

FREEPORT-MCMORAN INC  
Form 10-K  
February 20, 2018

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

FORM 10-K

(Mark One)

ANNUAL REPORT  
PURSUANT TO SECTION 13  
OR 15(d) OF THE SECURITIES  
EXCHANGE ACT OF 1934  
For the fiscal year ended  
December 31, 2017

OR  
 TRANSITION REPORT  
PURSUANT TO SECTION 13  
OR 15(d) OF THE SECURITIES  
EXCHANGE ACT OF 1934  
For the transition period from to  
Commission File Number:  
001-11307-01  
Freeport-McMoRan  
Inc.

(Exact name of  
registrant as  
specified in its  
charter)

Delaware

74-2480931

(State or other jurisdiction of  
incorporation or organization)

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

333 North Central Avenue

Phoenix, Arizona

85004-2189

(Address of principal executive offices) (Zip Code)

(602) 366-8100

(Registrant's telephone number, including area code)

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

Title of each class	Name of each exchange on which registered
Common Stock, par value \$0.10 per share	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

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

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

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

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of the 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.  No

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

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act).

Yes  No

The aggregate market value of common stock held by non-affiliates of the registrant was \$22.3 billion on January 31, 2018, and \$15.5 billion on June 30, 2017.

Common stock issued and outstanding was 1,447,844,743 shares on January 31, 2018, and 1,447,134,190 shares on June 30, 2017.

#### DOCUMENTS INCORPORATED BY REFERENCE

Portions of our proxy statement for our 2018 annual meeting of stockholders are incorporated by reference into Part III (Items 10, 11, 12, 13 and 14) of this report.

FREEPORT-McMoRan INC.

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PART I

Items 1. and 2. Business and Properties.

All of our periodic reports filed with the United States (U.S.) Securities and Exchange Commission (SEC) pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended, are available, free of charge, through our website, [www.fcx.com](http://www.fcx.com), including our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and any amendments to those reports. These reports and amendments are available through our website as soon as reasonably practicable after we electronically file or furnish such material to the SEC.

References to “we,” “us” and “our” refer to Freeport-McMoRan Inc. (FCX) and its consolidated subsidiaries. References to “Notes” refer to the Notes to Consolidated Financial Statements included herein (refer to Item 8), and references to “MD&A” refer to Management’s Discussion and Analysis of Financial Condition and Results of Operations included herein (refer to Item 7).

GENERAL

We are a leading international mining company with headquarters in Phoenix, Arizona. Our company was incorporated under the laws of the state of Delaware on November 10, 1987. We operate large, long-lived geographically diverse assets with significant proven and probable reserves of copper, gold and molybdenum, and we are the world’s largest publicly traded copper producer. Our portfolio of assets includes the Grasberg minerals district in Indonesia, one of the world’s largest copper and gold deposits; and significant mining operations in the Americas, including the large-scale Morenci minerals district in North America and the Cerro Verde operation in South America.

We have taken actions to restore our balance sheet strength through a combination of asset sale and capital market transactions, including:

Completing approximately \$6.7 billion in asset sale transactions (mostly in 2016), including the sale of substantially all of our oil and gas properties, our interest in TF Holdings Limited (TFHL), through which we held an effective 56 percent interest in the Tenke Fungurume (Tenke) mine in the Democratic Republic of Congo, and the sale of an additional 13 percent undivided interest in the Morenci minerals district in Arizona. Refer to Note 2 for further discussion of dispositions.

Generating \$1.5 billion in gross proceeds through the sale of 116.5 million shares of our common stock in 2016. Refer to Note 10 for further discussion.

Exchanging 27.7 million shares of our common stock for \$369 million of senior notes in 2016. Refer to Notes 8 and 10 for further discussion.

Settling \$1.1 billion in aggregate drillship contracts for \$755 million in 2016, of which \$540 million was funded with 48.1 million shares of our common stock. Refer to Notes 10 and 13 for further discussion.

These actions, combined with cash flow from operations, resulted in net reductions of debt totaling \$2.9 billion during 2017 and \$4.3 billion during 2016 (refer to Note 8 for discussion of debt) and an increase in consolidated cash from \$177 million at December 31, 2015, to \$4.2 billion at December 31, 2016, and \$4.4 billion at December 31, 2017. We continue to manage costs and capital spending and, subject to commodity prices and operational results, expect to generate significant operating cash flows for further debt reduction during 2018.

We believe the underlying long-term fundamentals of the copper business remain positive, and we have retained a high-quality portfolio of long-lived copper assets positioned to generate long-term value. We have commenced a

project to develop the Lone Star oxide ores near the Safford operation in eastern Arizona. We are also pursuing other opportunities to enhance net present values, and we continue to advance studies for future development of our copper resources, the timing of which will be dependent on market conditions.

