Compliance with Laws and Regulations.

(a) The Grant and any obligation of the Company to deliver RSUs or Stock hereunder shall be subject in all respects to (i) all applicable laws, rules and regulations and (ii) any registration, qualification, approvals or other requirements imposed by any government or regulatory agency or body which the Committee shall, in its discretion, determine to be necessary or applicable. Moreover, the Company shall not deliver any certificates for Stock to the Recipient or any other person pursuant to this Agreement if doing so would be contrary to applicable law. If at any time the Company determines, in its discretion, that the listing, registration or qualification of Stock upon any national securities exchange or under any applicable law, or the consent or approval of any governmental regulatory body, is necessary or desirable, the Company shall not be required to deliver any certificates for Stock to the Recipient or any other person pursuant to this Agreement unless and until such listing, registration, qualification, consent or approval has been effected or obtained, or otherwise provided for, free of any conditions not acceptable to the Company.

(b) It is intended that the issuance of any Stock received in respect of the Grant shall have been registered under the Securities Act of 1933 ("Securities Act"). If the Recipient is an "affiliate" of the Company, as that term is defined in Rule 144 under the Securities Act ("Rule 144"),

the Recipient may not sell the Stock received except in compliance with Rule 144. Certificates representing Stock issued to an “affiliate” of the Company may bear a legend setting forth such restrictions on the disposition or transfer of the Stock as the Company deems appropriate to comply with Federal and state securities laws.

(c) If, at any time, a registration statement with respect to the issuance of the Stock is not effective under the Securities Act, and/or there is no current prospectus in effect under the Securities Act with respect to the Stock, the Recipient shall execute, prior to the delivery of any Stock to the Recipient by the Company pursuant to this Agreement, an agreement (in such form as the Company may specify) in which the Recipient represents and warrants that the Recipient is purchasing or acquiring the Stock acquired under this Agreement for the Recipient’s own account, for investment only and not with a view to the resale or distribution thereof, and represents and agrees that any subsequent offer for sale or distribution of any kind of such Stock shall be made only pursuant to either (i) a registration statement on an appropriate form under the Securities Act, which registration statement has become effective and is current with regard to the Stock being offered or sold, or (ii) a specific exemption from the registration requirements of the Securities Act, but in claiming such exemption the Recipient shall, prior to any offer for sale of such Stock, obtain a prior favorable written opinion, in form and substance satisfactory to the Company, from counsel for or approved by the Company, as to the applicability of such exemption thereto.

(d) This Grant is intended to comply with, or be exempt from, the applicable requirements of Section 409A of the Code and the rules and regulations issued thereunder and shall be administered accordingly. Notwithstanding anything in this Agreement to the contrary, if the RSUs constitute “deferred compensation” under Section 409A of the Code and any RSUs become payable pursuant to the Recipient’s termination of employment, settlement of the RSUs shall be delayed for a period of six months after the Recipient’s termination of employment if the Recipient is a “specified employee” as defined under Code Section 409A(a)(2)(B)(i) and if required pursuant to Section 409A of the Code. If settlement of the RSU is delayed, the RSUs shall be settled on the first day of the first calendar month following the end of the six-month delay period. If the Recipient dies during the six-month delay, the RSUs shall be settled and paid to the Recipient’s designated beneficiary, legal representatives, heirs or legatees, as applicable, as soon as practicable after the date of death. Notwithstanding any provisions to the contrary herein, payments made with respect to this Grant may only be made in a manner and upon an event permitted by Section 409A of the Code, and all payments to be made upon a termination of employment hereunder may only be made upon a “separation from service”, as such term is defined in Section 11.1 of the Plan. Recipient shall not have any right to determine a date of payment of any amount under this Agreement. This Agreement may be amended without the consent of the Recipient in any respect deemed by the Board or the Committee to be necessary in order to preserve compliance with Section 409A of the Code. If the Grant and this Agreement is subject to Section 409A of the Code and the rules and regulations issued thereunder, then the vesting date shall be the “designated payment date” or “specified date” under Treasury Regulation 1.409A-3(d).

13. Notices. Unless otherwise provided in this Agreement, all notices by the Recipient or the Recipient’s assignees shall be addressed to the Administrative Agent, Fidelity, through the Recipient’s account at netbenefits.fidelity.com, or such other address as the Company may from

time to time specify. All notices to the Recipient shall be addressed to the Recipient at the Recipient's address in the Company's records.

14. Other Plans. The Recipient acknowledges that any income derived from the Grant shall not affect the Recipient's participation in, or benefits under, any other benefit plan or other contract or arrangement maintained by the Company or any Affiliate.

15. Terms of Employment. The Plan is a discretionary plan. The Recipient hereby acknowledges that neither the Plan nor this Agreement forms part of his terms of employment and nothing in the Plan may be construed as imposing on the Company or any Affiliate a contractual obligation to offer participation in the Plan to any employee of the Company or any Affiliate. The Company or any Affiliate is under no obligation to grant further RSUs or Stock to any Recipient under the Plan. The Recipient hereby acknowledges that if he ceases to be an employee of the Company or any Affiliate for any reason or no reason, he shall not be entitled by way of compensation for loss of office or otherwise howsoever to any sum.

16. Data Protection. By accepting this Agreement (whether by electronic means or otherwise), the Recipient hereby consents to the holding and processing of personal data provided by him to the Company for all purposes necessary for the operation of the Plan. These include, but are not limited to:

- (a) administering and maintaining Recipient records;
- (b) providing information to any registrars, brokers or third party administrators of the Plan; and
- (c) providing information to future purchasers of the Company or the business in which the Recipient works.

17. Severability. If any provision of this Agreement is held invalid or unenforceable, the remainder of this Agreement shall nevertheless remain in full force and effect, and if any provision is held invalid or unenforceable with respect to particular circumstances, it shall nevertheless remain in full force and effect in all other circumstances, to the fullest extent permitted by law.

\*\*\*\*\*

# Exhibit "A"

## Apache Corporation Retirement Matrix

		Points (Age at Retirement + Years of Service)																					
		60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	
Age at Retirement	70	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	100%	100%	100%	100%	100%	
	69	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	100%	100%	100%	100%	100%	100%
	68	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	100%	100%	100%	100%	100%	100%	100%
	67	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
	66	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
	65	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
	64	0%	0%	0%	0%	0%	0%	0%	0%	0%	50%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	100%
	63	0%	0%	0%	0%	0%	0%	0%	50%	50%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	100%
	62	0%	0%	0%	0%	0%	0%	50%	50%	50%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	100%
	61	0%	0%	0%	0%	0%	50%	50%	50%	50%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	100%
	60	0%	0%	0%	0%	50%	50%	50%	50%	50%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	100%
	59	0%	0%	0%	0%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	75%	75%	75%	75%	75%	75%	100%
	58	0%	0%	0%	0%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	75%	75%	75%	75%	75%	75%	100%
	57	0%	0%	0%	0%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	75%	75%	75%	75%	75%	75%	100%
	56	0%	0%	0%	0%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	75%	75%	75%	75%	75%	75%	100%
	55	0%	0%	0%	0%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	75%	75%	75%	75%	75%	75%	100%

0%
50%
75%
100%

**SCHEDULE A****Apache Corporation****Restricted Stock Unit Award Agreement****GRANT NOTICE****Recipient Name:** [Name]**Company:** Apache Corporation

**Notice:** A summary of the terms of your grant of Restricted Stock Units (“RSUs”) is set out in this notice (the “Grant Notice”) but subject always to the terms of the Apache Corporation 2016 Omnibus Compensation Plan (the “Plan”) and the Restricted Stock Unit Award Agreement (the “Agreement”). In the event of any inconsistency between the terms of this Grant Notice, the terms of the Plan and the Agreement, the terms of the Plan and the Agreement shall prevail. The Grant is a Cash-Based Award under Section 10 of the Plan and is subject to the provisions of the Plan governing RSUs.

You have been awarded a grant of Apache Corporation RSUs in accordance with the terms of the Plan and the Agreement.

Details of the RSUs which you are entitled to receive is provided to you in this Grant Notice and maintained on your account at [netbenefits.fidelity.com](http://netbenefits.fidelity.com)

**Type of Award:** Restricted Stock Unit(s)

**Restricted Stock Unit:** A Restricted Stock Unit (“RSU”) as defined in the Plan and meaning the right granted to the Recipient to receive one share of Stock or the cash equivalent thereof for each RSU at the end of the specified Vesting Period.

**Stock:** The \$0.625 par value common stock of the Company or as otherwise defined in the Plan.

**Grant:** A Grant related to \_\_\_\_\_ Restricted Stock Units

**Grant Date:** [Date]

**Conditions:** The Recipient may elect, at the time of the grant, to have his or her RSUs deferred into the Deferred Delivery Plan (the "DDP") when

the RSUs vest, in which case the Recipient will receive the value of the RSUs in cash at the times specified pursuant to the DDP. For RSUs that are not deferred, once the RSU vests, the Recipient shall be paid the value of his or her RSUs in cash (net of cash withheld for applicable tax withholdings).

**Vesting Period:**

RSUs granted shall vest (i.e., restrictions shall lapse) in accordance with the following schedule (the "Vesting Period"), provided that the Recipient remains employed as an Eligible Person as of such vesting date:

First day of the month following the first anniversary of the Grant Date – 1/3 vested.

Second anniversary of the Grant Date – an additional 1/3 vested.

Third anniversary of the Grant Date – an additional 1/3 vested.

Notwithstanding the foregoing, if the Recipient's termination of employment from the Company and the Affiliates occurs by reason of his or her Retirement, the Recipient shall be deemed to continue to be employed as an Eligible Person for purposes of this Grant and shall continue to vest with respect to a specified percentage of RSUs over the Vesting Period set forth above provided that the Recipient meets the Retirement Conditions set forth in section 5 of the Agreement.

Upon vesting (other than upon death or Disability), the applicable amount of cash, subject to required tax withholding, shall be paid by the Company to the Recipient within thirty (30) days of the vesting date, unless the Recipient had elected to defer such RSUs into the DDP, in which case the applicable amount of cash shall be paid to the DDP on the vesting date and paid out according to the provisions of the DDP.

Vesting is accelerated to 100% upon the Recipient's death or cessation of employment by reason of Disability while an Eligible Person (or, only in the case of death, while treated as an Eligible Person following Retirement as described above) during the Vesting Period. Upon vesting, the applicable amount of cash, subject to required tax withholding, shall be paid by the Company to the Recipient's designated beneficiary, legal representatives, heirs, or legatees, as applicable, in accordance with the terms of the Plan and this Agreement. The Recipient can name a beneficiary on a form approved by the Committee.

