

OCCIDENTAL PETROLEUM CORP /DE/  
Form 10-K  
February 21, 2019

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

Form 10-K

Annual Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934  
 Transition Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

For the fiscal year ended December 31, 2018 For the transition period from to

Commission File Number 1-9210

Occidental Petroleum Corporation

(Exact name of registrant as specified in its charter)

State or other jurisdiction of incorporation or organization Delaware

I.R.S. Employer Identification No. 95-4035997

Address of principal executive offices 5 Greenway Plaza, Suite 110, Houston, Texas

Zip Code 77046

Registrant's telephone number, including area code (713) 215-7000

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

Title of Each Class	Name of Each Exchange on Which Registered
9 1/4% Senior Debentures due 2019	New York Stock Exchange
Common Stock, \$0.20 par value	New York Stock Exchange

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

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

Yes  No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act: (Note: Checking the box will not relieve any registrant required to file reports pursuant to Section 13 or 15(d) of the Exchange Act from their obligations under those Sections). Yes  No

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

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

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

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

Large Accelerated Filer  Accelerated Filer  Emerging Growth Company

Non-Accelerated Filer  Smaller Reporting Company

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

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

The aggregate market value of the registrant's Common Stock held by nonaffiliates of the registrant was approximately \$64.0 billion, computed by reference to the closing price on the New York Stock Exchange composite tape of \$83.68 per share of Common Stock on June 30, 2018.

At January 31, 2019, there were 749,546,443 shares of Common Stock outstanding, par value \$0.20 per share.

#### DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's definitive Proxy Statement, relating to its May 10, 2019 Annual Meeting of Stockholders, are incorporated by reference into Part III.

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## Part I

### ITEMS 1 AND 2 BUSINESS AND PROPERTIES

In this report, "Occidental" means Occidental Petroleum Corporation, a Delaware corporation (OPC) incorporated in 1986, or OPC and one or more entities in which it owns a controlling interest (subsidiaries). Occidental conducts its operations through various subsidiaries and affiliates. Occidental's executive offices are located at 5 Greenway Plaza, Suite 110, Houston, Texas 77046; telephone (713) 215-7000.

#### GENERAL

Occidental's principal businesses consist of three segments. The oil and gas segment explores for, develops and produces oil and condensate, natural gas liquids (NGL) and natural gas. The chemical segment (OxyChem) mainly manufactures and markets basic chemicals and vinyls. The midstream and marketing segment purchases, markets, gathers, processes, transports and stores oil, condensate, NGL, natural gas, carbon dioxide (CO<sub>2</sub>) and power. It also trades around its assets, including transportation and storage capacity. Additionally, the midstream and marketing segment invests in entities that conduct similar activities.

For information regarding Occidental's segments, geographic areas of operation and current developments, including strategies and actions related thereto, see the information in the "Management's Discussion and Analysis of Financial Condition and Results of Operations" (MD&A) section of this report and Note 17 to the Consolidated Financial Statements.

#### OIL AND GAS OPERATIONS

##### General

Occidental's domestic upstream oil and gas operations are located in Texas and New Mexico. International operations are located in Colombia, Oman, United Arab Emirates (UAE) and Qatar.

##### Proved Reserves and Sales Volumes

The table below shows Occidental's total oil, NGL and natural gas proved reserves and sales volumes in 2018, 2017 and 2016. See "MD&A — Oil and Gas Segment," and the information under the caption "Supplemental Oil and Gas Information" for certain details regarding Occidental's proved reserves, the reserves estimation process, sales and production volumes, production costs and other reserves-related data.

##### Competition

As a producer of oil, condensate, NGL and natural gas, Occidental competes with numerous other domestic and international public, private, and government producers. Oil, NGL and natural gas are commodities that are sensitive to prevailing global and local, current and anticipated market conditions. Occidental competes for transportation capacity and infrastructure for the delivery of its products, which are sold at current market prices or on a forward basis to refiners and other market participants. Occidental's competitive strategy relies on increasing production through developing conventional and unconventional fields, utilizing primary and enhanced oil recovery (EOR) techniques and strategic acquisitions in areas where Occidental has a competitive advantage as a result of its current successful operations or investments in shared infrastructure. Occidental also competes to develop and produce its worldwide oil and gas reserves safely and cost-effectively, maintain a skilled workforce and obtain quality services.

##### Comparative Oil and Gas Proved Reserves and Sales Volumes

Oil (which includes condensate) and NGL are in millions of barrels; natural gas is in billions of cubic feet (Bcf); barrels of oil equivalent (BOE) are in millions.

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	2018				2017				2016			
	Oil	NGL	Gas	BOE <sup>(a)</sup>	Oil	NGL	Gas	BOE <sup>(a)</sup>	Oil	NGL	Gas	BOE <sup>(a)</sup>
Proved Reserves												
United States	1,186	284	1,445	1,711	1,107	247	1,205	1,555	960	219	1,045	1,353
International	397	202	2,650	1,041	408	198	2,626	1,043	397	201	2,729	1,053
Total	1,583	486	4,095	2,752	1,515	445	3,831	2,598	1,357	420	3,774	2,406
Sales Volumes												
United States	91	25	119	136	73	20	108	111	69	19	132	110
International	62	11	189	104	66	11	188	109	74	11	217	121
Total	153	36	308	240	139	31	296	220	143	30	349	231

Note: The detailed proved reserves information presented in accordance with Item 1202(a)(2) to Regulation S-K under the Securities Exchange Act of 1934 (Exchange Act) is provided under the heading "Supplemental Oil and Gas Information". Proved reserves are stated on a net basis after applicable royalties.

Natural gas volumes are converted to barrels of oil equivalence (BOE) at six thousand cubic feet (Mcf) of gas per one barrel of oil. Barrels of oil equivalence does not necessarily result in price equivalence. The price of natural gas on a BOE basis is currently substantially lower than the corresponding price for oil and has been similarly lower for a number of years. For example, in 2018, the average daily prices of West Texas Intermediate (WTI) oil and New York Mercantile Exchange (NYMEX) natural gas were \$64.77 per barrel and \$2.97 per Mcf, respectively, resulting in an oil to gas ratio of over 20 to 1.

## CHEMICAL OPERATIONS

## General

OxyChem owns and operates manufacturing plants at 22 domestic sites in Alabama, Georgia, Illinois, Kansas, Louisiana, Michigan, New Jersey, New York, Ohio, Tennessee and Texas and at two international sites in Canada and Chile. In 2018, OxyChem achieved a full year of operations at the 1.2 billion pound-per-year ethylene cracker at the OxyChem Ingleside, Texas facility as well as the 4CPe unit at OxyChem's Geismar, Louisiana site. The ethylene cracker, a 50/50 joint venture with Mexichem S.A.B. de C.V., began commercial operations in the first quarter of 2017.

## Competition

OxyChem competes with numerous other domestic and international chemical producers. OxyChem's market position was first or second in the United States in 2018 for the principal basic chemicals products it manufactures and markets as well as for vinyl chloride monomer (VCM). OxyChem ranks in the top three producers of polyvinyl chloride (PVC) in the United States. OxyChem's competitive strategy is to be a low-cost producer of its products in order to compete on price.

OxyChem produces the following products:

Principal Products	Major Uses	Annual Capacity
Basic Chemicals		
Chlorine	Raw material for ethylene dichloride (EDC), water treatment and pharmaceuticals	3.4 million tons
Caustic soda	Pulp, paper and aluminum production	3.5 million tons
Chlorinated organics	Refrigerants, silicones and pharmaceuticals	1.0 billion pounds
Potassium chemicals	Fertilizers, batteries, soaps, detergents and specialty glass	0.4 million tons
EDC	Raw material for vinyl chloride monomer (VCM)	2.1 billion pounds
Chlorinated isocyanurates	Swimming pool sanitation and disinfecting products	131 million pounds
Sodium silicates	Catalysts, soaps, detergents and paint pigments	0.6 million tons
Calcium chloride	Ice melting, dust control, road stabilization and oil field services	0.7 million tons
Vinyls		
VCM	Precursor for polyvinyl chloride (PVC)	6.2 billion pounds
PVC	Piping, building materials and automotive and medical products	3.7 billion pounds
Ethylene	Raw material for VCM	1.2 billion pounds (a)

(a) Amount is gross production capacity for 50/50 joint venture with Mexichem.



## MIDSTREAM AND MARKETING OPERATIONS

### General

Occidental's midstream and marketing operations primarily support and enhance its oil and gas and chemical businesses and also provide similar services for third parties.

In 2018, Occidental sold several non-core assets, including the Centurion common carrier oil pipeline and storage system, Southeast New Mexico oil gathering system and Ingleside Crude Terminal. Following the transactions, Occidental retained its long-term flow assurance, pipeline takeaway and export capacity through its retained marketing business.

Also within the midstream and marketing segment is Oxy Low Carbon Ventures (OLCV). OLCV seeks to capitalize on Occidental's EOR leadership by developing carbon capture, utilization and storage projects that source anthropogenic carbon dioxide and promote innovative technologies that drive cost efficiencies and economically grow Occidental's business while reducing emissions.

### Competition

Occidental's midstream and marketing businesses operate in competitive and highly regulated markets. Occidental's marketing business competes with other market participants on exchange platforms and through other bilateral transactions with direct counterparties.

The midstream and marketing operations are conducted in the locations described below as of December 31, 2018:

Location	Description	Capacity
<b>Gas Plants</b>		
Texas, New Mexico and Colorado	Occidental and third-party-operated natural gas gathering, compression and processing systems, and CO <sub>2</sub> processing and capturing	2.8 Bcf per day
United Arab Emirates	Natural gas processing facilities for Al Hosn Gas	1.3 Bcf of natural gas per day
<b>Pipelines and Gathering Systems</b>		
Texas, New Mexico and Colorado	CO <sub>2</sub> fields and pipeline systems transporting CO <sub>2</sub> to oil and gas producing locations	2.8 Bcf per day
Dolphin Pipeline - Qatar and United Arab Emirates and Oman	Equity investment in a natural gas pipeline	3.2 Bcf of natural gas per day
Western and Southern United States and Canada	Equity investment in entity involved in pipeline transportation, storage, terminalling and marketing of oil, gas and related petroleum products	17,965 miles of active crude oil and NGL pipelines and gathering systems. <sup>(a)</sup> 108 million barrels of crude oil, refined products and NGL storage capacity and 65 Bcf of natural gas storage working capacity <sup>(a)</sup>
<b>Power Generation</b>		
Texas and Louisiana	Occidental-operated power and steam generation facilities	1,200 megawatts of electricity and 1.6 million pounds of steam per hour

(a) Amounts are gross, including interests held by third parties.

## CAPITAL EXPENDITURES

For information on capital expenditures, see the information under the heading "Liquidity and Capital Resources" in the MD&A section of this report.

#### EMPLOYEES

Occidental employed approximately 11,000 people at December 31, 2018, 7,000 of whom were located in the U.S. Occidental employed approximately 7,000 people in the oil and gas and midstream and marketing segments and 3,000 people in the chemical segment. An additional 1,000 people were employed in administrative and headquarters functions. Approximately 500 U.S.-based employees and 900 international-based employees are represented by labor unions.

#### ENVIRONMENTAL REGULATION

For environmental regulation information, including associated costs, see the information under the heading "Environmental Liabilities and Expenditures" in the MD&A section of this report and "Risk Factors."

#### AVAILABLE INFORMATION

Occidental's annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and any amendments to those reports, are available free of charge on its website, [www.oxy.com](http://www.oxy.com), as soon as reasonably practicable after Occidental electronically files the material with, or furnishes it to, the Securities and Exchange Commission (SEC). In addition, copies of our annual report will be made available, free of charge, upon written request.

Information contained on Occidental's website is not part of this report.

## ITEM 1A RISK FACTORS

Volatile global and local commodity pricing strongly affect Occidental's results of operations.

Occidental's financial results correlate closely to the prices it obtains for its products, particularly oil and, to a lesser extent, natural gas and NGL, and its chemical products.

Prices for crude oil, natural gas and NGL fluctuate widely. Historically, the markets for crude oil, natural gas and NGL have been volatile and may continue to be volatile in the future. If the prices of oil, natural gas, or NGL continue to be volatile or decline, Occidental's operations, financial condition, cash flows, level of expenditures and the quantity of estimated proved reserves that may be attributed to our properties may be materially and adversely affected. Prices are set by global and local market forces which are not in Occidental's control. These factors include, among others:

- Ø Worldwide and domestic supplies of, and demand for, crude oil, natural gas, NGL and refined products;
- Ø The cost of exploring for, developing, producing, refining and marketing crude oil, natural gas, NGL and refined products;
- Ø Operational impacts such as production disruptions, technological advances and regional market conditions, including available transportation capacity and infrastructure constraints in producing areas;
- Ø Changes in weather patterns and climate;
- Ø The impacts of the members of OPEC and other non-OPEC member-producing nations that may agree to and maintain production levels;
- Ø The worldwide military and political environment, uncertainty or instability resulting from an escalation or outbreak of armed hostilities or acts of terrorism in the United States, or elsewhere;
- Ø The price and availability of alternative and competing fuels;
- Ø Technological advances affecting energy consumption and supply;
- Ø Domestic and foreign governmental regulations and taxes, or changes in regulation and taxes;
- Ø Shareholder activism or activities by non-governmental organizations to restrict the exploration, development and production of oil, natural gas and NGL;
- Ø Additional or increased nationalization and expropriation activities by foreign governments;
- Ø General economic conditions worldwide;
- Ø Volatility in commodity futures markets; and
- Ø The effect of energy conservation efforts.

The long-term effects of these and other conditions on the prices of crude oil, natural gas, NGL and refined products are uncertain. Generally, Occidental's practice is to remain exposed to market prices of commodities. Management may elect to hedge the price risk of crude oil, natural gas and NGL in the future, and commodity price risk management and hedging activities may prevent us from fully benefiting from price increases and may expose us to regulatory and other risks.

The prices obtained for Occidental's chemical products correlate strongly to the health of the United States and

global economies, as well as chemical industry expansion and contraction cycles. Occidental also depends on feedstocks and energy to produce chemicals, which are commodities subject to significant price fluctuations.

Occidental may experience delays, cost overruns, losses or other unrealized expectations in development efforts and exploration activities.

Oil, natural gas and NGL exploration and production activities are subject to numerous risks beyond our control, including the risk that drilling will not result in commercially viable oil, natural gas and NGL production. In its development and exploration activities, Occidental bears the risks of:

- Ø Equipment failures;

- Ø Construction delays;
- Ø Escalating costs or competition for services, materials, supplies or labor;
- Ø Property or border disputes;
- Ø Disappointing drilling results or reservoir performance;
- Ø Title problems and other associated risks that may affect its ability to profitably grow production, replace reserves and achieve its targeted returns;
- Ø Actions by third-party operators of our properties;
- Ø Delays and costs of drilling wells on lands subject to complex development terms and circumstances; and
- Ø Oil, natural gas or NGL gathering, transportation and processing availability, restrictions or limitations.

Exploration is inherently risky and is subject to delays, misinterpretation of geologic or engineering data, unexpected geologic conditions or finding reserves of disappointing quality or quantity, which may result in significant losses.

Governmental actions and political instability may affect Occidental's results of operations.

Occidental's businesses are subject to the actions and decisions of many federal, state, local and foreign governments and political interests. As a result, Occidental faces risks of:

New or amended laws and regulations, or new or different applications or interpretations of existing laws and regulations, including those related to drilling, manufacturing or production processes (including well stimulation techniques such as hydraulic fracturing and acidization), labor and employment, taxes, royalty rates, permitted production rates, entitlements, import, export and use of raw materials, equipment or products, use or increased use of land, water and other natural resources, safety, the manufacturing of chemicals, asset integrity management, the marketing or export of commodities, security and environmental protection, all of which may restrict or prohibit activities of Occidental or its contractors, increase Occidental's costs or reduce demand for Occidental's products. In addition, violation of certain governmental laws and regulations may result in strict, joint and several liability and the imposition of significant civil and criminal fines and penalties.

Ø Refusal of, or delay in, the extension or grant of exploration, development or production contracts.

Ø Development delays and cost overruns due to approval delays for, or denial of, drilling, construction, environmental and other regulatory approvals, permits and authorizations.

In addition, Occidental has and may continue to experience adverse consequences, such as risk of loss or production limitations, because certain of its international operations are located in countries affected by political instability, nationalizations, corruption, armed conflict, terrorism, insurgency, civil unrest, security problems, labor unrest, OPEC production restrictions, equipment import restrictions and sanctions. Exposure to such risks may increase if a greater percentage of Occidental's future oil and gas production or revenue comes from international sources.

Occidental's oil and gas business operates in highly competitive environments, which affect, among other things, its ability to make acquisitions to grow production and replace reserves.

Results of operations, reserves replacement and growth in oil and gas production depend, in part, on Occidental's ability to profitably acquire additional reserves. Occidental has many competitors (including national oil companies), some of which: (i) are larger and better funded; (ii) may be willing to accept greater risks; (iii) have greater access to capital; (iv) have substantially larger staffs; or (v) have special competencies. Competition for reserves may make it more difficult to find attractive investment opportunities or require delay of reserve replacement efforts. Further, during periods of low product prices, any cash conservation efforts may delay production growth and reserve replacement efforts. Also, there is substantial competition for capital available for investment in the oil and natural gas industry. Our failure to acquire properties, grow production, replace reserves and attract and retain qualified personnel could have a material adverse effect on our cash flows and results of operations.

In addition, Occidental's acquisition activities carry risks that it may: (i) not fully realize anticipated benefits due to less-than-expected reserves or production or changed circumstances, such as declines in crude oil, NGL, and gas prices; (ii) bear unexpected integration costs or experience other integration difficulties; (iii) experience share price declines based on the market's evaluation of the activity; or (iv) assume liabilities that are greater than anticipated.

Occidental's oil and gas reserves are estimates based on professional judgments and may be subject to revision. Reported oil and gas reserves are an estimate based on periodic review of reservoir characteristics and recoverability, including production decline rates, operating performance and economic feasibility at the prevailing commodity prices, assumptions concerning future crude oil and natural gas prices, future operating costs and capital expenditures, workover and remedial costs, assumed effects of regulation by governmental agencies, the quantity, quality and interpretation of relevant data, taxes

and availability of funds. The procedures and methods for estimating the reserves by our internal engineers were reviewed by independent petroleum consultants; however, there are inherent uncertainties in estimating reserves. Actual production, revenues, expenditures, crude oil, natural gas and NGL prices and taxes with respect to our reserves may vary from estimates, and the variance may be material. If Occidental were required to make significant negative reserve revisions, its results of operations and stock price could be adversely affected.

In addition, the discounted cash flows included in this Form 10-K should not be construed as the fair value of the reserves attributable to our properties. The estimated discounted future net cash flows from proved reserves are based on an unweighted 12-month average first-day-of-the-month prices in accordance with SEC regulations. Actual future prices and costs may differ materially from SEC regulation-compliant prices and costs used for purposes of estimating future discounted net cash flows from proved reserves. Also, actual future net cash flows may differ from these discounted net cash flows due to the amount and timing of actual production, availability of financing for capital expenditures necessary to develop our undeveloped reserves, supply and demand for oil, natural gas and NGL, increases or decreases in consumption of oil, natural gas and NGL and changes in governmental regulations or taxation.

Concerns about climate change and further regulation of greenhouse gas emissions may adversely affect Occidental's operations or results.

Continuing political and social attention to the issue of climate change has resulted in both existing and pending international agreements and national, regional and local legislation and regulatory programs to reduce greenhouse gas emissions. In December 2009, the EPA determined that emissions of carbon dioxide, methane and other greenhouse gases endanger public health and the environment because emissions of such gases are, according to the EPA, contributing to warming of the Earth's atmosphere and other climatic changes. Based on these findings, the EPA began adopting and implementing regulations to restrict emissions of greenhouse gases under existing provisions of the Clean Air Act. For example, the EPA issued rules restricting methane emissions from hydraulically fractured and refractured gas wells, compressors, pneumatic controls, storage vessels, and natural gas processing plants.

In the absence of federal legislation to significantly reduce emissions of greenhouse gases to date, many state governments have established rules aimed at reducing greenhouse gas emissions, including greenhouse gas cap and trade programs. Most of these cap and trade programs work by requiring major sources of emissions, such as electric power plants, or major producers of fuels, such as refineries and natural gas processing plants, to acquire and surrender emission allowances. In the future, the United States may also choose to adhere to international agreements targeting greenhouse gas reductions. These and other government actions relating to greenhouse gas emissions could require Occidental to incur increased operating and maintenance costs, such as costs to

purchase and operate emissions control systems, to acquire emissions allowances, pay carbon taxes, or comply with new regulatory or reporting requirements, or they could promote the use of alternative sources of energy and thereby decrease demand for oil, natural gas and other products that Occidental's businesses produce. Any such legislation or regulatory programs could also increase the cost of consuming, and thereby reduce demand for, oil, natural gas and other products produced by Occidental's businesses and lower the value of its reserves. Consequently, government actions designed to reduce emissions of greenhouse gases could have an adverse effect on Occidental's business, financial condition, results of operations, cash flows and reserves.

There also have been efforts in recent years to influence the investment community, including investment advisers and certain sovereign wealth, pension and endowment funds promoting divestment of fossil fuel equities and pressuring lenders to limit funding to companies engaged in the extraction of fossil fuel reserves. Such environmental activism and initiatives aimed at limiting climate change and reducing air pollution could interfere with our business activities, operations and ability to access capital. Finally, increasing attention to climate change risks has resulted in an increased possibility of governmental investigations and additional private litigation against Occidental without regard to causation or our contribution to the asserted damage, which could increase our costs or otherwise adversely affect our business. We have been named in certain private litigation relating to these matters.

It is difficult to predict the timing and certainty of such government actions and the ultimate effect on Occidental, which could depend on, among other things, the type and extent of greenhouse gas reductions required, the availability and price of emissions allowances or credits, the availability and price of alternative fuel sources, the energy sectors covered, and Occidental's ability to recover the costs incurred through its operating agreements or the pricing of the company's oil, NGL, natural gas and other products.

Occidental's businesses may experience catastrophic events.

The occurrence of events such as hurricanes, floods, droughts, earthquakes or other acts of nature, well blowouts, fires, explosions, pipeline ruptures, chemical releases, crude oil releases, including maritime releases, releases into navigable waters, and groundwater contamination, material or mechanical failure, industrial accidents, physical attacks, abnormally pressured or structured formations and other events that cause operations to cease or be curtailed may negatively affect Occidental's businesses and the communities in which it operates. Coastal operations are particularly susceptible to disruption from extreme weather events. Any of these risks could adversely affect our ability to conduct operations or result in substantial losses to us as a result of:

Ø Damage to and destruction of property and equipment;

Ø Damage to natural resources;

Ø Pollution and other environmental damage, including spillage or mishandling of recovered chemicals or fluids;

Ø Regulatory investigations and penalties;

Ø Loss of well location, acreage, expected production and related reserves;

Ø Suspension or delay of our operations;

Ø Substantial liability claims; and

Ø Repair and remediation costs.

Third-party insurance may not provide adequate coverage or Occidental may be self-insured with respect to the related losses. In addition, under certain circumstances, we may be liable for environmental damage caused by previous owners or operators of properties that we own, lease or operate. As a result, we may incur substantial liabilities to third parties or governmental entities for environmental matters for which we do not have insurance coverage, which could reduce or eliminate funds available for exploration, development or acquisitions or cause us to incur losses.

Cyber-attacks could negatively affect Occidental.

The oil and gas industry is increasingly dependent on digital and industrial control technologies to conduct certain exploration, development and production activities. Occidental relies on digital and industrial control systems, related

infrastructure, technologies and networks to run its business and to control and manage its oil and gas, chemicals, marketing and pipeline operations. Use of the internet, cloud services, mobile communication systems and other public networks exposes Occidental's business and that of other third parties with whom Occidental does business to cyber-attacks. Cyber-attacks on businesses have escalated in recent years.

Information and industrial control technology system failures, network disruptions and breaches of data security could disrupt our operations by causing delays, impeding processing of transactions and reporting financial results, resulting in the unintentional disclosure of company, partner, customer, employee information, or damage to our reputation. A cyber-attack involving our information or industrial control systems and related infrastructure, or that of our business associates, could negatively impact our operations in a variety of ways, including but not limited to, the following:

- Ø Unauthorized access to seismic data, reserves information, strategic information, or other sensitive or proprietary information could have a negative impact on our ability to compete for oil and natural gas resources;
- Ø Data corruption, communication or systems interruption or other operational disruption during drilling activities could result in delays and failure to reach the intended target or cause a drilling incident;
- Ø Data corruption, communication or systems interruption, or operational disruptions of production-related infrastructure could result in a loss of production, or accidental discharge;
- Ø A cyber-attack on our chemical operations could result in a disruption of the manufacturing and marketing of



our products or a potential environmental hazard and ultimately loss of revenue;

- Ø A cyber-attack on a vendor or service provider could result in supply chain disruptions, which could delay or halt our construction and development projects;
  - Ø A cyber-attack on third-party gathering, pipeline, or other transportation systems could delay or prevent us from transporting and marketing our production, resulting in loss of revenue;
  - Ø A cyber-attack involving commodities exchanges or financial institutions could slow or halt commodities trading, thus preventing us from marketing our production or engaging in hedging activities, resulting in loss of revenue;
  - Ø A cyber-attack that halts activities at a power generation facility or refinery using natural gas as feed stock could have a significant impact on the natural gas market;
  - Ø A cyber-attack on a communications network or power grid could cause operational disruption resulting in loss of revenue;
  - Ø A cyber-attack on our automated and surveillance systems could cause a loss in production and potential environmental hazards;
  - Ø A deliberate corruption of our financial or operating data could result in events of non-compliance which could then lead to regulatory fines or penalties; and
- A cyber-attack resulting in the loss or disclosure of, or damage to, our or any of our customer's or supplier's data or confidential information could harm our business by damaging our reputation, subjecting us to potential financial or legal liability, and requiring us to incur significant costs, including costs to repair or restore our systems and data or to take other remedial steps.

Even though Occidental has implemented controls and multiple layers of security to mitigate the risks of a cyber-attack that it believes are reasonable, there can be no assurance that such cyber security measures will be sufficient to prevent security breaches of its systems from occurring, and if a breach occurs, it may remain undetected for an extended period of time. Further, Occidental has no control over the comparable systems of the third parties with whom it does business. While Occidental has experienced cyber-attacks in the past, Occidental has not suffered any material losses. However, if in the future Occidental's cyber security measures are compromised or prove insufficient, the potential consequences to Occidental's businesses and the communities in which it operates could be significant. As cyber-attacks continue to evolve in magnitude and sophistication, Occidental may be required to expend additional resources in order to continue to enhance Occidental's cyber security measures and to investigate and remediate any digital and operational systems, related infrastructure, technologies and network security vulnerabilities, which would increase our costs. A system failure or data security breach, or a series of such failures or breaches, could have a material adverse effect on our financial condition, results of operations or cash flows.

Occidental's oil and gas reserve additions may not continue at the same rate and a failure to replace reserves may negatively affect Occidental's business.

Producing oil and natural gas reservoirs generally are characterized by declining production rates that vary depending upon reservoir characteristics and other factors. Unless Occidental conducts successful exploration or development activities, acquires properties containing proved reserves, or both, proved reserves will generally decline and negatively impact our business. The value of our securities and our ability to raise capital will be adversely impacted if we are not able to replace reserves that are depleted by production or replace our declining production with new production. Management expects improved recovery, extensions and discoveries to continue as main sources for reserve additions but factors such as geology, government regulations and permits, the effectiveness of development plans and the ability to make the necessary capital investments or acquire capital are partially or fully outside management's control and could cause results to differ materially from expectations.

Other risk factors.

Additional discussion of risks and uncertainties related to price and demand, litigation, environmental matters, oil, natural gas and NGL reserves estimation processes, impairments, derivatives, market risks and internal controls

appears under the headings: "Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities — Market Information, Holders and Dividend Policy," "MD&A — Oil and Gas Segment — Business Environment," "— Proved Reserves" and "— Industry Outlook," "— Chemical Segment — Industry Outlook," "— Midstream and Marketing Segment — Industry Outlook," "— Lawsuits, Claims and Contingencies," "— Environmental Liabilities and Expenditures," "— Critical Accounting Policies and Estimates," "— Quantitative and Qualitative Disclosures About Market Risk," and "Management's Annual Assessment of and Report on Internal Control Over Financial Reporting."

The risks described in this report are not the only risks facing Occidental and other risks, including risks deemed immaterial, may have material adverse effects.

#### ITEM 1B UNRESOLVED STAFF COMMENTS

None.

#### ITEM 3 LEGAL PROCEEDINGS

For information regarding legal proceedings, see the information under the caption "Lawsuits, Claims, Commitments and Contingencies" in the MD&A section of this report and in Note 10 to the Consolidated Financial Statements.

#### ITEM 4 MINE SAFETY DISCLOSURES

Not applicable.

## EXECUTIVE OFFICERS

Each executive officer holds his or her office from the date of election by the Board of Directors until the first board meeting held after the Annual Meeting of Stockholders or until a successor is duly elected. The next Annual Meeting of Stockholders is May 10, 2019.

The following table sets forth the executive officers of Occidental:

Name	Age at February 21, 2019	Positions with Occidental and Subsidiaries and Employment History
Vicki Hollub Chief Executive Officer and President	59	President, Chief Executive Officer and Director since April 2016; President, Chief Operating Officer and Director, 2015-2016; Senior Executive Vice President and President, Oxy Oil and Gas, 2015; Executive Vice President and President Oxy Oil and Gas - Americas, 2014-2015; Vice President and Executive Vice President, U.S. Operations, Oxy Oil and Gas, 2013-2014.
Cedric W. Burgher Chief Financial Officer and Senior Vice President	58	Senior Vice President and Chief Financial Officer since May 2017; EOG Resources: Senior Vice President, Investor and Public Relations, 2014-2017, QR Energy L.P.; Chief Financial Officer, 2010-2014.
Edward A. "Sandy" Lowe Executive Vice President	67	Executive Vice President since 2015; Group Chairman - Middle East since 2016; Senior Vice President, 2008-2015; President - Oxy Oil & Gas International, 2009-2016.
Marcia E. Backus Senior Vice President	64	Senior Vice President, General Counsel and Chief Compliance Officer since December 2016; Senior Vice President, General Counsel, Chief Compliance Officer and Corporate Secretary, 2015-2016; Vice President, General Counsel and Corporate Secretary, 2014-2015; Vice President and General Counsel, 2013-2014; Vinson & Elkins: Partner, 1990-2013.
Glenn M. Vangolen Senior Vice President	59	Senior Vice President, Business Support since February 2015; Executive Vice President, Business Support, 2014-2015; Senior Vice President - Oxy Oil & Gas Middle East, 2010-2014.
Jennifer M. Kirk Vice President	44	Vice President, Controller and Principal Accounting Officer since 2014; Controller, Occidental Oil and Gas Corporation, 2012-2014.

## Part II

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

#### MARKET INFORMATION, HOLDERS AND DIVIDEND POLICY

Occidental's common stock is listed and traded on the New York Stock Exchange under the ticker symbol "OXY". The common stock was held by approximately 23,300 stockholders of record at January 31, 2019, which does not include beneficial owners for whom Cede and Co. or others act as nominees.

Occidental's current annual dividend rate of \$3.12 per share has increased by over 500 percent since 2002. The declaration of future dividends is a business decision made by the Board of Directors from time to time, and will depend on Occidental's financial condition and other factors deemed relevant by the Board.

#### SHARE REPURCHASE ACTIVITIES

Occidental's share repurchase activities for the year ended December 31, 2018, were as follows:

Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Maximum Number of Shares that May Yet Be Purchased Under the Plans or Programs
First Quarter 2018	—	\$—	—	
Second Quarter 2018	1,197,973 <sup>(a)</sup>	\$83.46	872,000	
Third Quarter 2018	11,324,665 <sup>(a)</sup>	\$78.93	11,236,540	
October 1 - 31, 2018	88,001 <sup>(a)</sup>	\$82.18	—	
November 1 - 30, 2018	1,424,000	\$73.12	1,424,000	
December 1 - 31, 2018	3,327,217	\$59.96	3,327,217	
Fourth Quarter 2018	4,839,218 <sup>(a)</sup>	\$64.23	4,751,217	
Total 2018	17,361,856 <sup>(a)</sup>	\$75.15	16,859,757	46,896,787 <sup>(b)</sup>

(a) Includes purchases from the trustee of Occidental's defined contribution savings plan that are not part of publicly announced plans or programs.

Represents the total number of shares remaining at year end under Occidental's share repurchase program of 185

(b) million shares. The program was initially announced in 2005. The program does not obligate Occidental to acquire any specific number of shares and may be discontinued at any time.

## PERFORMANCE GRAPH

The following graph compares the yearly percentage change in Occidental's cumulative total return on its common stock with the cumulative total return of the Standard & Poor's 500 Stock Index (S&P 500), which Occidental is included in, and with that of Occidental's peer group over the five-year period ended on December 31, 2018. The graph assumes that \$100 was invested at the beginning of the five-year period shown in the graph below in: (i) Occidental common stock, (ii) the stock of the companies in the S&P 500, and (iii) each of the peer group companies' common stock weighted by their relative market values within the peer group, and that all dividends were reinvested. Occidental's peer group consists of Anadarko Petroleum Corporation, Apache Corporation, Canadian Natural Resources Limited, Chevron Corporation, ConocoPhillips, Devon Energy Corporation, EOG Resources Inc., ExxonMobil Corporation, Hess Corporation, Marathon Oil Corporation, Total S.A. and Occidental.

	12/31/2013	12/31/2014	12/31/2015	12/31/2016	12/31/2017	12/31/2018
Occidental \$100	\$ 91	\$ 80	\$ 88	\$ 95	\$ 83	
Peer Group 100	94	77	96	99	87	
S&P 500 100	114	115	129	157	150	

The information provided in this Performance Graph shall not be deemed "soliciting material" or "filed" with the SEC or subject to Regulation 14A or 14C under the Exchange Act, other than as provided in Item 201 to Regulation S-K under the Exchange Act, or subject to the liabilities of Section 18 of the Exchange Act and shall not be deemed incorporated by reference into any filing under the Securities Act of 1933 or the Exchange Act except to the extent Occidental specifically requests that it be treated as soliciting material or specifically incorporates it by reference.

(1) The cumulative total return of the peer group companies' common stock includes the cumulative total return of Occidental's common stock.

## ITEM 6 SELECTED FINANCIAL DATA

## FIVE-YEAR SUMMARY OF SELECTED FINANCIAL DATA

(in millions, except per-share amounts)

As of and for the years ended December 31,	2018	2017	2016	2015	2014
<b>RESULTS OF OPERATIONS</b> <sup>(a)</sup>					
Net sales	\$17,824	\$12,508	\$10,090	\$12,480	\$19,312
Income (loss) from continuing operations	\$4,131	\$1,311	\$(1,002)	\$(8,146)	\$(130)
Net income (loss) attributable to common stock	\$4,131	\$1,311	\$(574)	\$(7,829)	\$616
Basic earnings (loss) per common share from continuing operations	\$5.40	\$1.71	\$(1.31)	\$(10.64)	\$(0.18)
Basic earnings (loss) per common share	\$5.40	\$1.71	\$(0.75)	\$(10.23)	\$0.79
Diluted earnings (loss) per common share	\$5.39	\$1.70	\$(0.75)	\$(10.23)	\$0.79
 <b>FINANCIAL POSITION</b> <sup>(a)</sup>					
Total assets	\$43,854	\$42,026	\$43,109	\$43,409	\$56,237
Long-term debt, net	\$10,201	\$9,328	\$9,819	\$6,855	\$6,816
Stockholders' equity	\$21,330	\$20,572	\$21,497	\$24,350	\$34,959
 <b>MARKET CAPITALIZATION</b> <sup>(b)</sup>	\$45,998	\$56,357	\$54,437	\$51,632	\$62,119
 <b>CASH FLOW FROM CONTINUING OPERATIONS</b>					
Operating:					
Cash flow from continuing operations	\$7,669	\$4,861	\$2,520	\$3,251	\$8,879
Investing:					
Capital expenditures	\$(4,975)	\$(3,599)	\$(2,717)	\$(5,272)	\$(8,930)
Cash provided (used) by all other investing activities, net	\$1,769	\$520	\$(2,026)	\$(148)	\$2,678
Financing:					
Cash dividends paid	\$(2,374)	\$(2,346)	\$(2,309)	\$(2,264)	\$(2,210)
Purchases of treasury stock	\$(1,248)	\$(25)	\$(22)	\$(593)	\$(2,500)
Cash provided by all other financing activities, net	\$520	\$28	\$1,529	\$1,515	\$6,403
 <b>DIVIDENDS PER COMMON SHARE</b>	\$3.10	\$3.06	\$3.02	\$2.97	\$2.88
 <b>WEIGHTED AVERAGE BASIC SHARES OUTSTANDING</b> (millions)	762	765	764	766	781

Note: The statements of income and cash flows related to California Resources have been treated as discontinued operations for all periods presented. The assets and liabilities of California Resources were removed from Occidental's consolidated balance sheet as of November 30, 2014.

(a) See the MD&A section of this report and the Notes to Consolidated Financial Statements for information regarding acquisitions and dispositions, discontinued operations and other items affecting comparability.

(b) Market capitalization is calculated by multiplying the year-end total shares of common stock outstanding, net of shares held as treasury stock, by the year-end closing stock price.

ITEM 7 MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS (MD&A)

In this report, "Occidental" means Occidental Petroleum Corporation (OPC), or OPC and one or more entities in which it owns a controlling interest (subsidiaries). Occidental's principal businesses consist of three segments. The oil and gas segment explores for, develops and produces oil, condensate, natural gas liquids (NGL) and natural gas. The chemical segment (OxyChem) mainly manufactures and markets basic chemicals and vinyls. The midstream and marketing segment purchases, markets, gathers, processes, transports and stores oil, condensate, NGL, natural gas, carbon dioxide (CO<sub>2</sub>) and power. It also trades around its assets, including transportation and storage capacity. Additionally, the midstream and marketing segment invests in entities that conduct similar activities. Occidental's oil and gas assets are located in some of the world's highest-margin basins and are characterized by an advantaged mix of short- and long-cycle, high-return development opportunities. In the United States, Occidental continues to hold a leading position in the Permian Basin. Other core operations are in the Middle East (Oman, UAE and Qatar) and Latin America (Colombia). Occidental's midstream and marketing business provides flow assurance and access to domestic and international markets. OxyChem is a world-class chemical business that generates high financial returns.

## STRATEGY

### General

Occidental is focused on delivering a unique shareholder value proposition through continual enhancements to its asset quality, organizational capability and innovative technical applications that provide competitive advantages. Occidental's integrated business provides conventional and unconventional opportunities through which to grow value. Occidental aims to maximize shareholder returns through a combination of:

- Ø Consistent dividend growth;
- Ø Allocating capital to high-return opportunities across the integrated business;
- Ø Production growth rates of 5 to 8+ percent average per year over the long-term; and
- Ø Maintenance of a strong balance sheet to secure business and enhance shareholder value.

Occidental conducts its operations with a focus on sustainability, health, safety and environmental and social responsibility. Capital is employed to operate all assets in a safe and environmentally sound manner. Occidental accepts commodity, engineering and limited exploration risks. Occidental seeks to limit its financial and political risks.

Price volatility is inherent in the oil and gas business and Occidental's strategy is to position the business to thrive in an up- or down-cycle commodity price environment. In 2018, Occidental continued to build upon its integrated portfolio of high-value investment options, focusing on value growth and high-quality assets that deliver industry-leading returns. During the year,

Occidental completed its short-term strategic plan to maintain production and sustain the dividend at a West Texas Intermediate (WTI) oil price of \$40 per barrel and grow production at 5 to 8+ percent at \$50 per barrel. Achieving these goals in the short-term strengthens Occidental's ability to provide a meaningful dividend with growth and maintain a strong balance sheet at low oil prices. Occidental's Board of Directors and management are committed to allocating free cash flow toward investments that generate the highest returns, along with returning cash to shareholders through dividends and share repurchases.

The following describes the application of Occidental's overall strategy for each of its operating segments:

### Oil and Gas

Occidental's oil and gas segment focuses on long-term value creation and leadership in sustainability, health, safety and the environment. In each core operating area, Occidental's operations benefit from scale, technical expertise, environmental and safety leadership, and commercial and governmental collaboration. These attributes allow Occidental to bring additional production quickly to market, extend the life of older fields at lower costs, and provide

low-cost returns driven growth opportunities with advanced technology.