Following are our ownership interests at December 31, 2017, in operating mines through our subsidiaries, Freeport Minerals Corporation (FMC) and PT Freeport Indonesia (PT-FI):

FMC has a 72 percent undivided interest in Morenci via an unincorporated joint venture. Additionally, PT-FI has an unincorporated joint venture with Rio Tinto plc (Rio Tinto) related to our Indonesia operations. Refer to Note 3 for further discussion of our ownership in subsidiaries and joint ventures.

As further discussed in Note 13, PT-FI continues to actively engage with Indonesian government officials to address regulatory changes that conflict with its contractual rights in a manner that provides long-term stability for PT-FI's operations and investment plans, and protects value for our shareholders. Following a framework understanding reached in August 2017, the parties have been engaged in negotiation and documentation of a special license (IUPK) and accompanying documentation for assurances on legal and fiscal terms to provide PT-FI with long-term rights through 2041. In addition, the IUPK would provide that PT-FI construct a smelter within five years of reaching a definitive agreement and include agreement for the divestment of 51 percent of the project area interests to Indonesian participants at fair market value. The parties continue to negotiate documentation on a comprehensive agreement for PT-FI's extended operations and to reach agreement on timing, process and governance matters relating to the divestment. The parties have a mutual objective of completing negotiations and the required documentation during the first half of 2018.

At December 31, 2017, our estimated consolidated recoverable proven and probable mineral reserves totaled 86.7 billion pounds of copper, 23.5 million ounces of gold and 2.84 billion pounds of molybdenum. Following is a summary of our consolidated recoverable proven and probable mineral reserves at December 31, 2017, by geographic location (refer to "Mining Operations" for further discussion):

	Copper	Gold	Molybdenum
North America	39 %	1 %	78 %
South America	32	—	22
Indonesia	29	99	—
	100 %	100%	100 %

In North America, we operate seven copper mines - Morenci, Bagdad, Safford, Sierrita and Miami in Arizona, and Chino and Tyrone in New Mexico, and two molybdenum mines - Henderson and Climax in Colorado. In addition to copper, certain of our North America copper mines also produce molybdenum concentrate, gold and silver. In South America, we operate two copper mines - Cerro Verde in Peru and El Abra in Chile. In addition to copper, the Cerro Verde mine also produces molybdenum concentrate and silver. In Indonesia, our subsidiary PT-FI operates in the

Grasberg minerals district. In addition to copper, the Grasberg minerals district also produces gold and silver. Following is a summary of the geographic location of our consolidated copper, gold and molybdenum production for the year 2017 (refer to “Mining Operations” for further information):

	Copper	Gold	Molybdenum
North America	41 %	1 %	71 % <sup>a</sup>
South America	33	—	29
Indonesia	26	99	—
	100 %	100 %	100 %

<sup>a</sup> Our Henderson and Climax molybdenum mines produced 35 percent of consolidated molybdenum production, and our North America copper mines produced 36 percent.

The locations of our operating mines are shown on the world map below.

### COPPER, GOLD AND MOLYBDENUM

Following provides a brief discussion of our primary natural resources – copper, gold and molybdenum. For further discussion of historical and current market prices of these commodities, refer to MD&A and Item 1A. “Risk Factors.”

#### Copper

Copper is an internationally traded commodity, and its prices are determined by the major metals exchanges – the London Metal Exchange (LME), New York Mercantile Exchange (NYMEX) and Shanghai Futures Exchange. Prices on these exchanges generally reflect the worldwide balance of copper supply and demand, and can be volatile and cyclical. During 2017, the LME spot copper price averaged \$2.80 per pound, ranging from a low of \$2.48 per pound to a high of \$3.27 per pound, and was \$3.25 per pound at December 31, 2017.

In general, demand for copper reflects the rate of underlying world economic growth, particularly in industrial production and construction. According to Wood Mackenzie, a widely followed independent metals market consultant, copper’s end-use markets (and their estimated shares of total consumption) are construction (30 percent), consumer products (24 percent), electrical applications (24 percent), transportation (12 percent) and industrial machinery (10 percent). We believe copper will continue to be essential in these basic uses as well as contribute significantly to new technologies for energy efficiencies, to advance communications and to enhance public health. Examples of areas we believe will require additional copper in the future include: (i) high efficiency motors, which consume up to 75 percent more copper than a standard motor; (ii) electric vehicles, which consume up to four times the amount of copper in terms of weight compared to vehicles of similar size with an internal combustion engine, and require copper-intensive charging station infrastructure to refuel; and (iii) renewable energy

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such as wind and solar, which consume four to five times the amount of copper compared to traditional fossil fuel generated power.

### Gold

Gold is used for jewelry, coinage and bullion as well as various industrial and electronic applications. Gold can be readily sold on numerous markets throughout the world. Benchmark prices are generally based on London Bullion Market Association (London) quotations. During 2017, the London PM gold price averaged \$1,257 per ounce, ranging from a low of \$1,151 per ounce to a high of \$1,346 per ounce, and was \$1,297 per ounce at December 31, 2017.