Vesting is accelerated to 100% upon the Recipient's Involuntary Termination or Voluntary Termination with Cause occurring on or after a 409A Change of Control that occurs during the Vesting Period. With respect to a Recipient who continues to vest following his or her termination due to Retirement, vesting is accelerated to 100% upon a 409A Change of Control that occurs during the Vesting Period and on or after such termination due to Retirement. Upon such vesting, the applicable amount of cash, subject to required tax withholding, shall be paid by the Company to the Recipient within thirty (30) days of the vesting date, unless the Recipient had elected to defer such RSUs into the DDP, in which case the applicable amount of cash shall be paid to the DDP on the vesting date and paid out according to the provisions of the DDP.

**Withholding:**

The Company and the Recipient will comply with all federal and state laws and regulations respecting the required withholding, deposit, and payment of any income, employment, or other taxes relating to the Grant.

**Dividends:**

The Company will credit each of the Recipient's RSUs with Dividend Equivalents. For purposes of this Grant, a Dividend Equivalent is an amount equal to the cash dividend payable per share of Stock multiplied by the number of shares of Stock then underlying such outstanding RSUs. Such amount will be credited to a book entry account on Recipient's behalf at the time the Company pays any cash dividend on its Stock. The Recipient's rights in any such Dividend Equivalents will vest at the same time as, and only to the extent that, the underlying RSUs vest and will be distributed at the same time in cash (subject to applicable withholdings), and only to the extent, as the related RSUs are to be distributed to the Recipient as provided in the Agreement and to which such Dividend Equivalents apply.

**Acceptance:**

Please complete the on-line grant acceptance as promptly as possible to accept or reject your Grant. You can access this through your account at [netbenefits.fidelity.com](https://netbenefits.fidelity.com). By accepting your Grant, you will have agreed to the terms and conditions set forth in the Agreement, including, but not limited to, the non-compete and non-disparagement provisions set forth in sections 5 and 6 of the Agreement, and the terms and conditions of the Plan. If you do not accept your Grant, your RSUs will not vest and you will be unable to receive your RSUs.

# Apache Corporation

## Restricted Stock Unit Award Agreement

This Restricted Stock Unit Award Agreement (the "Agreement") relating to a grant of Restricted Stock Units (as defined in the definition section of the Apache Corporation 2016 Omnibus Compensation Plan (the "Plan")) (the "Grant"), dated as of the Grant Date set forth in the Notice of Award under the Agreement attached as Schedule A hereto (the "Grant Notice"), is made between Apache Corporation (together with its Affiliates, the "Company") and each Recipient. The Grant Notice is included in and made part of this Agreement.

In this Agreement and each Grant Notice, unless the context otherwise requires, words and expressions shall have the meanings given to them in the Plan except as herein defined.

### **Definitions**

"Disability" or "Disabled" means the Recipient is unable to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment which can be expected to result in death or which has lasted or can be expected to last for a continuous period of not less than 12 months. Recipient agrees that a final and binding determination of "Disability" will be made by the Company's representative under the Company's group long-term disability plan or any successor thereto or, if there is no such representative and there is a dispute as to the determination of "Disability," it will be decided in a court of law in Harris County, Texas.

"Grant Notice" means the separate notice given to each Recipient specifying the number of RSUs granted to the Recipient (the "Grant").

"Fair Market Value" means the fair market value of a share of the Stock as determined by the Committee by the reasonable application of such reasonable valuation method, consistently applied, as the Committee deems appropriate; provided, however, that if the Committee has not made such determination, such fair market value shall be the per share closing price of the Stock as reported on The New York Stock Exchange, Inc. Composite Transactions Reporting System ("Composite Tape") for a particular date or, if the Stock is not so listed on such date, as reported on NASDAQ or on such other exchange or electronic trading system as, on the date in question, reports the largest number of traded shares of stock; provided further, however, that if there are no Stock transactions on such date, the Fair Market Value shall be determined as of the immediately preceding date on which there were Stock transactions.

"Involuntary Termination" means the termination of employment of the Recipient by the Company or its successor for any reason on or after a 409A Change of Control; provided, that the termination does not result from an act of the Recipient that constitutes common-law fraud, a felony, or a gross malfeasance of duty.

"Payout Amount" means the vested portion of the Grant expressed as an amount of cash equal to the Fair Market Value of the shares of Stock underlying the RSUs and related Dividend Equivalents.

“Recipient” means an Eligible Person designated by the Committee at the Grant Date to receive one or more Grants under the Plan.

“Retirement” means, with respect to a Recipient and for purposes of this Agreement, the date the Recipient terminates employment with the Company after attaining (i) age 55 and (ii) a certain combination of age and Years of Service set forth in the Matrix in Exhibit “A” attached hereto.

“Years of Service” means the total number of months from the Recipient’s date of hire by the Company to the date of termination of employment, plus any months required to be recognized under an appropriate acquisition agreement, divided by 12.

“Voluntary Termination with Cause” occurs upon a Recipient’s separation from service of his own volition and one or more of the following conditions occurs without the Recipient’s consent on or after a 409A Change of Control:

- (a) There is a material diminution in the Recipient’s base compensation, compared to his rate of base compensation on the date of the 409A Change of Control.
- (b) There is a material diminution in the Recipient’s authority, duties or responsibilities.
- (c) There is a material diminution in the authority, duties or responsibilities of the Recipient’s supervisor, such as a requirement that the Recipient (or his supervisor) report to a corporate officer or employee instead of reporting directly to the board of directors.
- (d) There is a material diminution in the budget over which the Recipient retains authority.
- (e) There is a material change in the geographic location at which the Recipient must perform his service, including, for example the assignment of the Recipient to a regular workplace that is more than 50 miles from his regular workplace on the date of the 409A Change of Control.

The Recipient must notify the Company of the existence of one or more adverse conditions specified in clauses (a) through (e) above within 90 days of the initial existence of the adverse condition. The notice must be provided in writing to Apache Corporation’s Senior Vice President, Human Resources, or his or her delegate. The notice may be provided by personal delivery or it may be sent by email, inter-office mail, regular mail (whether or not certified), fax, or any similar method. Apache Corporation’s Senior Vice President, Human Resources, or his or her delegate shall acknowledge receipt of the notice within 5 business days; the acknowledgement shall be sent to the Recipient by certified mail. Notwithstanding the foregoing provisions of this definition, if the Company remedies the adverse condition within 30 days of being notified of the adverse condition, no Voluntary Termination with Cause shall occur.

## Terms

1. Grant of RSUs. Subject to the provisions of this Agreement and the provisions of the Plan and Grant Notice, the Company shall grant to the Recipient, pursuant to the Plan, a right to receive the number of RSUs set forth in the Recipient's Grant Notice. The Grant shall give the Recipient the right, upon vesting, to receive an amount in cash equal to the Fair Market Value of an equal number of shares of \$0.625 par value common stock of the Company ("Stock") to that of the number of RSUs set forth in the Recipient's Grant Notice. At the time of the Grant, the Recipient may elect to defer all or any portion of the RSUs in the Deferred Delivery Plan (the "DDP").

2. Vesting and Payment of Cash. Subject to the provisions of sections 3 and 4 of this Agreement, the entitlement to receive an amount of cash equal to the Fair Market Value of the number of shares of Stock pursuant to the RSUs comprising the Grant Amount shall vest in accordance with the schedule set forth in the Grant Notice (the "Vesting Period"); provided that the Recipient remains employed as an Eligible Person on such applicable vesting dates. Unless the Recipient elected to defer the RSU into the DDP, such cash, subject to applicable withholding, shall be paid by the Company to the Recipient within thirty (30) days of the vesting date (other than upon death or Disability). To the extent that the Recipient elected to defer the RSUs into the DDP and sections 3 and 4 do not apply, when the RSUs vest, an amount of cash equal to the Fair Market Value of the number of shares of Stock that have vested pursuant to the RSUs comprising the Grant Amount shall be paid to the DDP and paid thereafter to the Recipient as specified under the terms of the DDP.

3. Termination of Employment, Retirement, Death, or Disability. Except as set forth below in this section 3 and in section 4 of this Agreement, each Grant shall be subject to the condition that the Recipient has remained an Eligible Person from the award of the Grant of RSUs until the applicable vesting date as follows:

(a) If the Recipient voluntarily leaves the employment of the Company (other than for reason of Retirement), or if the employment of the Recipient is terminated by the Company for any reason or no reason, any RSUs granted to the Recipient pursuant to the Grant Notice not previously vested shall thereafter be void and forfeited for all purposes.

(b) If the Recipient leaves the employment of the Company by reason of Retirement, the RSUs granted to the Recipient pursuant to the Grant Notice not previously vested shall continue to vest following the Recipient's termination of employment by reason of Retirement as if the Recipient remained an Eligible Person in the employ of the Company, provided that such Recipient shall be entitled to continue vesting only if such Recipient satisfies the Retirement Conditions set forth in section 5 below (except in the case of death) and only with respect to the specified percentage of such unvested RSUs set forth in Exhibit "A" for a certain combination of age and Years of Service attained by the Recipient as of the Recipient's Retirement under the Matrix set forth in Exhibit "A".

(c) A Recipient shall become 100% vested in all RSUs under the Grant Notice on the date the Recipient dies while employed by the Company regardless whether Recipient has accepted the Grant, or on the date the Recipient is no longer employed by the Company by reason of Disability, or, only in the case of death, while continuing to vest pursuant to section 3(b) of this Agreement.

Payment shall be made as soon as administratively practicable, but in no event (i) in the case of death, shall the payment occur later than the last day of the calendar year following the calendar year in which such death occurs or (ii) in the case of cessation of employment by reason of Disability, shall the payment occur later than thirty (30) days following the date the Recipient is determined to be Disabled and is no longer employed by the Company. If clause (ii) is applicable and the period from the date on which the Recipient is determined to be Disabled and is no longer employed by the Company to the date under clause (ii) spans two consecutive calendar years, payment shall be made in the second calendar year of such consecutive calendar years. Such payment shall be made to the Recipient's designated beneficiary, legal representatives, heirs, or legatees, as applicable. Each Recipient may designate a beneficiary on a form approved by the Committee.

4. Change of Control. Pursuant to Section 13.1(d) of the Plan, the following provisions of this section 4 of the Agreement shall supersede Sections 13.1(a), (b) and (c) of the Plan. Without any further action by the Committee or the Board, in the event of a Recipient's Involuntary Termination or Voluntary Termination with Cause occurring on or after a Change of Control of Apache Corporation that constitutes, with respect to Apache Corporation, a "change of ownership or effective control of the corporation, or in the ownership of a substantial portion of the assets of the corporation" within the meaning of Section 409A(a)(2)(A)(v) of the Internal Revenue Code of 1986, as amended (the "Code") and Treasury Regulations Section 1.409A-3(i)(5) (a "409A Change of Control") during the Vesting Period, the Recipient shall become 100% fully vested in the unvested RSUs granted to the Recipient pursuant to the Grant Notice as of the date of his Involuntary Termination or Voluntary Termination with Cause. Further, in the event of a 409A Change of Control of Apache Corporation following the Recipient's termination of employment by reason of Retirement while the Recipient is continuing to vest in the RSUs pursuant to section 3(b) of this Agreement, the Recipient shall become 100% fully vested in the unvested RSUs granted to the Recipient pursuant to the Grant Notice as of the date of the 409A Change of Control. Subject to section 11(b) of this Agreement, payment shall occur within thirty (30) days following the date of such Involuntary Termination or Voluntary Termination with Cause (or, if the Recipient is continuing to vest pursuant to section 3(b) of this Agreement, the date of the 409A Change of Control).