As a result of Occidental's strategic positioning, Occidental's assets provide current production and a future portfolio of projects that are flexible and have short-cycle investment paybacks. Together with Occidental's technical capabilities, the oil and gas segment is able to achieve low development and operating costs to obtain full-cycle value while promoting innovative ideas that differentiate Occidental's approach and provide future opportunities.

The oil and gas business implements Occidental's strategy primarily by:

- Ø Operating and developing areas where reserves are known to exist and to increase production from core areas, primarily in the Permian Basin, Colombia, Oman, and UAE;
- Ø Maintaining a disciplined and prudent approach to capital expenditures with a focus on returns and an emphasis on creating value and further enhancing Occidental's existing positions;
- Ø Focusing Occidental's subsurface characterization and technical activities on unconventional opportunities, primarily in the Permian Basin;
- Ø Using enhanced oil recovery techniques, such as CO<sub>2</sub>, water and steam floods, in mature fields; and
- Ø Focusing on cost-reduction efficiencies, improvement in new well productivity and better base management to reduce full cycle costs.

In 2018, oil and gas capital expenditures were approximately \$4.4 billion, and were primarily focused on



Occidental's high-return assets in the Permian Basin, Oman and Colombia.

#### Chemical

The primary objective of OxyChem is to generate cash flow in excess of its normal capital expenditure requirements and achieve above-cost-of-capital returns. The chemical segment's strategy is to be a low-cost producer in order to maximize cash flow generation. OxyChem concentrates on the chlorovinyls chain beginning with the co-production of caustic soda and chlorine. Caustic soda and chlorine are marketed to external customers. In addition, chlorine, together with ethylene, is converted through a series of intermediate products into polyvinyl chloride (PVC). OxyChem's focus on chlorovinyls allows it to maximize the benefits of integration and take advantage of economies of scale. Capital is employed to sustain production capacity and to focus on projects and developments designed to improve the competitiveness of segment assets. Acquisitions and plant development opportunities may be pursued when they are expected to enhance the existing core chlor-alkali and PVC businesses or take advantage of other specific opportunities. In 2018, OxyChem, through a 50/50 joint venture with Mexichem S.A.B. de C.V., achieved a full year of commercial operations of its 1.2 billion pound-per-year ethylene cracker at the OxyChem Ingleside facility. The joint venture provides an opportunity to capitalize on the advantage that U.S. shale gas development has presented to U.S. chemical producers by providing low-cost ethane as a raw material. The joint venture provides OxyChem with an ongoing source of ethylene, significantly reducing OxyChem's reliance on third-party ethylene suppliers. OxyChem also achieved a full year of operations of its expansion at Geismar, Louisiana, following plant startup late in the fourth quarter of 2017. Using an OxyChem patented process, the new facility produces 4CPE, a new raw material used in making next-generation, climate-friendly refrigerants with a low global warming and ozone depletion potential. In 2018, capital expenditures for OxyChem totaled \$271 million.

#### Midstream and Marketing

The midstream and marketing segment strives to maximize realized value by optimizing the use of its committed pipeline and export capacities and by providing access to domestic and international markets. To generate returns, the segment evaluates opportunities across the value chain and uses its assets to provide services to Occidental subsidiaries, as well as third parties. The midstream and marketing segment operates gathering systems, gas plants, co-generation facilities and storage facilities and invests in entities that conduct similar activities. Also within the midstream and marketing segment is Oxy Low Carbon Ventures (OLCV). OLCV seeks to capitalize on Occidental's EOR leadership by developing carbon capture, utilization and storage projects that source anthropogenic carbon dioxide and promote innovative technologies that drive cost efficiencies and economically grow Occidental's business while reducing emissions.

This segment also seeks to minimize the costs of gas, power and other commodities used in Occidental's various businesses. Capital is employed to sustain or expand assets to improve the competitiveness of Occidental's businesses. In 2018, capital expenditures related to the midstream business totaled \$216 million primarily related to Permian Basin gas processing and the Ingleside Crude Terminal, prior to its sale.

In 2018, Occidental sold several assets, including the Centurion common carrier oil pipeline and storage system, Southeast New Mexico oil gathering system, and Ingleside Crude Terminal. Following the transactions, Occidental retained its long-term flow assurance, pipeline takeaway and export capacity through its retained marketing business.

#### Key Performance Indicators

Occidental seeks to meet its strategic goals by continually measuring its success in its key performance metrics that drive total stockholder return. In addition to production growth and capital allocation and deployment discussed above, Occidental believes the following are its most significant metrics:

- Ø Sustainability, health, environmental and safety performance measures;
- Ø Total shareholder return, including funding the dividend;
- Ø Return on capital employed (ROCE) and cash return on capital employed (CROCE); and
- Ø

Specific measures such as earnings per share, per-unit profit, production cost, cash flow, finding-and-development costs and reserves replacement percentages.

## OIL AND GAS SEGMENT

### Business Environment

Oil and gas prices are the major variables that drive the industry's financial performance. The following table presents the average daily West Texas Intermediate (WTI), Brent and New York Mercantile Exchange (NYMEX) prices for 2018 and 2017:

	2018	2017
WTI oil (\$/barrel)	\$64.77	\$50.95
Brent oil (\$/barrel)	\$71.53	\$54.82
NYMEX gas (\$/Mcf)	\$2.97	\$3.09

The following table presents Occidental's average realized prices as a percentage of WTI, Brent and NYMEX for 2018 and 2017:

	2018	2017
Worldwide oil as a percentage of average WTI	94 %	96 %
Worldwide oil as a percentage of average Brent	85 %	89 %
Worldwide NGL as a percentage of average WTI	41 %	42 %
Worldwide NGL as a percentage of average Brent	37 %	39 %
Domestic natural gas as a percentage of NYMEX	54 %	75 %

Average WTI and Brent oil price indexes increased 27 percent and 30 percent, from \$50.95 and \$54.82 in 2017 to \$64.77 and \$71.53 in 2018, respectively. Average worldwide realized oil prices rose \$11.71, or 24 percent, in 2018 compared to 2017. WTI and Brent oil price indexes decreased in the fourth quarter of 2018, closing at \$45.41 per barrel and \$53.80 per barrel, respectively, which is lower than 2017 year-end prices, which closed at \$60.42 per barrel and \$66.87 per barrel, respectively. The average realized domestic natural gas price in 2018 decreased 31 percent from 2017. Average NYMEX natural gas prices decreased 4 percent, from \$3.09 in 2017 to \$2.97 in 2018.

Prices and differentials can vary significantly, even on a short-term basis, making it difficult to predict realized prices with a reliable degree of certainty.

## Business Review

### Domestic Interests

Occidental conducts its domestic operations through land leases, subsurface mineral rights it owns, or a combination of both surface land and subsurface mineral rights it owns. Occidental's domestic oil and gas leases have a primary term ranging from one to ten years, which is extended through the end of production once it commences. Of the total 3.6 million net acres in which Occidental has interests, approximately 82 percent is leased, 17 percent is owned subsurface mineral rights and 1 percent is owned land with mineral rights.

The following charts show Occidental's domestic total production volumes for the last five years:

### Domestic Production Volumes

(thousands BOE/day)

Notes:

Excludes volumes from California Resources, which was separated on November 30, 2014, and included as discontinued operations for all applicable periods.

Operations sold include South Texas (sold in April 2017), Piceance (sold in March 2016), Williston (sold in November 2015) and Hugoton (sold in April 2014)

### United States Assets

1. Delaware Basin
2. Midland Basin
3. Central Basin Platform

### Permian Basin

The Permian Basin extends throughout West Texas and southeast New Mexico and is one of the largest and most active oil basins in the United States, accounting for more than 30 percent of the total United States oil production. Occidental manages its Permian Basin operations through two business units: Permian Resources, which includes growth-oriented unconventional opportunities, and Permian EOR, which utilizes enhanced oil recovery techniques such as CO<sub>2</sub> floods and waterfloods. Occidental has a leading position in the Permian Basin, producing approximately 10 percent of the total oil in the basin. By exploiting the natural synergies between Permian Resources and Permian EOR, Occidental is able to deliver unique short- and long-term advantages, efficiencies and expertise across its Permian Basin operations. Occidental expects to decrease its Permian Basin full-cycle breakeven costs, while continuing to expand its high-quality, low-cost breakeven inventory. Occidental expects the combined technical advancements, infrastructure utilization opportunities and operations across over 2.7 million net acres will provide sustainability of Occidental's low cost position in the Permian Basin.

In the next few years, growth within Occidental's Permian Basin portfolio will be focused in the Permian Resources unconventional assets. In 2018, Occidental spent approximately \$3.5 billion of capital in the Permian Basin, of which over 85 percent was spent on Permian Resources assets. In 2019, Occidental expects to allocate approximately 56 percent of its worldwide 2019 capital budget to Permian Resources for development and approximately 12 percent to

Permian EOR for the expansion of existing facilities to increase CO<sub>2</sub> production and injection capacity.

Permian Resources

Permian Resources' unconventional oil development projects provide very short-cycle investment payback,

averaging less than two years, providing some of the highest margin and returns of any oil and gas projects in the world. These investments provide better cash-flow and production growth, while increasing long-term value and sustainability through higher return on capital employed.

Occidental's Permian Resources inventory includes over 10,400 horizontal drilling locations in the Midland and Delaware sub-basins. As of December 31, 2018, approximately 1,000 of these drilling locations represented proved undeveloped reserves. In 2018, Permian Resources produced approximately 214,000 net BOE per day from approximately 5,280 net wells, of which 18 percent are operated by other companies.

#### Permian EOR

The Permian Basin's concentration of large conventional reservoirs, favorable CO<sub>2</sub> flooding performance and the proximity to naturally occurring CO<sub>2</sub> supply has resulted in decades of steady growth in enhanced oil production. With 34 active floods and over 40 years of experience, Occidental is the industry leader in Permian Basin CO<sub>2</sub> flooding, which can increase ultimate oil recovery by 10 to 25 percent. Technology improvements, such as the recent trend toward vertical expansion of the CO<sub>2</sub> flooded interval into residual oil zone targets, continue to yield more recovery from existing projects. Occidental utilizes workover rigs to drill extra depth into additional CO<sub>2</sub> floodable sections of the reservoir, and completed 118 well workovers in 2018 and has plans to complete 104 well workovers in 2019. In 2018, Permian EOR added 26 million BOE to Occidental's proved reserves for improved recovery additions, primarily as a result of executing CO<sub>2</sub> flood development projects and expansions. Occidental's share of production from Permian EOR was approximately 154,000 BOE per day in 2018.

Significant opportunities also remain to gain additional recovery by expanding Occidental's existing CO<sub>2</sub> projects into new portions of reservoirs that have only been water-flooded. Permian EOR has a large inventory of future CO<sub>2</sub> projects, which could be developed over the next 20 years or accelerated, depending on market conditions.

#### International Interests

##### Production-Sharing Contracts

Occidental's interests in Oman and Qatar are subject to production sharing contracts (PSC). Under such contracts, Occidental records a share of production and reserves to recover certain development and production costs and an additional share for profit. In addition, certain contracts in Colombia are subject to contractual arrangements similar to a PSC. These contracts do not transfer any right of ownership to Occidental and reserves reported from these arrangements are based on Occidental's economic interest as defined in the contracts. Occidental's share of production and reserves from these contracts decreases when product prices rise and increases when prices decline. Overall, Occidental's net economic benefit from these contracts is greater when product prices are higher.

The following charts show Occidental's international production volumes for the last five years:

#### International Production Volumes

(thousands BOE/day)

Notes:

Operations sold or exited include Bahrain, Iraq, Libya and Yemen.

#### Middle East Assets

1. Oman
2. United Arab Emirates
3. Qatar

#### Oman

In Oman, Occidental is the operator of Block 9 (Safah Field) with a 50-percent working interest, Block 27 with a 65-percent working interest, Block 53 with a 45-percent working interest and Block 62 with an 80-percent working interest. Occidental also has exploration contracts and memorandums of understanding for Blocks 30, 51, 65 and 72

which increased the acreage from 2.3 million to 6.0 million gross acres and the potential well inventory locations to approximately 10,000. In 2018, Occidental's share of production was 86,000 BOE per day.

Block 9 expires in 2030 and Block 27 expires in 2035. Occidental's share of production for Blocks 9 and 27 was 24,000 BOE per day and 8,000 BOE per day in 2018, respectively. Block 53 (Mukhaizna Field) expires in 2035 and is a major pattern steam flood project for enhanced oil recovery that utilizes some of the largest mechanical vapor compressors ever built. Since assuming operations in Mukhaizna, Occidental has drilled over 3,280 new wells and Occidental's share of production was 32,000 BOE per day in 2018. Block 62, which expires in 2028, is subject to declaration of commerciality. In addition a non-associated gas area (natural gas not in contact with crude oil in a reservoir) expires in 2019. Occidental's share of production for Block 62 was 22,000 BOE per day in 2018.

#### United Arab Emirates

In 2011, Occidental acquired a 40-percent participating interest in Al Hosn Gas, joining with the Abu Dhabi National Oil Company (ADNOC) in a 30-year joint venture agreement. In 2018, Occidental's share of production from Al Hosn Gas was 220 MMcf per day of natural gas and 36,000 barrels per day of NGL and condensate. Al Hosn Gas includes gas processing facilities which are discussed further in "Midstream and Marketing Segment - Gas Processing Plants and CO<sub>2</sub> Fields and Facilities".

In 2019, Occidental received a 35-year concession for onshore Block 3 which covers an area of approximately 1.5 million acres and is adjacent to Al Hosn Gas.

Occidental conducts a majority of its Middle East business development activities through its office in Abu Dhabi, which also provides various support functions for Occidental's Middle East oil and gas operations.

#### Qatar

In Qatar, Occidental partners in the Dolphin Energy project, an investment that is comprised of two separate economic interests. Occidental has a 24.5-percent interest in the upstream operations to develop and produce natural gas, NGL and condensate from Qatar's North Field through mid-2032. Occidental also has a 24.5-percent interest in Dolphin Energy Limited which operates a pipeline and is discussed further in "Midstream and Marketing Segment – Pipeline. Occidental's net share of production from the Dolphin upstream operations was 40,000 BOE per day in 2018. Occidental is also the operator of the offshore fields Idd El Shargi North Dome (ISND) and Idd El Shargi South Dome (ISSD), with a 100-percent working interest in each. The terms for ISND will expire in October 2019 and the ISSD terms expire in December 2022. Occidental's net share of production from ISND and ISSD was 50,000 barrels per day and 5,000 barrels per day in 2018, respectively.

#### Latin America Assets

1. Teca Heavy Oil Area
2. La Cira-Infantas Waterflood Area
3. Llanos Norte Basin
4. Putumayo Basin

#### Colombia

Occidental has working interests in the La Cira-Infantas and Teca areas and has operations within the Llanos Norte Basin. Occidental's interests range from 39 to 61 percent and certain interests expire between 2023 and 2038, while others extend through the economic limit of the areas.

In June 2018, Occidental and Ecopetrol agreed to enter into the second phase of development of the Teca heavy oil field, based on the positive results of the Teca steam flood pilot, which began in early 2016. Phase II drilling is expected to start in 2019.

Occidental also entered into agreements to develop Blocks 39 and 52 in the Llanos Norte Basin and farmed into an additional four blocks in the Putumayo Basin; these blocks increased Occidental's net acreage in Colombia to approximately 1 million acres.

Occidental's net share of production from Colombia was 31,000 BOE per day in 2018.

#### Proved Reserves

Proved oil, NGL and gas reserves were estimated using the unweighted arithmetic average of the first-day-of-the-month price for each month within the year, unless prices were defined by contractual arrangements. Oil, NGL and natural gas prices used for this purpose were based on posted benchmark prices and adjusted for price differentials including gravity, quality and transportation costs. For the 2018, 2017 and 2016 disclosures, the calculated average West Texas Intermediate oil prices were \$65.56, \$51.34 and \$42.75 per barrel, respectively. The calculated average Brent oil prices for 2018, 2017 and 2016 disclosures were \$72.20, \$54.93 and \$44.49, per barrel, respectively. The calculated average Henry Hub gas prices for 2018, 2017 and 2016 were \$3.10, \$3.08 and \$2.55 per MMBtu, respectively.

Occidental had proved reserves at year-end 2018 of 2,752 million BOE, compared to the year-end 2017 amount of 2,598 million BOE. Proved reserves at year-end 2018 and 2017 consisted of, respectively, 57 percent and 58



percent oil, 18 percent and 17 percent NGL and 25 percent and 25 percent natural gas. Proved developed reserves represented approximately 73 percent and 74 percent, respectively, of Occidental's total proved reserves at year-end 2018 and 2017.

Occidental does not have any reserves from non-traditional sources. For further information regarding Occidental's proved reserves, see "Supplemental Oil and Gas Information" following the "Financial Statements."

#### Changes in Proved Reserves

Occidental's total proved reserves increased 154 million BOE in 2018, which included additions of 301 million BOE from Occidental's development program.

Changes in reserves were as follows:

(in millions of BOE)	2018
Revisions of previous estimates	56
Improved recovery	294
Extensions and discoveries	7
Purchases	54
Sales	(17 )
Production	(240 )
Total	154

Occidental's ability to add reserves, other than through purchases, depends on the success of improved recovery, extension and discovery projects, each of which depends on reservoir characteristics, technology improvements and oil and natural gas prices, as well as capital and operating costs. Many of these factors are outside management's control, and may negatively or positively affect Occidental's reserves.

#### Revisions of Previous Estimates

Revisions can include upward or downward changes to previous proved reserve estimates for existing fields due to the evaluation or interpretation of geologic, production decline or operating performance data. In addition, product price changes affect proved reserves recorded by Occidental. For example, lower prices may decrease the economically recoverable reserves, particularly for domestic properties, because the reduced margin limits the expected life of the operations. Offsetting this effect, lower prices increase Occidental's share of proved reserves under PSCs because more oil is required to recover costs. Conversely, when prices rise, Occidental's share of proved reserves decreases for PSCs and economically recoverable reserves may increase for other operations. In 2018, Occidental had positive revisions of 56 million BOE, mainly in the Permian Basin and Al Hosn Gas.

Reserve estimation rules require that estimated ultimate recoveries be much more likely to increase or remain constant than to decrease, as changes are made due to increased availability of technical data.

#### Improved Recovery

In 2018, Occidental added proved reserves of 294 million BOE mainly associated with the Permian Basin. These properties comprise both conventional projects, which are characterized by the deployment of EOR

development methods, largely employing application of CO<sub>2</sub> flood, waterflood or steam flood, and unconventional projects. These types of conventional EOR development methods can be applied through existing wells, though additional drilling is frequently required to fully optimize the development configuration. Waterflooding is the technique of injecting water into the formation to displace the oil to the offsetting oil production wells. The use of either CO<sub>2</sub> or steam flooding depends on the geology of the formation, the evaluation of engineering data, availability and cost of either CO<sub>2</sub> or steam and other economic factors. Both techniques work similarly to lower viscosity causing the oil to move more easily to the producing wells. Many of Occidental's projects, including unconventional projects, rely on improving permeability to increase flow in the wells. In addition, some improved recovery comes from drilling infill wells that allow recovery of reserves that would not be recoverable from existing wells.

#### Extensions and Discoveries

Occidental also added proved reserves from extensions and discoveries, which are dependent on successful exploration and exploitation programs. In 2018, extensions and discoveries added 7 million BOE related primarily to the recognition of proved developed reserves in Colombia and Oman.

#### Purchases of Proved Reserves

Occidental continues to seek opportunities to add reserves through acquisitions when properties are available at prices it deems reasonable. As market conditions change, the available supply of properties may increase or decrease accordingly.

In 2018, Occidental purchased 54 million BOE of proved reserves in the Permian Basin, which mainly came from acquisitions made in the third quarter of 2018.

#### Sales of Proved Reserves

In 2018, Occidental sold 17 million BOE in proved reserves mainly related to non-core Permian acreage.

#### Proved Undeveloped Reserves

Occidental had proved undeveloped reserves at year-end 2018 of 750 million BOE, compared to the year-end 2017 amount of 670 million BOE.

Changes in proved undeveloped reserves were as follows:

(in millions of BOE)	2018
Revisions of previous estimates	8
Improved recovery	158
Extensions and discoveries	3
Purchases	48
Sales	(16 )
Transfer to proved developed reserves	(121 )
Total	80

Occidental incurred approximately \$1.1 billion in 2018 to convert proved undeveloped reserves to proved developed reserves. Permian Basin added approximately

146 million BOE through improved recovery, purchases and revisions.

The 2018 additions to proved undeveloped reserves were partially offset by 121 million BOE of transfers to proved developed reserves, mainly from the Permian Basin, and sales of proved undeveloped reserves related to non-core Permian acreage.

Occidental's highest-return projects and most active development areas are located in the Permian Basin, which represented 68 percent of the proved undeveloped reserves as of December 31, 2018. The majority of Occidental's 2019 capital program of \$4.5 billion is allocated to the development program in the Permian Basin. Overall, Occidental plans to spend approximately \$9.5 billion over the next five years to develop its proved undeveloped reserves in the Permian Basin.

Occidental's proved undeveloped reserves in international locations are associated with approved long-term international development projects.

#### Reserves Evaluation and Review Process

Occidental's estimates of proved reserves and associated future net cash flows as of December 31, 2018, were made by Occidental's technical personnel and are the responsibility of management. The estimation of proved reserves is based on the requirement of reasonable certainty of economic producibility and funding commitments by Occidental to develop the reserves. This process involves reservoir engineers, geoscientists, planning engineers and financial analysts. As part of the proved reserves estimation process, all reserve volumes are estimated by a forecast of production rates, operating costs and capital expenditures. Price differentials between benchmark prices (the unweighted arithmetic average of the first-day-of-the-month price for each month within the year) and realized prices and specifics of each operating agreement are then used to estimate the net reserves. Production rate forecasts are derived by a number of methods, including estimates from decline curve analysis, type curve analysis, material balance calculations that take into account the volumes of substances replacing the volumes produced, and associated reservoir pressure changes, seismic analysis and computer simulation of the reservoir performance. These reliable field-tested technologies have demonstrated reasonably certain results with consistency and repeatability in the formation being evaluated or in an analogous formation. Operating and capital costs are forecast using the current cost environment applied to expectations of future operating and development activities.

Net proved developed reserves are those volumes that are expected to be recovered through existing wells with existing equipment and operating methods for which the incremental cost of any additional required investment is relatively minor.

Net proved undeveloped reserves are those volumes 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. Proved undeveloped reserves are supported by a five-year, detailed, field-level development plan, which includes the timing, location and capital commitment of the wells to be

drilled. The development plan is reviewed and approved annually by senior management and technical personnel. Annually a detailed review is performed by Occidental's Worldwide Reserves Group and its technical personnel on a lease-by-lease basis to assess whether proved undeveloped reserves are being converted on a timely basis within five years from the initial disclosure date. Any leases not showing timely transfers from proved undeveloped reserves to proved developed reserves are reviewed by senior management to determine if the remaining reserves will be developed in a timely manner and have sufficient capital committed in the development plan. Only proved undeveloped reserves that are reasonably certain to be drilled within five years of booking and are supported by a final investment decision to drill them are included in the development plan. A portion of the proved developed reserves associated with international operations are expected to be developed beyond the five years and are tied to approved long-term development plans.

The current Senior Vice President, Reserves for Oxy Oil and Gas is responsible for overseeing the preparation of reserve estimates, in compliance with U.S. Securities and Exchange Commission (SEC) rules and regulations, including the internal audit and review of Occidental's oil and gas reserves data. He has over 35 years of experience in the upstream sector of the exploration and production business, and has held various assignments in North America,

Asia and Europe. He is a three-time past Chair of the Society of Petroleum Engineers Oil and Gas Reserves Committee. He is an American Association of Petroleum Geologists (AAPG) Certified Petroleum Geologist and currently serves on the AAPG Committee on Resource Evaluation. He is a member of the Society of Petroleum Evaluation Engineers, the Colorado School of Mines Potential Gas Committee and the UNECE Expert Group on Resource Classification. He has Bachelor of Science and Master of Science degrees in geology from Emory University in Atlanta.

Occidental has a Corporate Reserves Review Committee (Reserves Committee), consisting of senior corporate officers, to review and approve Occidental's oil and gas reserves. The Reserves Committee reports to the Audit Committee of Occidental's Board of Directors during the year. Since 2003, Occidental has retained Ryder Scott Company, L.P. (Ryder Scott), independent petroleum engineering consultants, to review its annual oil and gas reserve estimation processes.

In 2018, Ryder Scott conducted a process review of the methods and analytical procedures utilized by Occidental's engineering and geological staff for estimating the proved reserves volumes, preparing the economic evaluations and determining the reserves classifications as of December 31, 2018, in accordance with the SEC regulatory standards. Ryder Scott reviewed the specific application of such methods and procedures for selected oil and gas properties considered to be a valid representation of Occidental's 2018 year-end total proved reserves portfolio. In 2018, Ryder Scott reviewed approximately 20 percent of Occidental's proved oil and gas reserves. Since being engaged in 2003, Ryder Scott has reviewed the specific application of Occidental's

reserve estimation methods and procedures for approximately 80 percent of Occidental's existing proved oil and gas reserves. Management retains Ryder Scott to provide objective third-party input on its methods and procedures and to gather industry information applicable to Occidental's reserve estimation and reporting process. Ryder Scott has not been engaged to render an opinion as to the reasonableness of reserves quantities reported by Occidental. Occidental has filed Ryder Scott's independent report as an exhibit to this Form 10-K.

Based on its reviews, including the data, technical processes and interpretations presented by Occidental, Ryder Scott has concluded that the overall procedures and methodologies Occidental utilized in estimating the proved reserves volumes, documenting the changes in reserves from prior estimates, preparing the economic evaluations and determining the reserves classifications for the reviewed properties are appropriate for the purpose thereof and comply with current SEC regulations.

### Industry Outlook

The petroleum industry is highly competitive and subject to significant volatility due to various market conditions. WTI and Brent oil price indexes increased throughout a majority of 2018 relative to 2017 but decreased significantly in the fourth quarter of 2018 closing at \$45.41 per barrel and \$53.80 per barrel, respectively, as of December 31, 2018. Oil prices will continue to be affected by: (i) global supply and demand, which are generally a function of global economic conditions, inventory levels, production disruptions, technological advances, regional market conditions and the actions of OPEC, other significant producers and governments; (ii) transportation capacity, infrastructure constraints, and costs in producing areas; (iii) currency exchange rates; and (iv) the effect of changes in these variables on market perceptions.

NGL prices are related to the supply and demand for the components of products making up these liquids. Some of them more typically correlate to the price of oil while others are affected by natural gas prices as well as the demand for certain chemical products for which they are used as feedstock. In addition, infrastructure constraints magnify the pricing volatility from region to region.

Domestic natural gas prices and local differentials are strongly affected by local supply and demand fundamentals, as well as government regulations and availability of transportation capacity from producing areas.

These and other factors make it difficult to predict the future direction of oil, NGL and domestic gas prices reliably. For purposes of the current capital plan, Occidental will continue to focus on allocating capital to its highest-return assets with the flexibility to adjust based on fluctuations in commodity prices. International gas prices are generally fixed under long-term contracts. Occidental continues to adjust capital expenditures in line with current economic conditions with the goal of keeping returns well above its cost of capital.

## CHEMICAL SEGMENT

### Business Environment

In 2018, United States economic growth surpassed that of 2017 and was supported by flat to marginally lower natural gas pricing and lower ethylene costs as compared to the prior year. Although the average cost of natural gas in 2018 was essentially flat with 2017, prices did escalate in December 2018. Ethylene prices trended downward in the first half of 2018 before increasing in the second half with the total year average coming below that of 2017. The impact of lower to flat energy and feedstock costs, along with continued strong demand for caustic and PVC, resulted in higher margins for both products in 2018.

### Business Review

#### Basic Chemicals

In 2018, the United States economic growth rate, estimated to be 2.9 percent, exceeded the 2.2 percent experienced in 2017. The higher U.S. growth rate supported domestic demand, as the 2018 industry chlorine operating rate increased slightly to 89 percent, resulting in an improvement in chlorine pricing in the second quarter of 2018 which was sustained throughout the second half of 2018. Exports of downstream chlorine derivatives into the vinyls chain improved in 2018 as United States ethylene and energy costs remained advantaged over global pricing. Liquid caustic soda prices improved both domestically and globally in 2018 as stable demand and tighter supply supported the higher

pricing.

#### Vinyls

Demand for PVC in 2018 improved year-over-year in total as domestic demand remained flat with 2017 while export demand increased by 10 percent. Domestic demand was supported by construction as housing starts continued to moderately improve year-over-year. Export demand growth was driven by emerging economy growth and competitive North American feedstock costs. Export volume remains a significant portion of PVC sales representing over 30 percent of total North American producer's production. PVC industry operating rates increased over 2 percent compared to 2017. Industry PVC margins improved in 2018 due to lower ethylene prices.

#### Industry Outlook

Industry performance will depend on the health of the global economy, specifically in the housing, construction, automotive and durable goods markets. Margins also depend on market supply and demand balances and feedstock and energy prices. Strengthening in the petroleum industry may positively affect the demand and pricing of a number of Occidental's products that are consumed by industry participants. U.S. commodity export markets will continue to be impacted by the relative strength of the U.S. dollar.

#### Basic Chemicals

Continued improvement in the United States housing, automotive and durable goods markets should drive a moderate increase in domestic demand for basic chemical products in 2019. Export demand for caustic is also

expected to remain firm, if not improved, in 2019. Chlor-alkali operating rates should improve moderately with higher demand and continued competitive energy and raw material pricing as compared to global feedstock costs. Businesses such as calcium chloride and muriatic acid should improve as oil and gas drilling activity increases in the U.S.

#### Vinyls

North American demand should show moderate improvement in 2019 over 2018 levels as growth in construction spending continues with further upside potential driven by new infrastructure projects. North American operating rates are expected to remain relatively flat with 2018 and margins should maintain current levels based on strong overall demand and favorable ethylene costs.

### MIDSTREAM AND MARKETING SEGMENT

#### Business Environment

Midstream and marketing segment earnings are affected by the performance of its various businesses, including its marketing, gathering and transportation, gas processing and power-generation assets. The marketing business aggregates, markets and stores Occidental's and third-party volumes. Marketing performance is affected primarily by commodity price changes and margins in oil and gas transportation and storage programs. Gas processing and transportation results are affected by the volumes that are processed and transported through the segment's plants and pipelines, as well as the margins obtained on related services.

In September 2018, Occidental divested non-core midstream assets for total consideration of \$2.6 billion, of which approximately \$2.4 billion was received at closing, resulting in a pre-tax net gain of \$907 million. These assets included the Centurion common carrier oil pipeline and storage system, Southeast New Mexico oil gathering system and Ingleside Crude Terminal. Excluding the gain, the midstream and marketing earnings in 2018 were significantly higher than those in 2017 due to the improvement in the Midland-to-Gulf-Coast spreads, as well as higher gas plant income due to higher domestic NGL prices and higher sulfur prices at Al Hosn Gas.

#### Business Review

##### Marketing

The marketing group markets substantially all of Occidental's oil, NGL and gas production, as well as trades around its assets, including contracted transportation and storage capacity. Occidental's third-party marketing activities focus on purchasing oil, NGL and gas for resale from parties whose oil and gas supply is located near its transportation and storage assets. These purchases allow Occidental to aggregate volumes to better utilize and optimize its assets. Marketing performance in 2018 improved compared to 2017 as a result of higher marketing margins from improved crude oil price spreads.

##### Pipeline

In 2018, Occidental sold several assets, including the Centurion common carrier oil pipeline and storage system, Southeast New Mexico oil gathering system, and Ingleside Crude Terminal. Following the transactions, Occidental retained its long-term flow assurance, pipeline takeaway and export capacity through its retained marketing business. Subsequent to the sale of the Centurion common carrier oil pipeline and storage system, Occidental's pipeline business mainly consists of an 11 percent interest in the general partner which owns approximately 40 percent of Plains All American Pipeline, LP, and Dolphin Energy. Dolphin Energy owns and operates a 230-mile-long, 48-inch-diameter natural gas pipeline (Dolphin Pipeline), which transports dry natural gas from Qatar to the UAE and Oman. The Dolphin Pipeline contributes significantly to Occidental's pipeline transportation results through Occidental's 24.5-percent interest in Dolphin Energy. The Dolphin Pipeline has capacity to transport up to 3.2 Bcf of natural gas per day and currently transports approximately 2.2 Bcf per day, and up to 2.5 Bcf per day in the summer.

##### Gas Processing Plants and CO<sub>2</sub> Fields and Facilities

Occidental processes its and third-party domestic wet gas to extract NGL and other gas byproducts, including CO<sub>2</sub>, and delivers dry gas to pipelines. Margins primarily result from the difference between inlet costs of wet gas and market prices for NGL.

Occidental also has a 40-percent participating interest in Al Hosn Gas which is designed to process 1.3 Bcf per day of natural gas and separate it into sales gas, condensate, NGL and sulfur. In 2018, the facilities produced approximately 11,500 metric tons per day of sulfur, of which approximately 4,600 metric tons was Occidental's share. Al Hosn Gas facilities generate revenues from gas processing fees and the sale of sulfur. The increase in 2018 earnings compared to 2017 was primarily due to higher domestic NGL prices and volumes and higher sulfur prices in connection with Al Hosn Gas sulfur sales.

#### Power Generation Facilities

Earnings from power and steam generation facilities are derived from sales to affiliates and third parties.

#### Low Carbon Ventures

Also within the midstream and marketing segment is OLCV. OLCV seeks to capitalize on Occidental's EOR leadership by developing carbon capture, utilization and storage projects that source anthropogenic carbon dioxide and promote innovative technologies that drive cost efficiencies and economically grow Occidental's business while reducing emissions.

#### Industry Outlook

Marketing results can experience significant volatility depending on commodity price changes and the Midland-to-Gulf-Coast spreads. Permian takeaway capacity is expected to increase as a result of several new third-party pipelines which are expected to be completed in 2019 and in subsequent years, which will reduce the Midland-to-Gulf-



Coast spreads. The power generation business is expected to remain relatively stable. Gas processing plant operations depend primarily on NGL prices. Generally, higher NGL prices result in higher profitability.

#### SEGMENT RESULTS OF OPERATIONS AND SIGNIFICANT ITEMS AFFECTING EARNINGS

Segment earnings exclude income taxes, interest income, interest expense, environmental remediation expenses, unallocated corporate expenses and discontinued operations, but include gains and losses from dispositions of segment assets and income from the segments' equity investments. Seasonality is not a primary driver of changes in Occidental's consolidated quarterly earnings during the year.

The following table sets forth the sales and earnings of each operating segment and corporate items:

(in millions, except per share amounts)

For the years ended December 31,	2018	2017	2016
NET SALES <sup>(a)</sup>			
Oil and Gas	\$10,441	\$7,870	\$6,377
Chemical	4,657	4,355	3,756
Midstream and Marketing	3,656	1,157	684
Eliminations	(930 )	(874 )	(727 )
	\$17,824	\$12,508	\$10,090

#### SEGMENT RESULTS AND EARNINGS

Domestic	\$621	\$(589 )	\$(1,552 )
International	1,896	1,767	965
Exploration	(75 )	(67 )	(49 )
Oil and Gas	2,442	1,111	(636 )
Chemical	1,159	822	571
Midstream and Marketing	2,802	85	(381 )
	6,403	2,018	(446 )
Unallocated corporate items			
Interest expense, net	(356 )	(324 )	(275 )
Income taxes	(1,477 )	(17 )	662
Other	(439 )	(366 )	(943 )
Income (loss) from continuing operations	4,131	1,311	(1,002 )
Discontinued operations, net	—	—	428
Net income (loss)	\$4,131	\$1,311	\$(574 )
Basic Earnings (loss) per Common Share	\$5.40	\$1.71	\$(0.75 )

<sup>(a)</sup> Intersegment sales eliminate upon consolidation and are generally made at prices approximating those that the selling entity would be able to obtain in third-party transactions.

#### Oil and Gas

(in millions)

For the years ended December 31,	2018	2017	2016
Segment Sales	\$10,441	\$7,870	\$6,377
Segment Results <sup>(a)</sup>			
Domestic	\$621	\$(589 )	\$(1,552 )
International	1,896	1,767	965
Exploration	(75 )	(67 )	(49 )
	\$2,442	\$1,111	\$(636 )

#### Significant items affecting results

Asset sale gains <sup>(b)</sup>	\$—	\$655	\$107
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Asset impairments and related items domestic <sup>(c)</sup>	\$—	\$(397 )	\$(1 )
Asset impairments and related items international <sup>(d)</sup>	\$(416 )	\$(4 )	\$(70 )
Total Significant Items	\$(416 )	\$254	\$36

(a) Results include significant items listed below.

(b) The 2017 gain on sale of assets included the sale of South Texas and non-core acreage in the Permian Basin. The 2016 gain on sale of assets included the sale of Piceance and South Texas oil and gas properties.

(c) The 2017 amount included \$397 million of impairment and related charges associated with non-core proved and unproved Permian acreage.

(d) The 2018 amount included \$416 million of impairment and related charges associated with Qatar ISND and ISSD.

The 2016 amount included a net charge of \$61 million related to the sale of Libya and exit from Iraq.

(in millions)

For the years ended December 31, 2018 2017 2016

Average Realized Prices

Oil Prices (\$ per bbl)

United States	\$56.30	\$47.91	\$39.38
Latin America	\$64.32	\$48.50	\$37.48
Middle East	\$67.69	\$50.38	\$38.25
Total worldwide	\$60.64	\$48.93	\$38.73

NGL Prices (\$ per bbl)

United States	\$27.64	\$23.67	\$14.72
Middle East	\$23.20	\$18.05	\$15.01
Total worldwide	\$26.25	\$21.63	\$14.82

Gas Prices (\$ per Mcf)

United States	\$1.59	\$2.31	\$1.90
Latin America	\$6.43	\$5.08	\$3.78
Total worldwide	\$1.62	\$1.84	\$1.53

Domestic oil and gas results were earnings of \$621 million in 2018 and losses of \$589 million and \$1.6 billion in 2017 and 2016, respectively. Excluding significant items affecting results, domestic oil and gas results in 2018 increased from 2017, due to an 18 percent increase in average domestic realized oil prices, 22 percent higher volumes and lower DD&A rates.

Excluding significant items affecting results, domestic oil and gas results in 2017 increased from 2016, due to a 22 percent increase in average domestic realized oil prices, and lower DD&A rates.

International oil and gas earnings were \$1.9 billion, \$1.8 billion and \$965 million in 2018, 2017 and 2016, respectively. Excluding significant items affecting results, the improved international oil and gas earnings in 2018, compared to 2017, reflected a 34 and 33 percent increase in realized crude oil prices in the Middle East and Colombia, respectively. The improved 2017 earnings, excluding significant items, reflected a 32 and 20 percent increase in realized crude oil and NGL prices in the Middle East, respectively.

Average production costs for 2018, excluding taxes other than on income, were \$11.98 per BOE, compared to \$11.73 per BOE for 2017. The increase in average production costs per BOE reflected increased surface operations and maintenance costs. Permian Resources production costs per BOE for 2018 decreased by 10 percent from the prior year, and the fourth quarter of 2018 costs were below \$7.00 per BOE, due to continued improved operational efficiencies.

Average production costs for 2017, excluding taxes other than on income, were \$11.73 per BOE, compared to \$10.76 per BOE for 2016. The increase in average production costs per BOE reflected the sales of low margin non-core gas assets, which had low operating costs, including South Texas and Piceance Basin.

The following table sets forth the production volumes of oil, NGL and natural gas per day from ongoing operations for each of the three years in the period ended December 31, 2018.

Production per Day from Ongoing Operations (MBOE)	2018	2017	2016
United States			
Permian Resources	214	141	124
Permian EOR	154	150	145
Other Domestic	4	5	4
Total	372	296	273
Latin America	32	32	34
Middle East			
Al Hosn Gas	73	71	64
Dolphin	40	42	43
Oman	86	95	96
Qatar	55	58	65
Total	254	266	268
Total Production Ongoing Operations	658	594	575
Sold domestic operations	—	8	29
Sold or Exited MENA operations	—	—	26
Total Production (MBOE) <sup>(a)</sup>	658	602	630

Natural gas volumes have been converted to BOE based on energy content of six Mcf of gas to one barrel of oil.

(a) Barrels of oil equivalence does not necessarily result in price equivalence. Please refer to "Supplemental Oil and Gas Information (unaudited)" for additional information on oil and gas production and sales.