### Molybdenum

Molybdenum is a key alloying element in steel and the raw material for several chemical-grade products used in catalysts, lubrication, smoke suppression, corrosion inhibition and pigmentation. Molybdenum, as a high-purity metal, is also used in electronics such as flat-panel displays and in super alloys used in aerospace. Reference prices for molybdenum are available in several publications, including Metals Week, CRU Report and Metal Bulletin. During 2017, the weekly average price of molybdenum quoted by Metals Week averaged \$8.21 per pound, ranging from a low of \$6.98 per pound to a high of \$10.15 per pound, and was \$10.15 per pound at December 31, 2017.

## PRODUCTS AND SALES

FCX's consolidated revenues for 2017 primarily included sales of copper (74 percent), gold (12 percent) and molybdenum (5 percent). Copper concentrate sales to PT Smelting totaled 12 percent of FCX's consolidated revenues for the year ended December 31, 2017. Refer to Note 16 for a summary of our consolidated revenues and operating income (loss) by business segment and geographic area.

### Copper Products

We are one of the world's leading producers of copper concentrate, cathode and continuous cast copper rod. During 2017, 59 percent of our mined copper was sold in concentrate, 19 percent as cathode and 22 percent as rod from North America operations.

The copper ore from our mines is generally processed either by smelting and refining or by solution extraction and electrowinning (SX/EW). Before being subject to the smelting and refining process, ore is crushed and treated to produce a copper concentrate with copper content of approximately 20 to 30 percent. Copper concentrate is then smelted (i.e., subjected to extreme heat) to produce copper anode, which weighs between 800 and 900 pounds and has an average copper content of 99.5 percent. The anode is further treated by electrolytic refining to produce copper cathode, which weighs between 100 and 350 pounds and has an average copper content of 99.99 percent. For ore subject to the SX/EW process, the ore is placed on stockpiles and copper is extracted from the ore by dissolving it with a weak sulphuric acid solution. The copper content of the solution is increased in two additional solution-extraction stages, and then the copper-bearing solution undergoes an electrowinning process to produce cathode that is, on average, 99.99 percent copper. Our copper cathode is used as the raw material input for copper rod, brass mill products and for other uses.

**Copper Concentrate.** We produce copper concentrate at six of our mines. In North America, copper concentrate is produced at the Morenci, Bagdad, Sierrita and Chino mines, and a significant portion is shipped to our Miami smelter in Arizona. Copper concentrate is also produced at the Cerro Verde mine in Peru and the Grasberg minerals district in Indonesia.

**Copper Cathode.** We produce copper cathode at our electrolytic refinery located in El Paso, Texas, and at nine of our mines. SX/EW cathode is produced from the Morenci, Bagdad, Safford, Sierrita, Miami, Chino and Tyrone mines in North America, and from the Cerro Verde and El Abra mines in South America. Copper cathode is also produced at



Atlantic Copper (our wholly owned copper smelting and refining unit in Spain) and PT Smelting (PT-FI's 25-percent-owned copper smelter and refinery in Indonesia). Refer to "Mining Operations - Smelting Facilities and Other Mining Properties" for further discussion of Atlantic Copper and PT Smelting.

Continuous Cast Copper Rod. We manufacture continuous cast copper rod at our facilities in El Paso, Texas; Norwich, Connecticut; and Miami, Arizona, primarily using copper cathode produced at our North America copper mines.

Table of Contents**Copper Sales**

North America. The majority of the copper produced at our North America copper mines and refined in our El Paso, Texas, refinery is consumed at our rod plants. The remainder of our North America copper production is sold in the form of copper cathode or copper concentrate under U.S. dollar-denominated annual contracts. Cathode and rod contract prices are generally based on the prevailing Commodity Exchange Inc. (COMEX - a division of NYMEX) monthly average spot price for the month of shipment and include a premium. Generally, copper rod is sold to wire and cable manufacturers, while cathode is sold to rod, brass or tube fabricators. During 2017, 21 percent of our North America mines' copper concentrate sales volumes were shipped to Atlantic Copper.

South America. Production from our South America mines is sold as copper concentrate or copper cathode under U.S. dollar-denominated, annual and multi-year contracts. During 2017, our South America mines sold approximately 79 percent of their copper production in concentrate and 21 percent as cathode. During 2017, seven percent of our South America mines' copper concentrate sales volumes were shipped to Atlantic Copper.

Substantially all of South America's copper concentrate and cathode sales contracts provide final copper pricing in a specified future month (generally one to four months from the shipment date) primarily based on quoted LME monthly average spot copper prices. Revenues from South America's concentrate sales are recorded net of royalties and treatment charges (i.e., fees paid to smelters that are generally negotiated annually). In addition, because a portion of the metals contained in copper concentrate is unrecoverable from the smelting process, revenues from South America's concentrate sales are also recorded net of allowances for unrecoverable metals, which are a negotiated term of the contracts and vary by customer.