5. Conditions to Post-Retirement Vesting. If the Recipient has attained age 55 and a certain combination of age and Years of Service set forth in the Matrix in Exhibit "A" attached hereto and terminates employment with the Company and the Affiliates by reason of Retirement, it is agreed by the Company and the Recipient that:

(a) subject to the provisions of this section 5(a) and sections 5(b) and 5(c), such Recipient shall continue to vest in the specified percentage of unvested RSUs set forth in Exhibit "A", for the combination of age and Years of Service attained by such Recipient as of his or her Retirement under the Matrix set forth in Exhibit "A", following the date of his or her termination by reason of Retirement as if the Recipient continued in employment as an Eligible Person provided that the Grant Date of the unvested RSUs is prior to such termination date in an amount of time which allows the Recipient to provide the written notice as follows and the Recipient has provided advance written notice not before three (3) months following the Grant Date and not less than the number of months prior to such termination date as set forth in the Schedule below to Apache Corporation's Senior Vice President, Human Resources, or his or her delegate, and to his or her direct manager, regarding the Recipient's intent to terminate employment for reason of Retirement; provided,

however, a Recipient who is at least age 55 and attained the necessary combination of age and Years of Service under the Matrix set forth in Exhibit "A" for Retirement need not provide such advance written notice of his or her intent to terminate employment by reason of Retirement if the Company elects to require such Recipient to, or (as part of a reduction in force or otherwise in writing in exchange for a written release) offers such Recipient the opportunity to, terminate employment with the Company by reason of Retirement:

Age	Advance Written Notice
65 or older	3 months
between (and including) 55 and 64	6 months

; and it is further agreed that

(b) in consideration for the continued vesting treatment afforded to the Recipient under section 5(a), Recipient shall, during the continuing Vesting Period after Retirement (the "Continued Vesting Period"), refrain from becoming employed by, or consulting with, or becoming substantially involved in the business of, any business that competes with the Company or its Affiliate in the business of exploration or production of oil or natural gas wherever from time to time conducted throughout the world (a "Competitive Business") and Recipient shall provide to the Company, upon Company's request, (x) a written certification, in a form provided by or satisfactory to the Company, as to Recipient's compliance with the forgoing conditions and/or (y) his/her U.S. Individual Income Tax Return for any return filed by the Recipient which relates to any time during the Continued Vesting Period to allow the Company to verify that Recipient has complied with the foregoing conditions; provided, that the Recipient may purchase and hold for investment purposes less than five percent (5%) of the shares of any Competitive Business whose shares are regularly traded on a national securities exchange or inter-dealer quotation system, and provided further, that the Recipient may provide services solely as a director of any Competitive Business whose shares are regularly traded on a national securities exchange or inter-dealer quotation system if, during the Continued Vesting Period, (i) the Recipient only attends board and board committee meetings, votes on recommendations of management, and discharges his/her fiduciary obligations under the law and (ii) the Recipient is not involved in, and does not advise or consult on, the marketing, government relations, customer relations, or the day-to-day management, supervision, or operations of such Competitive Business; and it is further agreed that

(c) in consideration for the continued vesting treatment afforded to the Recipient under section 5(a), Recipient shall, during the Continued Vesting Period, refrain from making, or causing or assisting any other person to make, any oral or written communication to any third party about the Company, any Affiliate and/or any of the employees, officers or directors of the Company or any Affiliate which impugns or attacks, or is otherwise critical of, the reputation, business or character of such entity or person; or that discloses private or confidential information about their business affairs; or that constitutes an intrusion into their seclusion or private lives; or that gives rise to unreasonable publicity about their private lives; or that places them in a false light before the public; or that constitutes a misappropriation of their name or likeness.

Notwithstanding the foregoing provisions of this section 5 of the Agreement, (i) in the event that the Recipient fails to satisfy any of the conditions set forth in sections 5(a), (b) and (c) above, the Recipient shall not be entitled to vest in any unvested RSUs after the date of Retirement and the unvested RSUs subject to this Agreement shall be forfeited and (ii) the Recipient shall not have any right to continue to vest upon Retirement in any future awards granted under the Plan once the Recipient provides the notice of Retirement as set forth in section 5(a) above.

6. Prohibited Activity. In consideration for this Grant and except as permitted under section 5(b) above, the Recipient agrees not to engage in any “Prohibited Activity” while employed by the Company or within three years after the date of the Recipient’s termination of employment. A “Prohibited Activity” will be deemed to have occurred, as determined by the Committee in its sole and absolute discretion, if the Recipient (i) divulges any non-public, confidential or proprietary information of the Company, but excluding information that (a) becomes generally available to the public other than as a result of the Recipient’s public use, disclosure, or fault, or (b) becomes available to the Recipient on a non-confidential basis after the Recipient’s employment termination date from a source other than the Company prior to the public use or disclosure by the Recipient, provided that such source is not bound by a confidentiality agreement or otherwise prohibited from transmitting the information by contractual, legal or fiduciary obligation; (ii) directly or indirectly, consults with or becomes affiliated with, participate or engage in, or becomes employed by any business that is competitive with the Company, wherever from time to time conducted throughout the world, including situations where the Recipient solicits or participates in or assists in any way in the solicitation or recruitment, directly or indirectly, of any employees of the Company; or (iii) engages in publishing any oral or written statements about the Company, and/or any of its directors, officers, or employees that are disparaging, slanderous, libelous, or defamatory; or that disclose private or confidential information about their business affairs; or that constitute an intrusion into their seclusion or private lives; or that give rise to unreasonable publicity about their private lives; or that place them in a false light before the public; or that constitute a misappropriation of their name or likeness.

7. Payment and Tax Withholding. Upon receipt of any entitlement to cash under this Agreement and, if applicable, upon the Recipient’s attainment of eligibility to terminate employment by reason of Retirement pursuant to section 3(b), the Recipient shall make appropriate arrangements with the Company to provide for the amount of minimum tax and social security withholding, if any, required by law, including without limitation Sections 3102 and 3402 or any successor section(s) of the Internal Revenue Code and applicable state and local income and other tax laws. The payment of a Payout Amount shall be based on the Fair Market Value of the shares of Stock on the applicable date of vesting to which such tax withholding relates. Where appropriate, cash shall be withheld by the Company to satisfy applicable tax withholding requirements rather than paid directly to the Recipient.

8. Non-Transferability of Grant. A Grant shall not be transferable otherwise than by testamentary will or the laws of descent and distribution, or in accordance with a valid beneficiary designation on a form approved by the Committee, subject to the conditions and exceptions set forth in Section 15.2 of the Plan.

9. No Right to Continued Employment. Neither the RSUs or the cash payment pursuant to a Grant nor any terms contained in this Agreement shall confer upon the Recipient any express or implied right to be retained in the employment or service of the Company for any period, nor restrict in any way the right of the Company, which right is hereby expressly reserved, to terminate the Recipient's employment or service at any time for any reason or no reason. The Recipient acknowledges and agrees that any right to receive RSUs or cash pursuant to a Grant is earned only by continuing as an employee of the Company at the will of the Company, or satisfaction of any other applicable terms and conditions contained in the Plan and this Agreement, and not through the act of being hired, being granted the Grant, or acquiring RSUs or cash pursuant to the Grant hereunder.

10. The Plan. In consideration for this Grant, the Recipient agrees to comply with the terms of the Plan and this Agreement. This Agreement is subject to all the terms, provisions and conditions of the Plan, which are incorporated herein by reference, and to such regulations as may from time to time be adopted by the Committee. The Grant is a Cash-Based Award under Section 10 of the Plan and is subject to the provisions of the Plan governing RSUs. Unless defined herein, capitalized terms are used herein as defined in the Plan. In the event of any conflict between the provisions of the Plan and this Agreement, the provisions of the Plan shall control, and this Agreement shall be deemed to be modified accordingly. The Plan and the prospectus describing the Plan can be found on the Company's HR intranet and the Plan document can be found on Fidelity's website (netbenefits.fidelity.com). A paper copy of the Plan and the prospectus shall be provided to the recipient upon the Recipient's written request to the Company at 2000 Post Oak Blvd., Suite 100, Houston, Texas 77056-4400, Attention: Corporate Secretary.

11. Compliance with Laws and Regulations.

(a) The Grant and any obligation of the Company to deliver RSUs and cash hereunder shall be subject in all respects to (i) all applicable laws, rules and regulations and (ii) any registration, qualification, approvals or other requirements imposed by any government or regulatory agency or body which the Committee shall, in its discretion, determine to be necessary or applicable.

(b) This Grant is intended to comply with, or be exempt from, the applicable requirements of Section 409A of the Code and the rules and regulations issued thereunder and shall be administered accordingly. Notwithstanding anything in this Agreement to the contrary, if the RSUs constitute "deferred compensation" under Section 409A of the Code and any RSUs become payable pursuant to the Recipient's termination of employment, settlement of the RSUs shall be delayed for a period of six months after the Recipient's termination of employment if the Recipient is a "specified employee" as defined under Code Section 409A(a)(2)(B)(i) and if required pursuant to Section 409A of the Code. If settlement of the RSU is delayed, the RSUs shall be settled on the first day of the first calendar month following the end of the six-month delay period. If the Recipient dies during the six-month delay, the RSUs shall be settled and paid to the Recipient's designated beneficiary, legal representatives, heirs or legatees, as applicable, as soon as practicable after the date of death. Notwithstanding any provisions to the contrary herein, payments made with respect to this Grant may only be made in a manner and upon an event permitted by Section 409A of the Code, and all payments to be made upon a termination of employment hereunder may only be made upon a "separation from service", as such term is defined in Section 11.1 of the Plan. Recipient

shall not have any right to determine a date of payment of any amount under this Agreement. This Agreement may be amended without the consent of the Recipient in any respect deemed by the Board or the Committee to be necessary in order to preserve compliance with Section 409A of the Code. If the Grant and this Agreement is subject to Section 409A of the Code and the rules and regulations issued thereunder, then the vesting date shall be the “designated payment date” or “specified date” under Treasury Regulation 1.409A-3(d).