Average daily production volumes were 658,000 BOE and 602,000 BOE for 2018 and 2017, respectively, and included production from assets sold or exited of 8,000 BOE for 2017. The increase in production for ongoing operations mainly reflected higher Permian Resources production which increased by 52 percent from the prior year, due to developmental drilling activity and improved well performance.

Average daily production volumes were 602,000 BOE and 630,000 BOE for 2017 and 2016, respectively, and included production from assets sold or exited of 8,000 BOE and 55,000 BOE for 2017 and 2016, respectively. Excluding production for assets sold or exited, average daily production volumes were 594,000 BOE and 575,000 BOE for 2017 and 2016, respectively. The increase in production mainly reflected higher Permian Resources production which increased by 14 percent from 2016 to 2017.

## Chemical

(in millions)

For the years ended December 31,	2018	2017	2016
Segment Sales	\$4,657	\$4,355	\$3,756
Segment Results <sup>(a)</sup>	\$1,159	\$822	\$571

## Significant items affecting results

Asset sale gains <sup>(b)</sup>	\$—	\$5	\$88
Total Significant Items	\$—	\$5	\$88

(a) Results include significant items listed below.

(b) The 2016 amount included the \$57 million gain on sale of the Occidental Tower in Dallas and a \$31 million gain on the sale of a non-core specialty chemicals business.

Chemical segment earnings were \$1.2 billion, \$822 million and \$571 million for 2018, 2017 and 2016, respectively. Excluding significant items affecting results, the year-over-year increase in 2018 earnings was due to significant improvements in realized caustic soda pricing, strong margins and demand across many product lines and lower ethylene costs, slightly offset by decreased caustic soda export volumes. The 2018 earnings also benefited from the full-year equity contributions from the joint venture ethylene cracker in Ingleside, Texas and additional earning contributions from the Geismar, Louisiana, plant expansion to produce 4CPe.

Excluding significant items affecting results, the year-over-year increase in 2017 earnings compared to 2016, was the result of higher realized pricing for caustic soda, improved vinyl margins, higher sales volumes across most product lines, and the addition of equity income from the joint venture ethylene cracker in Ingleside, Texas.

## Midstream and Marketing

(in millions)

For the years ended December 31,	2018	2017	2016
Segment Sales	\$3,656	\$1,157	\$684
Segment Results <sup>(a)</sup>	\$2,802	\$85	\$(381)

## Significant items affecting results

Asset and equity investment gains <sup>(b)</sup>	\$907	\$94	\$—
Asset impairments and related items <sup>(c)</sup>	—	(120 )	(160 )
Total Significant Items	\$907	\$(26 )	\$(160)

(a) Results include significant items listed below.

(b) The 2018 amount included a \$907 million gain on sale of non-core domestic midstream assets. The 2017 amount included a \$94 million non-cash fair value gain on the Plains equity investment.

(c) The 2017 amount included \$120 million of impairment and related charges related to idled midstream facilities.

(c) The 2016 amount included charges related to the termination of crude oil supply contracts.

Midstream and marketing segment results were earnings of \$2.8 billion and \$85 million and a loss of \$381 million in 2018, 2017 and 2016, respectively. Excluding significant items affecting results, approximately 85 percent of the increase in 2018 results compared to 2017 reflected higher marketing margins due to improved Midland-to-Gulf-Coast spreads. Approximately 10 percent of the increase reflected higher gas plant income due to higher domestic NGL prices and higher sulfur prices in connection with Al Hosn Gas sulfur sales.

Excluding significant items affecting results, the increase in 2017 results compared to 2016 reflected higher marketing margins due to improved spreads, higher plant income due to higher NGL prices and higher income from a full year of operating the Ingleside Crude Terminal.

## Corporate

There were no significant corporate transactions and events affecting 2018 and 2017 results. Significant corporate transactions and events affecting 2016 earnings included charges of \$541 million related to a reserve for doubtful accounts, \$78 million loss on the distribution of the remaining CRC stock and gains related to the Ecuador settlement. See Note 2 of the consolidated financial statements.

## TAXES

Tax Cuts and Jobs Act (Tax Reform) was enacted in December 2017 and made significant changes to the U.S. federal income tax law. In accordance with guidance from the SEC, Occidental recorded provisional estimates with regards to federal and state taxes associated with the mandatory deemed repatriation and resulting impact on the net federal deferred tax liability. With regards to the Global Intangible Low-Tax Income (GILTI) and Base Erosion Anti-Abuse Tax (BEAT) provisions of the new law, Occidental recorded no tax liability on a provisional basis. During 2018, further analysis was completed and additional regulatory guidance was published which led Occidental to revise its initial provisional estimates resulting in a \$25 million tax benefit being recorded in 2018. Specifically, the regulatory

guidance related to the allocation of expenses between the net operating losses generated in 2017 and the mandatory deemed repatriation of accumulated earnings from certain U.S.-owned international corporations that was included in 2017 taxable income. Tax Reform also included new limitations on the ability of corporations to deduct interest expense. While these limitations did not adversely impact Occidental in 2018, under proposed regulations the limitations could significantly impact Occidental's ability to deduct interest expense in future years.

Deferred tax liabilities, net of deferred tax assets of \$1.3 billion, were \$907 million at December 31, 2018. The deferred tax assets, net of allowances, are expected to be realized through future operating income and reversal of temporary differences.

## Worldwide Effective Tax Rate

The following table sets forth the calculation of the worldwide effective tax rate for income from continuing operations:

(in millions)	2018	2017	2016
<b>SEGMENT RESULTS</b>			
Oil and Gas	\$2,442	\$1,111	\$(636 )
Chemical	1,159	822	571
Midstream and Marketing	2,802	85	(381 )
Unallocated Corporate Items	(795 )	(690 )	(1,218 )
Pre-tax (loss) income	5,608	1,328	(1,664 )
Income tax (benefit) expense			
Federal and State	463	(903 )	(1,298 )
Foreign	1,014	920	636
Total income tax (benefit) expense	1,477	17	(662 )
Income (loss) from continuing operations	\$4,131	\$1,311	\$(1,002)
Worldwide effective tax rate	26	% 1	% 40

In 2018, Occidental's worldwide effective tax rate was 26 percent, which is higher than the 2017 rate mainly due to the 2017 remeasurement of net deferred tax liabilities to the new federal corporate income tax rate. Excluding the impact of impairments, asset sales and other nonrecurring items, Occidental's worldwide effective tax rate for 2018 would be 25 percent.

The decrease in worldwide effective tax rate from 2016 to 2017 was due primarily to the remeasurement of net deferred tax liabilities to the new federal corporate income tax rate in 2017.

## CONSOLIDATED RESULTS OF OPERATIONS

Changes in components of Occidental's results of continuing operations are discussed below:

## Revenue and Other Income Items

(in millions)	2018	2017	2016
Net sales	\$17,824	\$12,508	\$10,090
Interest, dividends and other income	\$136	\$99	\$106
Gain on sale of equity investments and other assets	\$974	\$667	\$202

Price and volume changes generally represent the majority of the change in the oil and gas and chemical segments sales. Midstream and marketing sales are mainly impacted by the change in the Midland-to-Gulf-Coast spread for the marketing business and, to a lesser extent, the change in NGL and sulfur prices for the gas processing business.

The increase in net sales in 2018, compared to 2017, was mainly due to higher crude oil prices and higher domestic crude oil volumes, as well as higher marketing margins in the midstream and marketing segment due to improved Midland-to-Gulf-Coast spreads and higher realized caustic soda prices in the chemical segment. Average worldwide realized oil prices rose approximately 24 percent from 2017 to 2018.

The increase in net sales in 2017, compared to 2016, was mainly due to the increase in average worldwide realized oil and NGL prices, as well as higher realized prices for caustic soda in the chemical business. Average worldwide realized oil prices rose approximately 26 percent from 2016 to 2017.

The 2018 gain on sale included the sale of non-core domestic midstream assets including the Centurion common carrier pipeline and storage system, Southeast New Mexico oil gathering system, and Ingleside Crude Terminal of \$907 million.

The 2017 gain on sale included the sale of South Texas and non-core proved and unproved Permian acreage. The 2016 gain on sale included the sales of Piceance and South Texas oil and gas properties, the Occidental Tower building in Dallas, and a non-core specialty chemicals business.

#### Expense Items

(in millions)	2018	2017	2016
Cost of sales	\$6,568	\$5,594	\$5,189
Selling, general and administrative and other operating expenses	\$1,613	\$1,424	\$1,330
Taxes other than on income	\$439	\$311	\$277
Depreciation, depletion and amortization	\$3,977	\$4,002	\$4,268
Asset impairments and related items	\$561	\$545	\$825
Exploration expense	\$110	\$82	\$62
Interest and debt expense, net	\$389	\$345	\$292

Cost of sales increased in 2018 from the prior year primarily due to higher oil and gas production costs for surface operations and maintenance due to increased activity in the Permian Basin and third-party crude purchases used to fill committed transportation capacity in the marketing business. Cost of sales increased in 2017 from 2016 primarily due to increases in chemical feedstock and energy costs and higher oil and gas purchase injectants.

Selling, general and administrative and other operating expenses increased in 2018 compared to 2017, due to higher environmental remediation costs and higher compensation costs. Selling, general and administrative and other operating expenses increased in 2017 compared to 2016, due to the change in timing of incentive compensation awards.

Taxes other than on income increased in 2018 from 2017 due primarily to higher production taxes, which are directly tied to higher commodity prices. Taxes other than on income in 2017 increased from 2016 due primarily to higher oil, NGL and natural gas prices, which resulted in higher production taxes.

DD&A expense decreased in 2018, compared to 2017, due to lower domestic DD&A rates due to higher reserves partially offset by higher production volumes and higher DD&A rates in the Middle East. DD&A expense decreased in 2017, compared to 2016, due to lower volumes and lower DD&A rates.

In 2018, Occidental incurred impairment and related charges of approximately \$416 million on proved oil and gas properties and inventory in Qatar due to the decline in crude oil prices. In 2017, Occidental incurred impairment and related items charges of \$545 million, of which \$397 million related to proved and unproved non-core Permian acreage and \$120 million for idled midstream assets. In 2016, Occidental incurred impairment and related items charges of \$825 million, of which \$541 million related to a reserve for doubtful accounts and \$160 million related to the termination of crude oil supply contracts, \$78 million related to the disposal of CRC stock and \$61 million related

to exits from Libya and Iraq. The allowance for doubtful accounts recorded during 2016 includes a reserve against the long-term receivable related to environmental sites indemnified by Maxus described in Note 9, Environmental Liabilities and Expenditures. Occidental recorded a reserve against this receivable due to the uncertainty of collection as a result of the Maxus bankruptcy.

#### Other Items

Income/(expense) (in millions)	2018	2017	2016
(Provision for) benefit from income taxes	\$(1,477)	\$(17)	\$662
Income from equity investments	\$331	\$357	\$181
Discontinued operations, net	\$—	\$—	\$428

Provision for income taxes increased in 2018 from 2017, due to Tax Reform in 2017 and a higher pre-tax income in 2018. Occidental recorded an income tax expense in 2017 as opposed to an income tax benefit recorded in 2016, due to higher pre-tax operating income as a result of a recovery in commodity prices, partially offset by the deferred tax benefit from Tax Reform.

Excluding the 2017 non-cash fair value gain, income from equity investments increased in 2018, compared to 2017, due to a full year of operations from the OxyChem Ingleside facility. Income from equity investments in 2017 reflected a \$94 million non-cash fair value gain on the Plains equity investment. The increase in income from equity investments in 2017 from 2016 is the result of the OxyChem Ingleside facility beginning operations in the first quarter of 2017 and a non-cash fair value gain on the Plains equity investment.

There were no charges for discontinued operations in 2018 and 2017. Discontinued operations, net in 2016 of \$428 million, primarily include settlement payments by the Republic of Ecuador. See Note 2 of the Consolidated Financial Statements.



## CONSOLIDATED ANALYSIS OF FINANCIAL POSITION

The changes in select components of Occidental's balance sheet are discussed below:

(in millions)	2018	2017
<b>CURRENT ASSETS</b>		
Cash and cash equivalents	\$3,033	\$1,672
Trade receivables, net	4,893	4,145
Inventories	1,260	1,246
Assets held for sale	—	474
Other current assets	746	733
Total current assets	\$9,932	\$8,270
Investments in unconsolidated entities	\$1,680	\$1,515
Property, plant and equipment, net	\$31,437	\$31,174
Long-term receivables and other assets, net	\$805	\$1,067
<b>CURRENT LIABILITIES</b>		
Current maturities of long-term debt	\$116	\$500
Accounts payable	4,885	4,408
Accrued liabilities	2,411	2,492
Total current liabilities	\$7,412	\$7,400
Long-term debt, net	\$10,201	\$9,328
<b>DEFERRED CREDITS AND OTHER LIABILITIES</b>		
Deferred domestic and foreign income taxes, net	\$907	\$581
Asset retirement obligations	\$1,424	\$1,241
Pension and postretirement obligations	\$809	\$1,005
Environmental remediation reserves	\$762	\$728
Other	\$1,009	\$1,171
Total deferred credits and other liabilities	\$4,911	\$4,726
<b>TOTAL STOCKHOLDERS' EQUITY</b>	<b>\$21,330</b>	<b>\$20,572</b>

## Assets

See "Liquidity and Capital Resources — Cash Flow Analysis" for discussion of the change in cash and cash equivalents and restricted cash.

The increase in trade receivables, net, was primarily due to higher crude oil sales volumes at the end of 2018, compared to the end of 2017. The increase in inventories in 2018 primarily reflected higher international crude inventories. The increase in investments in unconsolidated entities is primarily due to capital contributions to the Cactus II Pipeline. The increase in property, plant and equipment, net (PP&E), was primarily due to oil and gas capital additions and acquisitions, which were partially offset by depletion and the sales of non-core domestic midstream assets. The decrease in long-term receivables and other assets, net is primarily due to a \$153 million reduction of the alternative minimum tax receivable.

## Liabilities

Current maturities of long-term debt represented the \$116 million of 9.25-percent senior notes due 2019.

The increase in accounts payable reflected higher oil and gas capital spending compared to the prior year due to increased activity in the Permian Basin and higher marketing payables as a result of higher crude oil prices and third-party purchases. The decrease in accrued liabilities reflected lower mark-to-market derivative liabilities due to lower commodity prices at year end.

The increase in long-term debt, net is a result of the issuance of \$1.0 billion of 4.2-percent senior notes due 2048. The increase in deferred domestic and foreign income tax liabilities, net was primarily due to the utilization of net operating losses and tax credit carry-forwards. The decrease in pension and postretirement obligations was primarily due to the adoption a postretirement benefit plan design change, which decreased the obligation by \$178 million, with a corresponding offset to accumulated other comprehensive income.

#### Stockholders' Equity

The increase in treasury stock reflected the purchase of \$1.3 billion of treasury stock in 2018. The increase in retained earnings reflected net income of \$4.1 billion, partially offset by the distribution of \$2.4 billion of cash dividends. Dividends per share were \$3.10 for the year ended December 31, 2018. The increase in additional paid in capital is the result of share issuances resulting from Occidental's long-term incentive programs. The decrease in accumulated other comprehensive loss reflected the postretirement benefit plan design change, partially offset by the reclassification of accumulated other comprehensive income to retained earnings of stranded tax effects resulting from the changes to the U.S. federal tax law from the Tax Reform.

#### LIQUIDITY AND CAPITAL RESOURCES

At December 31, 2018, Occidental had approximately \$3.0 billion in cash and cash equivalents. A substantial majority of this cash is held and available for use in the United States.

Occidental utilized the remaining restricted cash balance resulting from the spin-off of California Resources in the first quarter of 2016 to retire debt and pay dividends.

In March 2018, Occidental issued \$1.0 billion of 4.2-percent senior notes due 2048. Occidental received net proceeds of approximately \$985 million. Interest on the notes is payable semi-annually in arrears in March and September of each year, beginning on September 15, 2018. The proceeds were used to refinance the repayment of the \$500 million aggregate principal amount of Occidental's 1.5-percent senior notes due in February 2018, with the remainder used for general corporate purposes.

In November 2016, Occidental issued \$1.5 billion of senior notes, comprised of \$750 million of 3.0-percent senior notes due 2027 and \$750 million of 4.1-percent senior notes due 2047. Occidental received net proceeds of \$1.49 billion. Interest on the senior notes is payable semi-annually in arrears in February and August each year for each series of senior notes. Occidental used the proceeds for general corporate purposes.

In May and June 2016, respectively, Occidental utilized part of the proceeds from the April 2016 senior note offering (described below) to exercise the early redemption option on \$1.25 billion of 1.75-percent senior notes due in the first quarter of 2017 and to retire all \$750 million of 4.125-percent senior notes that matured in June 2016.

In April 2016, Occidental issued \$2.75 billion of senior notes, comprised of \$400 million of 2.6-percent senior notes due 2022, \$1.15 billion of 3.4-percent senior notes due 2026 and \$1.2 billion of 4.4-percent senior notes due 2046. Occidental received net proceeds of approximately \$2.72 billion. Interest on the senior notes is payable semi-annually in arrears in April and October of each year for each series of senior notes. Occidental used a portion of the proceeds to retire debt in May and June 2016, and used the remaining proceeds for general corporate purposes.

In February 2016, Occidental retired \$700 million of 2.5-percent senior notes that had matured.

In January 2018, Occidental entered into a \$3.0 billion revolving credit facility (2018 Credit Facility) which matures in January 2023, to replace the previously undrawn \$2.0 billion revolving credit facility (2014 Credit Facility), which was scheduled to expire in August 2019. Borrowings under the 2018 Credit Facility bear interest at various benchmark rates, including LIBOR, plus a margin based on Occidental's senior debt ratings. Both credit facilities have similar terms and along with other debt agreements do not contain material adverse change clauses or debt ratings triggers that could restrict Occidental's ability to borrow or that would permit lenders to terminate their commitments or accelerate debt repayment. The 2018 Credit Facility provides for the termination of loan commitments and requires immediate repayment of any outstanding amounts if certain events of default occur.

Occidental paid average annual facility fees of 0.08 percent in 2018 on the total commitment amounts of the 2018 Credit Facility. Occidental did not draw down any amounts under the 2018 Credit Facility during 2018. Occidental did not draw down any amounts under the 2014 Credit Facility during 2017 or 2016.

As of December 31, 2018, under the most restrictive covenants of its financing agreements, Occidental had substantial capacity for additional unsecured borrowings, the payment of cash dividends and other distributions on, or acquisitions of, Occidental stock.

Occidental expects to fund its liquidity needs, including future dividend payments, through cash on hand, cash generated from operations, monetization of non-core assets or investments and through future borrowings, and if necessary, proceeds from other forms of capital issuance.

#### Cash Flow Analysis

##### Cash provided by operating activities

(in millions)	2018	2017	2016
Operating cash flow from continuing operations	\$7,669	\$4,861	\$2,520
Operating cash flow from discontinued operations, net of taxes	—	—	864
Net cash provided by operating activities	\$7,669	\$4,861	\$3,384

Cash provided by operating activities of \$7.7 billion in 2018 increased \$2.8 billion from \$4.9 billion in 2017. The increase in operating cash flows reflected higher realized worldwide oil and NGL prices, which increased by 24 percent and 21 percent, respectively, as well as a 25 percent increase in domestic oil volumes. Operating cash flows in 2018 also benefited from higher marketing margins in the midstream and marketing segment due to improved Midland-to-Gulf-Coast spreads and higher chemical margins from significant improvements in caustic soda prices. Cash provided by operating activities from continuing operations in 2017 increased \$2.4 billion to \$4.9 billion, from \$2.5 billion in 2016. Operating cash flows were positively impacted by higher worldwide oil and NGL prices and higher domestic volumes in the oil and gas business and improved margins in the midstream and marketing and chemicals businesses. Cash flows from continuing operations in 2017 also included \$761 million of federal tax refunds.

Other cost elements, such as labor costs and overhead, are not significant drivers of changes in cash flow because they are relatively stable within a narrow range over the short to intermediate term. Changes in these costs had a much smaller effect on cash flows than changes in oil and gas product prices, sales volumes and operating costs.

##### Cash used by investing activities

(in millions)	2018	2017	2016
Capital expenditures			
Oil and Gas	\$(4,413)	\$(2,945)	\$(1,978)

Chemical	(271 )	(308 )	(324 )
Midstream and Marketing	(216 )	(284 )	(358 )
Corporate	(75 )	(62 )	(57 )
Total	(4,975 )	(3,599 )	(2,717 )
Other investing activities, net	1,769	520	(2,026 )
Net cash used by investing activities	\$(3,206)	\$(3,079)	\$(4,743)

Occidental's capital expenditures increased by \$1.4 billion in 2018 to \$5.0 billion. The increase was a result of additional capital spending, primarily in the Permian Basin due to its high returns. Occidental's capital expenditures increased by approximately \$900 million in 2017 to \$3.6 billion. Occidental's 2019 capital spending is expected to be \$4.5 billion.

In 2018, cash flows provided by other investing activities of \$1.8 billion was comprised primarily of proceeds from the sale of non-core domestic midstream assets, partially offset by asset purchases primarily related to the acquisition of a previously leased power and steam cogeneration facility.

In 2017, cash flows provided by other investing activities of \$520 million includes proceeds of \$1.4 billion, which were primarily related to the sale of non-core Permian acreage and Occidental's South Texas operations, partially offset by \$1.1 billion of acquisition costs primarily related to Permian properties.

In 2016, cash flows used in other investing activities of \$2.0 billion was comprised primarily of the acquisition of acreage in the Permian in October 2016.

Cash used by financing activities (in millions)	2018	2017	2016
Net cash used by financing activities	\$(3,102)	\$(2,343)	\$(802)

Cash used by financing activities in 2018 increased \$759 million from \$2.3 billion in 2017 to \$3.1 billion in 2018. Financing activities in 2018 mainly consisted of dividend payments of \$2.4 billion and purchases of treasury stock of \$1.2 billion. Financing activities in 2018 also included proceeds from long-term debt of \$978 million and payments of long-term debt of \$500 million.

Cash used by financing activities in 2017 was \$2.3 billion, as compared to cash used by financing activities in 2016 of \$802 million. Financing activities in 2017 mainly consist of dividend payments of \$2.3 billion.

Cash used by financing activities in 2016 was \$802 million. Financing activities in 2016 included proceeds from long-term debt of \$4.2 billion, payments of long-term debt of \$2.7 billion, and dividends paid of \$2.3 billion.

#### OFF-BALANCE-SHEET ARRANGEMENTS

The following is a description of the business purpose and nature of Occidental's off-balance-sheet arrangements.

##### Guarantees

Occidental has guaranteed its portion of equity method investees' debt and has entered into various other guarantees, including performance bonds, letters of credit, indemnities and commitments provided by Occidental to third parties, mainly to provide assurance that OPC or its subsidiaries and affiliates will meet their various obligations (guarantees). As of December 31, 2018, Occidental's guarantees were not material and a substantial majority consisted of limited recourse guarantees on approximately \$244 million of Dolphin Energy's debt.

Occidental has guaranteed certain obligations of its subsidiaries for various letters of credit, indemnities and commitments.

See "Oil and Gas Segment — Business Review — Qatar" and "Segment Results of Operations" for further information about Dolphin.

##### Leases

Occidental has entered into various operating lease agreements, mainly for real estate, equipment, plants and facilities, and information technology hardware. Occidental leases assets when leasing offers greater operating flexibility. Lease payments are generally expensed as part of cost of sales and selling, general and administrative expenses. For more information, see "Contractual Obligations."

#### CONTRACTUAL OBLIGATIONS

##### Delivery Commitments

Occidental has made commitments to certain refineries and other buyers to deliver oil, natural gas and NGL. The total amount contracted to be delivered in the United States is approximately 155 million barrels of oil through 2025, 288 Bcf of gas through 2029 and 36 million

barrels of NGL through 2028. The price for these deliveries is set at the time of delivery of the product. Occidental has significantly more production capacity than the amounts committed and has the ability to secure additional volumes in case of a shortfall.

The table below summarizes and cross-references Occidental's contractual obligations. This summary indicates on- and off-balance-sheet obligations as of December 31, 2018.

Contractual Obligations (in millions)	Total	Payments Due by Year			
		2019	2020 and 2021	2022 and 2023	2024 and thereafter
On-Balance Sheet					
Long-term debt (Note 6) <sup>(a)</sup>	\$ 10,407	\$ 116	\$ 1,249	\$ 2,426	\$ 6,616

Other long-term liabilities <sup>(b)</sup>	2,732	265	581	436	1,450
Off-Balance Sheet					
Leases					
(Note 7) <sup>(c)</sup>	704	186	243	117	158
Purchase obligations <sup>(d)</sup>	10,831	1,861	2,696	2,175	4,099
Total	\$24,674	\$2,428	\$4,769	\$5,154	\$12,323

Excludes unamortized debt discount and interest on the debt. As of December 31, 2018, interest on long-term debt (a) totaling \$5.6 billion is payable in the following years (in millions): 2019 - \$392, 2020 and 2021 - \$725, 2022 and 2023 - \$575, 2024 and thereafter - \$3,931.

(b) Includes obligations under postretirement benefit and deferred compensation plans, accrued transportation commitments and other accrued liabilities.

Occidental is the lessee under various agreements for real estate, equipment, plants and facilities, and information technology hardware. Refer to Note 3 of the consolidated financial statements regarding the impact of rules (c) effective January 1, 2019 which require Occidental to recognize most leases, including operating leases, on the balance sheet.

Amounts include payments which will become due under long-term agreements to purchase goods and services used in the normal course of business to secure terminal, pipeline and processing capacity, drilling rigs and services, CO<sub>2</sub>, electrical power, steam and certain chemical raw materials. In 2018, Occidental secured (d) approximately \$2 billion of additional long-term commitments related to pipeline and terminal capacity that extend over the next ten years. Amounts exclude certain product purchase obligations related to marketing activities for which there are no minimum purchase requirements or the amounts are not fixed or determinable. Long-term purchase contracts are discounted at a 3.83 percent discount rate.

#### LAWSUITS, CLAIMS AND CONTINGENCIES

Occidental or certain of its subsidiaries are involved, in the normal course of business, in lawsuits, claims and other legal proceedings that seek, among other things, compensation for alleged personal injury, breach of contract, property damage or other losses, punitive damages, civil penalties, or injunctive or declaratory relief. Occidental or certain of its subsidiaries also are involved in proceedings under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and similar federal, state, local and international environmental laws. These environmental proceedings seek funding or performance of remediation and, in some cases,

compensation for alleged property damage, punitive damages, civil penalties and injunctive relief. Usually Occidental or such subsidiaries are among many companies in these environmental proceedings and have to date been successful in sharing response costs with other financially sound companies. Further, some lawsuits, claims and legal proceedings involve acquired or disposed assets with respect to which a third-party or Occidental retains liability or indemnifies the other party for conditions that existed prior to the transaction.

In accordance with applicable accounting guidance, Occidental accrues reserves for outstanding lawsuits, claims and proceedings when it is probable that a liability has been incurred and the liability can be reasonably estimated. In Note 9, Occidental has disclosed its reserve balances for environmental remediation matters that satisfy this criteria.

Reserve balances for matters, other than environmental remediation matters that satisfy this criteria as of December 31, 2018, and December 31, 2017, were not material to Occidental's consolidated balance sheet.

In 2016, Occidental received payments from the Republic of Ecuador of approximately \$1.0 billion pursuant to a November 2015 arbitration award for Ecuador's 2006 expropriation of Occidental's Participation Contract for Block 15. The awarded amount represented a recovery of 60 percent of the value of Block 15. In 2017, Andes Petroleum Ecuador Ltd. (Andes) filed a demand for arbitration, claiming it is entitled to a 40 percent share of the judgment amount obtained by Occidental. Occidental contends that Andes is not entitled to any of the amounts paid under the 2015 arbitration award because Occidental's recovery was limited to Occidental's own 60 percent economic interest in the block. Occidental intends to vigorously defend against this claim in arbitration. A hearing on the merits has not been scheduled at this time.

The ultimate outcome and impact of outstanding lawsuits, claims and proceedings on Occidental cannot be predicted. Management believes that the resolution of these matters will not, individually or in the aggregate, have a material adverse effect on Occidental's consolidated balance sheet. If unfavorable outcomes of these matters were to occur, future results of operations or cash flows for any particular quarterly or annual period could be materially adversely affected. Occidental's estimates are based on information known about the legal matters and its experience in contesting, litigating and settling similar matters. Occidental reassesses the probability and estimability of contingent losses as new information becomes available.

#### Tax Matters

During the course of its operations, Occidental is subject to audit by tax authorities for varying periods in various federal, state, local and foreign tax jurisdictions. Taxable years through 2016 for United States federal income tax purposes have been audited by the United States Internal Revenue Service (IRS) pursuant to its Compliance Assurance Program and subsequent taxable years are currently under review. Taxable years through 2009 have been audited for state income tax purposes. While a single foreign tax jurisdiction is open for 2002, all

other significant audit matters in foreign jurisdictions have been resolved through 2010. During the course of tax audits, disputes have arisen and other disputes may arise as to facts and matters of law. Occidental believes that the resolution of outstanding tax matters would not have a material adverse effect on its consolidated financial position or results of operations.

#### Indemnities to Third Parties

Occidental, its subsidiaries, or both, have indemnified various parties against specified liabilities those parties might incur in the future in connection with purchases and other transactions that they have entered into with Occidental. These indemnities usually are contingent upon the other party incurring liabilities that reach specified thresholds. As of December 31, 2018, Occidental is not aware of circumstances that it believes would reasonably be expected to lead to indemnity claims that would result in payments materially in excess of reserves.

#### ENVIRONMENTAL LIABILITIES AND EXPENDITURES

Occidental's operations are subject to stringent federal, state, local and international laws and regulations related to improving or maintaining environmental quality.

The laws that require or address environmental remediation, including CERCLA and similar federal, state, local and international laws, may apply retroactively and regardless of fault, the legality of the original activities or the current ownership or control of sites. OPC or certain of its subsidiaries participate in or actively monitor a range of remedial activities and government or private proceedings under these laws with respect to alleged past practices at operating, closed and third-party sites. Remedial activities may include one or more of the following: investigation involving sampling, modeling, risk assessment or monitoring; cleanup measures including removal, treatment or disposal; or operation and maintenance of remedial systems. The environmental proceedings seek funding or performance of remediation and, in some cases, compensation for alleged property damage, punitive damages, civil penalties, injunctive relief and government oversight costs.

#### Environmental Remediation

As of December 31, 2018, Occidental participated in or monitored remedial activities or proceedings at 145 sites. The following table presents Occidental's current and non-current environmental remediation reserves as of December 31, 2018, 2017 and 2016, the current portion of which is included in accrued liabilities (\$120 million in 2018, \$137 million in 2017, and \$131 million in 2016) and the remainder in deferred credits and other liabilities — Environmental remediation reserves (\$762 million in 2018, \$728 million in 2017, and \$739 million in 2016). The reserves are grouped as environmental remediation sites listed or proposed for listing by the U.S. Environmental Protection Agency on the CERCLA National Priorities List (NPL) sites and three categories of non-NPL sites — third-party sites, Occidental-operated sites and closed or non-operated Occidental sites.



(\$ amounts in millions)	2018		2017		2016	
	# of Sites	Reserve Balance	# of Sites	Reserve Balance	# of Sites	Reserve Balance
NPL sites	34	\$ 458	34	\$ 457	33	\$ 461
Third-party sites	68	168	70	157	68	163
Occidental-operated sites	14	115	15	108	17	106
Closed or non-operated Occidental sites	29	141	29	143	29	140
Total	145	\$ 882	148	\$ 865	147	\$ 870

As of December 31, 2018, Occidental's environmental reserves exceeded \$10 million each at 16 of the 145 sites described above, and 87 of the sites had reserves from \$0 to \$1 million each.

As of December 31, 2018, three sites — the Diamond Alkali Superfund Site and a former chemical plant in Ohio (both of which are indemnified by Maxus Energy Corporation, as discussed further below), and a landfill in Western New York - accounted for 94 percent of its reserves associated with NPL sites. The reserve balance above includes 17 NPL sites indemnified by Maxus.

Four of the 68 third-party sites — a Maxus-indemnified chrome site in New Jersey, a former copper mining and smelting operation in Tennessee, an active plant outside of the United States, and an active refinery in Louisiana where Occidental reimburses the current owner for certain remediation activities - accounted for 62 percent of Occidental's reserves associated with these sites. The reserve balance above includes 9 third-party sites indemnified by Maxus. Four sites — chemical plants in Kansas, Louisiana, New York and Texas - accounted for 64 percent of the reserves associated with the Occidental-operated sites.

Five other sites — a landfill in western New York, former chemical plants in Tennessee, Washington and Delaware, and a closed coal mine in Pennsylvania - accounted for 61 percent of the reserves associated with closed or non-operated Occidental sites.

Environmental reserves vary over time depending on factors such as acquisitions or dispositions, identification of additional sites and remedy selection and implementation.

Based on current estimates, Occidental expects to expend funds corresponding to approximately 40 percent of the current environmental reserves at the sites described above over the next three to four years and the balance at these sites over the subsequent 10 or more years. Occidental believes its range of reasonably possible additional losses beyond those liabilities recorded for environmental remediation at all of its environmental sites could be up to \$1.1 billion.

#### Maxus Environmental Sites

When Occidental acquired Diamond Shamrock Chemicals Company (DSCC) in 1986, Maxus, a subsidiary of YPF S.A. (YPF), agreed to indemnify Occidental for a number of environmental sites, including the Diamond Alkali Superfund Site (Site) along a portion of the Passaic River. On June 17, 2016, Maxus and several affiliated companies filed for Chapter 11 bankruptcy in Federal

District Court in the State of Delaware. Prior to filing for bankruptcy, Maxus defended and indemnified Occidental in connection with clean-up and other costs associated with the sites subject to the indemnity, including the Site.

In March 2016, the EPA issued a Record of Decision (ROD) specifying remedial actions required for the lower 8.3 miles of the Lower Passaic River. The ROD does not address any potential remedial action for the upper nine miles of the Lower Passaic River or Newark Bay. During the third quarter of 2016, and following Maxus's bankruptcy filing, Occidental and the EPA entered into an Administrative Order on Consent (AOC) to complete the design of the proposed clean-up plan outlined in the ROD at an estimated cost of \$165 million. The EPA announced that it will pursue similar agreements with other potentially responsible parties.

Occidental has accrued a reserve relating to its estimated allocable share of the costs to perform the design and the remediation called for in the AOC and the ROD, as well as for certain other Maxus-indemnified sites. Occidental's

accrued estimated environmental reserve does not consider any recoveries for indemnified costs. Occidental's ultimate share of this liability may be higher or lower than the reserved amount, and is subject to final design plans and the resolution of Occidental's allocable share with other potentially responsible parties. Occidental continues to evaluate the costs to be incurred to comply with the AOC, the ROD and to perform remediation at other Maxus-indemnified sites in light of the Maxus bankruptcy and the share of ultimate liability of other potentially responsible parties. In June 2018, Occidental filed a complaint under CERCLA in Federal District Court in the State of New Jersey against numerous potentially responsible parties for reimbursement of amounts incurred or to be incurred to comply with the AOC, the ROD or to perform other remediation activities at the Site.

In June 2017, the court overseeing the Maxus bankruptcy approved a Plan of Liquidation (Plan) to liquidate Maxus and create a trust to pursue claims against YPF, Repsol and others to satisfy claims by Occidental and other creditors for past and future cleanup and other costs. In July 2017, the court-approved Plan became final and the trust became effective. Among other responsibilities, the trust will pursue claims against YPF, Repsol and others and distribute assets to Maxus' creditors in accordance with the trust agreement and Plan. In June 2018, the trust filed its complaint against YPF and Repsol in Delaware bankruptcy court asserting claims based upon, among other things, fraudulent transfer and alter ego. On February 15, 2019, the bankruptcy court denied Repsol's and YPF's motions to dismiss the complaint.

#### Environmental Costs

Operating expenses are incurred on a continual basis. Capital expenditures relate to longer-lived improvements in properties currently operated by Occidental. Remediation expenses relate to existing conditions from past operations. Occidental presently estimates capital expenditures for environmental compliance of approximately \$157 million for 2019.

Occidental's environmental costs, some of which include estimates, are presented below for each segment for each of the years ended December 31:

(in millions)	2018	2017	2016
Operating Expenses			
Oil and Gas	\$95	\$68	\$65
Chemical	80	78	75
Midstream and Marketing	15	15	11
	\$190	\$161	\$151
Capital Expenditures			
Oil and Gas	\$75	\$77	\$43
Chemical	23	18	25
Midstream and Marketing	5	6	5
	\$103	\$101	\$73
Remediation Expenses			
Corporate	\$47	\$39	\$61

#### INTERNATIONAL INVESTMENTS

Many of Occidental's assets are located outside North America. At December 31, 2018, the carrying value of Occidental's assets in countries outside North America aggregated approximately \$8.9 billion, or 20 percent of Occidental's total assets at that date. Of such assets, approximately \$7.6 billion are located in the Middle East and approximately \$1.3 billion are located in Latin America. For the year ended December 31, 2018, net sales outside North America totaled \$5.3 billion, or approximately 30 percent of total net sales.

#### CRITICAL ACCOUNTING POLICIES AND ESTIMATES

The process of preparing financial statements in accordance with generally accepted accounting principles requires Occidental's management to make informed estimates and judgments regarding certain items and transactions. Changes in facts and circumstances or discovery of new information may result in revised estimates and judgments, and actual results may differ from these estimates upon settlement but generally not by material amounts. There has been no material change to Occidental's critical accounting policies over the past three years. The selection and development of these policies and estimates have been discussed with the Audit Committee of the Board of Directors. Occidental considers the following to be its most critical accounting policies and estimates that involve management's judgment.

##### Oil and Gas Properties

The carrying value of Occidental's property, plant, and equipment (PP&E) represents the cost incurred to acquire or develop the asset, including any asset retirement obligations and capitalized interest, net of accumulated depreciation, depletion, and amortization (DD&A) and any impairment charges. For assets acquired, PP&E cost is based on fair values at the acquisition date. Asset retirement obligations and interest costs incurred in connection with qualifying capital expenditures are capitalized and amortized over the lives of the related assets.

Occidental uses the successful efforts method to account for its oil and gas properties. Under this method,

Occidental capitalizes costs of acquiring properties, costs of drilling successful exploration wells, and development costs. The costs of exploratory wells are initially capitalized pending a determination of whether proved reserves have been found. If proved reserves have been found, the costs of exploratory wells remain capitalized. Otherwise, Occidental charges the costs of the related wells to expense. In some cases, a determination of proved reserves cannot be made at the completion of drilling, requiring additional testing and evaluation of the wells. Occidental generally expenses the costs of such exploratory wells if a determination of proved reserves has not been made within a 12-month period after drilling is complete unless it is pending government approval for a development plan in

Occidental's international locations.

Occidental expenses annual lease rentals, the costs of injectants used in production, and geological, geophysical and seismic costs as incurred.

Occidental determines depreciation and depletion of oil and gas producing properties by the unit-of-production method. It amortizes acquisition costs over total proved reserves and capitalized development and successful exploration costs over proved developed 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. Occidental has no proved oil and gas reserves for which the determination of economic producibility is subject to the completion of major additional capital expenditures.

Several factors could change Occidental's proved oil and gas reserves. For example, Occidental receives a share of production from PSCs to recover its costs and generally an additional share for profit. Occidental's share of production and reserves from these contracts decreases when product prices rise and increases when prices decline. Overall, Occidental's net economic benefit from these contracts is greater at higher product prices. In other cases, particularly with long-lived properties, lower product prices may lead to a situation where production of a portion of proved reserves becomes uneconomical. For such properties, higher product prices typically result in additional reserves becoming economical. Estimation of future production and development costs is also subject to change partially due to factors beyond Occidental's control, such as energy costs and inflation or deflation of oil field service costs. These factors, in turn, could lead to changes in the quantity of proved reserves. Additional factors that could result in a change of proved reserves include production decline rates and operating performance differing from those estimated when the proved reserves were initially recorded.

Additionally, Occidental performs impairment tests with respect to its proved properties whenever events or circumstances indicate that the carrying value of property may not be recoverable. If there is an indication the carrying

amount of the asset may not be recovered due to declines in current and forward prices, significant changes in reserve estimates, changes in management's plans, or other significant events, management will evaluate the property for impairment. Under the successful efforts method, if the sum of the undiscounted cash flows is less than the carrying value of the proved property, the carrying value is reduced to estimated fair value and reported as an impairment charge in the period. Individual proved properties are grouped for impairment purposes at the lowest level for which there are identifiable cash flows. The fair value of impaired assets is typically determined based on the present value of expected future cash flows using discount rates believed to be consistent with those used by market participants. The impairment test incorporates a number of assumptions involving expectations of future cash flows which can change significantly over time. These assumptions include estimates of future product prices, contractual prices, estimates of risk-adjusted oil and gas reserves and estimates of future operating and development costs. It is reasonably possible that prolonged declines in commodity prices, reduced capital spending in response to lower prices or increases in operating costs could result in additional impairments.