Indonesia. PT-FI sells its production in the form of copper concentrate, which contains significant quantities of gold and silver, primarily under U.S. dollar-denominated, long-term contracts. PT-FI also sells a small amount of copper concentrate in the spot market. Following is a summary of PT-FI's aggregate percentage concentrate sales to third parties, PT Smelting and Atlantic Copper for the years ended December 31:

	2017	2016	2015
Third parties	54 %	56 %	61 %
PT Smelting	46	42	37
Atlantic Copper	—	2	2
	100%	100%	100%

Substantially all of PT-FI's concentrate sales contracts provide final copper pricing in a specified future month (generally one to four months from the shipment date) primarily based on quoted LME monthly average spot copper prices. Revenues from PT-FI's concentrate sales are recorded net of royalties, export duties, treatment charges and allowances for unrecoverable metals.

**Gold Products and Sales**

We produce gold almost exclusively from the Grasberg minerals district. Gold is primarily sold as a component of our copper concentrate or in slimes, which are a product of the smelting and refining process at Atlantic Copper. Gold generally is priced at the average London price for a specified month near the month of shipment. Revenues from gold sold as a component of our copper concentrate are recorded net of treatment and refining charges. Revenues from gold sold in slimes are recorded net of refining charges.

**Molybdenum Products and Sales**

We are the world's largest producer of molybdenum and molybdenum-based chemicals. In addition to production from the Henderson and Climax molybdenum mines, we produce molybdenum concentrate at certain of the North America copper mines and the Cerro Verde copper mine in Peru. The majority of our molybdenum concentrate is processed in our own conversion facilities. Our molybdenum sales are primarily priced based on the average published Metals

Week price for the month prior to the month of shipment.

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## LABOR MATTERS

At December 31, 2017, we employed approximately 25,200 people (11,000 in North America, 7,000 in Indonesia, 5,800 in South America and 1,400 in Europe and other locations). We also had contractors that employ personnel at many of our operations, including approximately 21,100 at the Grasberg minerals district in Indonesia, 3,800 in North America, 2,500 at our South America mining operations and 600 in Europe and other locations. Employees represented by unions at December 31, 2017, are listed below, with the number of employees represented and the expiration date of the applicable union agreements:

Location	Number of Unions	Number of Union-Represented Employees	Expiration Date
PT-FI – Indonesia	2	5,009	September 2019
Cerro Verde – Peru	1	3,176	August 2018
El Abra – Chile	2	614	April 2020
Atlantic Copper – Spain	2	445	March 2018 <sup>a</sup>
Kokkola - Finland <sup>b</sup>	3	403	November 2020
Rotterdam – The Netherlands	1	59	September 2018
Kisanfu – Africa Exploration	2	56	N/A <sup>c</sup>
Stowmarket - United Kingdom	1	40	May 2020

<sup>a</sup> The Collective Labor Agreement between Atlantic Copper and its workers' unions expired in December 2015, but has been extended through March 2018 by mutual agreement from both parties in accordance with Spanish law.

<sup>b</sup> These locations are held for sale at December 31, 2017 (refer to Note 2 for further discussion).

<sup>c</sup> The Collective Labor Agreement between Kisanfu and its unions has no expiration date, but can be amended at any time in accordance with an established process.

Refer to Item 1A. "Risk Factors" for further information on labor matters.

## ENVIRONMENTAL AND RECLAMATION MATTERS

The cost of complying with environmental laws and regulations is fundamental to and a substantial cost of our business. For information about environmental regulation, litigation and related costs, refer to Item 1A. "Risk Factors" and Notes 1 and 12.

## COMPETITION

The top 10 producers of copper comprise approximately 45 percent of total worldwide mined copper production. We currently rank second among those producers, with approximately seven percent of estimated total worldwide mined copper production. Our competitive position is based on the size, quality and grade of our ore bodies and our ability to manage costs compared with other producers. We have a diverse portfolio of mining operations with varying ore grades and cost structures. Our costs are driven by the location, grade and nature of our ore bodies, and the level of input costs, including energy, labor and equipment. The metals markets are cyclical, and our ability to maintain our competitive position over the long term is based on our ability to acquire and develop quality deposits, hire and retain a skilled workforce, and to manage our costs.



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MINING OPERATIONS

Following are maps and descriptions of our mining operations in North America (including both copper and molybdenum operations), South America and Indonesia.

North America

In the U.S., most of the land occupied by our copper and molybdenum mines, concentrators, SX/EW facilities, smelter, refinery, rod mills, molybdenum roasters and processing facilities is generally owned by us or is located on unpatented mining claims owned by us. Certain portions of our Bagdad, Sierrita, Miami, Chino, Tyrone, Henderson and Climax operations are located on government-owned land and are operated under a Mine Plan of Operations or other use permit. Various federal and state permits or leases on government land are held for purposes incidental to mine operations.