12. Notices. Unless otherwise provided in this Agreement, all notices by the Recipient or the Recipient’s assignees shall be addressed to the Administrative Agent, Fidelity, through the Recipient’s account at netbenefits.fidelity.com, or such other address as the Company may from time to time specify. All notices to the Recipient shall be addressed to the Recipient at the Recipient’s address in the Company’s records.

13. Other Plans. The Recipient acknowledges that any income derived from the Grant shall not affect the Recipient’s participation in, or benefits under, any other benefit plan or other contract or arrangement maintained by the Company or any Affiliate.

14. Terms of Employment. The Plan is a discretionary plan. The Recipient hereby acknowledges that neither the Plan nor this Agreement forms part of his terms of employment and nothing in the Plan may be construed as imposing on the Company or any Affiliate a contractual obligation to offer participation in the Plan to any employee of the Company or any Affiliate. The Company or any Affiliate is under no obligation to make further Grants to any Recipient under the Plan. The Recipient hereby acknowledges that if he ceases to be an employee of the Company or any Affiliate for any reason or no reason, he shall not be entitled by way of compensation for loss of office or otherwise howsoever to any sum.

15. Data Protection. By accepting this Agreement (whether by electronic means or otherwise), the Recipient hereby consents to the holding and processing of personal data provided by him to the Company for all purposes necessary for the operation of the Plan. These include, but are not limited to:

- (a) administering and maintaining Recipient records;
- (b) providing information to any registrars, brokers or third party administrators of the Plan; and
- (c) providing information to future purchasers of the Company or the business in which the Recipient works.

16. Severability. If any provision of this Agreement is held invalid or unenforceable, the remainder of this Agreement shall nevertheless remain in full force and effect, and if any provision is held invalid or unenforceable with respect to particular circumstances, it shall nevertheless remain in full force and effect in all other circumstances, to the fullest extent permitted by law.

\*\*\*\*\*

# Exhibit "A"

## Apache Corporation Retirement Matrix

		Points (Age at Retirement + Years of Service)																					
		60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	
Age at Retirement	70	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	100%	100%	100%	100%	100%	
	69	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	100%	100%	100%	100%	100%	100%
	68	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	100%	100%	100%	100%	100%	100%	100%
	67	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
	66	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
	65	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
	64	0%	0%	0%	0%	0%	0%	0%	0%	50%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	100%
	63	0%	0%	0%	0%	0%	0%	0%	50%	50%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	100%
	62	0%	0%	0%	0%	0%	0%	50%	50%	50%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	100%
	61	0%	0%	0%	0%	0%	50%	50%	50%	50%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	100%
	60	0%	0%	0%	0%	50%	50%	50%	50%	50%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	100%
	59	0%	0%	0%	0%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	75%	75%	75%	75%	75%	75%	100%
	58	0%	0%	0%	0%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	75%	75%	75%	75%	75%	75%	100%
	57	0%	0%	0%	0%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	75%	75%	75%	75%	75%	75%	100%
	56	0%	0%	0%	0%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	75%	75%	75%	75%	75%	75%	100%
	55	0%	0%	0%	0%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	75%	75%	75%	75%	75%	75%	100%

0%
50%
75%
100%

**Apache Corporation (a Delaware corporation)**  
**Listing of Subsidiaries as of December 31, 2018**

<b>Exact Name of Subsidiary and Name under which Subsidiary does Business</b>	<b>Jurisdiction of Incorporation or Organization</b>
Alta Vista Oil Corporation	Delaware
*Altus Midstream Company	Delaware
Altus Midstream GP LLC	Delaware
Apache Alaska Corporation	Delaware
Apache Corporation (New Jersey)	New Jersey
Apache Crude Oil Marketing, Inc.	Delaware
Apache Deepwater LLC	Delaware
Apache Fertilizer Holdings II Corporation LDC	Cayman Islands
Apache Finance Louisiana Corporation	Delaware
Apache Foundation	Minnesota
Apache Gathering Company	Delaware
Apache Holdings, Inc.	Delaware
Apache International Employment Inc.	Delaware
Apache Louisiana Holdings LLC	Delaware
Apache Louisiana Minerals LLC	Delaware
Apache Marketing, Inc.	Delaware
Apache Midstream LLC	Delaware
Alpine High Oil Pipeline LLC	Delaware
Altus Midstream Subsidiary GP LLC	Delaware
Apache Natural Gas Transportation Fuels LLC	Delaware
Apache North America LLC	Delaware
Apache Oil Corporation	Texas
Apache Overseas LLC	Delaware
Apache Asia Pacific Corporation LDC	Cayman Islands
Apache East Ras Budran Corporation LDC	Cayman Islands
Apache Egypt Investment Corporation LDC	Cayman Islands
Apache Egypt Holdings I Corporation LDC	Cayman Islands
Apache Egypt Holdings IV Corporation LDC	Cayman Islands
Apache Egypt Holdings III Corporation LDC	Cayman Islands
Apache Egypt GP Corporation LDC	Cayman Islands
Apache Egypt Holdings II Corporation LDC	Cayman Islands
Apache Abu Gharadig Corporation LDC	Cayman Islands
Apache East Bahariya Corporation LDC	Cayman Islands
Apache El Diyur Corporation LDC	Cayman Islands
Apache Faiyum Corporation LDC	Cayman Islands
Apache Khalda Corporation LDC	Cayman Islands
Apache Egypt Midstream Holdings I LDC	Cayman Islands
Apache Khalda II Corporation LDC	Cayman Islands
Apache Matruh Corporation LDC	Cayman Islands
Apache Mediterranean Corporation LDC	Cayman Islands
Apache North Bahariya Corporation LDC	Cayman Islands
Apache North El Diyur Corporation LDC	Cayman Islands
Apache North Tarek Corporation LDC	Cayman Islands

**Apache Corporation (a Delaware corporation)**  
**Listing of Subsidiaries as of December 31, 2018**

<b>Exact Name of Subsidiary and Name under which Subsidiary does Business</b>	<b>Jurisdiction of Incorporation or Organization</b>
Apache Qarun Corporation LDC	Cayman Islands
Apache Qarun Exploration Company LDC	Cayman Islands
Apache Shushan Corporation LDC	Cayman Islands
Apache South Umbarka Corporation LDC	Cayman Islands
Apache Umbarka Corporation LDC	Cayman Islands
Apache West Kalabsha Corporation LDC	Cayman Islands
Apache West Kanayis Corporation LDC	Cayman Islands
Apache UK Corporation LDC	Cayman Islands
Apache International Finance Corporation LDC	Cayman Islands
Apache North Sea Limited	England and Wales
Apache UK Pension Trustee Ltd.	England and Wales
Apache North Sea Production Limited	England and Wales
Apache UK Investment Limited	England and Wales
Apache Beryl I Limited	Cayman Islands
Apache EMEA Corporation LDC	Cayman Islands
Apache Exploration LDC	Cayman Islands
Apache Fertilizer Holdings Corporation LDC	Cayman Islands
Apache International Finance S.a.r.l.	Luxembourg
Apache International Finance II S.a.r.l.	Luxembourg
Apache Finance Pty Limited	Australian Capital Territory
Apache Ravensworth Corporation LDC	Cayman Islands
Apache Latin America II Corporation LDC	Cayman Islands
Apache Netherlands Investment B.V.	The Netherlands
Apache Suriname Corporation LDC	Cayman Islands
Apache Netherlands Investment II B.V.	The Netherlands
Apache Suriname 58 Corporation LDC	Cayman Islands
Apache Overseas Holdings LLC	Delaware
Apache Switzerland Holdings AG	Switzerland
Apache Kenya Holdings LLC	Delaware
Apache Kenya Limited	Kenya
Apache Overseas Holdings II, Inc.	Delaware
Apache Shady Lane Ranch Inc.	Delaware
Apache Shelf Exploration LLC	Delaware
Apache Shelf, Inc.	Delaware
Apache Texas Property Holding Company LLC	Delaware
Apache UK Limited	England and Wales
Apache Well Containment LLC	Delaware
Apache Western Exploration LLC	Delaware
BLPL Holdings LLC	Delaware
Clear Creek Hunting Preserve, Inc.	Wyoming
Cordillera Energy Partners III, LLC	Colorado
Cottonwood Aviation, Inc.	Delaware
CV Energy Corporation	Delaware

**Apache Corporation (a Delaware corporation)**  
**Listing of Subsidiaries as of December 31, 2018**

<b>Exact Name of Subsidiary and Name under which Subsidiary does Business</b>	<b>Jurisdiction of Incorporation or Organization</b>
DEK Energy LLC	Delaware
Apache Finance Canada LLC	Delaware
Apache Permian Basin Investment Corporation	Delaware
Apache Permian Basin Corporation	Delaware
Apache Permian Exploration and Production LLC	Delaware
LeaCo New Mexico Exploration and Production LLC	Delaware
Permian Basin Joint Venture LLC (95%)	Delaware
ZPZ Delaware I LLC	Delaware
Apache Canada Management LLC	Delaware
Apache Canada Holdings LLC	Delaware
Apache Canada Management II LLC	Delaware
Apache Finance Canada III LLC	Delaware
Apache Finance Canada IV LLC	Delaware
Stallion Canada Holdings LLC	Delaware
Edge Petroleum Exploration Company	Delaware
Granite Operating Company	Texas
Phoenix Exploration Resources, Ltd.	Delaware
Texas International Company	Delaware
Texas and New Mexico Exploration LLC	Delaware
ZPZ Acquisitions, Inc.	Delaware
ZPZ Delaware II LLC	Delaware
Phoenix Exploration Louisiana C LLC (75%)	Delaware
ZPZ Delaware III LLC	Delaware

**\*Apache Corporation owns a 79.19% voting interest and a 9.76% economic ownership interest.**

**Consent of Independent Registered Public Accounting Firm**

We consent to the incorporation by reference in the following Registration Statements:

- (1) Registration Statements (Form S-3 Nos. 333-57785, 333-75633, 333-32580, 333-105536, 333-155884, 333-174429, 333-197491, and 333-219345) of Apache Corporation and in the related Prospectuses,
- (2) Registration Statements (Form S-4 Nos. 333-107934 and 333-166964) of Apache Corporation and in the related Prospectuses, and
- (3) Registration Statements (Form S-8 Nos. 33-59721, 33-63817, 333-26255, 333-32557, 333-36131, 333-31092, 333-48758, 333-97403, 333-102330, 333-103758, 333-106213, 333-125232, 333-125233, 333-135044, 333-143115, 333-170533, 333-175250, 333-178672, 333-190619, and 333-212237) of Apache Corporation;

of our reports dated February 28, 2019, with respect to the consolidated financial statements of Apache Corporation and subsidiaries and the effectiveness of internal control over financial reporting of Apache Corporation and subsidiaries, included in this Annual Report (Form 10-K) of Apache Corporation for the year ended December 31, 2018.