For impairment testing, unless prices are contractually fixed, Occidental uses observable forward strip prices for oil and natural gas prices when projecting future cash flows. Prices are held constant for periods beyond those covered by forward strip prices. Future operating and development costs are estimated using the current cost environment applied to expectations of future operating and development activities to develop and produce oil and gas reserves. Market prices for crude oil, natural gas and NGL have been volatile and may continue to be volatile in the future. Changes in global supply and demand, transportation capacity, currency exchange rates, and applicable laws and regulations, and the effect of changes in these variables on market perceptions could impact current forecasts. Future fluctuations in commodity prices could result in estimates of future cash flows to vary significantly.

The most significant ongoing financial statement effect from a change in Occidental's oil and gas reserves or impairment of its proved properties would be to the DD&A rate. For example, a 5 percent increase or decrease in the amount of oil and gas reserves would change the DD&A rate by approximately \$0.55 per barrel, which would increase or decrease pre-tax income by approximately \$135 million annually at current production rates.

A portion of the carrying value of Occidental's oil and gas properties is attributable to unproved properties. Net capitalized costs attributable to unproved properties were \$1.0 billion at both December 31, 2018, and 2017. The unproved amounts are not subject to DD&A until they are classified as proved properties. Capitalized costs attributable to the properties become subject to DD&A when proved reserves are assigned to the property. If the exploration efforts are unsuccessful, or management decides not to pursue development of these properties as a result of lower commodity prices, higher development and operating costs, contractual conditions or other factors, the capitalized costs of the related properties would be

expensed. The timing of any writedowns of these unproved properties, if warranted, depends upon management's plans, the nature, timing and extent of future exploration and development activities, and their results. Occidental believes its current plans and exploration and development efforts will allow it to realize its unproved property balance.

#### Chemical Assets

Occidental performs impairment tests on its chemical assets whenever events or changes in circumstances lead to a reduction in the estimated useful lives or estimated future cash flows that would indicate that the carrying amount may not be recoverable, or when management's plans change with respect to those assets. Any impairment loss would be calculated as the excess of the asset's net book value over its estimated fair value.

#### Midstream, Marketing and Other Assets

Derivatives are carried at fair value and on a net basis when a legal right of offset exists with the same counterparty. Occidental applies hedge accounting when transactions meet specified criteria for cash-flow hedge treatment and management elects and documents such treatment. Otherwise, any fair value gains or losses are recognized in earnings in the current period. For cash-flow hedges, the gain or loss on the effective portion of the derivative is reported as a component of other comprehensive income (OCI) with an offsetting adjustment to the basis of the item being hedged.

Realized gains or losses from cash-flow hedges, and any ineffective portion, are recorded as a component of net sales in the consolidated statements of operations. Ineffectiveness is primarily created by a lack of correlation between the hedged item and the hedging instrument due to location, quality, grade or changes in the expected quantity of the hedged item. Gains and losses from derivative instruments are reported net in the consolidated statements of operations. There were no fair value hedges as of and during the years ended December 31, 2018, 2017 and 2016. A hedge is regarded as highly effective such that it qualifies for hedge accounting if, at inception and throughout its life, it is expected that changes in the fair value or cash flows of the hedged item will be offset by 80 to 125 percent of the changes in the fair value or cash flows, respectively, of the hedging instrument. In the case of hedging a forecast transaction, the transaction must be probable and must present an exposure to variations in cash flows that could ultimately affect reported net income or loss. Occidental discontinues hedge accounting when it determines that a derivative has ceased to be highly effective as a hedge; when the hedged item matures or is sold or repaid; or when a forecast transaction is no longer deemed probable.

#### Fair Value Measurements

Occidental has categorized its assets and liabilities that are measured at fair value in a three-level fair value hierarchy, based on the inputs to the valuation techniques: Level 1 – using quoted prices in active markets for the assets or liabilities; Level 2 – using observable inputs other than quoted prices for the assets or liabilities; and Level

3 – using unobservable inputs. Transfers between levels, if any, are recognized at the end of each reporting period.

#### Fair Values - Recurring

Occidental primarily applies the market approach for recurring fair value measurements, maximizes its use of observable inputs and minimizes its use of unobservable inputs. Occidental utilizes the mid-point between bid and ask prices for valuing the majority of its assets and liabilities measured and reported at fair value. In addition to using market data, Occidental makes assumptions in valuing its assets and liabilities, including assumptions about the risks inherent in the inputs to the valuation technique. For assets and liabilities carried at fair value, Occidental measures fair value using the following methods:

Ø Occidental values exchange-cleared commodity derivatives using closing prices provided by the exchange as of the balance sheet date. These derivatives are classified as Level 1.

Ø Over-the-Counter (OTC) bilateral financial commodity contracts, international exchange contracts, options and physical commodity forward purchase and sale contracts are generally classified as Level 2 and are generally valued using quotations provided by brokers or industry-standard models that consider various inputs, including quoted forward prices for commodities, time value, volatility factors, credit risk and current market and contractual prices for the underlying instruments, as well as other relevant economic measures. Substantially all of these inputs are observable in the marketplace throughout the full term of the instrument, and can be derived from observable data or are supported by observable prices at which transactions are executed in the marketplace.

Ø Occidental values commodity derivatives based on a market approach that considers various assumptions, including quoted forward commodity prices and market yield curves. The assumptions used include inputs that are generally unobservable in the marketplace or are observable but have been adjusted based upon various assumptions and the fair value is designated as Level 3 within the valuation hierarchy.

Occidental generally uses an income approach to measure fair value when there is not a market-observable price for an identical or similar asset or liability. This approach utilizes management's judgments regarding expectations of projected cash flows, and discounts those cash flows using a risk-adjusted discount rate.

#### Environmental Liabilities and Expenditures

Environmental expenditures that relate to current operations are expensed or capitalized as appropriate. Occidental records environmental reserves and related charges and expenses for estimated remediation costs that relate to existing conditions from past operations when environmental remediation efforts are probable and the costs can be reasonably estimated. In determining the reserves and the range of reasonably possible additional losses, Occidental refers to currently available information, including relevant past experience, remedial objectives, available technologies, applicable laws and regulations

and cost-sharing arrangements. Occidental bases environmental reserves on management's estimate of the most likely cost to be incurred, using the most cost-effective technology reasonably expected to achieve the remedial objective. Occidental periodically reviews reserves and adjusts them as new information becomes available. Occidental records environmental reserves on a discounted basis when it deems the aggregate amount and timing of cash payments to be reliably determinable at the time the reserves are established. The reserve methodology with respect to discounting for a specific site is not modified once it is established. Presently none of the environmental reserves are recorded on a discounted basis. Occidental generally records reimbursements or recoveries of environmental remediation costs in income when received, or when receipt of recovery is highly probable.

Many factors could affect Occidental's future remediation costs and result in adjustments to its environmental reserves and range of reasonably possible additional losses. The most significant are: (1) cost estimates for remedial activities may be inaccurate; (2) the length of time, type or amount of remediation necessary to achieve the remedial objective may change due to factors such as site conditions, the ability to identify and control contaminant sources or the discovery of additional contamination; (3) a regulatory agency may ultimately reject or modify Occidental's proposed remedial plan; (4) improved or alternative remediation technologies may change remediation costs; (5) laws and

regulations may change remediation requirements or affect cost sharing or allocation of liability; and (6) changes in allocation or cost-sharing arrangements may occur.

Certain sites involve multiple parties with various cost-sharing arrangements, which fall into the following three categories: (1) environmental proceedings that result in a negotiated or prescribed allocation of remediation costs among Occidental and other alleged potentially responsible parties; (2) oil and gas ventures in which each participant pays its proportionate share of remediation costs reflecting its working interest; or (3) contractual arrangements, typically relating to purchases and sales of properties, in which the parties to the transaction agree to methods of allocating remediation costs. In these circumstances, Occidental evaluates the financial viability of other parties with whom it is alleged to be jointly liable, the degree of their commitment to participate and the consequences to Occidental of their failure to participate when estimating Occidental's ultimate share of liability. Occidental records reserves at its expected net cost of remedial activities and, based on these factors, believes that it will not be required to assume a share of liability of such other potentially responsible parties in an amount materially above amounts reserved.

In addition to the costs of investigations and cleanup measures, which often take in excess of 10 years at NPL sites, Occidental's reserves include management's estimates of the costs to operate and maintain remedial systems. If remedial systems are modified over time in response to significant changes in site-specific data, laws, regulations, technologies or engineering estimates, Occidental reviews and adjusts its reserves accordingly.



If Occidental were to adjust the environmental reserve balance based on the factors described above, the amount of the increase or decrease would be recognized in earnings. For example, if the reserve balance were reduced by 10 percent, Occidental would record a pre-tax gain of \$88 million. If the reserve balance were increased by 10 percent, Occidental would record an additional remediation expense of \$88 million.

#### Other Loss Contingencies

Occidental is involved, in the normal course of business, in lawsuits, claims and other legal proceedings and audits. Occidental accrues reserves for these matters when it is probable that a liability has been incurred and the liability can be reasonably estimated. In addition, Occidental discloses, in aggregate, its exposure to loss in excess of the amount recorded on the balance sheet for these matters if it is reasonably possible that an additional material loss may be incurred. Occidental reviews its loss contingencies on an ongoing basis.

Loss contingencies are based on judgments made by management with respect to the likely outcome of these matters and are adjusted as appropriate. Management's judgments could change based on new information, changes in, or interpretations of, laws or regulations, changes in management's plans or intentions, opinions regarding the outcome of legal proceedings, or other factors. See "Lawsuits, Claims and Contingencies" for additional information.

#### SIGNIFICANT ACCOUNTING AND DISCLOSURE CHANGES

See Note 3 in the Notes to Consolidated Financial Statements in Part II Item 8 of this Form 10-K.

#### SAFE HARBOR DISCUSSION REGARDING OUTLOOK AND OTHER FORWARD-LOOKING DATA

Portions of this report, including Items 1 and 2, "Business and Properties," Item 3, "Legal Proceedings," Item 7 "Management's Discussion and Analysis of Financial Condition and Results of Operations," and Item 7A, "Quantitative and Qualitative Disclosures About Market Risk," contain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934 and involve risks and uncertainties that could materially affect expected results of operations, liquidity, cash flows and business prospects. Words such as "estimate," "project," "predict," "will," "would," "should," "could," "may," "might," "anticipate," "plan," "intend," "believe," "expect," "aim," "goal," "target," "objective," "likely" or similar expressions that convey the prospective nature of events or outcomes generally indicate forward-looking statements. You should not place undue reliance on these forward-looking statements, which speak only as of the date of this report. Unless legally required, Occidental does not undertake any obligation to update any forward-looking statements as a result of new information, future events or otherwise. Factors that may cause Occidental's results of operations and financial position to differ from expectations include the factors discussed in Item 1A, "Risk Factors" and

elsewhere.

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

##### Commodity Price Risk

###### General

Occidental's results are sensitive to fluctuations in oil, NGL and natural gas prices. Price changes at current global prices and levels of production affect Occidental's pre-tax annual income by approximately \$130 million for a \$1 per barrel change in oil prices and \$45 million for a \$1 per barrel change in NGL prices. If domestic natural gas prices varied by \$0.50 per Mcf, it would have an estimated annual effect on Occidental's pre-tax income of approximately \$35 million. These price-change sensitivities include the impact of PSC and similar contract volume changes on income. If production levels change in the future, the sensitivity of Occidental's results to prices also will change. Marketing results are sensitive to price changes of oil, natural gas and, to a lesser degree, other commodities. These sensitivities are additionally dependent on marketing volumes and cannot be predicted reliably.

Occidental's results are also sensitive to fluctuations in chemical prices. A variation in chlorine and caustic soda prices of \$10 per ton would have a pre-tax annual effect on income of approximately \$10 million and \$30 million,

respectively. A variation in PVC prices of \$0.01 per lb. would have a pre-tax annual effect on income of approximately \$30 million. Historically, over time, product price changes have tracked raw material and feedstock product price changes, somewhat mitigating the effect of price changes on margins. The 2018 average contract prices were: chlorine-\$344 per ton; caustic soda-\$768 per ton; and PVC-\$0.40 per lb.

Occidental uses derivative instruments, including a combination of short-term futures, forwards, options and swaps, to obtain the average prices for the relevant production month and to improve realized prices for oil and gas.

#### Risk Management

Occidental conducts its risk management activities for marketing and trading under the controls and governance of its risk control policies. The controls under these policies are implemented and enforced by a risk management group which monitors risk by providing an independent and separate evaluation and check. Members of the risk management group report to the Corporate Vice President and Treasurer. Controls for these activities include limits on value at risk, limits on credit, limits on total notional trade value, segregation of duties, delegation of authority, daily price verifications, reporting to senior management on various risk measures and a number of other policy and procedural controls.

#### Fair Value of Marketing Derivative Contracts

Occidental carries derivative contracts it enters into in connection with its marketing activities at fair value. Fair values for these contracts are derived from Level 1 and Level 2 sources. The fair values in future maturity periods

are insignificant.

The following table shows the fair value of Occidental's derivatives (excluding collateral), segregated by maturity periods and by methodology of fair value estimation:

Source of Fair Value Assets/(liabilities) (in millions)	Maturity Periods				Total
	2019 and 2021	2020 and 2022	2022 and 2023	2024 and thereafter	
Prices actively quoted	\$174	\$ (1 )	\$ —	\$ —	\$173
Prices provided by other external sources	8	2	3	1	14
Total	\$182	\$ 1	\$ 3	\$ 1	\$187

#### Cash-Flow Hedges

Occidental's marketing operations, from time to time, store natural gas purchased from third parties at Occidental's North American leased storage facilities. As of December 31, 2018, and 2017, Occidental had approximately 5 billion cubic feet (Bcf) and 7 Bcf of natural gas held in storage, respectively, and had cash-flow hedges for the forecast sales, to be settled by physical delivery, of approximately 4 Bcf and 7 Bcf of stored natural gas, respectively.

#### Quantitative Information

Occidental uses value at risk to estimate the potential effects of changes in fair values of commodity contracts used in trading activities. This measure determines the maximum potential negative one day change in fair value with a 95 percent level of confidence. Additionally, Occidental uses complementary trading limits including position and tenor limits and maintains liquid positions as a result of which market risk typically can be neutralized or mitigated on short notice. As a result of these controls, Occidental believes that the market risk of its trading activities is not reasonably likely to have a material adverse effect on its performance.

#### Interest Rate Risk

##### General

Occidental's exposure to changes in interest rates is not expected to be material and relates to its variable-rate long-term debt obligations. As of December 31, 2018, variable-rate debt constituted approximately 1 percent of Occidental's total debt.

#### Foreign Currency Risk

Occidental's international operations have limited currency risk. Occidental manages its exposure primarily by balancing monetary assets and liabilities and limiting cash positions in foreign currencies to levels necessary for operating purposes. A vast majority of international oil sales are denominated in United States dollars. Additionally, all of Occidental's consolidated international oil and gas subsidiaries have the United States dollar as the functional currency. As of December 31, 2018, the fair value of foreign currency derivatives used in the marketing operations was

immaterial. The effect of exchange rates on transactions in foreign currencies is included in periodic income.

#### Tabular Presentation of Interest Rate Risk

The table below provides information about Occidental's debt obligations. Debt amounts represent principal payments by maturity date.

Year of Maturity (in millions of U.S. dollars)	U.S. Dollar Fixed-Rate Debt	U.S. Dollar Variable-Rate Debt	Grand Total <sup>(a)</sup>
2019	116	—	116

2020	—	—	—
2021	1,249	—	1,249
2022	1,213	—	1,213
2023	1,213	—	1,213
Thereafter	6,548	68	6,616
Total	\$10,339	\$ 68	\$10,407
Weighted-average interest rate	3.83	% 1.89	% 3.81
Fair Value	\$10,202	\$ 68	\$10,270

(a) Excludes net unamortized debt discounts of \$36 million and debt issuance cost of \$54 million.

#### Credit Risk

The majority of Occidental's counterparty credit risk is related to the physical delivery of energy commodities to its customers and their inability to meet their settlement commitments. Occidental manages credit risk by selecting counterparties that it believes to be financially strong, by entering into netting arrangements with counterparties and by requiring collateral or other credit risk mitigants, as appropriate. Occidental actively evaluates the creditworthiness of its counterparties, assigns appropriate credit limits, and monitors credit exposures against those assigned limits. Occidental also enters into future contracts through regulated exchanges with select clearinghouses and brokers, which are subject to minimal credit risk as a significant portion of these transactions settle on a daily margin basis.

Certain of Occidental's OTC derivative instruments contain credit-risk-contingent features, primarily tied to credit ratings for Occidental or its counterparties, which may affect the amount of collateral that each would need to post. Occidental believes that if it had received a one-notch reduction in its credit ratings, it would not have resulted in a material change in its collateral-posting requirements as of December 31, 2018 and 2017.

As of December 31, 2018, the substantial majority of the credit exposures were with investment grade counterparties. Occidental believes its exposure to credit-related losses at December 31, 2018, was not material and losses associated with credit risk have been insignificant for all years presented.

ITEM 8 FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA  
REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Stockholders and Board of Directors Occidental Petroleum Corporation:

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheets of Occidental Petroleum Corporation and subsidiaries (the "Company") as of December 31, 2018 and 2017, the related consolidated statements of operations, comprehensive income, stockholders' equity, and cash flows for each of the years in the three-year period ended December 31, 2018, and the related notes and financial statement schedule II - valuation and qualifying accounts (collectively, "the consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2018 and 2017, and the results of its operations and its cash flows for each of the years in the three-year 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 (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission, and our report dated February 21, 2019 expressed an unqualified opinion on the effectiveness of the Company's internal control over financial reporting.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated 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 consolidated 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 consolidated 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 consolidated 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 consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

We have served as the Company's auditor since 2002.

/s/ KPMG LLP

Houston, Texas  
February 21, 2019

## REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Stockholders and Board of Directors Occidental Petroleum Corporation:

### Opinion on Internal Control Over Financial Reporting

We have audited Occidental Petroleum Corporation and subsidiaries' (the "Company") internal control over financial reporting as of December 31, 2018, based on criteria established in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission. In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2018, based on criteria established in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission.

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 consolidated statements of operations, comprehensive income, stockholders' equity, and cash flows for each of the years in the three-year period ended December 31, 2018, and the related notes and financial statement schedule II - valuation and qualifying accounts (collectively, "the consolidated financial statements"), and our report dated February 21, 2019 expressed an unqualified opinion on those consolidated financial statements.

### Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Annual Assessment of and Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included 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/ KPMG LLP

Houston, Texas  
February 21, 2019

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Consolidated Balance Sheets Occidental Petroleum Corporation  
(in millions) and Subsidiaries

Assets at December 31,	2018	2017
<b>CURRENT ASSETS</b>		
Cash and cash equivalents	\$3,033	\$1,672
Trade receivables, net of reserves of \$21 in 2018 and \$16 in 2017	4,893	4,145
Inventories	1,260	1,246
Assets held for sale	—	474
Other current assets	746	733
Total current assets	9,932	8,270
<b>INVESTMENTS</b>		
Investment in unconsolidated entities	1,680	1,515
<b>PROPERTY, PLANT AND EQUIPMENT</b>		
Oil and gas segment	58,799	53,409
Chemical segment	7,001	6,847
Midstream and marketing segment	8,070	9,493
Corporate	550	497
	74,420	70,246
Accumulated depreciation, depletion and amortization	(42,983 )	(39,072 )
	31,437	31,174
<b>LONG-TERM RECEIVABLES AND OTHER ASSETS, NET</b>	805	1,067
<b>TOTAL ASSETS</b>	\$43,854	\$42,026

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



Consolidated Balance Sheets (in millions, except share and per-share amounts)	Occidental Petroleum Corporation and Subsidiaries	
Liabilities and Stockholders' Equity at December 31,	2018	2017
<b>CURRENT LIABILITIES</b>		
Current maturities of long-term debt	\$116	\$500
Accounts payable	4,885	4,408
Accrued liabilities	2,411	2,492
Total current liabilities	7,412	7,400
LONG-TERM DEBT, NET	10,201	9,328
<b>DEFERRED CREDITS AND OTHER LIABILITIES</b>		
Deferred domestic and foreign income taxes, net	907	581
Asset retirement obligations	1,424	1,241
Pension and postretirement obligations	809	1,005
Environmental remediation reserves	762	728
Other	1,009	1,171
	4,911	4,726
<b>STOCKHOLDERS' EQUITY</b>		
Common stock, \$0.20 per share par value, authorized shares: 1.1 billion, issued shares: 2018 — 895,115,637 and 2017 — 893,468,707	179	179
Treasury stock: 2018 — 145,726,051 shares and 2017 — 128,364,195 shares	(10,473 )	(9,168 )
Additional paid-in capital	8,046	7,884
Retained earnings	23,750	21,935
Accumulated other comprehensive loss	(172 )	(258 )
Total stockholders' equity	21,330	20,572
<b>TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY</b>	<b>\$43,854</b>	<b>\$42,026</b>

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

Consolidated Statements of Operations Occidental Petroleum Corporation  
(in millions, except per-share amounts) and Subsidiaries

For the years ended December 31,	2018	2017	2016
<b>REVENUES AND OTHER INCOME</b>			
Net sales	\$17,824	\$12,508	\$10,090
Interest, dividends and other income	136	99	106
Gains on sale of equity investments and other assets	974	667	202
	18,934	13,274	10,398
<b>COSTS AND OTHER DEDUCTIONS</b>			
Cost of sales (excludes depreciation, depletion, and amortization of \$3,976 in 2018, \$4,000 in 2017, and \$4,266 in 2016)	6,568	5,594	5,189
Selling, general and administrative and other operating expenses	1,613	1,424	1,330
Taxes other than on income	439	311	277
Depreciation, depletion and amortization	3,977	4,002	4,268
Asset impairments and related items	561	545	825
Exploration expense	110	82	62
Interest and debt expense, net	389	345	292
	13,657	12,303	12,243
<b>INCOME (LOSS) BEFORE INCOME TAXES AND OTHER ITEMS</b>	5,277	971	(1,845 )
(Provision for) benefit from domestic and foreign income taxes	(1,477 )	(17 )	662
Income from equity investments	331	357	181
<b>INCOME (LOSS) FROM CONTINUING OPERATIONS</b>	4,131	1,311	(1,002 )
Income from discontinued operations	—	—	428
<b>NET INCOME (LOSS)</b>	\$4,131	\$1,311	\$(574 )
<b>BASIC EARNINGS (LOSS) PER COMMON SHARE (attributable to common stock)</b>			
Income (loss) from continuing operations	\$5.40	\$1.71	\$(1.31 )
Discontinued operations, net	—	—	0.56
<b>BASIC EARNINGS (LOSS) PER COMMON SHARE</b>	\$5.40	\$1.71	\$(0.75 )
<b>DILUTED EARNINGS (LOSS) PER COMMON SHARE (attributable to common stock)</b>			
Income (loss) from continuing operations	\$5.39	\$1.70	\$(1.31 )
Discontinued operations, net	—	—	0.56
<b>DILUTED EARNINGS (LOSS) PER COMMON SHARE</b>	\$5.39	\$1.70	\$(0.75 )

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

Consolidated Statements of Comprehensive Income Occidental Petroleum Corporation  
(in millions) and Subsidiaries

For the years ended December 31,	2018	2017	2016
Net income (loss) attributable to common stock	\$4,131	\$1,311	\$(574)
Other comprehensive income (loss) items:			
Foreign currency translation gains	—	3	—
Unrealized gains (losses) on derivatives <sup>(a)</sup>	(6 )	13	(14 )
Pension and postretirement gains (losses) <sup>(b)</sup>	137	(7 )	47
Reclassification of realized losses (gains) on derivatives <sup>(c)</sup>	13	(1 )	8
Other comprehensive income, net of tax	144	8	41
Comprehensive income (loss)	\$4,275	\$1,319	\$(533)

(a) Net of tax of \$2, \$(7) and \$8 in 2018, 2017 and 2016, respectively.

(b) Net of tax of \$(38), \$4 and \$(26) in 2018, 2017 and 2016, respectively. See Note 14 for additional information.

(c) Net of tax of \$(4), \$0 and \$(4) in 2018, 2017 and 2016, respectively.

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

Consolidated Statements of Stockholders' Equity Occidental Petroleum Corporation  
(in millions) and Subsidiaries

	Equity Attributable to Common Stock					Total Equity
	Common Stock	Treasury Stock	Additional Paid-in Capital	Retained Earnings	Accumulated Other Comprehensive Loss	
Balance, December 31, 2015	\$ 178	\$(9,121 )	\$ 7,640	\$ 25,960	\$ (307 )	\$ 24,350
Net loss	—	—	—	(574 )	—	(574 )
Other comprehensive income, net of tax	—	—	—	—	41	41
Dividends on common stock	—	—	—	(2,405 )	—	(2,405 )
Issuance of common stock and other, net	—	—	107	—	—	107
Purchases of treasury stock	—	(22 )	—	—	—	(22 )
Balance, December 31, 2016	\$ 178	\$(9,143 )	\$ 7,747	\$ 22,981	\$ (266 )	\$ 21,497
Net income	—	—	—	1,311	—	1,311
Other comprehensive income, net of tax	—	—	—	—	8	8
Dividends on common stock	—	—	—	(2,357 )	—	(2,357 )
Issuance of common stock and other, net	1	—	137	—	—	138
Purchases of treasury stock	—	(25 )	—	—	—	(25 )
Balance, December 31, 2017	\$ 179	\$(9,168 )	\$ 7,884	\$ 21,935	\$ (258 )	\$ 20,572
Net income	—	—	—	4,131	—	4,131
Other comprehensive income, net of tax	—	—	—	—	144	144
Dividends on common stock	—	—	—	(2,374 )	—	(2,374 )
Issuance of common stock and other, net	—	—	162	—	—	162
Purchases of treasury stock	—	(1,305 )	—	—	—	(1,305 )
Reclassification of stranded tax effects (See Note 3)	—	—	—	58	(58 )	—
Balance, December 31, 2018	\$ 179	\$(10,473 )	\$ 8,046	\$ 23,750	\$ (172 )	\$ 21,330

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

Consolidated Statements of Cash Flows Occidental Petroleum Corporation (in millions) and Subsidiaries		2018	2017	2016
For the years ended December 31,				
<b>CASH FLOW FROM OPERATING ACTIVITIES</b>				
Net income (loss)		\$4,131	\$1,311	\$(574 )
Adjustments to reconcile net income (loss) to net cash provided by operating activities:				
Income from discontinued operations		—	—	(428 )
Depreciation, depletion and amortization of assets		3,977	4,002	4,268
Deferred income tax (benefit) provision		371	(719 )	(517 )
Other noncash charges to income		34	219	116
Asset impairments and related items		561	545	665
Gain on sales of equity investments and other assets, net		(974 )	(667 )	(202 )
Undistributed earnings from equity investments		(43 )	(68 )	3
Dry hole expenses		56	51	33
Changes in operating assets and liabilities:				
Increase in receivables		(740 )	(158 )	(1,091 )
Decrease (increase) in inventories		(108 )	(349 )	17
Decrease in other current assets		94	39	65
(Decrease) increase in accounts payable and accrued liabilities		195	(89 )	609
Increase in current domestic and foreign income taxes		38	64	17
Other operating, net		77	680	(461 )
Operating cash flow from continuing operations		7,669	4,861	2,520
Operating cash flow from discontinued operations, net of taxes		—	—	864
Net cash provided by operating activities		7,669	4,861	3,384
<b>CASH FLOW FROM INVESTING ACTIVITIES</b>				
Capital expenditures		(4,975 )	(3,599 )	(2,717 )
Change in capital accrual		55	122	(114 )
Payments for purchases of assets and businesses		(928 )	(1,064 )	(2,044 )
Sales of equity investments and assets, net		2,824	1,403	302
Other, net		(182 )	59	(170 )
Net cash used by investing activities		(3,206 )	(3,079 )	(4,743 )
<b>CASH FLOW FROM FINANCING ACTIVITIES</b>				
Proceeds from long-term debt, net		978	—	4,203
Payments of long-term debt		(500 )	—	(2,710 )
Proceeds from issuance of common stock		33	28	36
Purchases of treasury stock		(1,248 )	(25 )	(22 )
Cash dividends paid		(2,374 )	(2,346 )	(2,309 )
Other, net		9	—	—
Net cash used by financing activities		(3,102 )	(2,343 )	(802 )
Increase (decrease) in cash, cash equivalents, and restricted cash		1,361	(561 )	(2,161 )
Cash, cash equivalents, and restricted cash — beginning of year		1,672	2,233	4,394
Cash and cash equivalents — end of year		\$3,033	\$1,672	\$2,233

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



Notes to Consolidated Financial Statements Occidental Petroleum Corporation  
and Subsidiaries

NOTE 1 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

NATURE OF OPERATIONS

In this report, "Occidental" means Occidental Petroleum Corporation, a Delaware corporation (OPC), or OPC and one or more entities in which it owns a controlling interest (subsidiaries). Occidental conducts its operations through various subsidiaries and affiliates. Occidental's principal businesses consist of three segments. The oil and gas segment explores for, develops and produces oil and condensate, natural gas liquids (NGL) and natural gas. The chemical segment (OxyChem) mainly manufactures and markets basic chemicals and vinyls. The midstream and marketing segment purchases, markets, gathers, processes, transports and stores oil, condensate, NGL, natural gas, carbon dioxide (CO<sub>2</sub>) and power. It also trades around its assets, including transportation and storage capacity. Additionally, the midstream and marketing segment invests in entities that conduct similar activities.

PRINCIPLES OF CONSOLIDATION

The consolidated financial statements have been prepared in conformity with United States generally accepted accounting principles (GAAP) and include the accounts of OPC, its subsidiaries and its undivided interests in oil and gas exploration and production ventures. Occidental accounts for its share of oil and gas exploration and production ventures, in which it has a direct working interest, by reporting its proportionate share of assets, liabilities, revenues, costs and cash flows within the relevant lines on the balance sheets, income statements and cash flow statements. Certain financial statements, notes and supplementary data for prior years have been reclassified to conform to the 2018 presentation.

INVESTMENTS IN UNCONSOLIDATED ENTITIES

Occidental's percentage interest in the underlying net assets of affiliates as to which it exercises significant influence without having a controlling interest (excluding oil and gas ventures in which Occidental holds an undivided interest) are accounted for under the equity method. Occidental reviews equity-method investments for impairment whenever events or changes in circumstances indicate that an other-than-temporary decline in value may have occurred. The amount of impairment, if any, is based on quoted market prices, when available, or other valuation techniques, including discounted cash flows.

RISKS AND UNCERTAINTIES

The process of preparing consolidated financial statements in conformity with GAAP requires Occidental's management to make informed estimates and judgments regarding certain types of financial statement balances and disclosures. Such estimates primarily relate to unsettled transactions and events as of the date of the consolidated financial statements and judgments on expected outcomes as well as the materiality of transactions and balances. Changes in facts and circumstances or discovery of new information relating to such transactions and events may result in revised estimates and judgments and actual results may differ from estimates upon settlement. Management believes that these estimates and judgments provide a reasonable basis for the fair presentation of Occidental's financial statements. Occidental establishes a valuation allowance against net operating losses and other deferred tax assets to the extent it believes the future benefit from these assets will not be realized in the statutory carryforward periods. Realization of deferred tax assets is dependent upon Occidental generating sufficient future taxable income and reversal of temporary differences in jurisdictions where such assets originate.

The accompanying consolidated financial statements include assets of approximately \$8.9 billion as of December 31, 2018, and net sales of approximately \$5.3 billion for the year ended December 31, 2018, relating to Occidental's operations in countries outside North America. Occidental operates some of its oil and gas business in countries that have experienced political instability, nationalizations, corruption, armed conflict, terrorism, insurgency, civil unrest, security problems, labor unrest, OPEC production restrictions, equipment import restrictions and sanctions, all of

which increase Occidental's risk of loss, delayed or restricted production or may result in other adverse consequences. Occidental attempts to conduct its affairs so as to mitigate its exposure to such risks and would seek compensation in the event of nationalization.

Because Occidental's major products are commodities, significant changes in the prices of oil and gas and chemical products may have a significant impact on Occidental's results of operations.

Also, see "Property, Plant and Equipment" below.

#### CASH EQUIVALENTS

Cash equivalents are short-term, highly liquid investments that are readily convertible to cash. Cash equivalents were approximately \$2.6 billion and \$1.3 billion at December 31, 2018, and 2017, respectively. In the year ended December 31, 2016, restricted cash, which was the result of the separation of California Resources, was used to retire debt and pay dividends. There was no restricted cash as of December 31, 2016, or thereafter.



**RECEIVABLES AND OTHER CURRENT ASSETS**

Trade receivables, net, of \$4.9 billion and \$4.1 billion at December 31, 2018, and 2017, respectively, represent rights to payment for which Occidental has satisfied its obligations under a contract with a customer and its right to payment is conditioned only on the passage of time.

Other current assets includes amounts receivable from working interest partners in Occidental's oil and gas operations, derivative assets, and taxes receivable.

**INVENTORIES**

Materials and supplies are valued at weighted-average cost and are reviewed periodically for obsolescence. Oil, NGL and natural gas inventories are valued at the lower of cost or market.

For the chemical segment, Occidental's finished goods inventories are valued at the lower of cost or market. For most of its domestic inventories, other than materials and supplies, the chemical segment uses the last-in, first-out (LIFO) method as it better matches current costs and current revenue. For other countries, Occidental uses the first-in, first-out method (if the costs of goods are specifically identifiable) or the average-cost method (if the costs of goods are not specifically identifiable).

**PROPERTY, PLANT AND EQUIPMENT****Oil and Gas**

The carrying value of Occidental's property, plant and equipment (PP&E) represents the cost incurred to acquire or develop the asset, including any asset retirement obligations and capitalized interest, net of accumulated depreciation, depletion and amortization (DD&A) and any impairment charges. For assets acquired, PP&E cost is based on fair values at the acquisition date. Asset retirement obligations and interest costs incurred in connection with qualifying capital expenditures are capitalized and amortized over the lives of the related assets.

Occidental uses the successful efforts method to account for its oil and gas properties. Under this method, Occidental capitalizes costs of acquiring properties, costs of drilling successful exploration wells and development costs. The costs of exploratory wells are initially capitalized pending a determination of whether proved reserves have been found. If proved reserves have been found, the costs of exploratory wells remain capitalized. Otherwise, Occidental charges the costs of the related wells to expense. In some cases, a determination of proved reserves cannot be made at the completion of drilling, requiring additional testing and evaluation of the wells. Occidental generally expenses the costs of such exploratory wells if a determination of proved reserves has not been made within a 12-month period after drilling is complete.

The following table summarizes the activity of capitalized exploratory well costs for continuing operations for the years ended December 31:

in millions	2018	2017	2016
Balance — Beginning of Year	\$108	\$56	\$76
Additions to capitalized exploratory well costs pending the determination of proved reserves	220	201	29
Reclassifications to property, plant and equipment based on the determination of proved reserves	(198 )	(128 )	(28 )
Capitalized exploratory well costs charged to expense	(18 )	(21 )	(21 )
Balance — End of Year	\$112	\$108	\$56

Occidental expenses annual lease rentals, the costs of injectants used in production and geological, geophysical and seismic costs as incurred.

Occidental determines depreciation and depletion of oil and gas producing properties by the unit-of-production method. It amortizes leasehold costs over total proved reserves, and capitalized development and successful exploration costs over proved developed 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. Occidental has no proved oil and gas reserves for which the determination of economic producibility is subject to the completion of major additional capital expenditures.

Occidental performs impairment tests with respect to its proved properties whenever events or circumstances indicate that the carrying value of property may not be recoverable. If there is an indication the carrying amount of the asset may not be recovered due to declines in current and forward prices, significant changes in reserve estimates, changes in management's plans, or other significant events, management will evaluate the property for impairment. Under the successful efforts method, if the sum of the undiscounted cash flows is less than the carrying value of the proved property, the carrying value is reduced to estimated fair value and reported as an impairment charge in the period. Individual proved properties are grouped for impairment purposes at the lowest level for which there are identifiable cash flows. The fair value of impaired assets is typically determined based on the present value of expected future cash flows using discount rates believed to be consistent with those used by market participants. The impairment test incorporates a number of assumptions involving expectations of future cash flows which can change significantly over time. These assumptions include future production and timing of production, estimates

of future product prices, contractual prices, estimates of risk-adjusted oil and gas reserves and estimates of future operating and development costs. See Note 16 and below for further discussion of asset impairments.

A portion of the carrying value of Occidental's oil and gas properties is attributable to unproved properties. Net capitalized costs attributable to unproved properties were \$1.0 billion at both December 31, 2018, and 2017. The unproved amounts are not subject to DD&A until they are classified as proved properties. Capitalized costs attributable to the properties become subject to DD&A when proved reserves are assigned to the property. If the exploration efforts are unsuccessful, or management decides not to pursue development of these properties as a result of lower commodity prices, higher development and operating costs, contractual conditions or other factors, the capitalized costs of the related properties would be expensed. The timing of any writedowns of these unproved properties, if warranted, depends upon management's plans, the nature, timing and extent of future exploration and development activities and their results.

#### Chemical

Occidental's chemical assets are depreciated using either the unit-of-production or the straight-line method, based upon the estimated useful lives of the facilities. The estimated useful lives of Occidental's chemical assets, which range from three years to 50 years, are also used for impairment tests. The estimated useful lives for the chemical facilities are based on the assumption that Occidental will provide an appropriate level of annual expenditures to ensure productive capacity is sustained. Such expenditures consist of ongoing routine repairs and maintenance, as well as planned major maintenance activities (PMMA). Ongoing routine repairs and maintenance expenditures are expensed as incurred. PMMA costs are capitalized and amortized over the period until the next planned overhaul. Additionally, Occidental incurs capital expenditures that extend the remaining useful lives of existing assets, increase their capacity or operating efficiency beyond the original specification or add value through modification for a different use. These capital expenditures are not considered in the initial determination of the useful lives of these assets at the time they are placed into service. The resulting revision, if any, of the asset's estimated useful life is measured and accounted for prospectively.

Without these continued expenditures, the useful lives of these assets could decrease significantly. Other factors that could change the estimated useful lives of Occidental's chemical assets include sustained higher or lower product prices, which are affected by domestic and international competition, demand, feedstock costs, energy prices, environmental regulations and technological changes.

Occidental performs impairment tests on its chemical assets whenever events or changes in circumstances lead to a reduction in the estimated useful lives or estimated future cash flows that would indicate that the carrying amount may not be recoverable, or when management's plans change with respect to those assets. Any impairment loss would be calculated as the excess of the asset's net book value over its estimated fair value.

#### Midstream and Marketing

Occidental's midstream and marketing PP&E is depreciated over the estimated useful lives of the assets, using either the unit-of-production or straight-line method.

Occidental performs impairment tests on its midstream and marketing assets whenever events or changes in circumstances lead to a reduction in the estimated useful lives or estimated future cash flows that would indicate that the carrying amount may not be recoverable, or when management's plans change with respect to those assets. Any impairment loss would be calculated as the excess of the asset's net book value over its estimated fair value.

#### IMPAIRMENTS AND RELATED ITEMS

Due to the decline in crude oil prices in late 2018, management performed an impairment test of its proved oil and gas properties. Occidental's oil and gas segment recorded impairment and related charges of \$416 million related to Qatar Idd El Shargi North Dome (ISND) and Idd El Shargi South Dome (ISSD) proved properties and inventory. In Oman, while undiscounted estimated future cash flows exceeded net book value, future declines in cash flows could result in a future impairment. At December 31, 2018, Occidental's net proved properties balance in Qatar ISND and ISSD and Oman were \$149 million and \$1.7 billion, respectively.

Also in 2018, the midstream and marketing segment incurred approximately \$100 million of charges primarily for lower of cost or market adjustments on its crude inventory and line fill.

In 2017, Occidental recorded net impairment and related charges of \$397 million related to proved and unproved non-core Permian acreage and \$120 million related to idled midstream and marketing facilities.