Morenci

We own a 72 percent undivided interest in Morenci, with the remaining 28 percent owned by Sumitomo Metal Mining Arizona, Inc. (15 percent) and SMM Morenci, Inc. (13 percent). Each partner takes in kind its share of Morenci's production.

Morenci is an open-pit copper mining complex that has been in continuous operation since 1939 and previously was mined through underground workings. Morenci is located in Greenlee County, Arizona, approximately 50 miles northeast of Safford on U.S. Highway 191. The site is accessible by a paved highway and a railway spur.

The Morenci mine is a porphyry copper deposit that has oxide, secondary sulfide and primary sulfide mineralization. The predominant oxide copper mineral is chrysocolla. Chalcocite is the most important secondary copper sulfide mineral, with chalcopyrite as the dominant primary copper sulfide.

The Morenci operation consists of two concentrators capable of milling 115,000 metric tons of ore per day, which produce copper and molybdenum concentrate; a 68,000 metric ton-per-day, crushed-ore leach pad and stacking system; a low-grade run-of-mine (ROM) leaching system; four SX plants; and three EW tank houses that produce copper cathode. Total EW tank house capacity is approximately 900 million pounds of copper per year. During second-quarter 2015, Morenci's concentrate leach, direct-electrowinning facility (which was placed on care-and-maintenance status in early 2009) resumed operation. Morenci's available mining fleet consists of one hundred and eleven 236-metric ton haul trucks loaded by 13 shovels with bucket sizes ranging from 47 to 57 cubic meters, which are capable of moving an average of 815,000 metric tons of material per day.

The Morenci mill expansion project, which achieved full rates in second-quarter 2015, expanded mill capacity from 50,000 metric tons of ore per day to approximately 115,000 metric tons of ore per day. Morenci's production, including our joint venture partner's share, totaled 1.0 billion pounds of copper and 12 million pounds of molybdenum in 2017, 1.1 billion pounds of copper and 15 million pounds of molybdenum in 2016, and 1.1 billion pounds of copper and 7 million pounds of molybdenum in 2015.

Morenci is located in a desert environment with rainfall averaging 13 inches per year. The highest bench elevation is 2,000 meters above sea level, and the ultimate pit bottom is expected to have an elevation of 840 meters above sea level. The Morenci operation encompasses approximately 68,355 acres, comprising 51,165 acres of patented

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mining claims and other fee lands, 14,470 acres of unpatented mining claims and 2,720 acres of land held by state or federal permits, easements and rights-of-way.

The Morenci operation's electrical power is primarily sourced from Tucson Electric Power Company, Arizona Public Service Company and the Luna Energy facility in Deming, New Mexico. Although we believe the Morenci operation has sufficient water sources to support current operations, we are a party to litigation that may impact our water rights claims or rights to continued use of currently available water supplies, which could adversely affect our water supply for the Morenci operation. Refer to Item 1A. "Risk Factors" and Item 3. "Legal Proceedings" for further discussion.

Bagdad

Our wholly owned Bagdad mine is an open-pit copper and molybdenum mining complex located in Yavapai County in west-central Arizona. It is approximately 60 miles west of Prescott and 100 miles northwest of Phoenix. The property can be reached by Arizona Highway 96, which ends at the town of Bagdad. The closest railroad is at Hillside, Arizona, approximately 24 miles southeast on Arizona Highway 96. The open-pit mining operation has been ongoing since 1945, and prior mining was conducted through underground workings.

The Bagdad mine is a porphyry copper deposit containing both sulfide and oxide mineralization. Chalcopyrite and molybdenite are the dominant primary sulfides and are the primary economic minerals in the mine. Chalcocite is the most common secondary copper sulfide mineral, and the predominant oxide copper minerals are chrysocolla, malachite and azurite.

The Bagdad operation consists of a 75,000 metric ton-per-day concentrator that produces copper and molybdenum concentrate, an SX/EW plant that can produce up to 32 million pounds per year of copper cathode from solution generated by low-grade stockpile leaching, and a pressure-leach plant to process molybdenum concentrate. The available mining fleet consists of thirty 235-metric ton haul trucks loaded by five shovels with bucket sizes ranging from 30 to 48 cubic meters, which are capable of moving an average of 250,000 metric tons of material per day.

Bagdad's production totaled 173 million pounds of copper and 9 million pounds of molybdenum in 2017, 177 million pounds of copper and 8 million pounds of molybdenum in 2016, and 210 million pounds of copper and 9 million pounds of molybdenum in 2015.

Bagdad is located in a desert environment with rainfall averaging 15 inches per year. The highest bench elevation is 1,200 meters above sea level, and the ultimate pit bottom is expected to be 310 meters above sea level. The Bagdad operation encompasses approximately 21,750 acres, comprising 21,150 acres of patented mining claims and other fee lands and 600 acres of unpatented mining claims.