/s/ ERNST & YOUNG LLP

Houston, Texas  
February 28, 2019



**EXHIBIT 23.2**

**Consent of Ryder Scott Company, L.P.**

As independent petroleum engineers, we hereby consent to the incorporation by reference in this Form 10-K of Apache Corporation to our Firm's name and our Firm's review of the proved oil and gas reserve quantities of Apache Corporation as of December 31, 2018, to the incorporation by reference of our Firm's name and review into Apache Corporation's previously filed Registration Statements on Form S-3 (Nos. 333-57785, 333-75633, 333-32580, 333-105536, 333-155884, 333-174429, 333-197491, and 333-219345), on Form S-4 (No. 333-107934 and 333-166964), and on Form S-8 (Nos. 33-59721, 33-63817, 333-26255, 333-32557, 333-36131, 333-31092, 333-48758, 333-97403, 333-102330, 333-103758, 333-106213, 333-125232, 333-125233, 333-135044, 333-143115, 333-170533, 333-175250, 333-178672, 333-190619, and 333-212237), and to the inclusion of our report, dated January 29, 2019, as an exhibit to this Form 10-K filed with the Securities and Exchange Commission.

/s/ Ryder Scott Company, L.P.

**RYDER SCOTT COMPANY, L.P.**  
TBPE Firm Registration No. F-1580

Houston, Texas  
February 28, 2019

## CERTIFICATIONS

I, John J. Christmann IV, certify that:

1. I have reviewed this annual report on Form 10-K of Apache Corporation;
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 the 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.

/s/ John J. Christmann IV

---

John J. Christmann IV

Chief Executive Officer and President  
(principal executive officer)

Date: February 28, 2019

## CERTIFICATIONS

I, Stephen J. Riney, certify that:

1. I have reviewed this annual report on Form 10-K of Apache Corporation;
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 the 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.

/s/ Stephen J. Riney

---

Stephen J. Riney

Executive Vice President and Chief Financial Officer  
(principal financial officer)

Date: February 28, 2019

## APACHE CORPORATION

**Certification of Principal Executive Officer  
and Principal Financial Officer**

I, John J. Christmann IV, certify pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to my knowledge, the annual report on Form 10-K of Apache Corporation for the period ending December 31, 2018, fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. §78m or §78o (d)) and that information contained in such report fairly represents, in all material respects, the financial condition and results of operations of Apache Corporation.

/s/ John J. Christmann IV

---

By: John J. Christmann IV  
Title: Chief Executive Officer and President  
(principal executive officer)

Date: February 28, 2019

I, Stephen J. Riney, certify pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to my knowledge, the annual report on Form 10-K of Apache Corporation for the period ending December 31, 2018, fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. §78m or §78o (d)) and that information contained in such report fairly represents, in all material respects, the financial condition and results of operations of Apache Corporation.

/s/ Stephen J. Riney

---

By: Stephen J. Riney  
Title: Executive Vice President and Chief Financial Officer  
(principal financial officer)

Date: February 28, 2019

**APACHE CORPORATION**

**Estimated  
Future Reserves  
Attributable to Certain  
Leasehold and Royalty Interests  
and  
Derived Through Certain Production Sharing Contracts**

**SEC Parameters**

**As of  
December 31, 2018**

*/s/ Ali A. Porbandarwala*  
\_\_\_\_\_  
Ali A. Porbandarwala, P.E.  
TBPE License No. 107652  
Senior Vice President

**RYDER SCOTT COMPANY, L.P.**  
TBPE Firm Registration No. F-1580

**[SEAL]**

RYDER SCOTT COMPANY PETROLEUM CONSULTANTS



January 29, 2019

Apache Corporation  
2000 Post Oak Boulevard, Suite 100  
Houston, Texas 77056-4400

Gentlemen:

At the request of Apache Corporation (Apache), Ryder Scott Company, L.P. (Ryder Scott) has conducted a reserves audit of the estimates of the proved reserves as of December 31, 2018 prepared by Apache's engineering and geological staff based on the definitions and disclosure guidelines of the United States Securities and Exchange Commission (SEC) contained in Title 17, Code of Federal Regulations, Modernization of Oil and Gas Reporting, Final Rule released January 14, 2009 in the Federal Register (SEC regulations). Our third party reserves audit, completed on January 18, 2019 and presented herein, was prepared for public disclosure by Apache in filings made with the SEC in accordance with the disclosure requirements set forth in the SEC regulations. The estimated reserves shown herein represent Apache's estimated net reserves attributable to the leasehold and royalty interests and derived through certain production sharing contracts in certain properties owned by Apache and the portion of those reserves reviewed by Ryder Scott, as of December 31, 2018. The properties reviewed by Ryder Scott incorporate Apache's reserves determinations and are attributable to the interests of Apache Corporation (U.S.A), Apache Egypt Companies (Egypt), and Apache North Sea Limited (United Kingdom).

The properties reviewed by Ryder Scott account for a portion of Apache's total net proved reserves as of December 31, 2018. Based on the estimates of total net proved reserves prepared by Apache, the reserves audit conducted by Ryder Scott addresses 85.3 percent of the total proved developed net liquid hydrocarbon reserves, 87.6 percent of the total proved developed net gas reserves, 57.7 percent of the total proved undeveloped net liquid hydrocarbon reserves, and 59.9 percent of the total proved undeveloped net gas reserves of Apache.

The wells or locations for which estimates of reserves were reviewed by Ryder Scott were selected by Apache. Apache informed Ryder Scott that the selected reserves for each country included at least 83.6 percent or more of the total proved discounted future net income at 10 percent attributable to the respective country's total interests of Apache (coverage) based on SEC hydrocarbon price parameters as of December 31, 2018. Total coverage of world-wide reserves is 86.0 percent of the total proved discounted future net income at 10 percent.

As prescribed by the Society of Petroleum Engineers in Paragraph 2.2(f) of the Standards Pertaining to the Estimating and Auditing of Oil and Gas Reserves Information (SPE auditing standards), a reserves audit is defined as "the process of reviewing certain of the pertinent facts interpreted and assumptions made that have resulted in an estimate of reserves and/or Reserves Information prepared by others and the rendering of an opinion about (1) the appropriateness of the methodologies employed; (2) the adequacy and quality of the data relied upon; (3) the depth and thoroughness of the reserves estimation process; (4) the classification of reserves appropriate to the relevant definitions used; and (5) the reasonableness of the estimated reserve quantities and/or Reserves Information." Reserves Information may consist of various estimates pertaining to the extent and value of petroleum properties.

Based on our review, including the data, technical processes and interpretations presented by Apache, it is our opinion that the overall procedures and methodologies utilized by Apache in preparing their estimates of the proved reserves as of December 31, 2018 comply with the current SEC regulations and that the overall proved reserves for the reviewed properties as estimated by Apache are, in the aggregate, reasonable within the established audit tolerance guidelines of 10 percent as set forth in the SPE auditing standards.

The estimated reserves presented in this report are related to hydrocarbon prices. Apache has informed us that in the preparation of their reserves and income projections, as of December 31, 2018, they used average prices during the 12-month period prior to the “as of date” of this report, determined as the unweighted arithmetic averages of the prices in effect on the first-day-of-the-month for each month within such period, unless prices were defined by contractual arrangements, as required by the SEC regulations. Actual future prices may vary considerably from the prices required by SEC regulations. The recoverable reserves volumes have a direct relationship to the hydrocarbon prices actually received; therefore, volumes of reserves actually recovered may differ significantly from the estimated quantities presented in this report. The net reserves as estimated by Apache attributable to Apache's interest and entitlement in properties that we reviewed and the reserves of properties that we did not review are summarized below:

**SEC PARAMETERS**  
 Estimated Net Proved Reserves  
 Certain Leasehold and Royalty Interests and  
 Derived Through Certain Production Sharing Contracts of  
**Apache Corporation (Total All Regions)**

As of December 31, 2018

	% Crude Oil & Condensate Reserves Reviewed	% Natural Gas Liquids Reserves Reviewed	% Gas Reserves Reviewed	Reviewed by Ryder Scott			Not Reviewed			Total		
				Crude Oil & Condensate MBarrels	Natural Gas Liquids MBarrels	Sales Gas MMCF	Crude Oil & Condensate MBarrels	Natural Gas Liquids MBarrels	Sales Gas MMCF	Crude Oil & Condensate MBarrels	Natural Gas Liquids MBarrels	Sales Gas MMCF
Developed	84.4	87.5	87.6	434,701	175,018	1,926,089	80,288	24,995	271,794	514,989	200,013	2,197,883
Undeveloped	56.5	60.0	59.9	37,270	20,689	189,088	28,675	13,798	126,812	65,945	34,487	315,900
Total Proved	81.2	83.5	84.1	471,971	195,707	2,115,177	108,963	38,793	398,606	580,934	234,500	2,513,783

RYDER SCOTT COMPANY PETROLEUM CONSULTANTS

**SEC PARAMETERS**  
 Estimated Net Proved Reserves  
 Certain Leasehold and Royalty Interests and  
 Derived Through Certain Production Sharing Contracts of  
**Apache Corporation (Summary by Region)**

As of December 31, 2018

	% Crude Oil & Condensate Reserves Reviewed	% Natural Gas Liquids Reserves Reviewed	% Gas Reserves Reviewed	Reviewed by Ryder Scott			Not Reviewed			Total		
				Crude Oil & Condensate MBarrels	Natural Gas Liquids MBarrels	Sales Gas MMcf	Crude Oil & Condensate MBarrels	Natural Gas Liquids MBarrels	Sales Gas MMcf	Crude Oil & Condensate MBarrels	Natural Gas Liquids MBarrels	Sales Gas MMcf
USA												
Developed	84.9	87.6	87.3	255,219	173,128	1,420,477	45,266	24,446	205,927	300,485	197,574	1,626,404
Undeveloped	50.6	60.7	59.3	22,853	20,516	158,407	22,330	13,280	108,683	45,183	33,796	267,090
Total Proved	80.4	83.7	83.4	278,072	193,644	1,578,884	67,596	37,726	314,610	345,668	231,370	1,893,494
Egypt												
Developed	83.7	87.0	89.6	92,090	436	426,710	17,924	65	49,422	110,014	501	476,132
Undeveloped	62.3	0	82.0	5,912	0	27,077	3,572	60	5,929	9,484	60	33,006
Total Proved	82.0	77.7	89.1	98,002	436	453,787	21,496	125	55,351	119,498	561	509,138
United Kingdom												
Developed	83.6	75.0	82.8	87,392	1,454	78,902	17,098	484	16,445	104,490	1,938	95,347
Undeveloped	75.4	27.4	22.8	8,505	173	3,604	2,773	458	12,200	11,278	631	15,804
Total Proved	82.8	63.3	74.2	95,897	1,627	82,506	19,871	942	28,645	115,768	2,569	111,151

Liquid hydrocarbons are expressed in standard 42 U.S. gallon barrels and shown herein as thousand of barrels (MBarrels). All gas volumes are reported on an “as sold basis” expressed in millions of cubic feet (MMcf) at the official temperature and pressure bases of the areas in which the gas reserves are located.