In 2016, Occidental's oil and gas segment recorded net impairment and related charges of \$46 million related to the exit from Libya, Iraq and non-core domestic areas, as well as commodity price declines. The Midstream segment recorded charges related to the termination of crude oil supply contracts at a cost of \$160 million. Other impairments of \$619 million included costs related to the California Resources spin-off and an allowance for doubtful accounts related to environmental sites indemnified by Maxus described in Note 9. Occidental recorded a reserve against this receivable due to the uncertainty of collection as a result of the Maxus bankruptcy.

It is reasonably possible that prolonged declines in commodity prices, reduced capital spending in response to lower prices or increases in operating costs could result in additional impairments.

## FAIR VALUE MEASUREMENTS

Occidental has categorized its assets and liabilities that are measured at fair value in a three-level fair value hierarchy, based on the inputs to the valuation techniques: Level 1 – using quoted prices in active markets for the assets or liabilities; Level 2 – using observable inputs other than quoted prices for the assets or liabilities; and Level 3 – using unobservable inputs. Transfers between levels, if any, are reported at the end of each reporting period.

### Fair Values - Recurring

Occidental primarily applies the market approach for recurring fair value measurements, maximizes its use of observable inputs and minimizes its use of unobservable inputs. Occidental utilizes the mid-point between bid and ask prices for valuing the majority of its assets and liabilities measured and reported at fair value. In addition to using market data, Occidental makes assumptions in valuing its assets and liabilities, including assumptions about the risks inherent in the inputs to the valuation technique. For assets and liabilities carried at fair value, Occidental measures fair value using the following methods:

Ø Occidental values exchange-cleared commodity derivatives using closing prices provided by the exchange as of the balance sheet date. These derivatives are classified as Level 1.

Ø Over-the-Counter (OTC) bilateral financial commodity contracts, foreign exchange contracts, options and physical commodity forward purchase and sale contracts are generally classified as Level 2 and are generally valued using quotations provided by brokers or industry-standard models that consider various inputs, including quoted forward prices for commodities, time value, volatility factors, credit risk and current market and contractual prices for the underlying instruments, as well as other relevant economic measures. Substantially all of these inputs are observable in the marketplace throughout the full term of the instrument, and can be derived from observable data or are supported by observable prices at which transactions are executed in the marketplace.

Ø Occidental values commodity derivatives based on a market approach that considers various assumptions, including quoted forward commodity prices and market yield curves. The assumptions used include inputs that are generally unobservable in the marketplace, or are observable but have been adjusted based upon various assumptions and the fair value is designated as Level 3 within the valuation hierarchy.

Occidental generally uses an income approach to measure fair value when there is not a market-observable price for an identical or similar asset or liability. This approach utilizes management's judgments regarding expectations of projected cash flows, and discounts those cash flows using a risk-adjusted discount rate.

## ACCRUED LIABILITIES - CURRENT

Accrued liabilities - current include accrued payroll, commissions and related expenses of \$428 million and \$412 million at December 31, 2018, and 2017, respectively. Dividend payable, also included in accrued liabilities - current, were \$600 million and \$598 million at December 31, 2018, and 2017, respectively.

## ENVIRONMENTAL LIABILITIES AND EXPENDITURES

Environmental expenditures that relate to current operations are expensed or capitalized as appropriate. Occidental records environmental reserves and related charges and expenses for estimated remediation costs that relate to existing conditions from past operations when environmental remediation efforts are probable and the costs can be reasonably estimated. In determining the reserves and the range of reasonably possible additional losses, Occidental refers to currently available information, including relevant past experience, remedial objectives, available technologies, applicable laws and regulations and cost-sharing arrangements. Occidental bases environmental reserves on management's estimate of the most likely cost to be incurred, using the most cost-effective technology reasonably expected to achieve the remedial objective. Occidental periodically reviews reserves and adjusts them as new information becomes available. Occidental records environmental reserves on a discounted basis when it deems the aggregate amount and timing of cash payments to be reliably determinable at the time the reserves are established. The reserve methodology with respect to discounting for a specific site is not modified once it is established. Presently none of the environmental reserves are recorded on a discounted basis. Occidental generally records reimbursements or recoveries of environmental remediation costs in income when received, or when receipt of recovery is highly

probable.

Many factors could affect Occidental's future remediation costs and result in adjustments to its environmental reserves and range of reasonably possible additional losses. The most significant are: (1) cost estimates for remedial activities may be inaccurate; (2) the length of time, type or amount of remediation necessary to achieve the remedial objective may change due to factors such as site conditions, the ability to identify and control contaminant sources or the discovery of additional contamination; (3) a regulatory agency may ultimately reject or modify Occidental's proposed remedial plan; (4) improved or alternative remediation technologies may change remediation costs; (5) laws and regulations may change remediation requirements or affect cost sharing or allocation of liability; and (6) changes in allocation or cost-sharing arrangements may occur.

Certain sites involve multiple parties with various cost-sharing arrangements, which fall into the following three categories: (1) environmental proceedings that result in a negotiated or prescribed allocation of remediation costs among Occidental and other alleged potentially responsible parties; (2) oil and gas ventures in which each participant pays its proportionate share

of remediation costs reflecting its working interest; or (3) contractual arrangements, typically relating to purchases and sales of properties, in which the parties to the transaction agree to methods of allocating remediation costs. In these circumstances, Occidental evaluates the financial viability of the other parties with whom it is alleged to be jointly liable, the degree of their commitment to participate and the consequences to Occidental of their failure to participate when estimating Occidental's ultimate share of liability. Occidental records reserves at its expected net cost of remedial activities and, based on these factors, believes that it will not be required to assume a share of liability of such other potentially responsible parties in an amount materially above amounts reserved.

In addition to the costs of investigations and cleanup measures, which often take in excess of 10 years at Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) National Priorities List (NPL) sites, Occidental's reserves include management's estimates of the costs to operate and maintain remedial systems. If remedial systems are modified over time in response to significant changes in site-specific data, laws, regulations, technologies or engineering estimates, Occidental reviews and adjusts its reserves accordingly.

#### ASSET RETIREMENT OBLIGATIONS

Occidental recognizes the fair value of asset retirement obligations in the period in which a determination is made that a legal obligation exists to dismantle an asset and reclaim or remediate the property at the end of its useful life and the cost of the obligation can be reasonably estimated. The liability amounts are based on future retirement cost estimates and incorporate many assumptions such as time to abandonment, technological changes, future inflation rates and the risk-adjusted discount rate. When the liability is initially recorded, Occidental capitalizes the cost by increasing the related PP&E balances. If the estimated future cost of the asset retirement obligations changes, Occidental records an adjustment to both the asset retirement obligations and PP&E. Over time, the liability is increased and expense is recognized for accretion, and the capitalized cost is depreciated over the useful life of the asset.

At a certain number of its facilities, Occidental has identified conditional asset retirement obligations that are related mainly to plant decommissioning. Occidental does not know or cannot estimate when it may settle these obligations. Therefore, Occidental cannot reasonably estimate the fair value of these liabilities. Occidental will recognize these conditional asset retirement obligations in the periods in which sufficient information becomes available to reasonably estimate their fair values.

The following table summarizes the activity of the asset retirement obligations, of which \$1.4 billion and \$1.2 billion is included in deferred credits and other liabilities - asset retirement obligations as of December 31, 2018 and 2017, respectively, with the remaining current portion in accrued liabilities.

For the years ended December 31, (in millions)	2018	2017
Beginning balance	\$1,312	\$1,369
Liabilities incurred – capitalized to PP&E	31	46
Liabilities settled and paid	(40 )	(39 )
Accretion expense	67	67
Acquisitions, dispositions and other – changes in PP&E	(18 )	(136 )
Revisions to estimated cash flows – changes in PP&E	147	5
Ending balance	\$1,499	\$1,312

#### DERIVATIVE INSTRUMENTS

Derivatives are carried at fair value and on a net basis when a legal right of offset exists with the same counterparty. Occidental applies hedge accounting when transactions meet specified criteria for cash-flow hedge treatment and management elects and documents such treatment. Otherwise, any fair value gains or losses are recognized in earnings in the current period. For cash-flow hedges, the gain or loss on the effective portion of the derivative is reported as a component of other comprehensive income (OCI) with an offsetting adjustment to the basis of the item being hedged. Realized gains or losses from cash-flow hedges, and any ineffective portion, are recorded as a component of net sales in the consolidated statements of operations. Ineffectiveness is primarily created by a lack of correlation between the hedged item and the hedging instrument due to location, quality, grade or changes in the expected quantity of the hedged item. Gains and losses from derivative instruments are reported net in the consolidated statements of

operations. There were no fair value hedges as of and during the years ended December 31, 2018, 2017 and 2016. A hedge is regarded as highly effective such that it qualifies for hedge accounting if, at inception and throughout its life, it is expected that changes in the fair value or cash flows of the hedged item will be offset by 80 to 125 percent of the changes in the fair value or cash flows, respectively, of the hedging instrument. In the case of hedging a forecast transaction, the transaction must be probable and must present an exposure to variations in cash flows that could ultimately affect reported net income or loss. Occidental discontinues hedge accounting when it determines that a derivative has ceased to be highly effective as a hedge; when the hedged item matures or is sold or repaid; or when a forecast transaction is no longer deemed probable.



### STOCK-BASED INCENTIVE PLANS

Occidental has established several stockholder-approved stock-based incentive plans for certain employees and directors (Plans) that are more fully described in Note 13. A summary of Occidental's accounting policy for awards issued under the Plans is as follows.

For cash- and stock-settled restricted stock units or incentive award shares (RSU), cash return on capital employed incentive awards (CROCEI), return on capital employed incentive awards (ROCEI) and return on assets incentive awards (ROAI), compensation value is initially measured on the grant date using the quoted market price of Occidental's common stock and the estimated payout at the grant date. For total shareholder return incentive awards (TSRI), compensation value is initially measured on the grant date using estimated payout levels derived from a Monte Carlo valuation model. Compensation expense for RSUs, CROCEIs, ROCEIs, ROAIs and TSRI is recognized on a straight-line basis over the requisite service periods, which is generally over the awards' respective vesting or performance periods. Dividends accrued on unvested awards are adjusted quarterly for any changes in the number of share equivalents expected to be paid based on the relevant performance and market criteria, if applicable. All such performance or stock-price-related changes are recognized in periodic compensation expense. The stock-settled portion of these awards is expensed using the initially measured compensation value.

### EARNINGS PER SHARE

Occidental's instruments containing rights to nonforfeitable dividends granted in stock-based awards are considered participating securities prior to vesting and, therefore, have been deducted from earnings in computing basic and diluted EPS under the two-class method.

Basic EPS was computed by dividing net income attributable to common stock, net of income allocated to participating securities, by the weighted-average number of common shares outstanding during each period, net of treasury shares and including vested but unissued shares and share units. The computation of diluted EPS reflects the additional dilutive effect of stock options and unvested stock awards.

### RETIREMENT AND POSTRETIREMENT BENEFIT PLANS

Occidental recognizes the overfunded or underfunded amounts of its defined benefit pension and postretirement plans, which are more fully described in Note 14, in its financial statements using a December 31 measurement date. Occidental determines its defined benefit pension and postretirement benefit plan obligations based on various assumptions and discount rates. The discount rate assumptions used are meant to reflect the interest rate at which the obligations could effectively be settled on the measurement date. Occidental estimates the rate of return on assets with regard to current market factors but within the context of historical returns. Occidental funds and expenses negotiated pension increases for domestic union employees over the terms of the applicable collective bargaining agreements. Pension and any postretirement plan assets are measured at fair value. Common stock, preferred stock, publicly registered mutual funds, U.S. government securities and corporate bonds are valued using quoted market prices in active markets when available. When quoted market prices are not available, these investments are valued using pricing models with observable inputs from both active and non-active markets. Common and collective trusts are valued at the fund units' net asset value (NAV) provided by the issuer, which represents the quoted price in a non-active market. Short-term investment funds are valued at the fund units' NAV provided by the issuer.

### SUPPLEMENTAL CASH FLOW INFORMATION

Occidental paid United States federal, state and foreign income taxes for continuing operations of approximately \$1.1 billion, \$0.8 billion and \$0.6 billion during the years ended December 31, 2018, 2017 and 2016, respectively. Occidental received refunds of \$82 million, \$768 million and \$325 million during the years ended December 31, 2018, 2017, and 2016, respectively. Occidental also paid production, property and other taxes of approximately \$505 million, \$375 million and \$345 million during the years ended December 31, 2018, 2017 and 2016, respectively, substantially all of which was in the United States. Interest paid totaled \$383 million, \$351 million and \$312 million, net of capitalized interest of \$46 million, \$52 million and \$64 million, for the years 2018, 2017 and 2016, respectively.

#### FOREIGN CURRENCY TRANSACTIONS

The functional currency applicable to all of Occidental's international oil and gas operations is the U.S. dollar since cash flows are denominated principally in U.S. dollars. In Occidental's other operations, Occidental's use of non-United States dollar functional currencies was not material for all years presented. The effect of exchange rates on transactions in foreign currencies is included in periodic income. Occidental reports the exchange rate differences arising from translating foreign-currency-denominated balance sheet accounts to the United States dollar as of the reporting date in other comprehensive income. Exchange-rate gains and losses for continuing operations were not material for all years presented.

## NOTE 2 ACQUISITIONS, DISPOSITIONS AND OTHER TRANSACTIONS

### 2018

In September 2018, Occidental divested non-core domestic midstream assets for total consideration of \$2.6 billion, of which approximately \$2.4 billion was received at closing, resulting in a pre-tax net gain of \$907 million. These assets include the Centurion common carrier oil pipeline and storage system, Southeast New Mexico oil gathering system, and Ingleside Crude Terminal. Following the transactions, Occidental retained its long-term flow assurance, pipeline takeaway and export capacity through its retained marketing business.

In July 2018, Occidental acquired a previously leased power and steam cogeneration facility for \$443 million.

In March 2018, Occidental divested non-core midstream assets for approximately \$150 million, resulting in a pre-tax gain of \$43 million.

In March 2018, Occidental issued \$1.0 billion of 4.2-percent senior notes due 2048. Occidental received net proceeds of approximately \$985 million. Interest on the notes is payable semi-annually in arrears in March and September of each year, beginning on September 15, 2018. The proceeds were used to refinance the repayment of the \$500 million aggregate principal amount of Occidental's 1.5-percent senior notes due in February 2018, with the remainder used for general corporate purposes.

In January 2018, Occidental entered into a five-year, \$3.0 billion revolving credit facility (2018 Credit Facility), replacing the previous credit facility that was scheduled to expire in August 2019. The 2018 Credit Facility has similar terms to the previous credit facility and does not contain material adverse change clauses or debt ratings triggers that could restrict Occidental's ability to borrow under the facility.

### 2017

In the third quarter of 2017, Occidental closed on two divestitures of non-core acreage in the Permian Basin for proceeds of approximately \$0.6 billion, resulting in a pre-tax gain of approximately \$81 million. Concurrently, Occidental purchased additional ownership interests and assumed operatorship in CO<sub>2</sub> enhanced oil recovery (EOR) properties located in the Seminole-San Andres Unit for approximately \$0.6 billion, which was primarily allocated to proved property. In the fourth quarter of 2017, Occidental sold other non-core proved and unproved acreage in the Permian Basin for approximately \$90 million, resulting in a pre-tax gain of approximately \$55 million. Occidental also classified approximately \$0.5 billion in non-core proved and unproved Permian acreage to assets held for sale at December 31, 2017.

In April 2017, Occidental completed the sale of its South Texas operations for net proceeds of \$0.5 billion resulting in pre-tax gain of \$0.5 billion.

### 2016

In 2016, Occidental completed its exit of non-core operations in Bahrain, Iraq, Libya and Yemen.

In November 2016, Occidental issued \$1.5 billion of senior notes, comprised of \$750 million of 3.0-percent senior notes due 2027 and \$750 million of 4.1-percent senior notes due 2047. Occidental received net proceeds of \$1.49 billion. Interest on the senior notes is payable semi-annually in arrears in February and August each year for each series of senior notes beginning August 15, 2017. Occidental used the proceeds for general corporate purposes.

In October 2016, Occidental acquired producing and non-producing leasehold acreage in the Permian Basin. This acquisition included 35,000 net acres in Reeves and Pecos counties, Texas, in the Southern Delaware Basin, in areas where Occidental currently operates or has working interests. Separately, Occidental also acquired working interests in several producing oil and gas CO<sub>2</sub> floods and related EOR infrastructure, increasing Occidental's ownership in several properties where it is currently the operator or an existing working interest partner. The total purchase price for these transactions was approximately \$2.0 billion which was allocated between unproved and proved property.

In September 2016, Occidental completed the sale of its South Texas Eagle Ford non-operated properties for \$63 million resulting in a pre-tax gain of \$59 million.

In August 2016, Occidental terminated crude oil supply contracts at a cost of \$160 million.

In the second quarter of 2016, Occidental received \$330 million as final payment from the settlement with the Republic of Ecuador. In January 2016, Occidental reached an understanding on the terms of payment for the approximate \$1.0 billion payable to Occidental by the Republic of Ecuador under a November 2015 International Center for Settlement of Investment Disputes arbitration award. This award relates to Ecuador's 2006 expropriation of the oil and gas segment's Participation Contract for Block 15. Occidental recorded a pre-tax gain of \$681 million in 2016. The results related to Ecuador were presented as discontinued operations.

In May and June 2016, respectively, Occidental utilized part of the proceeds from the April 2016 senior notes offering (described below) to exercise the early redemption option on \$1.25 billion of 1.75-percent senior notes due in the first quarter of 2017 and to retire all \$750 million of 4.125-percent senior notes that matured in June 2016.

In April 2016, Occidental issued \$2.75 billion of senior notes, comprised of \$400 million of 2.6-percent senior notes due 2022, \$1.15 billion of 3.4-percent senior notes due 2026 and \$1.2 billion of 4.4-percent senior notes due 2046. Occidental received net proceeds of approximately \$2.72 billion. Interest on the senior notes is payable semi-annually in arrears in April and October of each year for each series of senior notes, beginning on October 15, 2016. Occidental used a portion of the proceeds to retire debt in May and June 2016, and used the remaining proceeds for general corporate purposes.

In March 2016, Occidental distributed its remaining shares of California Resources Corporation (California Resources) through a special stock dividend to stockholders of record as of February 29, 2016. Upon distribution, Occidental recorded a \$78 million loss to reduce the investment to its fair market value, and Occidental no longer owns any shares of California Resources common stock.

In March 2016, Occidental completed the sale of its Piceance Basin operations in Colorado for \$153 million resulting in a pre-tax gain of \$121 million. The assets and liabilities related to these operations were presented as held for sale at December 31, 2015, and primarily included property, plant and equipment and current accrued liabilities and asset retirement obligations.

In February 2016, Occidental repaid \$700 million of 2.5-percent senior notes that matured.

In January 2016, Occidental completed the sale of its Occidental Tower building in Dallas, Texas, for net proceeds of approximately \$85 million, resulting in a pre-tax gain of \$57 million. The building was classified as held for sale as of December 31, 2015.

### NOTE 3 ACCOUNTING AND DISCLOSURE CHANGES

#### RECENTLY ADOPTED ACCOUNTING AND DISCLOSURE CHANGES

In February 2018, the Financial Accounting Standards Board (FASB) released standards that allow the reclassification from accumulated other comprehensive income to retained earnings of stranded tax effects resulting from changes to U.S. federal tax law from the 2017 Tax Cuts and Jobs Act (Tax Reform) enacted in December 2017. Occidental early adopted this standard in the first quarter of 2018, resulting in the reclassification of \$58 million in stranded tax effects from accumulated other comprehensive income (AOCI) to retained earnings.

In January 2018, Occidental adopted the new revenue recognition standard Topic 606 - Revenue from Contracts with Customers and related updates (ASC 606). The new standard requires more detailed disclosures related to the nature, amount, timing and uncertainty of revenue and cash flows arising from contracts with customers. Occidental adopted the standard using the modified retrospective method. The cumulative-effect adjustment to retained earnings upon adoption was not material. See Note 4 Revenue.

In March 2017, FASB issued guidance related to presentation of net periodic pension cost and net periodic postretirement benefit cost. The rules became effective in the first quarter of 2018. These rules did not have a material impact to Occidental's financial statements upon adoption.

In January 2017, FASB issued new guidance clarifying the definition of a business under the topic Business Combinations. The rules became effective in the first quarter of 2018, and did not have a material impact to Occidental's financial statements upon adoption.

In November 2016, FASB issued new guidance related to the cash flow classification and presentation of the changes in restricted cash on the statement of cash flows. The rules were effective for the interim and annual periods beginning after December 15, 2017 and were applied retrospectively. Occidental did not have restricted cash as of December 31, 2018, 2017 or 2016. Total of cash and restricted cash was \$4.4 billion as of December 31, 2015. In the statement of cash flows for the year ended December 31, 2016, the \$1.2 billion previously presented as cash flows from financing activities related to the decrease in restricted cash was retrospectively applied to the beginning balance of cash, cash equivalents, and restricted cash at December 31, 2015. As a result, cash flows from financing activities for the year ended December 31, 2016 decreased by \$1.2 billion and the beginning balance of cash, cash equivalents, and restricted cash was increased by the same amount. The cash balance as of December 31, 2016 was unaffected.

In August 2016, FASB issued new guidance related to the classification of certain cash receipts and payments on the statement of cash flows. The rules were effective for the interim and annual periods beginning after December 15, 2017. The rules resulted in the retrospective reclassification of \$135 million of cash flows related to corporate owned life insurance policies from operating to investing cash flows for the years ended December 31, 2017.

#### RECENTLY ISSUED ACCOUNTING STANDARDS NOT YET ADOPTED

In February 2016, FASB issued rules which require Occidental to recognize most leases, including operating leases, on the balance sheet. The new rules require lessees to recognize a right-of-use asset and lease liability for all leases with lease terms of more than 12 months. The lease liability represents the discounted obligation to make future minimum lease payments. The corresponding right-of-use asset includes the discounted obligation in addition to any upfront payment or cost incurred during contract execution of the lease. Recognition, measurement and disclosure of expenses and cash flows arising from a lease will depend on classification as a finance or operating lease. Occidental will apply the revised lease rules for its interim and annual reporting periods starting January 1, 2019, using a modified retrospective approach, including adopting several optional practical expedients affecting both leases that commenced before and after the effective date. Generally, Occidental is the lessee under various agreements for real estate, equipment, plants and facilities, and information technology hardware that are currently accounted for as operating leases. Under the new standard, certain contracts, which were not previously reported as leases, will be now subject to lease accounting requirements. As a result, existing and newly qualifying operating leases under these new rules will increase reported assets and liabilities. The expected estimated right-of-use asset and

lease liability which will be recorded upon adoption is between \$0.8 - \$1.0 billion. Occidental is currently training employees, working with third-party consultants and finalizing testing on an internally developed software solution for the identification, documentation, tracking and accounting of leases as part of the adoption plan designed to address Occidental's population of leases under the revised definition of leases.

#### NOTE 4 REVENUE

On January 1, 2018, Occidental adopted ASC 606 using the modified retrospective method. Results for reporting periods beginning after January 1, 2018, are presented under ASC 606, while prior period amounts have not been adjusted. There was no impact of adopting ASC 606 to the opening balance of retained earnings. There was no impact to the timing or amount of revenue recognized in the year ended December 31, 2018, as a result of the adoption of ASC 606.

#### Revenue recognition before the adoption of ASC 606

Prior to the adoption of ASC 606, revenue was recognized from oil and gas production when title was passed to the customer, which occurred when the product was shipped. Where oil was shipped by tanker, title passed when the tanker was loaded or product was received by the customer, depending on the shipping terms. This process occasionally caused a difference between actual production in a reporting period and sales volumes that had been recognized as revenue. Revenues from the production of oil and gas properties in which Occidental had an interest with other producers was recognized on the basis of Occidental's net revenue interest.

Revenue from chemical product sales was recognized when the product was shipped and title had passed to the customer. Certain incentive programs may have provided for payments or credits to be made to customers based on the volume of product purchased over a defined period. Total customer incentive payments over a given period were estimated and recorded as a reduction to revenue ratably over the contract period. Such estimates were evaluated and revised as warranted.

Revenue from marketing activities was recognized on net settled transactions upon completion of contract terms and, for physical deliveries, upon title transfer. For unsettled transactions, contracts were recorded at fair value and changes in fair value were reflected in net sales. Revenue from all marketing activities was reported on a net basis. Occidental recorded revenue net of any taxes, such as sales taxes, that are assessed by governmental authorities on Occidental's customers.

#### Revenue recognition after the adoption of ASC 606

Revenue from customers is recognized when obligations under the terms of a contract with our customer are satisfied; this generally occurs with the delivery of oil, gas, NGL, chemicals or services such as transportation. Revenue from customers is measured as the amount of consideration Occidental expects to receive in exchange for the delivery of goods or services. Contracts may last from one month to one year or more, and may have renewal terms that extend indefinitely at the option of either party. Price is typically based on market indexes. Volumes fluctuate due to production and, in certain cases, customer demand and transportation availability. Occidental records revenue net of certain taxes, such as sales taxes, that are assessed by governmental authorities on Occidental's customers. Occidental will not disclose revenue recognizable in future periods for unsatisfied performance obligations because the consideration related to those performance obligations is based on volume or market prices, which are variable.

Occidental does not incur significant costs to obtain contracts. Incidental items that are immaterial in the context of the contract are recognized as expenses. Sales of hydrocarbons and chemicals to customers are invoiced and settled on a monthly basis. Occidental is not usually subject to obligations for warranties, rebates, returns or refunds except in the case of customer incentive payments as discussed for the chemical segment below. Occidental does not typically receive payment in advance of satisfying its obligations under the terms of its sales contracts with customers;

therefore, liabilities related to such payment are immaterial to Occidental.

#### Oil and Gas Segment

Revenue from oil and gas production is recognized when it is delivered and control passes to the customer. Revenues from the production of oil and gas properties in which Occidental has an interest with other producers are recognized on the basis of Occidental's net revenue interest.



## Chemical Segment

Revenue from chemical product sales is recognized when control passes to the customer. Certain incentive programs may provide for payments or credits to be made to customers based on the volume of product purchased over a defined period. Customer incentives are estimated and recorded as a reduction to revenue ratably over the contract period. Such estimates are evaluated and revised as warranted. Revenue from exchange contracts is excluded from revenue from customers.

## Midstream and Marketing Segment

Revenue from pipeline and gas processing is recognized upon the completion of the transportation or processing service. Revenue from power sales is recognized upon delivery. Net marketing revenue is included in net sales, but excluded from revenue from customers in the table below. Net marketing revenue is recognized upon completion of contract terms that are a prerequisite to payment and upon title transfer for physical deliveries. Unless the normal purchases and sales exception has been elected, net marketing revenue is classified as a derivative, reported on a net basis, recorded at fair value and changes in fair value are reflected in net sales.

The following table shows a reconciliation of revenue from customers to total net sales:  
For the year ended December 31, (in millions) 2018

Revenue from customers	\$15,560
All other revenues <sup>(a)</sup>	2,264
Total net sales	\$17,824

<sup>(a)</sup> Includes net marketing revenue and chemical exchange contracts.

The following table presents Occidental's revenue from customers by segment, product and geographical area. The oil and gas segment typically sells its oil, gas and NGL at the lease or concession area. Chemical revenues are shown by geographic area based on the location of the sale. Excluding net marketing revenue, Midstream revenues are shown by the location of sale:

For the year ended December 31, 2018 (in millions)

Revenue by Product	United States	Middle East	Latin America	Other International	Eliminations	Total
<b>Oil and Gas Segment</b>						
Oil	\$5,125	\$3,405	\$ 715	\$ —	\$ —	\$9,245
NGL	430	261	—	—	—	691
Gas	185	294	16	—	—	495
Other	7	3	—	—	—	10
Segment Total	\$5,747	\$3,963	\$ 731	\$ —	\$ —	\$10,441
Chemical Segment	\$4,363	\$—	\$ 205	\$ 80	\$ —	\$4,648
<b>Midstream Segment</b>						
Gas Processing	557	425	—	—	—	982
Pipelines	311	—	—	—	—	311
Power and Other	108	—	—	—	—	108
Segment Total	\$976	\$425	\$ —	\$ —	\$ —	\$1,401

Eliminations	\$—	\$—	\$ —	\$ —	\$ (930 )	\$(930 )
Consolidated	\$11,086	\$4,388	\$ 936	\$ 80	\$ (930 )	\$15,560

## NOTE 5 INVENTORIES

Finished goods primarily represents crude oil, which is carried at the lower of weighted average cost or market value, and caustic soda and chlorine, which are valued under the LIFO method. Net carrying values of inventories valued under the LIFO method were \$169 million and \$172 million at December 31, 2018 and 2017, respectively. Inventories consisted of the following:

Balance at December 31, (in millions)	2018	2017
Raw materials	\$74	\$66
Materials and supplies	445	447
Finished goods	788	776
	1,307	1,289
Revaluation to LIFO	(47 )	(43 )
Total	\$1,260	\$1,246

## NOTE 6 LONG-TERM DEBT

Long-term debt consisted of the following:

Balance at December 31, (in millions)	2018	2017
9.25% senior debentures due 2019	\$116	\$116
4.10% senior notes due 2021	1,249	1,249
3.125% senior notes due 2022	813	813
2.60% senior notes due 2022	400	400
2.70% senior notes due 2023	1,191	1,191
8.75% medium-term notes due 2023	22	22
3.50% senior notes due 2025	750	750
3.40% senior notes due 2026	1,150	1,150
3.00% senior notes due 2027	750	750
7.20% senior debentures due 2028	82	82
8.45% senior debentures due 2029	116	116
4.625% senior notes due 2045	750	750
4.40% senior notes due 2046	1,200	1,200
4.10% senior notes due 2047	750	750
4.20% senior notes due 2048	1,000	—
1.50% senior notes due 2018	—	500
Variable rate bonds due 2030 (1.9% and 1.8% as of December 31, 2018 and 2017, respectively )	68	68
	10,407	9,907
Less:		
Unamortized discount, net	(36 )	(32 )
Debt issuance costs	(54 )	(47 )
Current maturities	(116 )	(500 )
Total	\$10,201	\$9,328

In January 2018, Occidental entered into a \$3.0 billion revolving credit facility (2018 Credit Facility) which matures in January 2023, to replace the previously undrawn \$2.0 billion revolving credit facility (2014 Credit Facility), which was scheduled to expire in August 2019. Borrowings under the 2018 Credit Facility bear interest at various benchmark rates, including LIBOR, plus a margin based on Occidental's senior debt ratings. Both credit facilities have similar terms and along with other debt agreements do not contain material adverse change clauses or debt ratings triggers that could restrict Occidental's ability to borrow or that would permit lenders to terminate their commitments or accelerate debt repayment. The 2018 Credit Facility provides for the termination of loan commitments and requires

immediate repayment of any outstanding amounts if certain events of default occur.

Occidental paid average annual facility fees of 0.08 percent in 2018 on the total commitment amounts of the 2018 Credit Facility. Occidental did not draw down any amounts under the 2018 Credit Facility during 2018. Occidental did not draw down any amounts under the 2014 Credit Facility during 2017 or 2016.

As of December 31, 2018, under the most restrictive covenants of its financing agreements, Occidental had substantial capacity for additional unsecured borrowings, the payment of cash dividends and other distributions on, or acquisitions of, Occidental stock.

Occidental has provided guarantees on Dolphin Energy's debt, which are limited to certain political and other events. At December 31, 2018, and 2017, Occidental's total guarantees were not material and a substantial majority of the amounts consisted of limited recourse guarantees on \$244 million and \$272 million, respectively, of Dolphin's debt. At December 31, 2018, principal payments on long-term debt aggregated approximately \$10.4 billion, of which \$116 million is due in 2019, zero is due in 2020, \$1.2 billion is due in 2021, \$1.2 billion is due in 2022, and \$7.9 billion is due in 2023 and thereafter.

Occidental estimates the fair value of fixed-rate debt based on the quoted market prices for those instruments or on quoted market yields for similarly rated debt instruments, taking into account such instruments' maturities. The estimated fair values of Occidental's debt at December 31, 2018, and 2017, substantially all of which were classified as Level 1, were approximately \$10.3 billion and \$10.4 billion, respectively, compared to carrying values of approximately \$10.4 billion at December 31, 2018, and \$9.9 billion at December 31, 2017. Occidental's exposure to changes in interest rates relates primarily to its variable-rate, long-term debt obligations, and is not material. As of December 31, 2018, and 2017, variable-rate debt constituted approximately one percent of Occidental's total debt.

#### NOTE 7 LEASE COMMITMENTS

Operating lease agreements include leases for real estate, equipment, plants and facilities, and information technology hardware. Occidental's operating lease agreements frequently include renewal or purchase options and require the Company to pay for various fixed and variable cost including such things as utilities, taxes, insurance and maintenance expenses.

At December 31, 2018, future net minimum fixed lease payments for non-cancellable operating leases were the following (undiscounted):

(in millions)	Amount
2019	\$ 186
2020	147
2021	96
2022	68
2023	49
Thereafter	158
Total minimum lease payments	\$ 704

Rental expense for operating leases was \$175 million in 2018, \$278 million in 2017 and \$237 million in 2016.

#### NOTE 8 DERIVATIVES

##### Objective & Strategy

Occidental uses a variety of derivative financial instruments and physical contracts, including those designated as cash flow hedges, to manage its exposure to commodity price fluctuations, transportation commitments and to fix margins on the future sale of stored volumes of oil and natural gas. Where Occidental buys product for its own consumption or sells its production to a defined customer, Occidental may elect normal purchases and normal sales exclusions.

Occidental usually applies cash flow hedge accounting treatment to derivative financial instruments to lock in margins on the forecasted sales of its natural gas storage volumes, and at times for other strategies to lock in margins.

Occidental also enters into derivative financial instruments for speculative or trading purposes; however, the results of any transactions are immaterial to the marketing portfolio. Refer to Note 1 for Occidental's accounting policy on derivatives.

The financial instruments, not designated as hedges, will impact Occidental's earnings through mark-to-market until the offsetting future physical commodity is delivered. Physical inventory is carried at lower of cost or market on the balance sheet. A substantial majority of Occidental's physical derivative contracts are index-based and carry no mark-to-market value in earnings. Net gains and losses associated with derivative instruments not designated as

hedging instruments are recognized currently in net sales. Net gains and losses attributable to derivatives instruments subject to hedge accounting reside in accumulated other comprehensive income (loss) and are reclassified to earnings as the transactions to which the derivatives relate are recognized in earnings.

#### Cash-Flow Hedges

Occidental's marketing operations store natural gas purchased from third parties at Occidental's leased storage facilities. Derivative instruments are used to fix margins on the future sales of the stored volumes. These agreements continue through 2019. As of December 31, 2018, and 2017, Occidental had approximately 5 Bcf and 7 Bcf of natural gas held in storage, respectively, and had cash-flow hedges for the forecasted sales, to be settled by physical delivery, of approximately 4 Bcf and 7 Bcf of stored natural gas, respectively. The amount of cash-flow hedges, including the ineffective portion, was immaterial for the years ended December 31, 2018, and 2017.

## Derivatives Not Designated as Hedging Instruments

Forward unrealized instruments that are derivatives not designated as hedging instruments are required to be recorded on the income statement and balance sheet at fair value. The fair value represents an unrealized gain or loss between executed sales prices and market prices at the end of the period. The fair value does not reflect the realized or cash value of the instrument. Substantially all of the fair value of Occidental's derivative instruments not designated as hedges are used to manage its exposure to commodity price fluctuations and settle within three months at a weighted average contract price of \$58.81 and \$3.18 for crude oil and natural gas, respectively, at December 31, 2018. The remaining fair value of derivative instruments not designated as hedges was immaterial. The weighted average contract price was \$57.38 and \$2.73 for crude oil and natural gas, respectively, at December 31, 2017.

As of December 31, (in millions, except Long/(Short) volumes)	2018	2017
Unrealized gain (loss) on derivatives not designated as hedges		
Oil commodity contracts	\$184	\$(47)
Natural gas commodity contracts	\$5	\$1
Outstanding net volumes on derivatives not designated as hedges		
Oil Commodity Contracts		
Volume (MMBOE)	61	61
Natural gas commodity contracts		
Volume (Bcf)	(142 )	(47 )

## Fair Value of Derivatives

Occidental has categorized its assets and liabilities that are measured at fair value in a three-level fair value hierarchy, based on the inputs to the valuation techniques: Level 1 - using quoted prices in active markets for the assets or liabilities; Level 2 - using observable inputs other than quoted prices for the assets or liabilities; and Level 3 - using unobservable inputs. Transfers between levels, if any, are reported at the end of each reporting period. The following summarizes the fair value of the Company's derivative assets and liabilities by input level within the fair-value hierarchy:

As of December 31, 2018		Fair Value			Total Fair Value
(in millions)	Balance Sheet Location	Level 1	Level 2	Level 3	
Assets:					
Derivatives not designated as hedging instruments <sup>(a)</sup>					
Commodity contracts	Other current assets	2,531	110	—	(2,392) 249
	Long-term receivables and other assets, net	5	9	—	(6 ) 8
Liabilities:					
Cash-flow hedges <sup>(a)</sup>					
Commodity contracts	Accrued liabilities	—	2	—	— 2
Derivatives not designated as hedging instruments <sup>(a)</sup>					
Commodity contracts	Accrued liabilities	2,357	101	—	(2,392) 66
	Deferred credits and liabilities	6	2	—	(6 ) 2

<sup>(a)</sup> Fair values are presented at gross amounts, including when the derivatives are subject to netting arrangements and presented on a net basis in the consolidated balance sheets.

<sup>(b)</sup> These amounts do not include collateral. As of December 31, 2018, \$45 million collateral received has been netted against derivative assets and collateral paid of \$1 million has been netted against derivative liabilities. Select

clearinghouses and brokers require Occidental to post an initial margin deposit. Collateral, mainly for initial margin, of \$178 million as of December 31, 2018, deposited by Occidental, has not been reflected in these derivative fair value tables. This collateral is included in other current assets in the consolidated balance sheets.



As of December 31, 2017		Fair Value Measurements Using			Netting (b)	Total Fair Value
		Level 1	Level 2	Level 3		
(in millions)	Balance Sheet Location					
Assets:						
Cash-flow hedges (a)						
Commodity contracts	Other current assets	—	3	—	—	3
Derivatives not designated as hedging instruments (a)						
Commodity contracts	Other current assets	485	227	—	(517 )	195
	Long-term receivables and other assets, net	1	2	—	(1 )	2
Liabilities:						
Derivatives not designated as hedging instruments (a)						
Commodity contracts	Accrued liabilities	535	222	—	(517 )	240
	Deferred credits and liabilities	1	3	—	(1 )	3

(a) Fair values are presented at gross amounts, including when the derivatives are subject to netting arrangements and presented on a net basis in the consolidated balance sheets.

These amounts do not include collateral. As of December 31, 2017, no collateral received has been netted against derivative assets and collateral paid of \$54 million has been netted against derivative liabilities. Select clearinghouses and brokers require Occidental to post an initial margin deposit. Collateral, mainly for initial margin, of \$70 million as of December 31, 2017, deposited by Occidental, has not been reflected in these derivative fair value tables. This collateral is included in other current assets in the consolidated balance sheets.

#### Credit Risk

The majority of Occidental's counterparty credit risk is related to the physical delivery of energy commodities to its customers and their inability to meet their settlement commitments. Occidental manages credit risk by selecting counterparties that it believes to be financially strong, by entering into netting arrangements with counterparties and by requiring collateral or other credit risk mitigants, as appropriate. Occidental actively evaluates the creditworthiness of its counterparties, assigns appropriate credit limits, and monitors credit exposures against those assigned limits. Occidental also enters into future contracts through regulated exchanges with select clearinghouses and brokers, which are subject to minimal credit risk as a significant portion of these transactions settle on a daily margin basis.

Certain of Occidental's OTC derivative instruments contain credit-risk-contingent features, primarily tied to credit ratings for Occidental or its counterparties, which may affect the amount of collateral that each would need to post. Occidental believes that if it had received a one-notch reduction in its credit ratings, it would not have resulted in a material change in its collateral-posting requirements as of December 31, 2018, and 2017. The aggregate fair value of derivative instruments with credit-risk-related contingent features for which a net liability position existed was immaterial for both December 31, 2018, and December 31, 2017.

#### NOTE 9 ENVIRONMENTAL LIABILITIES AND EXPENDITURES

Occidental's operations are subject to stringent federal, state, local and international laws and regulations related to improving or maintaining environmental quality.