Bagdad receives electrical power from Arizona Public Service Company. We believe the Bagdad operation has sufficient water sources to support current operations.

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Safford

Our wholly owned Safford mine has been in operation since 2007 and is an open-pit copper mining complex located in Graham County, Arizona, approximately 8 miles north of the town of Safford and 170 miles east of Phoenix. The site is accessible by paved county road off U.S. Highway 70.

The Safford mine includes two copper deposits that have oxide mineralization overlaying primary copper sulfide mineralization. The predominant oxide copper minerals are chrysocolla and copper-bearing iron oxides with the predominant copper sulfide material being chalcopyrite.

The property is a mine-for-leach project and produces copper cathode. The operation consists of two open pits feeding a crushing facility with a capacity of 103,000 metric tons per day. The crushed ore is delivered to leach pads by a series of overland and portable conveyors. Leach solutions feed a SX/EW facility with a capacity of 240 million pounds of copper per year. A sulfur burner plant is also in operation at Safford, providing a cost-effective source of sulphuric acid used in SX/EW operations. The available mining fleet consists of sixteen 235-metric ton haul trucks loaded by four shovels with bucket sizes ranging from 31 to 34 cubic meters, which are capable of moving an average of 225,000 metric tons of material per day.

Safford's copper production totaled 150 million pounds in 2017, 230 million pounds in 2016 and 202 million pounds in 2015.

Through exploration drilling, we have identified a significant resource at our wholly owned Lone Star project located near the Safford operation. We have commenced a project to develop the Lone Star oxide ores with first production expected by the end of 2020. Total estimated capital costs for the project, including mine equipment and pre-production stripping, approximates \$850 million and will benefit from the utilization of existing infrastructure at the Safford operation. Production from the Lone Star oxides is expected to average approximately 200 million pounds of copper per year with an approximate 20-year mine life. The project also advances the potential for development of a larger-scale district opportunity. We are conducting additional drilling as we continue to evaluate longer term opportunities available from the significant sulfide potential in the Safford/Lone Star minerals district.

Safford is located in a desert environment with rainfall averaging 10 inches per year. The highest bench elevation is 1,250 meters above sea level, and the ultimate pit bottom is expected to have an elevation of 750 meters above sea level. The Safford operation encompasses approximately 25,000 acres, comprising 21,000 acres of patented lands, 3,950 acres of unpatented lands and 50 acres of land held by federal permit.

The Safford operation's electrical power is primarily sourced from Tucson Electric Power Company, Arizona Public Service Company and the Luna Energy facility. Although we believe the Safford operation has sufficient water sources to support current operations, we are a party to litigation that may impact our water right claims or rights to continued use of currently available water supplies, which could adversely affect our water supply for the Safford operation. Refer to Item 1A. "Risk Factors" and Item 3. "Legal Proceedings" for further discussion.



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Sierrita

Our wholly owned Sierrita mine has been in operation since 1959 and is an open-pit copper and molybdenum mining complex located in Pima County, Arizona, approximately 20 miles southwest of Tucson and 7 miles west of the town of Green Valley and Interstate Highway 19. The site is accessible by a paved highway and by rail.

The Sierrita mine is a porphyry copper deposit that has oxide, secondary sulfide and primary sulfide mineralization. The predominant oxide copper minerals are malachite, azurite and chrysocolla. Chalcocite is the most important secondary copper sulfide mineral, and chalcopyrite and molybdenite are the dominant primary sulfides.

The Sierrita operation includes a 100,000 metric ton-per-day concentrator that produces copper and molybdenum concentrate. Sierrita also produces copper from a ROM oxide-leaching system. Cathode copper is plated at the Twin Buttes EW facility, which has a design capacity of approximately 50 million pounds of copper per year. The Sierrita operation also has molybdenum facilities consisting of a leaching circuit, two molybdenum roasters and a packaging facility. The molybdenum facilities process molybdenum concentrate produced by Sierrita, from our other mines and from third-party sources. The available mining fleet consists of twenty-two 235-metric ton haul trucks loaded by three shovels with bucket sizes ranging from 34 to 56 cubic meters, which are capable of moving an average of 175,000 metric tons of material per day.

Sierrita's production totaled 160 million pounds of copper and 15 million pounds of molybdenum in 2017, 162 million pounds of copper and 14 million pounds of molybdenum in 2016, and 189 million pounds of copper and 21 million pounds of molybdenum in 2015.

Sierrita is located in a desert environment with rainfall averaging 12 inches per year. The highest bench elevation is 1,160 meters above sea level, and the ultimate pit bottom is expected to be 440 meters above sea level. The Sierrita operation, including the adjacent Twin Buttes site (refer to "Smelting Facilities and Other Mining Properties" for further discussion), encompasses approximately 37,650 acres, comprising 13,300 acres of patented mining claims and 24,350 acres of split-estate lands.