**Reserves Included in This Report**

In our opinion, the proved reserves presented in this report conform to the definition as set forth in the Securities and Exchange Commission’s Regulations Part 210.4-10(a). An abridged version of the SEC reserves definitions from 210.4-10(a) entitled “PETROLEUM RESERVES DEFINITIONS” is included as an attachment to this report.

The various proved reserves status categories are defined under the attachment entitled “PETROLEUM RESERVES STATUS DEFINITIONS AND GUIDELINES” in this report. The proved developed non-producing reserves included herein consist of the shut-in and behind pipe categories.

Reserves are “estimated remaining quantities of oil and gas and related substances anticipated to be economically producible, as of a given date, by application of development projects to known accumulations.” All reserves estimates involve an assessment of the uncertainty relating the likelihood that the actual remaining quantities recovered will be greater or less than the estimated quantities determined as of the date the estimate is made. The uncertainty depends chiefly on the amount of reliable geologic and engineering data available at the time of the estimate and the interpretation of these data. The relative degree of uncertainty may be conveyed by placing reserves into one of two principal classifications, either proved or unproved. Unproved reserves are less certain to be recovered than proved reserves and may be further sub-classified as probable and possible reserves to denote progressively

increasing uncertainty in their recoverability. At Apache's request, this report addresses only the proved reserves attributable to the properties reviewed herein.

Proved oil and gas reserves are "those quantities of oil and gas which, by analysis of geoscience and engineering data, can be estimated with reasonable certainty to be economically producible from a given date forward." The proved reserves included herein were estimated using deterministic methods. The SEC has defined reasonable certainty for proved reserves, when based on deterministic methods, as a "high degree of confidence that the quantities will be recovered."

Proved reserves estimates will generally be revised only as additional geologic or engineering data become available or as economic conditions change. For proved reserves, the SEC states that "as changes due to increased availability of geoscience (geological, geophysical, and geochemical), engineering, and economic data are made to the estimated ultimate recovery (EUR) with time, reasonably certain EUR is much more likely to increase or remain constant than to decrease." Moreover, estimates of proved reserves may be revised as a result of future operations, effects of regulation by governmental agencies or geopolitical or economic risks. Therefore, the proved reserves included in this report are estimates only and should not be construed as being exact quantities, and if recovered, could be more or less than the estimated amounts.

### ***Audit Data, Methodology, Procedure and Assumptions***

The estimation of reserves involves two distinct determinations. The first determination results in the estimation of the quantities of recoverable oil and gas and the second determination results in the estimation of the uncertainty associated with those estimated quantities in accordance with the definitions set forth by the Securities and Exchange Commission's Regulations Part 210.4-10(a). The process of estimating the quantities of recoverable oil and gas reserves relies on the use of certain generally accepted analytical procedures. These analytical procedures fall into three broad categories or methods: (1) performance-based methods; (2) volumetric-based methods; and (3) analogy. These methods may be used individually or in combination by the reserves evaluator in the process of estimating the quantities of reserves. Reserves evaluators must select the method or combination of methods which in their professional judgment is most appropriate given the nature and amount of reliable geoscience and engineering data available at the time of the estimate, the established or anticipated performance characteristics of the reservoir being evaluated and the stage of development or producing maturity of the property.

In many cases, the analysis of the available geoscience and engineering data and the subsequent interpretation of this data may indicate a range of possible outcomes in an estimate, irrespective of the method selected by the evaluator. When a range in the quantity of reserves is identified, the evaluator must determine the uncertainty associated with the incremental quantities of the reserves. If the reserves quantities are estimated using the deterministic incremental approach, the uncertainty for each discrete incremental quantity of the reserves is addressed by the reserves category assigned by the evaluator. Therefore, it is the categorization of reserves quantities as proved, probable and/or possible that addresses the inherent uncertainty in the estimated quantities reported. For proved reserves, uncertainty is defined by the SEC as reasonable certainty wherein the "quantities actually recovered are much more likely than not to be achieved." The SEC states that "probable reserves are those additional reserves that are less certain to be recovered than proved reserves but which, together with proved reserves, are as likely as not to be recovered." The SEC states that "possible reserves are those additional reserves that are less certain to be recovered than probable reserves and the total quantities ultimately recovered from a project have a low probability of exceeding proved plus probable plus possible reserves." All quantities of reserves within the same reserves category must meet the SEC definitions as noted above.

Estimates of reserves quantities and their associated reserves categories may be revised in the future as additional geoscience or engineering data become available. Furthermore, estimates of reserves quantities and their associated reserves categories may also be revised due to other factors such as changes in economic conditions, results of future operations, effects of regulation by governmental agencies or geopolitical or economic risks as previously noted herein.

The proved reserves, prepared by Apache, for the properties that we reviewed were estimated by performance methods, the volumetric method, analogy, or a combination of methods. Approximately 90 percent of the proved producing reserves attributable to producing wells and/or reservoirs that we reviewed were estimated by performance methods or a combination of methods. These performance methods include, but may not be limited to, decline curve analysis, material balance and/or reservoir simulation which utilized extrapolations of historical production and pressure data available through November 2018, in those cases where such data were considered to be definitive. The data utilized in this analysis were furnished to Ryder Scott by Apache or obtained from public data sources and were considered sufficient for the purpose thereof. The remaining 10 percent of the proved producing reserves that we reviewed were estimated by the volumetric method, analogy, or a combination of methods. These methods were used where there were inadequate historical performance data to establish a definitive trend and where the use of production performance data as a basis for the reserves estimates was considered to be inappropriate.

Approximately 100 percent of the proved developed non-producing and undeveloped reserves that we reviewed were estimated by the volumetric method or analogy. The volumetric analysis utilized pertinent well and seismic data furnished to Ryder Scott by Apache for our review or which we have obtained from public data sources that were available through November 2018. The data utilized from the analogues in conjunction with well and seismic data incorporated into the volumetric analysis were considered sufficient for the purpose thereof.

To estimate economically recoverable proved oil and gas reserves, many factors and assumptions are considered including, but not limited to, the use of reservoir parameters derived from geological, geophysical and engineering data which cannot be measured directly, economic criteria based on current costs and SEC pricing requirements, and forecasts of future production rates. Under the SEC regulations 210.4-10(a)(22)(v) and (26), proved reserves must be anticipated to be economically producible from a given date forward based on existing economic conditions including the prices and costs at which economic producibility from a reservoir is to be determined. While it may reasonably be anticipated that the future prices received for the sale of production and the operating costs and other costs relating to such production may increase or decrease from those under existing economic conditions, such changes were, in accordance with rules adopted by the SEC, omitted from consideration in conducting this review.

As stated previously, proved reserves must be anticipated to be economically producible from a given date forward based on existing economic conditions including the prices and costs at which economic producibility from a reservoir is to be determined. To confirm that the proved reserves reviewed by us meet the SEC requirements to be economically producible, we have reviewed certain primary economic data utilized by Apache relating to hydrocarbon prices and costs as noted herein.

The hydrocarbon prices furnished by Apache for the properties reviewed by us are based on SEC price parameters using the average prices during the 12-month period prior to the "as of date" of this report, determined as the unweighted arithmetic averages of the prices in effect on the first-day-of-the-month for each month within such period, unless prices were defined by contractual arrangements. For hydrocarbon products sold under contract, the contract prices, including fixed and determinable escalations exclusive of inflation adjustments, were used until expiration of the contract. Upon contract expiration, the prices were adjusted to the 12-month unweighted arithmetic average as previously described.

The initial SEC hydrocarbon prices in effect on December 31, 2018 for the properties reviewed by us were determined using the 12-month average first-day-of-the-month benchmark prices, provided by Apache, appropriate to the geographic area where the hydrocarbons are sold. These benchmark prices are prior to the adjustments for differentials as described herein. The table below summarizes the “benchmark prices” and “price reference” used by Apache for the geographic areas reviewed by us. In certain geographic areas, the price reference and benchmark prices may be defined by contractual arrangements. In cases where there are numerous contracts or price references within the same geographic area, the benchmark price is represented by the unweighted arithmetic average of the initial 12-month average first-day-of-the-month benchmark prices used.

The product prices which were actually used by Apache to determine the future gross revenue for each property reviewed by us reflect adjustments to the benchmark prices for gravity, quality, local conditions, and/or distance from market, referred to herein as “differentials.” The differentials used by Apache were accepted as factual data and reviewed by us for their reasonableness; however, we have not conducted an independent verification of the data used by Apache.

The table below summarizes Apache’s net volume weighted benchmark prices adjusted for differentials for the properties reviewed by us and referred to herein as Apache’s “average realized prices.” The average realized prices shown in the table below were determined from Apache’s estimate of the total future gross revenue before production taxes for the properties reviewed by us and Apache’s estimate of the total net reserves for the properties reviewed by us for the geographic area. The data shown in the table on the following page is presented in accordance with SEC disclosure requirements for each of the geographic areas reviewed by us.

Geographic Area	Product	Price Reference	Average Benchmark Prices	Average Realized Prices
North America United States				
	Oil/Condensate	WTI Cushing	\$65.41/Bbl	\$56.59/Bbl
	NGLs	Mt. Belvieu Non-Tet Propane	\$36.99/Bbl	\$24.74/Bbl
	Gas	Henry Hub	\$3.10/MMBTU	\$2.06/Mcf
Egypt				
	Oil/Condensate	Brent	\$71.41/Bbl	\$70.29/Bbl
	NGLs	Brent	\$71.41/Bbl	\$44.76/Bbl
	Gas	Contracts	Contract	\$2.84/Mcf
United Kingdom				
	Oil/Condensate	Brent	\$71.41/Bbl	\$68.80/Bbl
	NGLs	Brent	\$71.41/Bbl	\$39.06/Bbl
	Gas	NBP	\$9.75/MMBTU	\$10.16/Mcf

The effects of derivative instruments designated as price hedges of oil and gas quantities are not reflected in Apache’s individual property evaluations.

Accumulated gas production imbalances, if any, were not taken into account in the proved gas reserves estimates reviewed. The proved gas volumes presented herein do not include volumes of gas consumed in operations as reserves.