The laws that require or address environmental remediation, including CERCLA and similar federal, state, local and international laws, may apply retroactively and regardless of fault, the legality of the original activities or the current ownership or control of sites. OPC or certain of its subsidiaries participate in or actively monitor a range of remedial activities and government or private proceedings under these laws with respect to alleged past practices at operating, closed and third-party sites. Remedial activities may include one or more of the following: investigation involving

sampling, modeling, risk assessment or monitoring; cleanup measures including removal, treatment or disposal; or operation and maintenance of remedial systems. The environmental proceedings seek funding or performance of remediation and, in some cases, compensation for alleged property damage, punitive damages, civil penalties, injunctive relief and government oversight costs.

#### ENVIRONMENTAL REMEDIATION

As of December 31, 2018, Occidental participated in or monitored remedial activities or proceedings at 145 sites. The following table presents Occidental's current and non-current environmental remediation reserves as of December 31, 2018, 2017 and 2016, the current portion of which is included in accrued liabilities (\$120 million in 2018, \$137 million in 2017, and \$131 million in 2016) and the remainder in deferred credits and other liabilities - environmental remediation reserves (\$762 million in 2018, \$728 million in 2017, and \$739 million in 2016). The reserves are grouped as environmental remediation sites listed or proposed for listing by the U.S. Environmental Protection Agency on the CERCLA NPL sites and three categories of non-NPL sites - third-party sites, Occidental-operated sites and closed or non-operated Occidental sites.

(\$ amounts in millions)	2018		2017		2016	
	Number of Sites	Reserve Balance	Number of Sites	Reserve Balance	Number of Sites	Reserve Balance
NPL sites	34	\$ 458	34	\$ 457	33	\$ 461
Third-party sites	68	168	70	157	68	163
Occidental-operated sites	14	115	15	108	17	106
Closed or non-operated Occidental sites	29	141	29	143	29	140
Total	145	\$ 882	148	\$ 865	147	\$ 870

As of December 31, 2018, Occidental's environmental reserves exceeded \$10 million each at 16 of the 145 sites described above, and 87 of the sites had reserves from \$0 to \$1 million each.

As of December 31, 2018, three sites — the Diamond Alkali Superfund Site and a former chemical plant in Ohio (both of which are indemnified by Maxus Energy Corporation, as discussed further below), and a landfill in Western New York - accounted for 94 percent of its reserves associated with NPL sites. The reserve balance above includes 17 NPL sites indemnified by Maxus.

Four of the 68 third-party sites — a Maxus-indemnified chrome site in New Jersey, a former copper mining and smelting operation in Tennessee, an active plant outside of the United States, and an active refinery in Louisiana where Occidental reimburses the current owner for certain remediation activities - accounted for 62 percent of Occidental's reserves associated with these sites. The reserve balance above includes 9 third-party sites indemnified by Maxus. Four sites - chemical plants in Kansas, Louisiana, New York and Texas - accounted for 64 percent of the reserves associated with the Occidental-operated sites.

Five other sites - a landfill in Western New York, former chemical plants in Tennessee, Washington and Delaware, and a closed coal mine in Pennsylvania - accounted for 61 percent of the reserves associated with closed or non-operated Occidental sites.

Environmental reserves vary over time depending on factors such as acquisitions or dispositions, identification of additional sites and remedy selection and implementation.

Based on current estimates, Occidental expects to expend funds corresponding to approximately 40 percent of the current environmental reserves at the sites described above over the next three to four years and the balance at these sites over the subsequent 10 or more years. Occidental believes its range of reasonably possible additional losses beyond those liabilities recorded for environmental remediation at all of its environmental sites could be up to \$1.1 billion.

#### Maxus Environmental Sites

When Occidental acquired Diamond Shamrock Chemicals Company (DSCC) in 1986, Maxus, a subsidiary of YPF S.A. (YPF), agreed to indemnify Occidental for a number of environmental sites, including the Diamond Alkali Superfund Site (Site) along a portion of the Passaic River. On June 17, 2016, Maxus and several affiliated companies filed for Chapter 11 bankruptcy in Federal District Court in the State of Delaware. Prior to filing for bankruptcy, Maxus defended and indemnified Occidental in connection with clean-up and other costs associated with the sites subject to the indemnity, including the Site.

In March 2016, the EPA issued a Record of Decision (ROD) specifying remedial actions required for the lower 8.3 miles of the Lower Passaic River. The ROD does not address any potential remedial action for the upper nine miles of the Lower Passaic River or Newark Bay. During the third quarter of 2016, and following Maxus's bankruptcy filing, Occidental and the EPA entered into an Administrative Order on Consent (AOC) to complete the design of the proposed clean-up plan outlined in the ROD at an estimated cost of \$165 million. The EPA announced that it will pursue similar agreements with other potentially responsible parties.

Occidental has accrued a reserve relating to its estimated allocable share of the costs to perform the design and the remediation called for in the AOC and the ROD, as well as for certain other Maxus-indemnified sites. Occidental's accrued estimated environmental reserve does not consider any recoveries for indemnified costs. Occidental's ultimate

share of this liability may be higher or lower than the reserved amount, and is subject to final design plans and the resolution of Occidental's allocable share with other potentially responsible parties. Occidental continues to evaluate the costs to be incurred to comply with the AOC, the ROD and to perform remediation at other Maxus-indemnified sites in light of the Maxus bankruptcy and the share of ultimate liability of other potentially responsible parties. In June 2018, Occidental filed a complaint under CERCLA in Federal District Court in the State of New Jersey against numerous potentially responsible parties for reimbursement of amounts incurred or to be incurred to comply with the AOC, the ROD or to perform other remediation activities at the Site.

In June 2017, the court overseeing the Maxus bankruptcy approved a Plan of Liquidation (Plan) to liquidate Maxus and create a trust to pursue claims against YPF, Repsol and others to satisfy claims by Occidental and other creditors for past and future cleanup and other costs. In July 2017, the court-approved Plan became final and the trust became effective. Among other responsibilities, the trust will pursue claims against YPF, Repsol and others and distribute assets to Maxus' creditors in accordance with the trust agreement and Plan. In June 2018, the trust filed its complaint against YPF and Repsol in Delaware bankruptcy court asserting claims based upon, among other things, fraudulent transfer and alter ego. On February 15, 2019, the bankruptcy court denied Repsol's and YPF's motions to dismiss the complaint.

## ENVIRONMENTAL COSTS

Occidental's environmental costs, some of which include estimates, are presented below for each segment for each of the years ended December 31:

(in millions)	2018	2017	2016
Operating Expenses			
Oil and Gas	\$95	\$68	\$65
Chemical	80	78	75
Midstream and Marketing	15	15	11
	\$190	\$161	\$151
Capital Expenditures			
Oil and Gas	\$75	\$77	\$43
Chemical	23	18	25
Midstream and Marketing	5	6	5
	\$103	\$101	\$73
Remediation Expenses			
Corporate	\$47	\$39	\$61

Operating expenses are incurred on a continual basis. Capital expenditures relate to longer-lived improvements in properties currently operated by Occidental. Remediation expenses relate to existing conditions from past operations.

## NOTE 10 LAWSUITS, CLAIMS, COMMITMENTS AND CONTINGENCIES

## Legal Matters

Occidental or certain of its subsidiaries are involved, in the normal course of business, in lawsuits, claims and other legal proceedings that seek, among other things, compensation for alleged personal injury, breach of contract, property damage or other losses, punitive damages, civil penalties, or injunctive or declaratory relief. Occidental or certain of its subsidiaries also are involved in proceedings under CERCLA and similar federal, state, local and international environmental laws. These environmental proceedings seek funding or performance of remediation and, in some cases, compensation for alleged property damage, punitive damages, civil penalties and injunctive relief. Usually Occidental or such subsidiaries are among many companies in these environmental proceedings and have to date been successful in sharing response costs with other financially sound companies. Further, some lawsuits, claims and legal proceedings involve acquired or disposed assets with respect to which a third-party or Occidental retains liability or indemnifies the other party for conditions that existed prior to the transaction.

In accordance with applicable accounting guidance, Occidental accrues reserves for outstanding lawsuits, claims and proceedings when it is probable that a liability has been incurred and the liability can be reasonably estimated. In Note 9, Occidental has disclosed its reserve balances for environmental remediation matters that satisfy this criteria.

Reserve balances for matters, other than environmental remediation matters that satisfy this criteria as of December 31, 2018, and December 31, 2017, were not material to Occidental's consolidated balance sheet.

In 2016, Occidental received payments from the Republic of Ecuador of approximately \$1.0 billion pursuant to a November 2015 arbitration award for Ecuador's 2006 expropriation of Occidental's Participation Contract for Block 15. The awarded amount represented a recovery of 60 percent of the value of Block 15. In 2017, Andes Petroleum Ecuador Ltd. (Andes) filed a demand for arbitration, claiming it is entitled to a 40 percent share of the judgment amount obtained by Occidental. Occidental contends that Andes is not entitled to any of the amounts paid under the 2015 arbitration award because Occidental's recovery was limited to Occidental's own 60 percent economic interest in the block. Occidental intends to vigorously defend against this claim in arbitration. A hearing on the merits has not been scheduled at this time.

The ultimate outcome and impact of outstanding lawsuits, claims and proceedings on Occidental cannot be predicted. Management believes that the resolution of these matters will not, individually or in the aggregate, have a material adverse effect on Occidental's consolidated balance sheet. If unfavorable outcomes of these matters were to occur,

future results of operations or cash flows for any particular quarterly or annual period could be materially adversely affected. Occidental's estimates are based on information known about the legal matters and its experience in contesting, litigating and settling similar matters. Occidental reassesses the probability and estimability of contingent losses as new information becomes available.

#### Tax Matters

During the course of its operations, Occidental is subject to audit by tax authorities for varying periods in various federal, state, local and foreign tax jurisdictions. Taxable years through 2016 for United States federal income tax purposes have been audited by the United States Internal Revenue Service (IRS) pursuant to its Compliance Assurance Program and subsequent taxable years are currently under review. Taxable years through 2009 have been audited for state income tax purposes. While

a single foreign tax jurisdiction is open for 2002, all other significant audit matters in foreign jurisdictions have been resolved through 2010. During the course of tax audits, disputes have arisen and other disputes may arise as to facts and matters of law. Occidental believes that the resolution of outstanding tax matters would not have a material adverse effect on its consolidated financial position or results of operations.

#### Indemnities to Third Parties

Occidental, its subsidiaries, or both, have indemnified various parties against specified liabilities those parties might incur in the future in connection with purchases and other transactions that they have entered into with Occidental. These indemnities usually are contingent upon the other party incurring liabilities that reach specified thresholds. As of December 31, 2018, Occidental is not aware of circumstances that it believes would reasonably be expected to lead to indemnity claims that would result in payments materially in excess of reserves.

#### Purchase Obligations and Commitments

OPC, its subsidiaries, or both, have entered into agreements providing for future payments to secure terminal and pipeline capacity, drilling rigs and services, electrical power, steam and certain chemical raw materials. Occidental has certain other commitments under contracts, guarantees and joint ventures, including purchase commitments for goods and services at market-related prices and certain other contingent liabilities. At December 31, 2018, total purchase obligations were \$10.8 billion, which included approximately \$1.9 billion, \$1.4 billion, \$1.3 billion, \$1.1 billion, \$1.0 billion and \$4.1 billion that will be paid in 2019, 2020, 2021, 2022, 2023, and 2024 and thereafter, respectively. Included in the purchase obligations are commitments for major fixed and determinable capital expenditures during 2019 and thereafter, which were approximately \$106 million.

#### NOTE 11 DOMESTIC AND FOREIGN INCOME TAXES

The domestic and foreign components of income (loss) from continuing operations before domestic and foreign income taxes were as follows:

For the years ended December 31, (in millions)	Domestic	Foreign	Total
2018	\$3,431	\$2,177	\$5,608
2017	\$(609)	\$1,937	\$1,328
2016	\$(2,698)	\$1,034	\$(1,664)

The provisions (credits) for domestic and foreign income taxes on continuing operations consisted of the following:

For the years ended December 31, (in millions)	United States		State and Foreign	Total
	Federal	Local		
2018				
Current	\$(23)	\$52	\$1,077	\$1,106
Deferred	422	12	(63)	371
	\$399	\$64	\$1,014	\$1,477
2017				
Current	\$(81)	\$11	\$806	\$736
Deferred	(856)	23	114	(719)
	\$(937)	\$34	\$920	\$17
2016				
Current	\$(784)	\$9	\$630	\$(145)
Deferred	(504)	(19)	6	(517)
	\$(1,288)	\$(10)	\$636	\$(662)





The following reconciliation of the United States federal statutory income tax rate to Occidental's worldwide effective tax rate on income from continuing operations is stated as a percentage of pre-tax income:

For the years ended December 31,	2018	2017	2016
United States federal statutory tax rate	21 %	35 %	35 %
Other than temporary loss on available for sale investment in California Resources stock	—	—	(2 )
Enhanced oil recovery credit	(3 )	(9 )	5
Tax benefit due to write off of exploration blocks	—	—	14
Change in federal income tax rate	—	(44)	—
Tax (benefit) expense due to reversal of indefinite reinvestment assertion	(2 )	7	—
Operations outside the United States	11	12	(14)
State income taxes, net of federal benefit	1	2	—
Other	(2 )	(2 )	2
Worldwide effective tax rate	26 %	1 %	40 %

On December 22, 2017, Tax Reform was enacted, which made significant changes to the U.S. federal income tax law, including lowering the federal corporate income tax rate from 35 percent to 21 percent, repealing the corporate alternative minimum tax (AMT) and mandating a deemed repatriation of accumulated earnings and profits of U.S.-owned international corporations. Occidental disclosed, as part of its 2017 financial statements, provisional estimates of the income tax effects of Tax Reform.

The SEC provided a one-year measurement period for companies to complete the accounting requirements with regards to Tax Reform. As a result during 2018, Occidental recorded an additional tax benefit of \$25 million that was primarily due to Occidental's review of proposed tax regulations and other regulatory guidance issued in 2018. Specifically, the regulations related to the allocation of expenses between the net operating losses generated in 2017 and the mandatory deemed repatriation of accumulated earnings from certain U.S.-owned international corporations that was included in 2017 taxable income. Upon review of the guidance issued during 2018, Occidental confirmed that the GILTI and BEAT provisions are not expected to have a material impact. Tax Reform also included new limitations on the ability of corporations to deduct interest expense. While these limitations did not adversely impact Occidental in 2018, under proposed regulations the limitations could significantly impact Occidental's ability to deduct interest expense in future years.

The tax effects of temporary differences resulting in deferred income taxes at December 31, 2018, and 2017 were as follows:

Tax effects of temporary differences (in millions)	2018		2017	
	Deferred Tax Assets	Deferred Tax Liabilities	Deferred Tax Assets	Deferred Tax Liabilities
Property, plant and equipment differences	\$—	\$ 2,089	\$—	\$ 2,272
Equity investments, partnerships and foreign subsidiaries	—	161	—	134
Environmental reserves	195	—	191	—
Postretirement benefit accruals	176	—	145	—
Deferred compensation and benefits	170	—	151	—
Asset retirement obligations	280	—	228	—
Foreign tax credit carryforwards	2,356	—	2,750	—
General business credit carryforwards	429	—	407	—
Net operating loss carryforward	29	—	437	—
Federal benefit of state income taxes	18	—	10	—
All other	93	—	146	—
Subtotal	3,746	2,250	4,465	2,406
Valuation allowance	(2,403 )	—	(2,640 )	—

Total deferred taxes	\$1,343	\$ 2,250	\$1,825	\$ 2,406
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Total deferred tax assets, after valuation allowances, were \$1.3 billion and \$1.8 billion as of December 31, 2018, and 2017, respectively. Occidental expects to realize the recorded deferred tax assets, net of any allowances, through future operating income and reversal of temporary differences. The increase in net deferred tax liability in 2018 over 2017 is primarily due to the utilization of net operating loss carryforwards in 2018.

As of December 31, 2018, Occidental had foreign tax credit carryforwards of \$2.4 billion, state operating loss carryforwards of \$28 million and state tax credit carryforwards of \$41 million. These carryforward balances have varying carryforward periods through 2038. Occidental has recorded a valuation allowance for all of the foreign tax credit carryforwards, \$14 million of the tax-effected state net operating loss carryforwards and \$33 million of the state tax credit carryforwards.

At December 31, 2018, Occidental made an indefinite reinvestment assertion with regard to a portion of its foreign undistributed earnings and, as a result, a deferred tax liability of \$99 million was released.

A deferred tax liability has not been recognized for temporary differences related to unremitted earnings of certain consolidated international subsidiaries aggregating approximately \$837 million at December 31, 2018, as it is Occidental's intention to reinvest such earnings indefinitely. If the earnings of these international subsidiaries were not indefinitely reinvested, an additional deferred tax liability of approximately \$199 million would be required.

Discontinued operations include income tax charges of \$249 million in 2016.

As of December 31, 2018, Occidental had no liabilities for unrecognized tax benefits included in deferred credits and other liabilities – other. A reconciliation of the beginning and ending amount of unrecognized tax benefits is as follows:

For the years ended December 31, (in millions)	2018	2017	2016
Balance at January 1,	\$22	\$ 22	\$ 22
Reductions based on tax positions related to prior years and settlements	(22 )	—	—
Balance at December 31,	\$—	\$ 22	\$ 22

Management believes it is unlikely that Occidental's liabilities for unrecognized tax benefits related to existing matters would increase or decrease within the next 12 months by a material amount. Occidental cannot reasonably estimate a range of potential changes in such benefits due to the unresolved nature of the various audits.

Occidental has recognized \$68 million and \$76 million in federal income tax receivables at December 31, 2018, and 2017, respectively, which was recorded in other current assets. In addition, Occidental has recognized \$68 million and \$221 million in federal alternative minimum tax non-current receivables at December 31, 2018, and 2017, respectively, which was recorded in long-term receivables and other assets, net.

Occidental is subject to audit by various tax authorities in varying periods. See Note 10 for a discussion of these matters.

Occidental records estimated potential interest and penalties related to liabilities for unrecognized tax benefits in the provisions for domestic and foreign income taxes and these amounts were not material for the years ended December 31, 2018, 2017 and 2016.

#### NOTE 12 STOCKHOLDERS' EQUITY

The following is a summary of common stock issuances:

Shares in thousands	Common Stock
Balance, December 31, 2015	891,360
Issued	843
Options exercised and other, net	12
Balance, December 31, 2016	892,215
Issued	1,252
Options exercised and other, net	2
Balance, December 31, 2017	893,469
Issued	1,628
Options exercised and other, net	19
Balance, December 31, 2018	895,116

#### TREASURY STOCK

The total number of shares authorized for Occidental's share repurchase program is 185 million shares of which 46.9 million may yet be purchased under the repurchase program. However, the program does not obligate Occidental to acquire any specific number of shares and may be discontinued at any time. In 2018, 16.9 million shares were purchased at an average price of \$74.92 under the program. No shares were purchased under the program in 2017 and 2016. Additionally, Occidental purchased shares from the trustee of its defined contribution savings plan during each year. As of December 31, 2018, 2017 and 2016, treasury stock shares numbered 145.7 million, 128.4 million and 128.0 million, respectively.

#### NONREDEEMABLE PREFERRED STOCK

Occidental has authorized 50,000,000 shares of preferred stock with a par value of \$1.00 per share. At December 31, 2018, 2017 and 2016, Occidental had no outstanding shares of preferred stock.

## EARNINGS PER SHARE

The following table presents the calculation of basic and diluted earnings per share for the years ended December 31: (in millions, except per-share amounts)

	2018	2017	2016
Income (loss) from continuing operations attributable to common stock	\$4,131	\$1,311	\$(1,002)
Income from discontinued operations	—	—	428
Net income (loss)	4,131	1,311	(574 )
Less: Net income allocated to participating securities	(17 )	(6 )	—
Net income (loss), net of participating securities	\$4,114	\$1,305	\$(574 )
Weighted average number of basic shares	761.7	765.1	763.8
Basic earnings (loss) per common share	\$5.40	\$1.71	\$(0.75 )
Net income (loss), net of participating securities	\$4,114	\$1,305	\$(574 )
Weighted average number of basic shares	761.7	765.1	763.8
Dilutive securities	1.6	0.8	—
Total diluted weighted average common shares	763.3	765.9	763.8
Diluted earnings (loss) per common share	\$5.39	\$1.70	\$(0.75 )

## ACCUMULATED OTHER COMPREHENSIVE LOSS

Accumulated other comprehensive loss consisted of the following after-tax amounts:

Balance at December 31, (in millions)	2018	2017
Foreign currency translation adjustments	\$(7 )	\$(7 )
Unrealized gains on derivatives	5	—
Pension and postretirement adjustments <sup>(a)</sup>	(170 )	(251 )
Total	\$(172)	\$(258)

(a) See Note 14 for further information.

## NOTE 13 STOCK-BASED INCENTIVE PLANS

Occidental issues stock-based awards to employees in accordance with the terms of the shareholder approved 2015 Long-Term Incentive Plan (2015 LTIP). Awards issued under the superseded 2005 LTIP, and subsequently forfeited after adoption of the 2015 LTIP, increase the shares available for issuance under the 2015 LTIP. An aggregate of 80 million shares of Occidental common stock were authorized for issuance and approximately 6.8 million shares had been allocated to employee awards through December 31, 2018. As of December 31, 2018, approximately 70.3 million shares were available for grants of future awards. The plan requires each share covered by an award (other than options) to be counted as if three shares were issued in determining the number of shares that are available for future awards. Accordingly, the number of shares available for future awards may be less than 70.3 million depending on the type of award granted, and shares available for future awards may increase by the number of shares that are forfeited, canceled, or correspond to the portion of any stock-based awards settled in cash, including awards that were issued under a previous plan that remain outstanding. Current outstanding awards include RSUs, stock options, CROCEIs, ROCEIs, ROAIs and TSRIIs.

During 2018, non-employee directors were granted awards for 31,835 shares of common stock. Compensation expense for these awards was measured using the closing quoted market price of Occidental's common stock on the grant date and was fully recognized at that time.

Total share-based compensation expense recognized in income related to continuing and discontinued operations and the associated tax benefit for the years ended December 31, 2018, 2017, and 2016 was \$180 million, \$150 million, and \$121 million, respectively. The income tax benefit associated with this expense was \$47 million, \$32 million, and \$43 million in the years ended December 31, 2018, 2017, and 2016, respectively.

As of December 31, 2018, unrecognized compensation expense for all unvested stock-based incentive awards was \$193.4 million. This expense is expected to be recognized over a weighted-average period of 1.6 years. Occidental accounts for forfeitures as they occur.

#### RSUs

Certain employees are awarded the right to receive RSUs, some of which have performance criteria, and are in the form of, or equivalent in value to, actual shares of Occidental common stock. Depending on their terms, RSUs are settled in cash or stock at the time of vesting. These awards vest from one to 4 years following the grant date, however, certain of the RSUs are forfeitable if performance objectives are not satisfied by the seventh anniversary of the grant date. For certain RSUs, dividend equivalents are paid during the vesting period. For those awards that cliff vest between one to three years, dividend

equivalents are accumulated during the vesting or performance period, as appropriate, and are paid upon vesting or performance certification, as appropriate.

The weighted-average, grant-date fair values of cash-settled RSUs granted in 2018, 2017 and 2016 were \$75.86, \$66.62, and \$75.57 per share, respectively. The weighted-average, grant-date fair values of the stock-settled RSUs granted in 2018, 2017, and 2016 were \$69.87, \$67.21, and \$74.82, respectively. Cash-Settled RSUs resulted in payments of \$18 million, \$23 million, and \$41 million, during the years ended December 31, 2018, 2017 and 2016, respectively. The fair value of RSUs settled in shares during the years ended December 31, 2018, 2017 and 2016 was \$109 million, \$64 million, and \$31 million, respectively.

A summary of changes in Occidental's unvested cash- and stock-settled RSUs during the year ended December 31, 2018, is presented below:

	Cash-Settled		Stock-Settled	
	RSUs (000's)	Weighted-Average Grant-Date Fair Value	RSUs (000's)	Weighted-Average Grant-Date Fair Value
Unvested at January 1	269	\$ 71.58	3,951	\$ 73.24
Granted	133	75.86	1,689	69.87
Vested	(212)	72.23	(1,469)	69.89
Forfeitures	(4 )	70.06	(200 )	70.37
Unvested at December 31	186	73.93	3,971	73.19

#### TSRIs

Certain executives are awarded TSRIs that vest at the end of a three-year period following the grant date. Payout is based upon Occidental's absolute total shareholder return and performance relative to its peers. TSRIs have payouts that range from 0 to 200 percent of the target award and settle in stock once certified. Dividend equivalents for TSRIs are accumulated and paid upon certification of the award. The fair value of TSRIs settled in shares during the years ended December 31, 2018, 2017 and 2016 was \$12 million, \$5 million, and \$8 million, respectively.

The fair values of TSRIs are initially determined on the grant date using a Monte Carlo simulation model based on Occidental's assumptions, noted in the following table, and the volatility from corresponding peer group companies. The expected life is based on the vesting period (Term). The risk-free interest rate is the implied yield available on zero coupon T-notes (U.S. Treasury Strip) at the time of grant with a remaining term equal to the Term. The dividend yield is the expected annual dividend yield over the Term, expressed as a percentage of the stock price on the grant date. Estimates of fair value may not accurately predict the value ultimately realized by the employees who receive the awards, and the ultimate value may not be indicative of the reasonableness of the original estimates of fair value made by Occidental.

The grant-date assumptions used in the Monte Carlo simulation models for the estimated payout level of TSRIs were as follows:

Year Granted	TSRIs		
	2018	2017	2016
Assumptions used:			
Risk-free interest rate	2.3	% 1.5	% 0.8
Dividend yield	4.4	% 4.5	% 3.9
Volatility factor	24	% 25	% 24
Expected life (years)	3	3	3
Grant-date fair value of underlying Occidental common stock	\$69.87	\$67.21	\$76.83

A summary of Occidental's unvested TSRIs as of December 31, 2018, and changes during the year ended December 31, 2018, is presented below:

TSRIs
Awards
Weighted-Average

	(000's)	Grant-Date Fair Value of Occidental Stock
Unvested at January 1	1,152	\$ 71.58
Granted	448	69.87
Vested (a)	(145 )	72.54
Forfeitures	(11 )	69.87
Unvested at December 31	1,444	70.97

(a) The payout at vesting was 100% of the target.



## STOCK OPTIONS

Certain employees have been granted options that are settled in stock. Exercise prices of the options were equal to the quoted market value of Occidental's stock on the grant date. No options were granted in 2018. The intrinsic value of options exercised during the years ended December 31, 2018, 2017, and 2016 was insignificant.

The fair value of each option is initially measured on the grant date using the Black Scholes option valuation model. The expected life is estimated based on the vesting and expiration terms of the award. The volatility factors are based on the historical volatilities of Occidental common stock over the expected lives as estimated on the grant date. The risk-free interest rate is the implied yield available on U.S. Treasury Strips at the grant date with a remaining term equal to the expected life of the measured instrument. The dividend yield is the expected annual dividend yield over the expected life, expressed as a percentage of the stock price on the grant date. Estimates of fair value may not accurately predict the value ultimately realized by employees who receive stock-based incentive awards, and the ultimate value may not be indicative of the reasonableness of the original estimates of fair value made by Occidental. The following is a summary of option transactions during the year ended December 31, 2018:

	SARs & Options (000's)	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Term (yrs)	Aggregate Intrinsic Value (000's)
Beginning balance, January 1	549	\$ 79.98		
Exercised	(19 )	79.98		
Ending balance, December 31	530	79.98	3.1	\$ —
Exercisable at December 31	530	79.98	3.1	\$ —

## CROCEI, ROCEI and ROAI

Certain executives are awarded CROCEI, ROCEI or ROAI awards that vest at the end of a three-year period if performance targets based on return on assets, return on capital employed, or cash return on capital employed are certified as being met. These awards are settled in stock upon certification of the performance target, with payouts that range from 0 to 200 percent of the target award. Dividend equivalents are accumulated and paid upon certification of the award.

	CROCEI, ROCEI, and ROAI	Weighted-Average Award Grant-Date (000's) Fair Value of Occidental Stock
Unvested at January 1	268	\$ 84.46
Granted	80	69.87
Vested <sup>(a)</sup>	(132)	101.95
Forfeited	(6 )	69.87
Unvested at December 31	210	71.60

<sup>(a)</sup> Presented at the target payouts. The payout at vesting was 97.5% of the target for approximately 6,000 shares. The payout at vesting was 0% of target for the remaining 126,000 shares.

## NOTE 14 RETIREMENT AND POSTRETIREMENT BENEFIT PLANS

Occidental has various benefit plans for its salaried, domestic union and nonunion hourly, and certain foreign national employees.

## DEFINED CONTRIBUTION PLANS

All domestic employees and certain foreign national employees are eligible to participate in one or more of the defined contribution retirement or savings plans that provide for periodic contributions by Occidental based on plan-specific criteria, such as base pay, level and employee contributions. Certain salaried employees participate in a supplemental retirement plan that restores benefits lost due to governmental limitations on qualified retirement benefits. The accrued liabilities for the supplemental retirement plan were \$201 million and \$175 million as of December 31, 2018, and 2017, respectively, and Occidental expensed \$152 million in 2018, \$130 million in 2017 and \$113 million in 2016 under the provisions of these defined contribution and supplemental retirement plans.

## DEFINED BENEFIT PLANS

Participation in defined benefit plans is limited. Approximately 400 domestic and 1,000 foreign national employees, mainly union, nonunion hourly and certain employees that joined Occidental from acquired operations with grandfathered benefits, are currently accruing benefits under these plans.

Pension costs for Occidental's defined benefit pension plans, determined by independent actuarial valuations, are generally funded by payments to trust funds, which are administered by independent trustees.

## POSTRETIREMENT AND OTHER BENEFIT PLANS

Occidental provides medical and dental benefits and life insurance coverage for certain active, retired and disabled employees and their eligible dependents. Occidental generally funds the benefits as they are paid during the year. These benefit costs, including the postretirement costs, were approximately \$182 million in 2018, \$181 million in 2017 and \$182 million in 2016.

During the third quarter of 2018, Occidental adopted a postretirement benefit plan design change, which replaced the previous self-insured benefit with a Medicare Advantage PPO plan for Medicare-eligible retirees. As a result of this change, the postretirement benefit obligation was remeasured as of August 31, 2018. The remeasurement resulted in a decrease to the benefit obligation of \$178 million, with a corresponding offset to accumulated other comprehensive income.

## OBLIGATIONS AND FUNDED STATUS

The following tables show the amounts recognized in the consolidated balance sheets of Occidental related to its pension and postretirement benefit plans:

(in millions)	Pension Benefits		Postretirement Benefits	
	2018	2017	2018	2017
As of December 31,				
Amounts recognized in the consolidated balance sheet:				
Other assets	\$60	\$82	\$—	\$—
Accrued liabilities	(25 )	(5 )	(45 )	(59 )
Deferred credits and other liabilities — pension and postretirement obligations	(46 )	(65 )	(763 )	(940 )
	\$(11)	\$12	\$(808)	\$(999)
Accumulated other comprehensive loss included the following after-tax balances:				
Net loss	\$ 91	\$ 59	\$ 151	\$ 192

Prior service cost	—	—	(72	)	1
	\$ 91	\$ 59	\$ 79		\$ 193

The following tables show the funding status, obligations and plan asset fair values of Occidental related to its pension and postretirement benefit plans:

For the years ended December 31,	Pension		Postretirement	
	Benefits		Benefits	
	2018	2017	2018	2017
Changes in the benefit obligation:				
Benefit obligation — beginning of year	\$391	\$399	\$999	\$950
Service cost — benefits earned during the period	5	6	23	21
Interest cost on projected benefit obligation	15	17	34	38
Actuarial (gain) loss	(19 )	14	(90 )	61
Foreign currency exchange rate gain	(3 )	—	—	—
Liability gain due to curtailment	—	(2 )	—	(9 )
Special termination benefits	—	1	—	—
Benefits paid	(40 )	(44 )	(57 )	(62 )
Settlements	—	—	—	—
Plan amendments	—	—	(101 )	—
Benefit obligation — end of year	\$349	\$391	\$808	\$999
Changes in plan assets:				
Fair value of plan assets — beginning of year	\$403	\$386	\$—	\$—
Actual return on plan assets	(33 )	52	—	—
Foreign currency exchange rate loss	—	—	—	—
Employer contributions	8	9	—	—
Benefits paid	(40 )	(44 )	—	—
Settlements	—	—	—	—
Fair value of plan assets — end of year	\$338	\$403	\$—	\$—
Funded/(Unfunded) status:	\$(11 )	\$12	\$(808)	\$(999)

The following table sets forth details of the obligations and assets of Occidental's defined benefit pension plans:

(in millions)	Accumulated Plan Assets			
	Benefit		in Excess of	
	Obligation in		Accumulated	
	Excess of		Benefit	
	Plan Assets		Obligation	
As of December 31,	2018	2017	2018	2017
Projected Benefit Obligation	\$ 173	\$ 161	\$ 176	\$ 230
Accumulated Benefit Obligation	\$ 169	\$ 157	\$ 176	\$ 230
Fair Value of Plan Assets	\$ 98	\$ 91	\$ 240	\$ 312

Occidental does not expect any plan assets to be returned during 2019.

#### COMPONENTS OF NET PERIODIC BENEFIT COST

The following table sets forth the components of net periodic benefit costs:

For the years ended December 31, (in millions)	Pension			Postretirement		
	Benefits			Benefits		
	2018	2017	2016	2018	2017	2016
Net periodic benefit costs:						
Service cost — benefits earned during the period	\$5	\$6	\$7	\$23	\$21	\$20
Interest cost on projected benefit obligation	15	17	18	34	38	39

Expected return on plan assets	(25)	(24 )	(24 )	—	—	—
Recognized actuarial loss	7	10	12	14	14	15
Other costs and adjustments	1	3	4	(2 )	1	—
Net periodic benefit cost	\$3	\$12	\$17	\$69	\$74	\$74

The estimated net loss and prior service cost for the defined benefit pension plans that will be amortized from Accumulated Other Comprehensive Income (AOCI) into net periodic benefit cost over the next fiscal year are \$9 million and zero, respectively.

The estimated net loss and prior service cost for the defined benefit postretirement plans that will be amortized from AOCI into net periodic benefit cost over the next fiscal year are \$9 million and \$(8) million, respectively.

#### ADDITIONAL INFORMATION

The following table sets forth the weighted-average assumptions used to determine Occidental's benefit obligation and net periodic benefit cost for domestic plans:

	Pension		Postretirement	
	Benefits	Benefits	Benefits	Benefits
For the years ended December 31,	2018	2017	2018	2017
Benefit Obligation Assumptions:				
Discount rate	4.09%	3.45%	4.29%	3.61%
Net Periodic Benefit Cost Assumptions:				
Discount rate for January 1 - August 31 expense	3.45%	3.90%	3.61%	4.15%
Discount rate for September 1 - December 31 expense	3.45%	3.90%	4.14%	4.15%
Assumed long-term rate of return on assets	6.50%	6.50%	—	—

For domestic pension plans and postretirement benefit plans, Occidental based the discount rate on the Aon/Hewitt AA-AAA Universe yield curve in 2018 and 2017. The assumed long-term rate of return on assets is estimated with regard to current market factors but within the context of historical returns for the asset mix that exists at year end. In 2018, Occidental adopted the Society of Actuaries 2018 Mortality Improvement Scale, which updated the mortality assumptions that private defined-benefit plans in the United States use in the actuarial valuations that determine a plan sponsor's pension obligations. The new mortality improvement scale reflects additional data that the Social Security Administration has released since the MP-2017 scale released in 2017. This additional data shows a lower degree of mortality improvement than previously reflected. The changes in the mortality improvement scale results in a decrease of \$1 million and \$1 million in the pension and postretirement benefit obligation at December 31, 2018, respectively. For pension plans outside the United States, Occidental based its discount rate on rates indicative of government or investment grade corporate debt in the applicable country, taking into account hyperinflationary environments when necessary. The discount rates used for the foreign pension plans ranged from 1.0 percent to 8.9 percent at December 31, 2018 and from 1.0 percent to 10.8 percent at December 31, 2017. The average rate of increase in future compensation levels ranged from 1.0 percent to 8.0 percent in 2018, depending on local economic conditions. The postretirement benefit obligation was determined by application of the terms of medical and dental benefits and life insurance coverage, including the effect of established maximums on covered costs, together with relevant actuarial assumptions and health care cost trend rates. Health care cost trend rates for Medicare advantaged prescription drug (MAPD) plans of 22-34 percent in 2019, 6-10 percent in 2020, then grading down to 4.50 percent in 2027 and beyond. Health care cost trend rates used for non-MAPD plans are 7.75 percent in 2018, then grading down to 4.50 percent in 2025 and beyond. In 2017, health care cost trend rates were projected at an assumed U.S. Consumer Price Index (CPI) increase of 1.97 percent for salaried employees. For union employees, Occidental projected that health care cost trend rates would decrease from 8.0 percent in 2017 until they reached 4.50 percent in 2025, and remain at 4.50 percent thereafter.

A 1 percent increase or a 1 percent decrease in these assumed health care cost trend rates would result in an increase of \$102 million or a reduction of \$82 million, respectively, in the postretirement benefit obligation and increase of \$10 million or a reduction of \$8 million in the annual service and interest costs as of December 31, 2018.

The actuarial assumptions used could change in the near term as a result of changes in expected future trends and other factors that, depending on the nature of the changes, could cause increases or decreases in the plan assets and liabilities.

#### FAIR VALUE OF PENSION PLAN ASSETS

Occidental employs a total return investment approach that uses a diversified blend of equity and fixed-income investments to optimize the long-term return of plan assets at a prudent level of risk. The investments are monitored

by Occidental's Pension and Retirement Trust and Investment Committee (Investment Committee) in its role as fiduciary. The Investment Committee, consisting of senior Occidental executives, selects and employs various external professional investment management firms to manage specific investments across the spectrum of asset classes. Equity investments are diversified across U.S. and non-U.S. stocks, as well as differing styles and market capitalizations. Other asset classes, such as private equity and real estate, may be used with the goals of enhancing long-term returns and improving portfolio diversification. The target allocation of plan assets is 65 percent equity securities and 35 percent debt securities. Investment performance is measured and monitored on an ongoing basis through quarterly investment portfolio and manager guideline compliance reviews, annual liability measurements and periodic studies.

The fair values of Occidental's pension plan assets by asset category are as follows:

(in millions)	Fair Value			Total
	Measurements at			
Description	December 31, 2018,			
	Using			
	Level 1	Level 2	Level 3	
Asset Class:				
U.S. government securities	\$17	\$—	\$—	—\$17
Corporate bonds <sup>(a)</sup>	—	66	—	66
Common/collective trusts <sup>(b)</sup>	—	9	—	9
Mutual funds:				
Bond funds	31	—	—	31
Blend funds	48	—	—	48
Common and preferred stocks <sup>(c)</sup>	141	—	—	141
Other	—	31	—	31
Total pension plan assets <sup>(d)</sup>	\$237	\$106	\$—	—\$343

(in millions)	Fair Value			Total
	Measurements at			
Description	December 31, 2017,			
	Using			
	Level 1	Level 2	Level 3	
Asset Class:				
U.S. government securities	\$12	\$—	\$—	—\$12
Corporate bonds <sup>(a)</sup>	—	83	—	83
Common/collective trusts <sup>(b)</sup>	—	20	—	20
Mutual funds:				
Bond funds	19	—	—	19
Blend funds	59	—	—	59
Common and preferred stocks <sup>(c)</sup>	188	—	—	188
Other	—	30	—	30
Total pension plan assets <sup>(d)</sup>	\$278	\$133	\$—	—\$411

(a) This category represents investment grade bonds of U.S. and non-U.S. issuers from diverse industries.

(b) This category includes investment funds that primarily invest in U.S. and non-U.S. common stocks and fixed-income securities.

(c) This category represents direct investments in common and preferred stocks from diverse U.S. and non-U.S. industries.

(d) Amounts exclude net payables of approximately \$6 million and \$8 million as of December 31, 2018 and 2017, respectively.

Occidental expects to contribute \$26 million in cash to its defined benefit pension plans during 2019. Estimated future benefit payments, which reflect expected future service, as appropriate, are as follows:

For the years ended December 31, (in millions)	Pension Benefits	Postretirement Benefits
2019	\$ 60	\$ 46
2020	\$ 27	\$ 50
2021	\$ 28	\$ 50



2022	\$ 27	\$ 50
2023	\$ 26	\$ 50
2024 - 2028	\$ 129	\$ 249

## NOTE 15 INVESTMENTS AND RELATED-PARTY TRANSACTIONS

## EQUITY INVESTMENTS

As of December 31, 2018, and 2017, investments in unconsolidated entities comprised \$1.7 billion and \$1.5 billion of equity-method investments, respectively.