Sierrita receives electrical power through long-term contracts with the Tucson Electric Power Company. Although we believe the Sierrita operation has sufficient water sources to support current operations, we are a party to litigation that may impact our water rights claims or rights to continued use of currently available water supplies, which could adversely affect our water supply for the Sierrita operation. Refer to Item 1A. "Risk Factors" and Item 3. "Legal Proceedings" for further discussion.

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Miami

Our wholly owned Miami mine is an open-pit copper mining complex located in Gila County, Arizona, approximately 90 miles east of Phoenix and 6 miles west of the city of Globe on U.S. Highway 60. The site is accessible by a paved highway and by rail.

The Miami mine is a porphyry copper deposit that has leachable oxide and secondary sulfide mineralization. The predominant oxide copper minerals are chrysocolla, copper-bearing clays, malachite and azurite. Chalcocite and covellite are the most important secondary copper sulfide minerals.

Since about 1915, the Miami mining operation had processed copper ore using both flotation and leaching technologies. The design capacity of the SX/EW plant is 200 million pounds of copper per year. Miami is no longer mining ore, but currently produces copper through leaching material already placed on stockpiles, which is expected to continue until 2022. Miami's copper production totaled 19 million pounds in 2017, 25 million pounds in 2016 and 43 million pounds in 2015.

Miami is located in a desert environment with rainfall averaging 18 inches per year. The highest bench elevation is 1,390 meters above sea level, and the pit bottom has an elevation of 810 meters above sea level. The Miami operation encompasses approximately 9,100 acres, comprising 8,750 acres of patented mining claims and other fee lands and 350 acres of unpatented mining claims.

Miami receives electrical power through long-term contracts with the Salt River Project and natural gas through long-term contracts with El Paso Natural Gas as the transporter. We believe the Miami operation has sufficient water sources to support current operations.

Chino and Tyrone

Chino

Our wholly owned Chino mine is an open-pit copper mining complex located in Grant County, New Mexico, approximately 15 miles east of the town of Silver City off of State Highway 180. The mine is accessible by paved roads and by rail. Chino has been in operation since 1910.

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The Chino mine is a porphyry copper deposit with adjacent copper skarn deposits. There is leachable oxide, secondary sulfide and millable primary sulfide mineralization. The predominant oxide copper mineral is chrysocolla. Chalcocite is the most important secondary copper sulfide mineral, and chalcopyrite and molybdenite the dominant primary sulfides.

The Chino operation consists of a 36,000 metric ton-per-day concentrator that produces copper and molybdenum concentrate, and a 150 million pound-per-year SX/EW plant that produces copper cathode from solution generated by ROM leaching. The available mining fleet consists of thirty-seven 240-metric ton haul trucks loaded by four shovels with bucket sizes ranging from 42 to 48 cubic meters, which are capable of moving an average of 235,000 metric tons of material per day.

Chino's copper production totaled 215 million pounds in 2017, 308 million pounds in 2016 and 314 million pounds in 2015.

Chino is located in a desert environment with rainfall averaging 16 inches per year. The highest bench elevation is 2,250 meters above sea level, and the ultimate pit bottom is expected to be 1,500 meters above sea level. The Chino operation encompasses approximately 118,600 acres, comprising 113,200 acres of patented mining claims and other fee lands and 5,400 acres of unpatented mining claims.

Chino receives power from the Luna Energy facility and from the open market. We believe Chino has sufficient water resources to support current operations.

### Tyrone

Our wholly owned Tyrone mine is an open-pit copper mining complex which has been in operation since 1967. It is located in Grant County, New Mexico, approximately 10 miles south of Silver City, New Mexico, along State Highway 90. The site is accessible by paved road and by rail.

The Tyrone mine is a porphyry copper deposit. Mineralization is predominantly secondary sulfide consisting of chalcocite, with leachable oxide mineralization consisting of chrysocolla.

Copper processing facilities consist of a SX/EW operation with a maximum capacity of approximately 100 million pounds of copper cathode per year. The available mining fleet consists of seven 240-metric ton haul trucks loaded by one shovel with a bucket size of 47 cubic meters, which is capable of moving an average of 49,000 metric tons of material per day.

Tyrone's copper production totaled 61 million pounds in 2017, 76 million pounds in 2016 and 84 million pounds in 2015.

Tyrone is located in a desert environment with rainfall averaging 16 inches per year. The highest bench elevation is 2,000 meters above sea level, and the ultimate pit bottom is expected to have an elevation of 1,500 meters above sea level. The Tyrone operation encompasses approximately 35,200 acres, comprising 18,750 acres of patented mining claims and other fee lands and 16,450 acres of unpatented mining claims.

Tyrone receives electrical power from the Luna Energy facility and from the open market. We believe the Tyrone operation has sufficient water resources to support current operations.