Operating costs furnished by Apache are based on the operating expense reports of Apache and include only those costs directly applicable to the leases or wells for the properties reviewed by us. The operating costs include a portion of general and administrative costs allocated directly to the leases and wells. For operated properties, the operating costs include an appropriate level of corporate general administrative and overhead costs. The operating costs for non-operated properties include the COPAS overhead costs that are allocated directly to the leases and wells under terms of operating agreements. Other costs include transportation and/or processing fees as deductions. The operating costs furnished by Apache were accepted as factual data and reviewed by us for their reasonableness; however, we have not conducted an independent verification of the data used by Apache. No deduction was made for loan repayments, interest expenses, or exploration and development prepayments that were not charged directly to the leases or wells.

Development costs furnished by Apache are based on authorizations for expenditure for the proposed work or actual costs for similar projects. The development costs furnished by Apache were accepted as factual data and reviewed by us for their reasonableness; however, we have not conducted an independent verification of the data used by Apache. The estimated net cost of abandonment after salvage was included by Apache for properties where abandonment costs net of salvage were material. Apache's estimates of the net abandonment costs were accepted without independent verification.

The proved developed non-producing and undeveloped reserves for the properties reviewed by us have been incorporated herein in accordance with Apache's plans to develop these reserves as of December 31, 2018. The implementation of Apache's development plans as presented to us is subject to the approval process adopted by Apache's management. As the result of our inquiries during the course of our review, Apache has informed us that the development activities for the properties reviewed by us have been subjected to and received the internal approvals required by Apache's management at the appropriate local, regional and/or corporate level. In addition to the internal approvals as noted, certain development activities may still be subject to specific partner AFE processes, Joint Operating Agreement (JOA) requirements or other administrative approvals external to Apache. Additionally, Apache has informed us that they are not aware of any legal, regulatory or political obstacles that would significantly alter their plans. While these plans could change from those under existing economic conditions as of December 31, 2018, such changes were, in accordance with rules adopted by the SEC, omitted from consideration in making this evaluation.

Current costs used by Apache were held constant throughout the life of the properties.

Apache's forecasts of future production rates are based on historical performance from wells currently on production. If no production decline trend has been established, future production rates were held constant, or adjusted for the effects of curtailment where appropriate, until a decline in ability to produce was anticipated. An estimated rate of decline was then applied to depletion of the reserves. If a decline trend has been established, this trend was used as the basis for estimating future production rates.

Test data and other related information were used by Apache to estimate the anticipated initial production rates for those wells or locations that are not currently producing. For reserves not yet on production, sales were estimated to commence at an anticipated date furnished by Apache. Wells or locations that are not currently producing may start producing earlier or later than anticipated in Apache's estimates due to unforeseen factors causing a change in the timing to initiate production. Such factors may include delays due to weather, the availability of rigs, the sequence of drilling, completing and/or recompleting wells and/or constraints set by regulatory bodies.

The future production rates from wells currently on production or wells or locations that are not currently producing may be more or less than estimated because of changes including, but not limited to, reservoir performance, operating conditions related to surface facilities, compression and artificial lift, pipeline capacity and/or operating conditions, producing market demand and/or allowables or other constraints set by regulatory bodies.

The proved reserves reported herein are limited to the period prior to expiration of current contracts providing the legal right to produce or a revenue interest in such production unless evidence indicates that contract renewal is reasonably certain.

The proved reserves for the properties located in Egypt are subject to the contractual fiscal terms contained in production sharing contracts. For these properties, Ryder Scott audited the gross economic inputs used by Apache in the economic models for Egypt through a comparison of Apache and Ryder Scott's gross economic volumes. Apache's gross economic volumes were then used as input to the economic models to generate the net interests used to determine the net reserves summarized in this report. Ryder Scott reviewed the fiscal terms of such contracts and discussed with Apache the net economic benefit attributed to such operations for the determination of the net hydrocarbon volumes and income thereof. Ryder Scott has not conducted an exhaustive audit or verification of such contractual information. Neither our review of such contractual information nor our acceptance of Apache's representations regarding such contractual information should be construed as a legal opinion on this matter.

Ryder Scott did not evaluate the country and geopolitical risks in the countries where Apache operates or has interests. Apache's operations may be subject to various levels of governmental controls and regulations. These controls and regulations may include, but may not be limited to, matters relating to land tenure and leasing, the legal rights to produce hydrocarbons including the granting, extension or termination of production sharing contracts, the fiscal terms of various production sharing contracts, drilling and production practices, environmental protection, marketing and pricing policies, royalties, various taxes and levies including income tax, and foreign trade and investment and are subject to change from time to time. Such changes in governmental regulations and policies may cause volumes of proved reserves actually recovered and amounts of proved income actually received to differ significantly from the quantities as estimated by Apache.

The estimates of proved reserves presented herein were based upon a review of the properties in which Apache owns and derives an interest; however, we have not made any field examination of the properties. No consideration was given in this report to potential environmental liabilities that may exist nor were any costs included by Apache for potential liabilities to restore and clean up damages, if any, caused by past operating practices.

Certain technical personnel of Apache are responsible for the preparation of reserves estimates on new properties and for the preparation of revised estimates, when necessary, on old properties. These personnel assembled the necessary data and maintained the data and workpapers in an orderly manner. We consulted with these technical personnel and had access to their workpapers and supporting data in the course of our audit.

Apache has informed us that they have furnished us all of the material accounts, records, geological and engineering data, and reports and other data required for this investigation. In performing our audit of Apache's forecast of future proved production, we have relied upon data furnished by Apache with respect to property interests owned or derived, production and well tests from examined wells, normal direct costs of operating the wells or leases, other costs such as transportation and/or processing fees, ad valorem and production taxes, recompletion and development costs, development plans, abandonment costs after salvage, product prices based on the SEC regulations, adjustments or differentials to product

prices, geological structural and isochore maps, well logs, core analyses, and pressure measurements. Ryder Scott reviewed such factual data for its reasonableness; however, we have not conducted an independent verification of the data furnished by Apache. We consider the factual data furnished to us by Apache to be appropriate and sufficient for the purpose of our review of Apache's estimates of reserves. In summary, we consider the assumptions, data, methods and analytical procedures used by Apache and as reviewed by us appropriate for the purpose hereof, and we have used all such methods and procedures that we consider necessary and appropriate under the circumstances to render the conclusions set forth herein.

### ***Audit Opinion***

Based on our review, including the data, technical processes and interpretations presented by Apache, it is our opinion that the overall procedures and methodologies utilized by Apache in preparing their estimates of the proved reserves as of December 31, 2018 comply with the current SEC regulations and that the overall proved reserves for the reviewed properties as estimated by Apache are, in the aggregate, reasonable within the established audit tolerance guidelines of 10 percent as set forth in the SPE auditing standards. Ryder Scott found the processes and controls used by Apache in their estimate of proved reserves to be effective and in the aggregate, we found no bias in the utilization and analysis of data in estimates for these properties.

We were in reasonable agreement with Apache's estimates of proved reserves for the properties which we reviewed; although in certain cases there was more than an acceptable variance between Apache's estimates and our estimates due to a difference in interpretation of data or due to our having access to data which were not available to Apache when its reserves estimates were prepared. However notwithstanding, it is our opinion that on an aggregate basis the data presented herein for the properties that we reviewed fairly reflects the estimated net reserves owned by Apache.

### ***Other Properties***

Other properties, as used herein, are those properties of Apache which we did not review. The proved net reserves attributable to the other properties account for 14.7 percent of the total proved developed net liquid hydrocarbon reserves, 12.4 percent of the total proved developed net gas reserves, 42.3 percent of the total proved undeveloped net liquid hydrocarbon reserves, and 40.1 percent of the total proved undeveloped net gas reserves based on estimates prepared by Apache as of December 31, 2018. The other properties represent 14.0 percent of the total proved discounted future net income at 10 percent based on the unescalated pricing policy of the SEC as taken from reserves and income projections prepared by Apache as of December 31, 2018.

The same technical personnel of Apache were responsible for the preparation of the reserves estimates for the properties that we reviewed as well as for the properties not reviewed by Ryder Scott.

### ***Standards of Independence and Professional Qualification***

Ryder Scott is an independent petroleum engineering consulting firm that has been providing petroleum consulting services throughout the world since 1937. Ryder Scott is employee-owned and maintains offices in Houston, Texas; Denver, Colorado; and Calgary, Alberta, Canada. We have approximately eighty engineers and geoscientists on our permanent staff. By virtue of the size of our firm and the large number of clients for which we provide services, no single client or job represents a material portion of our annual revenue. We do not serve as officers or directors of any privately-owned or publicly-traded oil and gas company and are separate and independent from the operating and investment decision-

making process of our clients. This allows us to bring the highest level of independence and objectivity to each engagement for our services.

Ryder Scott actively participates in industry-related professional societies and organizes an annual public forum focused on the subject of reserves evaluations and SEC regulations. Many of our staff have authored or co-authored technical papers on the subject of reserves related topics. We encourage our staff to maintain and enhance their professional skills by actively participating in ongoing continuing education.

Prior to becoming an officer of the Company, Ryder Scott requires that staff engineers and geoscientists have received professional accreditation in the form of a registered or certified professional engineer's license or a registered or certified professional geoscientist's license, or the equivalent thereof, from an appropriate governmental authority or a recognized self-regulating professional organization. Regulating agencies require that, in order to maintain active status, a certain amount of continuing education hours be completed annually, including an hour of ethics training. Ryder Scott fully supports this technical and ethics training with our internal requirement mentioned above.

We are independent petroleum engineers with respect to Apache. Neither we nor any of our employees have any financial interest in the subject properties, and neither the employment to do this work nor the compensation is contingent on our estimates of reserves for the properties which were reviewed.

The results of this audit, presented herein, are based on technical analysis conducted by teams of geoscientists and engineers from Ryder Scott. The professional qualifications of the undersigned, the technical person primarily responsible for overseeing the review of the reserves information discussed in this report, are included as an attachment to this letter.

### ***Terms of Usage***

The results of our third party audit, presented in report form herein, were prepared in accordance with the disclosure requirements set forth in the SEC regulations and intended for public disclosure as an exhibit in filings made with the SEC by Apache Corporation.

Apache makes periodic filings on Form 10-K with the SEC under the 1934 Exchange Act. Furthermore, Apache has certain registration statements filed with the SEC under the 1933 Securities Act into which any subsequently filed Form 10-K is incorporated by reference. We have consented to the incorporation by reference in the registration statements on Form S-3, Form S-4, and Form S-8 of Apache of the references to our name as well as to the references to our third party report for Apache, which appears in the December 31, 2018 annual report on Form 10-K of Apache. Our written consent for such use is included as a separate exhibit to the filings made with the SEC by Apache.

We have provided Apache with a digital version of the original signed copy of this report letter. In the event there are any differences between the digital version included in filings made by Apache and the original signed report letter, the original signed report letter shall control and supersede the digital version.