As of December 31, 2018, Occidental's equity investments consisted mainly of an 11 percent interest in the general partner which owns approximately 40 percent of Plains All American Pipeline, LP, a 24.5-percent interest in the stock of Dolphin Energy, a 50-percent interest in OxyChem Ingleside facility, and various other partnerships and joint ventures. Equity investments paid dividends of \$329 million, \$297 million, and \$224 million to Occidental in 2018, 2017 and 2016, respectively. As of December 31, 2018, cumulative undistributed earnings of equity-method investees since they were acquired was immaterial. As of December 31, 2018, Occidental's investments in equity investees exceeded the underlying equity in net assets by approximately \$636 million, of which \$464 million represented goodwill and the remainder comprised intangibles amortized over their estimated useful lives.

The following table presents Occidental's interest in the summarized financial information of its equity-method investments:

For the years ended December 31, (in millions)	2018	2017	2016
Revenues and other income	\$1,932	\$1,252	\$1,238
Costs and expenses	1,527	973	1,043
Net income	\$405	\$279	\$195

As of December 31, (in millions)	2018	2017
Current assets	\$547	\$602
Non-current assets	\$2,139	\$2,072
Current liabilities	\$237	\$247
Long-term debt	\$1,042	\$1,174
Other non-current liabilities	\$22	\$66
Stockholders' equity	\$1,385	\$1,187

Occidental's investment in Dolphin, which was acquired in 2002, consists of two separate economic interests through which Occidental owns (i) a 24.5-percent undivided interest in the upstream operations under an agreement which is proportionately consolidated in the financial statements; and (ii) a 24.5-percent interest in the stock of Dolphin Energy, which operates a pipeline and is accounted for as an equity investment.

## RELATED-PARTY TRANSACTIONS

From time to time, Occidental purchases oil, NGL, power, steam and chemicals from and sells oil, NGL, natural gas, chemicals and power to certain of its equity investees and other related parties. During 2018, 2017 and 2016, Occidental entered into the following related-party transactions and had the following amounts due from or to its related parties:

For the years ended December 31, (in millions)	2018	2017	2016
Sales <sup>(a)</sup>	\$805	\$636	\$602
Purchases <sup>(b)</sup>	\$502	\$387	\$7
Services	\$52	\$38	\$17
Advances and amounts due from	\$63	\$63	\$59
Amounts due to	\$46	\$45	\$—

In 2018, 2017 and 2016, sales of Occidental-produced oil and NGL to Plains Pipeline affiliates accounted for 89 percent, 86 percent and 89 percent of these totals, respectively. Sales to Plains Pipeline affiliates related to (a) Occidental's oil and gas production are disclosed above. In addition to these sales, Occidental conducts marketing activities with Plains Pipeline affiliates for oil, NGL and transportation. Net margins associated with these marketing activities are negligible.

(b) In 2018, purchases of ethylene from the Ingleside ethylene cracker accounted for 98 percent of related-party purchases.

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## NOTE 16 FAIR VALUE MEASUREMENTS

## FAIR VALUES – RECURRING

In January 2012, Occidental entered into a long-term contract to purchase CO<sub>2</sub>. This contract contains a price adjustment clause that is linked to changes in NYMEX crude oil prices. Occidental determined that the portion of this contract linked to NYMEX oil prices is not clearly and closely related to the host contract, and Occidental therefore bifurcated this embedded pricing feature from its host contract and accounts for it at fair value in the consolidated financial statements.

The following tables provide fair value measurement information for assets and liabilities that are measured on a recurring basis:

(in millions)	Fair Value Measurements at December 31, 2018,					
	Using	Level			Netting and Collateral	Total Fair Value
Description		1	2	3		
Liabilities:						
Embedded derivative	Accrued liabilities	\$	-\$66	\$	-\$	-\$ 66
	Deferred credits and liabilities	\$	-\$116	\$	-\$	-\$ 116

(in millions)	Fair Value Measurements at December 31, 2017,					
	Using	Level			Netting and Collateral	Total Fair Value
Description		1	2	3		
Liabilities:						
Embedded derivative	Accrued liabilities	\$	-\$39	\$	-\$	-\$ 39
	Deferred credits and liabilities	\$	-\$147	\$	-\$	-\$ 147

## FAIR VALUES – NONRECURRING

During 2018, Occidental recognized pre-tax impairment and related charges of \$416 million primarily related to Qatar ISND and ISSD proved properties and inventory. The fair value of the proved properties was measured based on the income approach, which incorporated a number of assumptions involving expectations of future cash flows. These assumptions included estimates of future product prices, which Occidental based on forward price curves, estimates of oil and gas reserves, estimates of future expected operating and capital costs and a risk-adjusted discount rate of 10 percent. These inputs are categorized as Level 3 in the fair value hierarchy. As the end of the contract period for Qatar approaches, significant changes to estimated future cash flows could result in additional impairment charges.

During 2017, Occidental recognized pre-tax impairment charges of \$397 million primarily related to held for sale non-core proved and unproved Permian acreage. Assumptions for proved and unproved properties classified as held for sale include estimated third-party prices to be received based on recent transactions of similar acreage.

During 2016, Occidental recognized pre-tax impairment charges of \$15 million related to proved oil and gas properties.

## FINANCIAL INSTRUMENTS FAIR VALUE

The carrying amounts of cash and cash equivalents and other on-balance sheet financial instruments, other than fixed-rate debt, approximate fair value. See Note 6 for the fair value of Long-term Debt.



## NOTE 17 INDUSTRY SEGMENTS AND GEOGRAPHIC AREAS

Results of industry segments and geographic areas exclude income taxes, interest income, interest expense, environmental remediation expenses, unallocated corporate expenses and discontinued operations, but include gains and losses from dispositions of segment and geographic area assets and income from the segments' equity investments. Intersegment sales eliminate upon consolidation and are generally made at prices approximating those that the selling entity would be able to obtain in third-party transactions.

Identifiable assets are those assets used in the operations of the segments. Corporate assets consist of cash and restricted cash, certain corporate receivables and PP&E.

## Industry Segments

(in millions)

	Oil and Gas	Chemical	Midstream and Marketing	Corporate and Eliminations	Total
Year ended December 31, 2018					
Net sales	\$10,441	(a) \$ 4,657	(b) \$ 3,656	(c) \$ (930)	) \$17,824
Pretax operating profit (loss)	\$2,442	(d) \$ 1,159	\$ 2,802	(e) \$ (795)	(f) \$5,608
Income taxes	—	—	—	(1,477)	(g) (1,477)
Net income (loss) attributable to common stock	\$2,442	\$ 1,159	\$ 2,802	\$ (2,272)	) \$4,131
Investments in unconsolidated entities	\$—	\$ 733	\$ 947	\$ —	\$1,680
Property, plant and equipment additions, net (h)	\$4,443	\$ 277	\$ 221	\$ 79	\$5,020
Depreciation, depletion and amortization	\$3,254	\$ 354	\$ 331	\$ 38	\$3,977
Total assets	\$24,874	\$ 4,359	\$ 11,087	\$ 3,534	\$43,854
Year ended December 31, 2017					
Net sales	\$7,870	(a) \$ 4,355	(b) \$ 1,157	(c) \$ (874)	) \$12,508
Pretax operating profit (loss)	\$1,111	(d) \$ 822	\$ 85	(e) \$ (690)	(f) \$1,328
Income taxes	—	—	—	(17)	(g) (17)
Net income (loss) attributable to common stock	\$1,111	\$ 822	\$ 85	\$ (707)	) \$1,311
Investments in unconsolidated entities	\$—	\$ 771	\$ 739	\$ 5	\$1,515
Property, plant and equipment additions, net (h)	\$2,968	\$ 323	\$ 296	\$ 64	\$3,651
Depreciation, depletion and amortization	\$3,269	\$ 352	\$ 340	\$ 41	\$4,002
Total assets	\$23,595	\$ 4,364	\$ 11,775	\$ 2,292	\$42,026
Year ended December 31, 2016					
Net sales	\$6,377	(a) \$ 3,756	(b) \$ 684	(c) \$ (727)	) \$10,090
Pretax operating profit (loss)	\$(636)	(d) \$ 571	(i) \$(381)	(e) \$ (1,218)	(f) \$(1,664)
Income taxes	—	—	—	662	(g) 662
Discontinued operations, net	—	—	—	428	(j) 428
Net income (loss) attributable to common stock	\$(636)	) \$ 571	\$(381)	) \$ (128)	) \$(574)
Investments in unconsolidated entities	\$—	\$ 730	\$ 666	\$ 5	\$1,401
Property, plant and equipment additions, net (h)	\$1,998	\$ 353	\$ 370	\$ 59	\$2,780
Depreciation, depletion and amortization	\$3,575	\$ 340	\$ 313	\$ 40	\$4,268
Total assets	\$24,130	\$ 4,348	\$ 11,059	\$ 3,572	\$43,109

(See footnotes on next page)

## Footnotes:

(a) Oil sales represented approximately 90 percent of the oil and gas segment net sales for the years ended December 31, 2018, 2017 and 2016.

(b) Net sales for the chemical segment comprised the following products:

	Basic Chemicals	Vinyls	Other Chemicals
Year ended December 31, 2018	59%	41%	—
Year ended December 31, 2017	57%	42%	1%
Year ended December 31, 2016	57%	40%	3%

(c) Net sales for the midstream and marketing segment comprised the following:

	Marketing	Gas Plants	Power	Other Midstream and Marketing
Year ended December 31, 2018	62%	27%	10%	1%
Year ended December 31, 2017	(11)%	69%	29%	13%
Year ended December 31, 2016	(52)%	92%	44%	16%

(d) The 2018 amount includes \$416 million for the impairment of proved oil properties and inventory in Qatar ISND and ISSD due to the decline in crude oil prices. The 2017 amount includes pre-tax asset sale gains of \$655 million primarily related to South Texas and non-core acreage in the Permian basin and \$397 million for the impairment of non-core proved and unproved Permian acreage. The 2016 amount includes pre-tax asset sale gains of \$121 million and \$59 million related to Piceance and South Texas oil and gas properties, pre-tax charges of \$61 million related to the sale of Libya and the exit from Iraq, and pre-tax gain of \$24 million for other related items.

(e) The 2018 amount includes pre-tax asset sale gains of \$907 million on the sale of non-core domestic midstream assets. The 2017 amount includes pre-tax charges of \$120 million related to asset impairments of idled facilities.

(f) The 2016 amount includes pre-tax charges of \$160 million related to the termination of crude oil supply contracts. There were no significant corporate transactions and events affecting 2018 and 2017 results. Significant corporate transactions and events affecting 2016 earnings, included charges of \$541 million related to a reserve for doubtful accounts, \$78 million loss on the distribution of the remaining CRC stock and gains related to the Ecuador settlement. The tax effect of these pre-tax adjustments, as well as those in footnotes (d), (e), (i), and (j) was \$198 million, \$392 million, and \$424 million for the years ended December 31, 2018, 2017, and 2016, respectively.

(g) Includes all foreign and domestic income taxes from continuing operations.

(h) Includes capital expenditures and capitalized interest, but excludes acquisition and disposition of assets.

(i) The 2016 amount includes gain on sale of \$57 million and \$31 million related to Occidental Tower in Dallas, Texas, and a non-core specialty chemicals business, respectively.

(j) Includes discontinued operations from Ecuador.

## GEOGRAPHIC AREAS

(in millions)	Net sales <sup>(a)</sup>			Property, plant and equipment, net		
	2018	2017	2016	2018	2017	2016
For the years ended December 31,						
United States	\$13,351	\$8,959	\$7,017	\$23,594	\$22,863	\$24,004
International						
Qatar	1,701	1,394	1,206	741	1,236	1,299
Oman	1,667	1,397	1,101	2,048	1,962	1,858
United Arab Emirates	1,021	808	664	4,051	4,241	4,373
Colombia	715	555	463	927	807	741
Other International	299	269	366	76	65	62
Total International	5,403	4,423	3,800	7,843	8,311	8,333
Eliminations	(930)	(874)	(727)	—	—	—

Total \$17,824 \$12,508 \$10,090 \$31,437 \$31,174 \$32,337

(a) Sales are shown by individual country based on the location of the entity making the sale.



2018 Quarterly Financial Data (Unaudited) Occidental Petroleum Corporation  
in millions, except per-share amounts and Subsidiaries

Three months ended	March 31	June 30	September 30	December 31
Segment net sales				
Oil and gas	\$2,454	\$2,531	\$2,889	\$2,567
Chemical	1,154	1,176	1,185	1,142
Midstream and marketing	389	603	1,367	1,297
Eliminations	(234 )	(227 )	(225 )	(244 )
Net sales	\$3,763	\$4,083	\$5,216	\$4,762
Gross profit	\$1,371	\$1,556	\$2,297	\$1,616
Segment earnings				
Oil and gas	\$750	\$780	\$767	(a) \$145 (a)
Chemical	298	317	321	223
Midstream and marketing	179	250	1,698	(b) 675 (b)
	1,227	1,347	2,786	1,043
Unallocated corporate items				
Interest expense, net	(92 )	(91 )	(92 )	(81 )
Income taxes	(339 )	(302 )	(710 )	(126 )
Other	(88 )	(106 )	(115 )	(130 )
Net income attributable to common stock	\$708	\$848	\$1,869	\$706
Basic earnings per common share	\$0.92	\$1.10	\$2.44	\$0.93
Diluted earnings per common share	\$0.92	\$1.10	\$2.44	\$0.93
Dividends per common share	\$0.77	\$0.77	\$0.78	\$0.78

(a) Included pre-tax impairments on Qatar ISND and ISSD proved oil properties and inventory of \$196 million and \$220 million in the third and fourth quarter, respectively.

(b) Included pre-tax asset sale gains on the divestiture of non-core domestic midstream assets of \$902 million and \$5 million in the third and fourth quarter, respectively.

2017 Quarterly Financial Data (Unaudited) Occidental Petroleum Corporation  
in millions, except per-share amounts and Subsidiaries

Three months ended	March 31	June 30	September 30	December 31	
Segment net sales					
Oil and gas	\$1,894	\$1,848	\$1,865	\$2,263	
Chemical	1,068	1,156	1,071	1,060	
Midstream and marketing	211	270	266	410	
Eliminations	(216 )	(214 )	(203 )	(241 )	
Net sales	\$2,957	\$3,060	\$2,999	\$3,492	
Gross profit	\$521	\$508	\$571	\$1,001	
Segment earnings					
Oil and gas	\$220	\$627	(a) \$220	(a) \$44	(a)
Chemical	170	230	200	222	
Midstream and marketing	(47 )	119	(b) 4	9	(b)
	343	976	424	275	
Unallocated corporate items					
Interest expense, net	(78 )	(81 )	(85 )	(80 )	
Income taxes	(78 )	(285 )	(85 )	431	
Other	(70 )	(103 )	(64 )	(129 )	
Net income (loss)	\$117	\$507	\$190	\$497	
Basic earnings per common share	\$0.15	\$0.66	\$0.25	\$0.65	
Diluted earnings per common share	\$0.15	\$0.66	\$0.25	\$0.65	
Dividends per common share	\$0.76	\$0.76	\$0.77	\$0.77	

Included pre-tax asset sale gains of \$0.5 billion in the second quarter related to the sale of South Texas operations, (a) \$81 million in the third quarter related to the sale of non-core acreage in the Permian Basin, and approximately \$55 million in the fourth quarter related to the sale of non-core proved and unproved acreage in the Permian Basin. The fourth quarter also included impairments of \$397 million on non-core proved and unproved Permian acreage.

(b) Included second quarter pre-tax non-cash fair value gain of \$94 million on Plains Pipeline equity investment and fourth quarter pre-tax charges of \$120 million related to idled midstream facilities.

Supplemental Oil and Gas Information (Unaudited)

The following tables set forth Occidental's net interests in quantities of proved developed and undeveloped reserves of oil (including condensate), NGL and natural gas and changes in such quantities. Proved oil, NGL and natural gas reserves were estimated using the unweighted arithmetic average of the first-day-of-the-month price for each month within the year, unless prices were defined by contractual arrangements. Oil, NGL and natural gas prices used for this purpose were based on posted benchmark prices and adjusted for price differentials including gravity, quality and transportation costs. For the 2018, 2017 and 2016 disclosures, the calculated average West Texas Intermediate oil prices were \$65.56, \$51.34 and \$42.75 per barrel, respectively. The calculated average Brent oil prices for 2018, 2017 and 2016 disclosures were \$72.20, \$54.93 and \$44.49, per barrel, respectively. The calculated average Henry Hub natural gas prices for 2018, 2017 and 2016 were \$3.10, \$3.08 and \$2.55 per MMBtu, respectively. Reserves are stated net of applicable royalties. Estimated reserves include Occidental's economic interests under production-sharing contracts (PSCs) and other similar economic arrangements. In addition, discussions of oil and gas production or volumes, in general, refer to sales volumes unless the context requires or it is indicated otherwise.

Prices for crude oil, natural gas and NGL fluctuate widely. Historically, the markets for crude oil, natural gas, NGL and refined products have been volatile and may continue to be volatile in the future. Prolonged or further declines in crude oil, natural gas and NGL prices would continue to reduce Occidental's operating results and cash flows, and could impact its future rate of growth and further impact the recoverability of the carrying value of its assets.

(Unaudited)

## Oil Reserves

in millions of barrels (MMbbl)

	United States	Latin America	Middle East (a)	Total
<b>PROVED DEVELOPED AND UNDEVELOPED RESERVES</b>				
Balance at December 31, 2015	915	77	317	1,309
Revisions of previous estimates (b)	(90 )	4	86	—
Improved recovery	114	2	9	125
Extensions and discoveries	—	—	2	2
Purchases of proved reserves	90	—	—	90
Sales of proved reserves (c)	—	—	(26 )	(26 )
Production	(69 )	(12 )	(62 )	(143 )
Balance at December 31, 2016	960	71	326	1,357
Revisions of previous estimates (b)	66	14	33	113
Improved recovery	97	8	17	122
Extensions and discoveries	—	—	5	5
Purchases of proved reserves	70	—	—	70
Sales of proved reserves (c)	(13 )	—	—	(13 )
Production	(73 )	(11 )	(55 )	(139 )
Balance at December 31, 2017	1,107	82	326	1,515
Revisions of previous estimates (b)	15	(2 )	(7 )	6
Improved recovery	135	23	31	189
Extensions and discoveries	—	4	2	6
Purchases of proved reserves	32	—	—	32
Sales of proved reserves (c)	(12 )	—	—	(12 )
Production	(91 )	(11 )	(51 )	(153 )
Balance at December 31, 2018	1,186	96	301	1,583
<b>PROVED DEVELOPED RESERVES</b>				
December 31, 2015	673	77	278	1,028
December 31, 2016	670	69	298	1,037
December 31, 2017	772	77	279	1,128
December 31, 2018 (d)	843	77	240	1,160
<b>PROVED UNDEVELOPED RESERVES (e)</b>				
December 31, 2015	242	—	39	281
December 31, 2016	290	2	28	320
December 31, 2017	335	5	47	387
December 31, 2018	343	19	61	423

(a) A majority of the proved reserve amounts relate to PSCs and other similar economic arrangements.

(b) Revisions of previous estimates in 2018 primarily reflected positive price revisions in Permian Basin. Revisions of previous estimates in 2017 primarily reflected positive revisions in Permian Basin and Oman. Revisions of previous estimates in 2016 were primarily price and price-related.

(c) Sales of proved reserves in 2018 were related to sales of non-core acreage in the Permian Basin. Sales of proved reserves in 2017 were primarily related to sales of South Texas and non-core acreage in the Permian Basin. Sales of proved reserves in 2016 were related to the sale of Libya.

(d) Approximately 12 percent of the proved developed reserves at December 31, 2018, are nonproducing, primarily associated with Oman and Permian EOR.

Proved undeveloped reserves in the Permian Basin are supported by a five-year detailed field-level development plan, which includes the timing, location and capital commitment of the wells to be drilled. Only proved undeveloped reserves which are reasonably certain to be drilled within five years of booking and are supported by a final investment decision to drill them are included in the development plan. A portion of the proved undeveloped reserves associated with international operations are expected to be developed beyond the five years and are tied to approved long-term development plans.

(Unaudited)

NGL Reserves

in millions of barrels (MMbbl)

	United States	Latin America	Middle East	Total
<b>PROVED DEVELOPED AND UNDEVELOPED RESERVES</b>				
Balance at December 31, 2015	186	—	144	330
Revisions of previous estimates <sup>(a)</sup>	1	—	70	71
Improved recovery	28	—	—	28
Extensions and discoveries	—	—	—	—
Purchases of proved reserves	26	—	—	26
Sales of proved reserves	(3 )	—	(2 )	(5 )
Production	(19 )	—	(11 )	(30 )
Balance at December 31, 2016	219	—	201	420
Revisions of previous estimates <sup>(a)</sup>	11	—	(2 )	9
Improved recovery	23	—	10	33
Extensions and discoveries	—	—	—	—
Purchases of proved reserves	21	—	—	21
Sales of proved reserves <sup>(b)</sup>	(7 )	—	—	(7 )
Production	(20 )	—	(11 )	(31 )
Balance at December 31, 2017	247	—	198	445
Revisions of previous estimates <sup>(a)</sup>	7	—	15	22
Improved recovery	47	—	—	47
Extensions and discoveries	—	—	—	—
Purchases of proved reserves	11	—	—	11
Sales of proved reserves <sup>(b)</sup>	(3 )	—	—	(3 )
Production	(25 )	—	(11 )	(36 )
Balance at December 31, 2018	284	—	202	486
<b>PROVED DEVELOPED RESERVES</b>				
December 31, 2015	141	—	112	253
December 31, 2016	149	—	164	313
December 31, 2017	161	—	153	314
December 31, 2018 <sup>(c)</sup>	196	—	145	341
<b>PROVED UNDEVELOPED RESERVES <sup>(d)</sup></b>				
December 31, 2015	45	—	32	77
December 31, 2016	70	—	37	107
December 31, 2017	86	—	45	131
December 31, 2018	88	—	57	145

(a) Revisions of previous estimates were primarily due to prices.

(b) Sales of proved reserves in 2018 were related to sales of non-core acreage in the Permian Basin. Sales of proved reserves in 2017 were primarily related to the sale of South Texas.

(c) Approximately 6 percent of the proved developed reserves at December 31, 2018, are nonproducing, primarily associated with Permian EOR.

(d) Proved undeveloped reserves in the Permian Basin are supported by a five-year detailed field-level development plan, which includes the timing, location and capital commitment of the wells to be drilled. Only proved undeveloped reserves which are reasonably certain to be drilled within five years of booking and are supported by a final investment decision to drill them are included in the development plan. A portion of the proved undeveloped reserves associated with international operations are expected to be developed beyond the five years

and are tied to approved long-term development plans.

(Unaudited)

Natural Gas Reserves  
in billions of cubic feet (Bcf)

	United States	Latin America	Middle East <sup>(a)</sup>	Total
<b>PROVED DEVELOPED AND UNDEVELOPED RESERVES</b>				
Balance at December 31, 2015	1,019	19	2,330	3,368
Revisions of previous estimates <sup>(b)</sup>	(19 )	(10 )	554	525
Improved recovery	138	—	51	189
Extensions and discoveries	—	—	2	2
Purchases of proved reserves	128	—	—	128
Sales of proved reserves <sup>(c)</sup>	(89 )	—	—	(89 )
Production	(132 )	(3 )	(214 )	(349 )
Balance at December 31, 2016	1,045	6	2,723	3,774
Revisions of previous estimates <sup>(b)</sup>	197	8	(33 )	172
Improved recovery	167	1	106	274
Extensions and discoveries	—	—	3	3
Purchases of proved reserves	50	—	—	50
Sales of proved reserves <sup>(c)</sup>	(146 )	—	—	(146 )
Production	(108 )	(3 )	(185 )	(296 )
Balance at December 31, 2017	1,205	12	2,614	3,831
Revisions of previous estimates <sup>(b)</sup>	(25 )	—	191	166
Improved recovery	329	1	17	347
Extensions and discoveries	—	—	4	4
Purchases of proved reserves	69	—	—	69
Sales of proved reserves <sup>(c)</sup>	(14 )	—	—	(14 )
Production	(119 )	(2 )	(187 )	(308 )
Balance at December 31, 2018	1,445	11	2,639	4,095
<b>PROVED DEVELOPED RESERVES</b>				
December 31, 2015	813	19	1,872	2,704
December 31, 2016	708	6	2,324	3,038
December 31, 2017	782	11	2,131	2,924
December 31, 2018 <sup>(d)</sup>	978	11	2,015	3,004
<b>PROVED UNDEVELOPED RESERVES <sup>(e)</sup></b>				
December 31, 2015	206	—	458	664
December 31, 2016	337	—	399	736
December 31, 2017	423	1	483	907
December 31, 2018	467	—	624	1,091

(a) Approximately one-third of proved reserve amounts relate to PSCs and other similar economic arrangements.

(b) Revisions of previous estimates in 2018 primarily reflected positive revisions in Al Hosn Gas due to improved performance partially offset by negative price revisions at Dolphin. Revisions of previous estimates in 2017 primarily reflected positive domestic revisions. Revisions of previous estimates in 2016 primarily reflected positive revisions in Al Hosn Gas.

(c) Sales of proved reserves in 2018 were related to the sale of non-core Permian acreage. Sales of proved reserves in 2017 were primarily related to the sale of South Texas and non-core acreage in the Permian Basin. 2016 sales of proved reserves are related to Piceance.

(d) Approximately 3 percent of the proved developed reserves at December 31, 2018, are nonproducing, primarily associated with Permian Basin.



Proved undeveloped reserves in the Permian Basin are supported by a five-year detailed field-level development plan, which includes the timing, location and capital commitment of the wells to be drilled. Only proved undeveloped reserves which are reasonably certain to be drilled within five years of booking and are supported by a final investment decision to drill them are included in the development plan. A portion of the proved undeveloped reserves associated with international operations are expected to be developed beyond the five years and are tied to approved long-term development plans.

(Unaudited)

## Total Reserves

in millions of BOE (MMBOE) <sup>(a)</sup>

	United States	Latin America	Middle East	Total <sup>(b)</sup>
<b>PROVED DEVELOPED AND UNDEVELOPED RESERVES</b>				
Balance at December 31, 2015	1,271	80	849	2,200
Revisions of previous estimates <sup>(c)</sup>	(92 )	3	248	159
Improved recovery	165	2	18	185
Extensions and discoveries	—	—	2	2
Purchases of proved reserves	137	—	—	137
Sales of proved reserves <sup>(d)</sup>	(18 )	—	(28 )	(46 )
Production	(110 )	(13 )	(108 )	(231 )
Balance at December 31, 2016	1,353	72	981	2,406
Revisions of previous estimates <sup>(c)</sup>	109	16	26	151
Improved recovery	149	8	44	201
Extensions and discoveries	—	—	5	5
Purchases of proved reserves	99	—	—	99
Sales of proved reserves <sup>(d)</sup>	(44 )	—	—	(44 )
Production	(111 )	(12 )	(97 )	(220 )
Balance at December 31, 2017	1,555	84	959	2,598
Revisions of previous estimates <sup>(c)</sup>	18	(2 )	40	56
Improved recovery	237	23	34	294
Extensions and discoveries	—	4	3	7
Purchases of proved reserves	54	—	—	54
Sales of proved reserves <sup>(d)</sup>	(17 )	—	—	(17 )
Production	(136 )	(11 )	(93 )	(240 )
Balance at December 31, 2018	1,711	98	943	2,752
<b>PROVED DEVELOPED RESERVES</b>				
December 31, 2015	950	80	702	1,732
December 31, 2016	937	70	849	1,856
December 31, 2017	1,063	79	786	1,928
December 31, 2018 <sup>(e)</sup>	1,202	79	721	2,002
<b>PROVED UNDEVELOPED RESERVES <sup>(f)</sup></b>				
December 31, 2015	321	—	147	468
December 31, 2016	416	2	132	550
December 31, 2017	492	5	173	670
December 31, 2018	509	19	222	750

Natural gas volumes have been converted to barrels of oil equivalent (BOE) based on energy content of six thousand cubic feet (Mcf) of gas to one barrel of oil. Barrels of oil equivalence does not necessarily result in price equivalence. The price of natural gas on a barrel of oil equivalent basis is currently substantially lower than the

(a) corresponding price for oil and has been similarly lower for a number of years. For example, in 2018, the average daily prices of West Texas Intermediate (WTI) oil and New York Mercantile Exchange (NYMEX) natural gas were \$64.77 per barrel and \$2.97 per Mcf, respectively, resulting in an oil to gas ratio of over 20 to 1.

(b) Included proved reserves related to PSCs and other similar economic arrangements of 0.3 billion BOE, 0.5 billion BOE, 0.5 billion BOE, and 0.5 billion BOE at December 31, 2018, 2017, 2016 and 2015, respectively.

(c)

Revisions of previous estimates in 2018 primarily reflected positive revisions in Permian Basin related to prices and Al Hosn Gas due to improved performance. Revisions of previous estimates in 2017 reflected positive revisions in the Permian Basin and Oman. Revisions in 2016 are primarily positive revisions in Al Hosn Gas and price revisions in Oman due to the PSC impact, partially offset by negative domestic price revisions.

(d) Sales of proved reserves in 2018 were primarily related to the sale of non-core acreage in the Permian Basin. Sales of proved reserves in 2017 were primarily related to the sale of South Texas and non-core acreage in the Permian Basin. 2016 sales of proved reserves are related to Libya and Piceance.

(e) Approximately 9 percent of the proved developed reserves at December 31, 2018, are nonproducing, primarily associated with Oman and Permian EOR.

(f) Proved undeveloped reserves in the Permian Basin are supported by a five-year detailed field-level development plan, which includes the timing, location and capital commitment of the wells to be drilled. Only proved undeveloped reserves which are reasonably certain to be drilled within five years of booking and are supported by a final investment decision to drill them are included in the development plan. A portion of the proved undeveloped reserves associated with international operations are expected to be developed beyond the five years and are tied to approved long-term development plans.

(Unaudited)

**CAPITALIZED COSTS**

Capitalized costs relating to oil and gas producing activities and related accumulated DD&amp;A were as follows:

in millions	United States	Latin America	Middle East	Total
December 31, 2018				
Proved properties	\$35,717	\$3,436	\$17,302	\$56,455
Unproved properties	1,900	43	401	2,344
Total capitalized costs <sup>(a)</sup>	37,617	3,479	17,703	58,799
Proved properties depreciation, depletion and amortization	(17,188 )	(2,514 )	(14,286 )	(33,988 )
Unproved properties valuation	(1,200 )	(27 )	(85 )	(1,312 )
Total Accumulated depreciation, depletion and amortization	(18,388 )	(2,541 )	(14,371 )	(35,300 )
Net capitalized costs	\$19,229	\$938	\$3,332	\$23,499
December 31, 2017				
Proved properties	\$31,091	\$3,194	\$16,582	\$50,867
Unproved properties	2,094	53	394	2,541
Total capitalized costs <sup>(a)</sup>	33,185	3,247	16,976	53,408
Proved properties depreciation, depletion and amortization	(14,609 )	(2,412 )	(13,196 )	(30,217 )
Unproved properties valuation	(1,166 )	(27 )	—	(1,193 )
Total Accumulated depreciation, depletion and amortization	(15,775 )	(2,439 )	(13,196 )	(31,410 )
Net capitalized costs	\$17,410	\$808	\$3,780	\$21,998
December 31, 2016				
Proved properties	\$32,220	\$3,029	\$16,453	\$51,702
Unproved properties	2,548	28	393	2,969
Total capitalized costs <sup>(a)</sup>	34,768	3,057	16,846	54,671
Proved properties depreciation, depletion and amortization	(15,085 )	(2,285 )	(13,067 )	(30,437 )
Unproved properties valuation	(1,178 )	(27 )	—	(1,205 )
Total Accumulated depreciation, depletion and amortization	(16,263 )	(2,312 )	(13,067 )	(31,642 )
Net capitalized costs	\$18,505	\$745	\$3,779	\$23,029

(a) Includes acquisition costs, development costs, capitalized interest and asset retirement obligations.

**COSTS INCURRED**

Costs incurred in oil and gas property acquisition, exploration and development activities, whether capitalized or expensed, were as follows:

in millions	United States	Latin America	Middle East	Total
FOR THE YEAR ENDED DECEMBER 31, 2018				
Property acquisition costs				
Proved properties	\$428	\$ —	\$ —	\$428
Unproved properties	46	4	2	52
Exploration costs	196	42	44	282
Development costs	3,387	203	698	4,288
Costs incurred	\$4,057	\$ 249	\$ 744	\$5,050
FOR THE YEAR ENDED DECEMBER 31, 2017				
Property acquisition costs				
Proved properties	\$880	\$ —	\$ 1	\$881
Unproved properties	32	—	—	32
Exploration costs	163	39	54	256
Development costs	1,981	157	582	2,720

Costs incurred	\$3,056	\$ 196	\$637	\$3,889
FOR THE YEAR ENDED DECEMBER 31, 2016				
Property acquisition costs				
Proved properties	\$797	\$ —	\$28	\$825
Unproved properties	1,265	—	339	1,604
Exploration costs	13	6	52	71
Development costs	1,417	75	670	2,162
Costs incurred	\$3,492	\$ 81	\$1,089	\$4,662

(Unaudited)

## RESULTS OF OPERATIONS

Occidental's oil and gas producing activities for continuing operations, which exclude items such as asset dispositions, corporate overhead, interest and royalties, were as follows:

in millions	United States	Latin America	Middle East	Total
FOR THE YEAR ENDED DECEMBER 31, 2018				
Revenues <sup>(a)</sup>	\$5,747	\$ 731	\$3,963	\$10,441
Production costs <sup>(b)</sup>	1,686	154	1,037	2,877
Other operating expenses	672	49	186	907
Depreciation, depletion and amortization	2,321	102	831	3,254
Taxes other than on income	407	6	—	413
Exploration expenses	64	19	27	110
Pretax income before impairments and related items	597	401	1,882	2,880
Asset impairments and related items	32	—	416	448
Pretax income	565	401	1,466	2,432
Income tax expense (benefit) <sup>(c)</sup>	(131 )	174	925	968
Results of operations	\$696	\$ 227	\$541	\$1,464
FOR THE YEAR ENDED DECEMBER 31, 2017				
Revenues <sup>(a)</sup>	\$4,047	\$ 570	\$3,253	\$7,870
Production costs <sup>(b)</sup>	1,474	155	950	2,579
Other operating expenses	585	51	166	802
Depreciation, depletion and amortization	2,549	124	596	3,269
Taxes other than on income	273	9	—	282
Exploration expenses	28	7	47	82
Pretax income (loss) before impairments and related items	(862 )	224	1,494	856
Asset impairments and related items	397	4	—	401
Pretax income (loss)	(1,259 )	220	1,494	455
Income tax expense (benefit) <sup>(c)</sup>	(695 )	120	690	115
Results of operations	\$(564 )	\$ 100	\$804	\$340
FOR THE YEAR ENDED DECEMBER 31, 2016				
Revenues <sup>(a)</sup>	\$3,135	\$ 476	\$2,766	\$6,377
Production costs <sup>(b)</sup>	1,335	170	982	2,487
Other operating expenses	426	36	218	680
Depreciation, depletion and amortization	2,793	156	626	3,575
Taxes other than on income	240	10	—	250
Exploration expenses	8	5	49	62
Pretax income (loss) before impairments and related items	(1,667 )	99	891	(677 )
Asset impairments and related items	1	9	61	71
Pretax income (loss)	(1,668 )	90	830	(748 )
Income tax expense (benefit) <sup>(c)</sup>	(784 )	65	336	(383 )
Results of operations	\$(884 )	\$ 25	\$494	\$(365 )

(a) Revenues are net of royalty payments.

Production costs are the costs incurred in lifting the oil and gas to the surface and include gathering, primary (b) processing and field storage, but do not include DD&A, royalties, income taxes, interest, general and administrative and other expenses.

(c)

U.S. federal income taxes reflect certain expenses related to oil and gas activities allocated for United States income tax purposes only, including allocated interest and corporate overhead. These amounts are computed using the statutory rate in effect during the period.

(Unaudited)

## RESULTS PER UNIT OF PRODUCTION FOR CONTINUING OPERATIONS

	United States	Latin America	Middle East	Total
\$/BOE <sup>(a)</sup>				
FOR THE YEAR ENDED DECEMBER 31, 2018				
Revenues <sup>(b)</sup>	\$42.30	\$ 63.37	\$42.78	\$43.50
Production costs	12.41	13.32	11.20	11.98
Other operating expenses	4.95	4.24	2.01	3.79
Depreciation, depletion and amortization	17.08	8.88	8.96	13.56
Taxes other than on income	3.00	0.52	—	1.72
Exploration expenses	0.47	1.65	0.29	0.46
Pretax income before impairments and related items	4.39	34.76	20.32	11.99
Asset impairments and related items	0.24	—	4.49	1.87
Pretax income	4.15	34.76	15.83	10.12
Income tax expense (benefit) <sup>(c)</sup>	(0.96 )	15.08	9.99	4.03
Results of operations	\$5.11	\$ 19.68	\$5.84	\$6.09
FOR THE YEAR ENDED DECEMBER 31, 2017				
Revenues <sup>(b)</sup>	\$36.50	\$ 47.79	\$33.51	\$35.79
Production costs	13.29	12.99	9.79	11.73
Other operating expenses	5.28	4.28	1.71	3.65
Depreciation, depletion and amortization	22.99	10.37	6.14	14.87
Taxes other than on income	2.47	0.75	—	1.28
Exploration expenses	0.25	0.59	0.48	0.37
Pretax income (loss) before impairments and related items	(7.78 )	18.81	15.39	3.89
Asset impairments and related items	3.58	0.34	—	1.82
Pretax income (loss)	(11.36 )	18.47	15.39	2.07
Income tax expense (benefit) <sup>(c)</sup>	(6.27 )	10.06	7.11	0.52
Results of operations	\$(5.09 )	\$ 8.41	\$8.28	\$1.55
FOR THE YEAR ENDED DECEMBER 31, 2016				
Revenues <sup>(b)</sup>	\$28.36	\$ 36.87	\$25.67	\$27.59
Production costs	12.07	13.16	9.12	10.76
Other operating expenses	3.86	2.76	2.02	2.94
Depreciation, depletion and amortization	25.27	12.12	5.81	15.46
Taxes other than on income	2.17	0.77	—	1.08
Exploration expenses	0.07	0.39	0.45	0.27
Pretax income (loss) before impairments and related items	(15.08 )	7.67	8.27	(2.92 )
Asset impairments and related items	0.01	0.70	0.57	0.31
Pretax income (loss)	(15.09 )	6.97	7.70	(3.23 )
Income tax expense (benefit) <sup>(c)</sup>	(7.09 )	5.03	3.12	(1.66 )
Results of operations	\$(8.00 )	\$ 1.94	\$4.58	\$(1.57 )

Natural gas volumes have been converted to barrels of oil equivalent (BOE) based on energy content of six thousand cubic feet (Mcf) of gas to one barrel of oil. Barrels of oil equivalence does not necessarily result in price equivalence. The price of natural gas on a barrel of oil equivalent basis is currently substantially lower than the corresponding price for oil and has been similarly lower for a number of years. For example, in 2018, the average daily prices of WTI oil and NYMEX natural gas were \$64.77 per barrel and \$2.97 per Mcf, respectively, resulting in an oil to gas ratio of over 20 to 1.

(a) Revenues are net of royalty payments.

(c)



United States federal income taxes reflect certain expenses related to oil and gas activities allocated for U.S. income tax purposes only, including allocated interest and corporate overhead. These amounts are computed using the statutory rate in effect during the period, and do not consider the effects of changes to the U.S. federal income tax law by Tax Reform.

(Unaudited)

## STANDARDIZED MEASURE, INCLUDING YEAR-TO-YEAR CHANGES THEREIN, OF DISCOUNTED FUTURE NET CASH FLOWS

For purposes of the following disclosures, future cash flows were computed by applying to Occidental's proved oil and gas reserves the unweighted arithmetic average of the first-day-of-the-month price for each month within the years ended December 31, 2018, 2017 and 2016, respectively, unless prices were defined by contractual arrangements, and exclude escalations based upon future conditions. For the 2018, 2017 and 2016 disclosures, the calculated average West Texas Intermediate oil prices were \$65.56, \$51.34 and \$42.75 per barrel, respectively. The calculated average Brent oil prices for 2018, 2017 and 2016 disclosures were \$72.20, \$54.93 and \$44.49, per barrel, respectively. The calculated average Henry Hub natural gas prices for 2018, 2017 and 2016 were \$3.10, \$3.08, and \$2.55 per MMBtu, respectively. The realized prices used to calculate future cash flows vary by producing area and market conditions. Future operating and capital costs were forecast using the current cost environment applied to expectations of future operating and development activities to develop and produce proved reserves at year end. Future income tax expenses were computed by applying, generally, year-end statutory tax rates (adjusted for permanent differences, tax credits, allowances and foreign income repatriation considerations) to the estimated net future pre-tax cash flows. The discount was computed by application of a 10 percent discount factor. The calculations assumed the continuation of existing economic, operating and contractual conditions at December 31, 2018, 2017 and 2016. Such assumptions, which are required by regulation, have not always proven accurate in the past. Other valid assumptions would give rise to substantially different results.

Standardized Measure of Discounted Future Net Cash Flows  
in millions

	United States	Latin America	Middle East	Total
AT DECEMBER 31, 2018				
Future cash inflows	\$75,313	\$6,104	\$31,158	\$112,575
Future costs				
Production costs and other operating expenses	(33,373 )	(2,673 )	(9,609 )	(45,655 )
Development costs <sup>(a)</sup>	(9,450 )	(377 )	(2,136 )	(11,963 )
Future income tax expense	(4,150 )	(959 )	(3,524 )	(8,633 )
Future net cash flows	28,340	2,095	15,889	46,324
Ten percent discount factor	(14,288 )	(846 )	(7,729 )	(22,863 )
Standardized measure of discounted future net cash flows	\$14,052	\$1,249	\$8,160	\$23,461
AT DECEMBER 31, 2017				
Future cash inflows	\$59,289	\$3,961	\$25,662	\$88,912
Future costs				
Production costs and other operating expenses	(29,318 )	(1,915 )	(9,349 )	(40,582 )
Development costs <sup>(a)</sup>	(7,986 )	(238 )	(2,199 )	(10,423 )
Future income tax expense	(1,838 )	(543 )	(2,906 )	(5,287 )
Future net cash flows	20,147	1,265	11,208	32,620
Ten percent discount factor	(10,951 )	(423 )	(5,026 )	(16,400 )
Standardized measure of discounted future net cash flows	\$9,196	\$842	\$6,182	\$16,220
AT DECEMBER 31, 2016				
Future cash inflows	\$42,289	\$2,551	\$21,079	\$65,919
Future costs				
Production costs and other operating expenses	(23,574 )	(1,418 )	(8,101 )	(33,093 )
Development costs <sup>(a)</sup>	(7,204 )	(134 )	(1,900 )	(9,238 )
Future income tax expense	—	(244 )	(2,349 )	(2,593 )
Future net cash flows	11,511	755	8,729	20,995

Ten percent discount factor	(6,676 )	(202 )	(4,404 )	(11,282 )
Standardized measure of discounted future net cash flows	\$4,835	\$553	\$4,325	\$9,713

(a) Includes asset retirement costs.

(Unaudited)

Changes in the Standardized Measure of Discounted Future  
Net Cash Flows From Proved Reserve Quantities  
in millions

For the years ended December 31,	2018	2017	2016
Beginning of year	\$16,220	\$9,713	\$11,395
Sales and transfers of oil and gas produced, net of production costs and other operating expenses	(7,828 )	(5,362 )	(3,830 )
Net change in prices received per barrel, net of production costs and other operating expenses	9,482	7,598	(3,714 )
Extensions, discoveries and improved recovery, net of future production and development costs	3,378	1,534	811
Change in estimated future development costs	(3,463 )	(1,283 )	(227 )
Revisions of quantity estimates	664	966	868
Previously estimated development costs incurred during the period	1,943	1,643	1,662
Accretion of discount	1,551	922	1,034
Net change in income taxes	(1,182 )	(528 )	1,367
Purchases and sales of reserves in place, net	347	688	178
Changes in production rates and other	2,349	329	169
Net change	7,241	6,507	(1,682 )
End of year	\$23,461	\$16,220	\$9,713

## Average Sales Prices

The following table sets forth, for each of the three years in the period ended December 31, 2018, Occidental's approximate average sales prices in continuing operations.

	United States	Latin America	Middle East	Total
2018				
Oil —Average sales price (\$/bbl)	\$56.30	\$64.32	\$67.69	\$60.64
NGL —Average sales price (\$/bbl)	\$27.64	\$—	\$23.20	\$26.25
Gas —Average sales price (\$/mcf)	\$1.59	\$6.43	\$1.58	\$1.62
2017				
Oil —Average sales price (\$/bbl)	\$47.91	\$48.50	\$50.38	\$48.93
NGL —Average sales price (\$/bbl)	\$23.67	\$—	\$18.05	\$21.63
Gas —Average sales price (\$/mcf)	\$2.31	\$5.08	\$1.52	\$1.84
2016				
Oil —Average sales price (\$/bbl)	\$39.38	\$37.48	\$38.25	\$38.73
NGL —Average sales price (\$/bbl)	\$14.72	\$—	\$15.01	\$14.82
Gas —Average sales price (\$/mcf)	\$1.90	\$3.78	\$1.27	\$1.53

(Unaudited)

## Net Productive and Dry — Exploratory and Development Wells Completed

The following table sets forth, for each of the three years in the period ended December 31, 2018, Occidental's net productive and dry exploratory and development wells completed.

		United States	Latin America	Middle East	Total
2018					
Oil	—Exploratory	11	2	5	18
	Development	267	54	138	459
Gas	—Exploratory	—	—	—	—
	Development	3	—	1	4
Dry	—Exploratory	—	2	3	5
	Development	—	—	—	—
2017					
Oil	—Exploratory	14	1	5	20
	Development	201	51	105	357
Gas	—Exploratory	—	—	—	—
	Development	2	—	1	3
Dry	—Exploratory	—	—	3	3
	Development	—	—	—	—
2016					
Oil	—Exploratory	—	—	2	2
	Development	166	12	157	335
Gas	—Exploratory	—	—	—	—
	Development	—	—	10	10
Dry	—Exploratory	—	—	6	6
	Development	—	—	—	—

## Productive Oil and Gas Wells

The following table sets forth, as of December 31, 2018, Occidental's productive oil and gas wells (both producing and capable of production).

Wells at December 31, 2018 (a)	United States	Latin America	Middle East	Total
Oil —Gross (b)	16,674 (886)	1,857	—2,595 (1)	21,126 (887)
Net (c)	14,501 (812)	976	—1,369 (1)	16,846 (813)
Gas —Gross (b)	2,606 (319)	33	—12	2,751 (319)
Net (c)	2,312 (299)	31	—59	2,402 (299)

(a) The numbers in parentheses indicate the number of wells with multiple completions.

(b) The total number of wells in which interests are owned.

(c) The sum of fractional interests.

(Unaudited)

## Participation in Exploratory and Development Wells Being Drilled

The following table sets forth, as of December 31, 2018, Occidental's participation in exploratory and development wells being drilled.

Wells at December 31, 2018	United States	Latin America	Middle East	Total
Exploratory and development wells				
–Gross	52	3	21	76
–Net	52	2	13	67

At December 31, 2018, Occidental was participating in 88 pressure-maintenance projects, mostly waterfloods, in the United States, five in Latin America and 24 in the Middle East.

## Oil and Gas Acreage

The following table sets forth, as of December 31, 2018, Occidental's holdings of developed and undeveloped oil and gas acreage.

Thousands of acres at December 31, 2018	United States	Latin America	Middle East	Total
Developed (a)				
–Gross <sup>(b)</sup>	6,026	145	678	6,849
–Net <sup>(c)</sup>	3,030	99	286	3,415
Undeveloped (d)				
–Gross <sup>(b)</sup>	1,652	481	5,815	7,948
–Net <sup>(c)</sup>	537	310	4,900	5,747

(a) Acres spaced or assigned to productive wells.

(b) Total acres in which interests are held.

(c) Sum of the fractional interests owned based on working interests, or interests under PSCs and other economic arrangements.

(d) Acres on which wells have not been drilled or completed to a point that would permit the production of commercial quantities of oil and gas, regardless of whether the acreage contains proved reserves.

Occidental's investment in developed and undeveloped acreage comprises numerous concessions, blocks and leases. Work programs are designed to ensure that the exploration potential of any property is fully evaluated before the contractual expiration date. In some instances, Occidental may elect to relinquish acreage in advance of the contractual expiration date if the evaluation process is complete and there is not a business basis for extension. In cases where additional time may be required to fully evaluate acreage, Occidental has generally been successful in obtaining extensions. Scheduled lease and concession expirations for undeveloped acreage over the next three years are not expected to have a material adverse impact on Occidental.



(Unaudited)

## Oil, NGL and Natural Gas Production and Sales Volumes Per Day

The following tables set forth the production and sales volumes of oil, NGL and natural gas per day for each of the three years in the period ended December 31, 2018. The differences between the production and sales volumes per day are generally due to the timing of shipments at Occidental's international locations where product is loaded onto tankers.

Production per Day (MBOE)	2018	2017	2016
United States			
Permian Resources	214	141	124
Permian EOR	154	150	145
Other Domestic	4	13	33
Total	372	304	302
Latin America	32	32	34
Middle East			
Al Hosn Gas	73	71	64
Dolphin	40	42	43
Oman	86	95	96
Qatar	55	58	65
Other	—	—	26
Total	254	266	294
Total Production (MBOE) <sup>(a)</sup>	658	602	630

(See footnote following the Sales Volumes from Ongoing Operations table)

Production per Day from Ongoing Operations (MBOE)	2018	2017	2016
United States			
Permian Resources	214	141	124
Permian EOR	154	150	145
Other Domestic	4	5	4
Total	372	296	273
Latin America	32	32	34
Middle East			
Al Hosn Gas	73	71	64
Dolphin	40	42	43
Oman	86	95	96
Qatar	55	58	65
Total	254	266	268
Total Production Ongoing Operations (MBOE) <sup>(a)</sup>	658	594	575
Sold domestic operations	—	8	29
Sold or Exited MENA operations	—	—	26
Total Production (MBOE) <sup>(a)</sup>	658	602	630

(See footnote following the Sales Volumes from Ongoing Operations table)



(Unaudited)

Production per Day by Products	2018	2017	2016
United States			
Oil (MBBL)			
Permian Resources	132	85	77
Permian EOR	117	113	108
Other Domestic	1	2	4
Total	250	200	189
NGL (MBBL)			
Permian Resources	38	26	21
Permian EOR	29	27	27
Other Domestic	—	2	5
Total	67	55	53
Natural gas (MMCF)			
Permian Resources	261	184	158
Permian EOR	50	57	59
Other Domestic	16	53	144
Total	327	294	361
Latin America			
Oil (MBBL)	31	31	33
Natural gas (MMCF)	6	7	8
Middle East			
Oil (MBBL)			
Al Hosn Gas	13	13	12
Dolphin	7	7	7
Oman	63	71	77
Qatar	55	59	65
Other	—	—	7
Total	138	150	168
NGL (MBBL)			
Al Hosn Gas	23	23	20
Dolphin	8	8	8
Total	31	31	28
Natural gas (MMCF)			
Al Hosn Gas	220	211	190
Dolphin	152	159	166
Oman	139	138	115
Other	—	—	114
Total	511	508	585
Total Production (MBOE) <sup>(a)</sup>	658	602	630

(See footnote following the Sales Volumes from Ongoing Operations table)

(Unaudited)

Production per Day by Products from Ongoing Operations	2018	2017	2016
United States			
Oil (MBBL)			
Permian Resources	132	85	77
Permian EOR	117	113	108
Other Domestic	1	2	1
Total	250	200	186
NGL (MBBL)			
Permian Resources	38	26	21
Permian EOR	29	27	27
Total	67	53	48
Natural gas (MMCF)			
Permian Resources	261	184	158
Permian EOR	50	57	59
Other Domestic	16	18	18
Total	327	259	235
Latin America			
Oil (MBBL)	31	31	33
Natural gas (MMCF)	6	7	8
Middle East			
Oil (MBBL)			
Al Hosn Gas	13	13	12
Dolphin	7	7	7
Oman	63	71	77
Qatar	55	59	65
Total	138	150	161
NGL (MBBL)			
Al Hosn Gas	23	23	20
Dolphin	8	8	8
Total	31	31	28
Natural gas (MMCF)			
Al Hosn Gas	220	211	190
Dolphin	152	159	166
Oman	139	138	115
Total	511	508	471
Total Production Ongoing Operations (MBOE) <sup>(a)</sup>	658	594	575
Sold domestic operations	—	8	29
Sold or Exited MENA operations	—	—	26
Total Production (MBOE) <sup>(a)</sup>	658	602	630

(See footnote following the Sales Volumes from Ongoing Operations table)

(Unaudited)

Sales Volumes per Day by Products	2018	2017	2016
United States			.
Oil (MBBL)	250	200	189
NGL (MBBL)	67	55	53
Natural gas (MMCF)	327	294	361
Latin America			
Oil (MBBL)	31	32	34
Natural gas (MMCF)	6	7	8
Middle East			
Oil (MBBL)			
Al Hosn Gas	13	13	12
Dolphin	7	7	7
Oman	63	72	77
Qatar	55	58	66
Other	—	—	7
Total	138	150	169
NGL (MBBL)			
Al Hosn Gas	23	23	20
Dolphin	8	8	8
Total	31	31	28
Natural gas (MMCF)	511	508	585
Total Sales Volumes (MBOE) <sup>(a)</sup>	658	603	632

(See footnote following the Sales Volumes from Ongoing Operations table)

Sales Volumes per Day by Products from Ongoing Operations	2018	2017	2016
United States			
Oil (MBBL)	250	200	186
NGL (MBBL)	67	53	48
Natural gas (MMCF)	327	259	235
Latin America			
Oil (MBBL)	31	32	34
Natural gas (MMCF)	6	7	8
Middle East			
Oil (MBBL)			
Al Hosn Gas	13	13	12
Dolphin	7	7	7
Oman	63	72	77
Qatar	55	58	66
Total	138	150	162
NGL (MBBL)			
Al Hosn Gas	23	23	20
Dolphin	8	8	8
Total	31	31	28
Natural gas (MMCF)	511	508	471
Total Sales Ongoing Operations (MBOE) <sup>(a)</sup>	658	595	577
Sold domestic operations	—	8	29
Sold or Exited MENA operations	—	—	26
Total Sales Volumes (MBOE) <sup>(a)</sup>	658	603	632

Natural gas volumes have been converted to BOE based on energy content of six Mcf of gas to one barrel of oil. Barrels of oil equivalence does not necessarily result in price equivalence. The price of natural gas on a barrel (a) of oil equivalent basis is currently substantially lower than the corresponding price for oil and has been similarly lower for a number of years. For example, in 2018, the average daily prices of WTI oil and NYMEX natural gas were \$64.77 per barrel and \$2.97, respectively, resulting in an oil to gas ratio of over 20 to 1.

Schedule II – Valuation and Qualifying Accounts Occidental Petroleum Corporation  
in millions and Subsidiaries

	Balance at Beginning of Period	Additions Charged to		Deductions (a)	Balance at End of Period
		Costs and Expenses	Other Accounts		
2018					
Allowance for doubtful accounts	\$ 594	\$77	\$ (3 )	\$ —	\$ 668 (b)
Environmental, litigation, tax and other reserves	\$ 935	\$140	\$ 85	\$ (166 )	\$ 994 (c)
2017					
Allowance for doubtful accounts	\$ 558	\$37	\$ (2 )	\$ 1	\$ 594 (b)
Environmental, litigation, tax and other reserves	\$ 997	\$45	\$ 53	\$ (160 )	\$ 935 (c)
2016					
Allowance for doubtful accounts	\$ 20	\$543	\$ (3 )	\$ (2 )	\$ 558 (b)
Environmental, litigation, tax and other reserves	\$ 479	\$61	\$ 531	\$ (74 )	\$ 997 (c)

Note: The amounts presented represent continuing operations.

(a) Primarily represents payments.

(b) Of these amounts, \$24 million, \$18 million and \$17 million in 2018, 2017 and 2016, respectively, are classified as current.

(c) Of these amounts, \$146 million, \$163 million and \$197 million in 2018, 2017 and 2016, respectively, are classified as current.

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

Occidental had no changes in, and no disagreements with, Occidental's accountants on accounting and financial disclosure.

ITEM 9A CONTROLS AND PROCEDURES  
MANAGEMENT'S ANNUAL ASSESSMENT OF AND REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING

The management of Occidental Petroleum Corporation and its subsidiaries (Occidental) is responsible for establishing and maintaining adequate internal control over financial reporting. Occidental's system of internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of consolidated financial statements for external purposes in accordance with generally accepted accounting principles. Occidental's internal control over financial reporting includes those policies and procedures that: (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of Occidental's assets; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that Occidental's receipts and expenditures are being made only in accordance with authorizations of Occidental's management and directors; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of Occidental'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.

Management has assessed the effectiveness of Occidental's internal control system as of December 31, 2018, based on the criteria for effective internal control over financial reporting described in Internal Control - Integrated Framework issued in 2013 by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on this assessment, management believes that, as of December 31, 2018, Occidental's system of internal control over financial reporting is effective.

Occidental's independent auditors, KPMG LLP, have issued an audit report on Occidental's internal control over financial reporting.

DISCLOSURE CONTROLS AND PROCEDURES

Occidental's President and Chief Executive Officer and its Senior Vice President and Chief Financial Officer supervised and participated in Occidental's evaluation of its disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934 (Exchange Act)) as of the end of the period covered by this report. Based upon that evaluation, Occidental's President and Chief Executive Officer and Senior Vice President and Chief Financial Officer concluded that Occidental's disclosure controls and procedures were effective as of December 31, 2018.

There has been no change in Occidental's internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) during the fourth quarter of 2018 that has materially affected, or is reasonably likely to materially affect, Occidental's internal control over financial reporting. The Report of Independent Registered Public Accounting Firm on Internal Control over Financial Reporting is set forth in Item 8.

ITEM 9B OTHER INFORMATION

None.

Part III

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

Occidental has adopted a Code of Business Conduct (Code). The Code applies to the President and Chief Executive Officer; Senior Vice President and Chief Financial Officer; Vice President, Controller and Principal Accounting Officer; and persons performing similar functions (Key Personnel). The Code also applies to Occidental's directors, its employees and the employees of entities it controls. The Code is posted at [www.oxy.com](http://www.oxy.com). Occidental will satisfy any disclosure requirement under Item 5.05 of Form 8-K regarding an amendment to, or waiver from, any provision of the Code with respect to its Key Personnel or directors by disclosing the nature of that amendment or waiver on its website.

The list of Occidental's executive officers and related information under "Executive Officers" set forth in Part I of this report is incorporated by reference herein. The information required by this Item 10 is incorporated herein by reference from Occidental's definitive Proxy Statement, relating to its May 10, 2019, Annual Meeting of Stockholders, to be filed with the SEC pursuant to Regulation 14A within 120 days of December 31, 2018.

ITEM 11 EXECUTIVE  
COMPENSATION

The information under the caption "Compensation Discussion and Analysis - Compensation Committee Report" shall not be deemed to be "soliciting material," or to be "filed" with the SEC, or subject to Regulation 14A or 14C under the Exchange Act or to the liabilities of Section 18 of the Exchange Act, nor shall it be deemed incorporated by reference into any filing under the Securities Act of 1933. The information required by this Item 11 is incorporated herein by reference from Occidental's definitive Proxy Statement, relating to its May 10, 2019, Annual Meeting of Stockholders, to be filed with the SEC pursuant to Regulation 14A within 120 days of December 31, 2018.

ITEM 12 SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

SECURITIES AUTHORIZED FOR ISSUANCE UNDER EQUITY COMPENSATION PLANS

All of Occidental's stock-based compensation plans for its employees and non-employee directors have been approved by the stockholders. The aggregate number of shares of Occidental common stock authorized for issuance under such plans is approximately 80 million, of which approximately 6.8 million had been reserved for issuance through December 31, 2018. The following is a summary of the securities available for issuance under such plans:

a) Number of securities to be issued upon exercise of outstanding options, warrants and rights	b) Weighted-average exercise price of outstanding options, warrants and rights	c) Number of securities remaining available for future issuance under equity compensation plans (excluding securities in column (a))
7,808,913 <sup>(1)</sup>	79.98 <sup>(2)</sup>	57,319,387 <sup>(3)</sup>

(1) Includes shares reserved to be issued pursuant to restricted stock units, stock options (Options), and performance-based awards. Shares for performance-based awards are included assuming maximum payout, but may be paid out at lesser amounts, or not at all, according to achievement of performance goals.

(2) Price applies only to the Options included in column (a). Exercise price is not applicable to the other awards included in column (a).

(3) A plan provision requires each share covered by an award (other than stock appreciation rights (SARs) and Options) to be counted as if three shares were issued in determining the number of shares that are available for future awards. Accordingly, the number of shares available for future awards may be less than the amount shown depending on the type of award granted. Additionally, under the plan, the amount shown may increase, depending on the award type, by the number of shares currently unvested or forfeitable, or three times that number as applicable, that are forfeited or canceled, or correspond to the portion of any stock-based awards settled in cash.

The information required by this Item 12 is incorporated herein by reference from Occidental's definitive Proxy Statement, relating to its May 10, 2019, Annual Meeting of Stockholders, to be filed with the SEC pursuant to Regulation 14A within 120 days of December 31, 2018.

ITEM 13 CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS AND DIRECTOR INDEPENDENCE

The information required by this Item 13 is incorporated herein by reference from Occidental's definitive Proxy Statement, relating to its May 10, 2019, Annual Meeting of Stockholders, to be filed with the SEC pursuant to Regulation 14A within 120 days of December 31, 2018.

ITEM 14 PRINCIPAL ACCOUNTING FEES AND SERVICES

The information required by this Item 14 is incorporated herein by reference from Occidental's definitive Proxy Statement, relating to its May 10, 2019, Annual Meeting of Stockholders, to be filed with the SEC pursuant to Regulation 14A within 120 days of December 31, 2018.

Part IV



ITEM 15 EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

The agreements included as exhibits to this report are included to provide information about their terms and not to provide any other factual or disclosure information about Occidental or the other parties to the agreements. The agreements contain representations and warranties by each of the parties to the applicable agreement that were made solely for the benefit of the other agreement parties and:

- should not be treated as categorical statements of fact, but rather as a way of allocating the risk among the parties if those statements prove to be inaccurate;
- have been qualified by disclosures that were made to the other party in connection with the negotiation of the applicable agreement, which disclosures are not necessarily reflected in the agreement;
- may apply standards of materiality in a way that is different from the way investors may view materiality; and
- were made only as of the date of the applicable agreement or such other date or dates as may be specified in the agreement and are subject to more recent developments.

(a) (1) and (2). Financial Statements and Financial Statement Schedule

Reference is made to Item 8 of the Table of Contents of this report, where these documents are listed.

(a) (3). Exhibits

- 2.1\* Separation and Distribution Agreement by and between Occidental Petroleum Corporation and California Resources Corporation, dated November 25, 2014 (filed as Exhibit 2.1 to the Current Report on Form 8-K of Occidental dated November 25, 2014 (date of earliest event reported), filed December 1, 2014, File No. 1-9210).
- 3.(i)\* Restated Certificate of Incorporation of Occidental, dated November 12, 1999, and Certificates of Amendment thereto dated May 5, 2006, May 1, 2009, and May 2, 2014 (filed as Exhibit 4.1 to the Registration Statement on Form S-8 of Occidental dated May 1, 2015, File No. 333-203801).
- 3.(i)(a)\* Certificate of Change of Location of Registered Office and of Registered Agent, dated July 6, 2001 (filed as Exhibit 3.1(i) to the Registration Statement on Form S-3 of Occidental dated February 6, 2002, File No. 333-82246).
- 3.(ii)\* Bylaws of Occidental, as amended through October 8, 2015 (filed as Exhibit 3.(ii) to the Current Report on Form 8-K of Occidental dated October 8, 2015 (date of earliest event reported), filed October 14, 2015, File No. 1-9210).
- 4.1\* Indenture, dated as of August 18, 2011, between Occidental Petroleum and The Bank of New York Mellon Trust Company, N.A. (filed as Exhibit 4.1 to the Current Report on Form 8-K of Occidental dated August 15, 2011 (date of earliest event reported), File No. 1-9210).
- 4.2\* Indenture (Senior Debt Securities), dated as of April 1, 1998, between Occidental and The Bank of New York, as Trustee (filed as Exhibit 4 to the Registration Statement on Form S-3 of Occidental dated May 7, 1998, File No. 333-52053).

Instruments defining the rights of holders of other long-term debt of Occidental and its subsidiaries are not being filed since the total amount of securities authorized under each of such instruments does not exceed 10 percent of the total assets of Occidental and its subsidiaries on a consolidated basis. Occidental agrees to furnish a copy of any such instrument to the Commission upon request.

All of the Exhibits numbered 10.1 to 10.42 are management contracts and compensatory plans required to be identified specifically as responsive to Item 601(b)(10)(iii)(A) of Regulation S-K pursuant to Item 15(b) of Form 10-K.

- 10.1 Occidental Petroleum Corporation Savings Plan, Amended and Restated as of January 1, 2018.
- 10.2 Occidental Petroleum Corporation Modified Deferred Compensation Plan, Amended and Restated as of January 1, 2019.
- 10.3\* Occidental Petroleum Corporation Supplemental Retirement Plan II, Amended and Restated as of January 1, 2018 (filed as Exhibit 10.3 to the Annual Report on Form 10-K of Occidental for the fiscal year ended December 31, 2017, File No. 1-9210).
- 10.4\* Form of 2018 Occidental Petroleum Corporation 2015 Long-Term Incentive Plan Total Shareholder Return Incentive Award (filed as Exhibit 10.1 to the Quarterly Report on Form 10-Q of Occidental for the quarterly period ended March 31, 2018, File No.1-9210).
- 10.5\* Form of 2018 Occidental Petroleum Corporation 2015 Long-Term Incentive Plan Restricted Stock Unit Incentive Award (filed as Exhibit 10.2 to the Quarterly Report on Form 10-Q of Occidental for the quarterly period ended March 31, 2018, File No.1-9210).
- 10.6\* Form of 2018 Occidental Petroleum Corporation 2015 Long-Term Incentive Plan Cash Return on Capital Employed Incentive Award (filed as Exhibit 10.3 to the Quarterly Report on Form 10-Q of Occidental for the quarterly period ended March 31, 2018, File No.1-9210).
- 10.7\* Form of Amendment to Occidental Petroleum Corporation 2015 Long-Term Incentive Plan Notice of Grant of Performance Retention Incentive Award (filed as Exhibit 10.4 to the Annual Report on Form 10-K of Occidental for the fiscal year ended December 31, 2017, File No. 1-9210).
- 10.8\* Occidental Petroleum Corporation Executive Incentive Compensation Plan, Amended and Restated as of January 1, 2016. (filed as Exhibit 10.4 to the Annual Report on Form 10-K of Occidental for the fiscal year

- ended December 31, 2016. File No. 1-9210).
- 10.9\* Form of Indemnification Agreement between Occidental and each of its directors and certain executive officers (filed as Exhibit B to the Proxy Statement of Occidental for its May 21, 1987, Annual Meeting of Stockholders, File No. 1-9210).
- 10.10\* Occidental Petroleum Corporation Split Dollar Life Insurance Program and Related Documents (filed as Exhibit 10.2 to the Quarterly Report on Form 10-Q of Occidental for the quarterly period ended September 30, 1994, File No. 1-9210).
- 10.12\* Occidental Petroleum Corporation 2015 Long-Term Incentive Plan (filed as Exhibit 4.5 to the Registration Statement on Form S-8 of Occidental dated May 1, 2015, File No. 333-203801).
- 10.13\* Form of Occidental Petroleum Corporation Amendment to Senior Executive Supplemental Life Insurance Plan (Effective as of January 1, 1986, Amended and Restated Effective as of January 1, 1996) (filed as Exhibit 10.5 to the Quarterly Report on Form 10-Q of Occidental for the quarterly period ended September 30, 2008, File No. 1-9210).
- 10.14\* Form of Occidental Petroleum Corporation Amendment to Senior Executive Survivor Benefit Plan (Effective as of January 1, 1986, Amended and Restated Effective as of January 1, 1996) (filed as Exhibit 10.6 to the Quarterly Report on Form 10-Q of Occidental for the quarterly period ended September 30, 2008, File No. 1-9210).
- 10.15\* First Amendment to the Occidental Petroleum Corporation 2015 Long-Term Incentive Plan (filed as Exhibit 10.1 to the Quarterly Report on Form 10-Q of Occidental for the quarterly period ended September 30, 2016, File No. 1-9210).
- 10.16\* Second Amendment to the Occidental Petroleum Corporation 2015 Long-Term Incentive Plan (filed as Exhibit 4.5 to the Registration Statement on Form S-8 of Occidental filed May 4, 2018, File No. 333-224691).
- 10.17\* Form of 2016 Occidental Petroleum Corporation 2015 Long-Term Incentive Plan Common Stock Unit Award For Non-Employee Directors (filed as Exhibit 10.1 to the Quarterly Report on Form 10-Q of Occidental for the quarterly period ended June 30, 2016, File No. 1-9210).
- 10.18\* Form of 2016 Occidental Petroleum Corporation 2015 Long-Term Incentive Plan Restricted Stock Unit Incentive Award (filed as Exhibit 10.3 to the Quarterly Report on Form 10-Q of Occidental for the quarterly period ended June 30, 2016, File No. 1-9210).
- 10.19\* Form of 2016 Occidental Petroleum Corporation 2015 Long-Term Incentive Plan Total Shareholder Return Incentive Award (filed as Exhibit 10.4 to the Quarterly Report on Form 10-Q of Occidental for the quarterly period ended June 30, 2016, File No. 1-9210).
- 10.20\* Occidental Petroleum Corporation 2015 Long-Term Incentive Plan Form of Notice of Grant of Restricted Stock Unit Incentive Award (filed as Exhibit 10.1 to the Quarterly Report on Form 10-Q of Occidental for the quarterly period ended March 31, 2016, File No. 1-9210).
- 10.21\* Occidental Petroleum Corporation 2001 Incentive Compensation Plan (as amended through September 12, 2002) (filed as Exhibit 10.2 to the Quarterly Report on Form 10-Q of Occidental for the quarterly period ended September 30, 2002, File No. 1-9210).
- 10.22\* Occidental Petroleum Corporation 2005 Long-Term Incentive Plan, as amended through October 13, 2010 (filed as Exhibit 10.1 to the Current Report on Form 8-K of Occidental dated October 13, 2010 (date of earliest event reported), filed October 14, 2010, File No. 1-9210).
- 10.23\* Sign-on agreement with Chief Financial Officer (filed as Exhibit 10.4 to the Quarterly Report on Form 10-Q of Occidental for the quarterly period ended June 30, 2017, File No. 1-9210).
- 10.24\* Description of financial counseling program (filed as Exhibit 10.50 to the Annual Report on Form 10-K of Occidental for the fiscal year ended December 31, 2003, File No. 1-9210).
- 10.25\* Description of group excess liability insurance program (filed as Exhibit 10.51 to the Annual Report on Form 10-K of Occidental for the fiscal year ended December 31, 2003, File No. 1-9210).

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\* Incorporated herein by reference



- Form of 2017 Occidental Petroleum Corporation 2015 Long-Term Incentive Plan Restricted Stock Unit Incentive Award (filed as Exhibit 10.1 to the Quarterly Report on Form 10-Q of Occidental for the quarterly period ended March 31, 2017, File No. 1-9210).
- 10.26\*
- Form of Restricted Stock Award for Non-Employee Directors under Occidental Petroleum Corporation 2005 Long-Term Incentive Plan (filed as Exhibit 10.1 to the Quarterly Report on Form 10-Q of Occidental for the fiscal quarter ended March 31, 2012, File No. 1-9210).
- 10.27\*
- Form of Restricted Stock Unit Award for Non-Employee Directors under Occidental Petroleum Corporation 2005 Long-Term Incentive Plan (filed as Exhibit 10.2 to the Quarterly Report on Form 10-Q of Occidental for the fiscal quarter ended March 31, 2012, File No. 1-9210).
- 10.28\*
- Occidental Petroleum Corporation 2005 Long-Term Incentive Plan Restricted Stock Incentive Award Terms and Conditions (filed as Exhibit 10.1 to the Current Report on Form 8-K of Occidental dated July 10, 2013 (date of earliest event reported), filed July 16, 2013, File No. 1-9210).
- 10.29\*
- Occidental Petroleum Corporation 2005 Long-Term Incentive Plan Restricted Stock Incentive Award Terms and Conditions (Performance-Based) (filed as Exhibit 10.2 to the Current Report on Form 8-K of Occidental dated July 22, 2013 (date of earliest event reported), filed July 26, 2013, File No. 1-9210).
- 10.30\*
- Occidental Petroleum Corporation 2005 Long-Term Incentive Plan Common Stock Unit Award For Non-Employee Directors Grant Agreement (filed as Exhibit 10.1 to the Quarterly Report on Form 10-Q for the fiscal quarter ended March 31, 2014, File No. 1-9210).
- 10.31\*
- Occidental Petroleum Corporation 2005 Long-Term Incentive Plan Common Stock Award For Non-Employee Directors Grant Agreement (filed as Exhibit 10.2 to the Quarterly Report on Form 10-Q for the fiscal quarter ended March 31, 2014, File No. 1-9210).
- 10.32\*
- Form of Occidental Petroleum Corporation 2005 Long-Term Incentive Plan Nonstatutory Stock Option Award Terms and Conditions (filed as Exhibit 10.73 to the Annual Report on Form 10-K for the fiscal year ended December 31, 2014, File No. 1-9210).
- 10.33\*
- Occidental Petroleum Corporation 2015 Long-Term Incentive Plan Form of Notice of Grant of Restricted Stock Unit Incentive Award (filed as Exhibit 10.4 to the Quarterly Report on Form 10-Q of Occidental for the fiscal quarter ended June 30, 2015, File No. 1-9210).
- 10.34\*
- Occidental Petroleum Corporation 2015 Long-Term Incentive Plan Form of Notice of Grant of Performance Retention Incentive Award (filed as Exhibit 10.5 to the Quarterly Report on Form 10-Q of Occidental for the fiscal quarter ended June 30, 2015, File No. 1-9210).
- 10.35\*
- Occidental Petroleum Corporation 2015 Long-Term Incentive Plan Form of Notice of Grant of Return on Assets Incentive Award (MENA) (filed as Exhibit 10.6 to the Quarterly Report on Form 10-Q of Occidental for the fiscal quarter ended June 30, 2015, File No. 1-9210).
- 10.36\*
- Occidental Petroleum Corporation 2015 Long-Term Incentive Plan Form of Notice of Grant of Return on Assets Incentive Award (Total) (filed as Exhibit 10.7 to the Quarterly Report on Form 10-Q of Occidental for the fiscal quarter ended June 30, 2015, File No. 1-9210).
- 10.37\*
- Occidental Petroleum Corporation 2015 Long-Term Incentive Plan Form of Notice of Grant of Return on Capital Employed Incentive Award (filed as Exhibit 10.8 to the Quarterly Report on Form 10-Q of Occidental for the fiscal quarter ended June 30, 2015, File No. 1-9210).
- 10.38\*
- Occidental Petroleum Corporation 2015 Long-Term Incentive Plan Form of Notice of Grant of Total Shareholder Return Incentive Award (filed as Exhibit 10.9 to the Quarterly Report on Form 10-Q of Occidental for the fiscal quarter ended June 30, 2015, File No. 1-9210).
- 10.39\*
- Form of Occidental Petroleum Corporation 2015 Long-Term Incentive Plan Common Stock Unit Award For Non-Employee Directors Grant Agreement (filed as Exhibit 10.1 to the Quarterly Report on Form 10-Q of Occidental for the fiscal quarter ended June 30, 2015, File No. 1-9210).
- 10.40\*
- Form of Occidental Petroleum Corporation 2015 Long-Term Incentive Plan Common Stock Award For Non-Employee Directors Grant Agreement (filed as Exhibit 10.2 to the Quarterly Report on Form 10-Q of Occidental for the fiscal quarter ended June 30, 2015, File No. 1-9210).
- 10.41\*
- 10.42\*

- Separation Agreement, effective June 27, 2017 (filed as Exhibit 10.3 to the Quarterly Report on Form 10-Q of Occidental for the quarterly period ended June 30, 2017, File No. 1-9210).
- Tax Sharing Agreement by and between Occidental Petroleum Corporation and California Resources Corporation, dated November 25, 2014 (filed as Exhibit 10.2 to the Current Report on Form 8-K of Occidental dated November 25, 2014 (date of earliest event reported), filed December 1, 2014, File No. 1-9210).
- 10.43\* Employee Matters Agreement by and between Occidental Petroleum Corporation and California Resources Corporation, dated November 25, 2014 (filed as Exhibit 10.3 to the Current Report on Form 8-K of Occidental dated November 25, 2014 (date of earliest event reported), filed December 1, 2014, File No. 1-9210).
- 10.44\* Transition Services Agreement by and between Occidental Petroleum Corporation and California Resources Corporation, dated November 25, 2014 (filed as Exhibit 10.4 to the Current Report on Form 8-K of Occidental dated November 25, 2014 (date of earliest event reported), filed December 1, 2014, File No. 1-9210).
- 10.45\* Area of Mutual Interest Agreement by and between Occidental Petroleum Corporation and California Resources Corporation, dated November 25, 2014 (filed as Exhibit 10.5 to the Current Report on Form 8-K of Occidental dated November 25, 2014 (date of earliest event reported), filed December 1, 2014, File No. 1-9210).
- 10.46\* Confidentiality and Trade Secret Protection Agreement by and between Occidental Petroleum Corporation and California Resources Corporation, dated November 25, 2014 (filed as Exhibit 10.6 to the Current Report on Form 8-K of Occidental dated November 25, 2014 (date of earliest event reported), filed December 1, 2014, File No. 1-9210).
- 10.47\* Intellectual Property License Agreement by and between Occidental Petroleum Corporation and California Resources Corporation, dated November 25, 2014 (filed as Exhibit 10.7 to the Current Report on Form 8-K of Occidental dated November 25, 2014 (date of earliest event reported), filed December 1, 2014, File No. 1-9210).
- 10.48\* List of subsidiaries of Occidental at December 31, 2018.
- 21 Consent of Independent Registered Public Accounting Firm.
- 23.1 Consent of Independent Petroleum Engineers.
- 23.2 Certification of CEO Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
- 31.1 Certification of CFO Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
- 31.2 Certifications of CEO and CFO Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
- 32.1 Ryder Scott Company Process Review of the Estimated Future Proved Reserves and Income Attributable to Certain Fee, Leasehold and Royalty Interests and Certain Economic Interests Derived Through Certain Production Sharing Contracts as of December 31, 2018.
- 99.1

ITEM 16 FORM 10-K SUMMARY

Not applicable.

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\* Incorporated herein by reference

## SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

OCCIDENTAL PETROLEUM  
CORPORATION

By: /s/ Vicki Hollub  
Vicki Hollub  
President and Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

	Title	Date
/s/ Vicki Hollub Vicki Hollub	President, Chief Executive Officer and Director	February 21, 2019
/s/ Cedric W. Burgher Cedric W. Burgher	Senior Vice President and Chief Financial Officer	February 21, 2019
/s/ Jennifer M. Kirk Jennifer M. Kirk	Vice President, Controller and Principal Accounting Officer	February 21, 2019
/s/ Spencer Abraham Spencer Abraham	Director	February 21, 2019
/s/ Howard I. Atkins Howard I. Atkins	Director	February 21, 2019
/s/ Eugene L. Batchelder Eugene L. Batchelder	Chairman of the Board of Directors	February 21, 2019
/s/ John E. Feick John E. Feick	Director	February 21, 2019
/s/ Margaret M. Foran Margaret M. Foran	Director	February 21, 2019
/s/ Carlos M. Gutierrez Carlos M. Gutierrez	Director	February 21, 2019
/s/ William R. Klesse William R. Klesse	Director	February 21, 2019
/s/ Jack B. Moore Jack B. Moore	Director	February 21, 2019

/s/ Avedick B. Poladian      Director      February 21, 2019  
Avedick B. Poladian

/s/ Elisse B. Walter      Director      February 21, 2019  
Elisse B. Walter