RYDER SCOTT COMPANY PETROLEUM CONSULTANTS

The data and work papers used in the preparation of this report are available for examination by authorized parties in our offices. Please contact us if we can be of further service.

Very truly yours,

**RYDER SCOTT COMPANY, L.P.**  
TBPE Firm Registration No. F-1580

/s/ Ali A. Porbandarwala

Ali A. Porbandarwala, P.E.  
TBPE License No. 107652  
Senior Vice President

**[SEAL]**

AAP (FWZ)/pl

RYDER SCOTT COMPANY PETROLEUM CONSULTANTS

## **Professional Qualifications of Primary Technical Person**

The conclusions presented in this report are the result of technical analysis conducted by teams of geoscientists and engineers from Ryder Scott Company, L.P. Mr. Ali A. Porbandarwala was the primary technical person responsible for overseeing the estimate of the reserves, future production and income prepared by Ryder Scott presented herein.

Mr. Porbandarwala, an employee of Ryder Scott Company, L.P. (Ryder Scott) since 2008, is a Senior Vice President responsible for coordinating and supervising staff and consulting engineers of the company in ongoing reservoir evaluation studies worldwide. Before joining Ryder Scott, Mr. Porbandarwala served in a number of engineering positions with ExxonMobil Corporation. For more information regarding Mr. Porbandarwala's geographic and job specific experience, please refer to the Ryder Scott Company website at [www.ryderscott.com/Company/Employees](http://www.ryderscott.com/Company/Employees).

Mr. Porbandarwala earned a Bachelor of Science degree in Chemical Engineering from The University of Kansas in 2001 and a Masters in Business Administration from The University of Texas at Austin in 2007 and is a licensed Professional Engineer in the State of Texas. He is also a member of the Society of Petroleum Engineers and a member of the Society of Petroleum Evaluation Engineers as the Treasurer for the Houston Chapter.

In addition to gaining experience and competency through prior work experience, the Texas Board of Professional Engineers requires a minimum of fifteen hours of continuing education annually, including at least one hour in the area of professional ethics, which Mr. Porbandarwala fulfills. As part of his 2018 continuing education hours, Mr. Porbandarwala attended 25 hours of formalized training including the 2018 RSC Reserves Conference and/or various professional society presentations specifically relating to the definitions and disclosure guidelines contained in the United States Securities and Exchange Commission Title 17, Code of Federal Regulations, Modernization of Oil and Gas Reporting, Final Rule released January 14, 2009 in the Federal Register.

Based on his educational background, professional training and more than 10 years of practical experience in the estimation and evaluation of petroleum reserves, Mr. Porbandarwala has attained the professional qualifications as a Reserves Estimator and Reserves Auditor set forth in Article III of the "Standards Pertaining to the Estimating and Auditing of Oil and Gas Reserves Information" promulgated by the Society of Petroleum Engineers as of February 19, 2007.

## PETROLEUM RESERVES DEFINITIONS

**As Adapted From:  
RULE 4-10(a) of REGULATION S-X PART 210  
UNITED STATES SECURITIES AND EXCHANGE COMMISSION (SEC)**

### **PREAMBLE**

On January 14, 2009, the United States Securities and Exchange Commission (SEC) published the “Modernization of Oil and Gas Reporting; Final Rule” in the Federal Register of National Archives and Records Administration (NARA). The “Modernization of Oil and Gas Reporting; Final Rule” includes revisions and additions to the definition section in Rule 4-10 of Regulation S-X, revisions and additions to the oil and gas reporting requirements in Regulation S-K, and amends and codifies Industry Guide 2 in Regulation S-K. The “Modernization of Oil and Gas Reporting; Final Rule”, including all references to Regulation S-X and Regulation S-K, shall be referred to herein collectively as the “SEC regulations”. The SEC regulations take effect for all filings made with the United States Securities and Exchange Commission as of December 31, 2009, or after January 1, 2010. Reference should be made to the full text under Title 17, Code of Federal Regulations, Regulation S-X Part 210, Rule 4-10(a) for the complete definitions (direct passages excerpted in part or wholly from the aforementioned SEC document are denoted in italics herein).

*Reserves are estimated remaining quantities of oil and gas and related substances anticipated to be economically producible, as of a given date, by application of development projects to known accumulations.* All reserves estimates involve an assessment of the uncertainty relating the likelihood that the actual remaining quantities recovered will be greater or less than the estimated quantities determined as of the date the estimate is made. The uncertainty depends chiefly on the amount of reliable geologic and engineering data available at the time of the estimate and the interpretation of these data. The relative degree of uncertainty may be conveyed by placing reserves into one of two principal classifications, either proved or unproved. Unproved reserves are less certain to be recovered than proved reserves and may be further sub-classified as probable and possible reserves to denote progressively increasing uncertainty in their recoverability. Under the SEC regulations as of December 31, 2009, or after January 1, 2010, a company may optionally disclose estimated quantities of probable or possible oil and gas reserves in documents publicly filed with the SEC. The SEC regulations continue to prohibit disclosure of estimates of oil and gas resources other than reserves and any estimated values of such resources in any document publicly filed with the SEC unless such information is required to be disclosed in the document by foreign or state law as noted in §229.1202 Instruction to Item 1202.

Reserves estimates will generally be revised only as additional geologic or engineering data become available or as economic conditions change.

Reserves may be attributed to either natural energy or improved recovery methods. Improved recovery methods include all methods for supplementing natural energy or altering natural forces in the reservoir to increase ultimate recovery. Examples of such methods are pressure maintenance, natural gas cycling, waterflooding, thermal methods, chemical flooding, and the use of miscible and immiscible displacement fluids. Other improved recovery methods may be developed in the future as petroleum technology continues to evolve.

Reserves may be attributed to either conventional or unconventional petroleum accumulations. Petroleum accumulations are considered as either conventional or unconventional based on the nature of their in-place characteristics, extraction method applied, or degree of processing prior to sale. Examples of unconventional petroleum accumulations include coalbed or coalseam methane (CBM/CSM), basin-

centered gas, shale gas, gas hydrates, natural bitumen and oil shale deposits. These unconventional accumulations may require specialized extraction technology and/or significant processing prior to sale.

Reserves do not include quantities of petroleum being held in inventory.

Because of the differences in uncertainty, caution should be exercised when aggregating quantities of petroleum from different reserves categories.

### **RESERVES (SEC DEFINITIONS)**

Securities and Exchange Commission Regulation S-X §210.4-10(a)(26) defines reserves as follows:

**Reserves.** *Reserves are estimated remaining quantities of oil and gas and related substances anticipated to be economically producible, as of a given date, by application of development projects to known accumulations. In addition, there must exist, or there must be a reasonable expectation that there will exist, the legal right to produce or a revenue interest in the production, installed means of delivering oil and gas or related substances to market, and all permits and financing required to implement the project.*

Note to paragraph (a)(26): *Reserves should not be assigned to adjacent reservoirs isolated by major, potentially sealing, faults until those reservoirs are penetrated and evaluated as economically producible. Reserves should not be assigned to areas that are clearly separated from a known accumulation by a non-productive reservoir (i.e., absence of reservoir, structurally low reservoir, or negative test results). Such areas may contain prospective resources (i.e., potentially recoverable resources from undiscovered accumulations).*

### **PROVED RESERVES (SEC DEFINITIONS)**

Securities and Exchange Commission Regulation S-X §210.4-10(a)(22) defines proved oil and gas reserves as follows:

**Proved oil and gas reserves.** *Proved oil and gas reserves are those quantities of oil and gas, which, by analysis of geoscience 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 price 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.*

## PETROLEUM RESERVES STATUS DEFINITIONS AND GUIDELINES

As Adapted From:  
RULE 4-10(a) of REGULATION S-X PART 210  
UNITED STATES SECURITIES AND EXCHANGE COMMISSION (SEC)

and

### 2018 PETROLEUM RESOURCES MANAGEMENT SYSTEM (SPE-PRMS)

Sponsored and Approved by:  
SOCIETY OF PETROLEUM ENGINEERS (SPE)  
WORLD PETROLEUM COUNCIL (WPC)  
AMERICAN ASSOCIATION OF PETROLEUM GEOLOGISTS (AAPG)  
SOCIETY OF PETROLEUM EVALUATION ENGINEERS (SPEE)  
SOCIETY OF EXPLORATION GEOPHYSICISTS (SEG)  
SOCIETY OF PETROPHYSICISTS AND WELL LOG ANALYSTS (SPWLA)  
EUROPEAN ASSOCIATION OF GEOSCIENTISTS & ENGINEERS (EAGE)

Reserves status categories define the development and producing status of wells and reservoirs. Reference should be made to Title 17, Code of Federal Regulations, Regulation S-X Part 210, Rule 4-10(a) and the SPE-PRMS as the following reserves status definitions are based on excerpts from the original documents (direct passages excerpted from the aforementioned SEC and SPE-PRMS documents are denoted in italics herein).

### **DEVELOPED RESERVES (SEC DEFINITIONS)**

Securities and Exchange Commission Regulation S-X §210.4-10(a)(6) defines developed oil and gas reserves as follows:

*Developed oil and gas reserves are reserves of any category that can be expected to be recovered:*

- (i) 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; and*
- (ii) Through installed extraction equipment and infrastructure operational at the time of the reserves estimate if the extraction is by means not involving a well.*

### **Developed Producing (SPE-PRMS Definitions)**

While not a requirement for disclosure under the SEC regulations, developed oil and gas reserves may be further sub-classified according to the guidance contained in the SPE-PRMS as Producing or Non-Producing.

#### **Developed Producing Reserves**

*Developed Producing Reserves are expected quantities to be recovered from completion intervals that are open and producing at the effective date of the estimate.*

*Improved recovery reserves are considered producing only after the improved recovery project is in operation.*

**Developed Non-Producing**

*Developed Non-Producing Reserves include shut-in and behind-pipe Reserves.*

**Shut-In**

*Shut-in Reserves are expected to be recovered from:*

- (1) completion intervals that are open at the time of the estimate, but which have not yet started producing;*
- (2) wells which were shut-in for market conditions or pipeline connections; or*
- (3) wells not capable of production for mechanical reasons.*

**Behind-Pipe**

*Behind-pipe Reserves are expected to be recovered from zones in existing wells that will require additional completion work or future re-completion before start of production with minor cost to access these reserves.*

*In all cases, production can be initiated or restored with relatively low expenditure compared to the cost of drilling a new well.*

**UNDEVELOPED RESERVES (SEC DEFINITIONS)**

Securities and Exchange Commission Regulation S-X §210.4-10(a)(31) defines undeveloped oil and gas reserves as follows:

*Undeveloped oil and gas reserves are reserves of any category 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 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 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, as defined in paragraph (a)(2) of this section, or by other evidence using reliable technology establishing reasonable certainty.*