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### Henderson and Climax

#### Henderson

Our wholly owned Henderson molybdenum mine has been in operation since 1976 and is located approximately 42 miles west of Denver, Colorado, off U.S. Highway 40. Nearby communities include the towns of Empire, Georgetown and Idaho Springs. The Henderson mill site is located approximately 15 miles west of the mine and is accessible from Colorado State Highway 9. The Henderson mine and mill are connected by a 10-mile conveyor tunnel under the Continental Divide and an additional five-mile surface conveyor. The tunnel portal is located five miles east of the mill.

The Henderson mine is a porphyry molybdenum deposit, with molybdenite as the primary sulfide mineral.

The Henderson operation consists of a large block-cave underground mining complex feeding a concentrator with a current capacity of approximately 32,000 metric tons per day. Henderson has the capacity to produce approximately 35 million pounds of molybdenum per year. The majority of the molybdenum concentrate produced is shipped to our Fort Madison, Iowa, processing facility. The available underground mining equipment fleet consists of seventeen 9-metric ton load-haul-dump (LHD) units and seven 73-metric ton haul trucks, which deliver ore to a gyratory crusher feeding a series of three overland conveyors to the mill stockpiles.

In response to market conditions, the Henderson molybdenum mine operated at reduced rates during 2017 and 2016. Henderson's molybdenum production totaled 12 million pounds in 2017, 10 million pounds in 2016 and 25 million pounds in 2015.

The Henderson mine is located in a mountainous region with the main access shaft at 3,180 meters above sea level. The main production levels are currently at elevations of 2,200 and 2,350 meters above sea level. This region experiences significant snowfall during the winter months.

The Henderson mine and mill operations encompass approximately 11,900 acres, comprising 11,850 acres of patented mining claims and other fee lands and a 50-acre easement with the U.S. Forest Service for the surface portion of the conveyor corridor.

Henderson operations receive electrical power through long-term contracts with Xcel Energy and natural gas through long-term contracts with BP Energy Company (with Xcel Energy as the transporter). We believe the Henderson operation has sufficient water resources to support current operations.

#### Climax

Our wholly owned Climax mine is located 13 miles northeast of Leadville, Colorado, off Colorado State Highway 91 at the top of Fremont Pass. The mine is accessible by paved roads.

The Climax ore body is a porphyry molybdenum deposit, with molybdenite as the primary sulfide mineral.

The Climax open-pit mine includes a 25,000 metric ton-per-day mill facility. Climax has the capacity to produce approximately 30 million pounds of molybdenum per year. The available mining fleet consists of nine 177-metric ton haul trucks loaded by two hydraulic shovels with bucket sizes of 34 cubic meters, which are capable of moving an average of 90,000 metric tons of material per day.

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Molybdenum production from Climax totaled 20 million pounds in 2017, 16 million pounds in 2016 and 23 million pounds in 2015.

The Climax mine is located in a mountainous region. The highest bench elevation is approximately 4,050 meters above sea level, and the ultimate pit bottom is expected to have an elevation of approximately 3,100 meters above sea level. This region experiences significant snowfall during the winter months.

The operations encompass approximately 14,350 acres, consisting primarily of patented mining claims and other fee lands.

Climax operations receive electrical power through long-term contracts with Xcel Energy and natural gas through long-term contracts with Andarko Energy and BP Energy Company (with Xcel Energy as the transporter). We believe the Climax operation has sufficient water resources to support current operations.

South America

At our operations in South America, mine properties and facilities are controlled through mining claims or concessions under the general mining laws of the relevant country. The claims or concessions are owned or controlled by the operating companies in which we or our subsidiaries have a controlling ownership interest. Roads, power lines and aqueducts are controlled by easements.

Cerro Verde

We have a 53.56 percent ownership interest in Cerro Verde, with the remaining 46.44 percent held by SMM Cerro Verde Netherlands B.V. (21.0 percent), Compañía de Minas Buenaventura S.A.A. (19.58 percent) and other stockholders whose shares are publicly traded on the Lima Stock Exchange (5.86 percent).

Cerro Verde is an open-pit copper and molybdenum mining complex that has been in operation since 1976 and is located 20 miles southwest of Arequipa, Peru. The site is accessible by paved highway. Cerro Verde's copper cathode and concentrate production that is not sold locally is transported approximately 70 miles by truck and by rail to the Port of Matarani for shipment to international markets.

The Cerro Verde mine is a porphyry copper deposit that has oxide, secondary sulfide and primary sulfide mineralization. The predominant oxide copper minerals are brochantite, chrysocolla, malachite and copper "pitch." Chalcocite and covellite are the most important secondary copper sulfide minerals. Chalcopyrite and molybdenite are the dominant primary sulfides.

Cerro Verde's operation consists of an open-pit copper mine, a 360,000 metric ton-per-day concentrator and SX/EW leaching facilities. Leach copper production is derived from a 39,000 metric ton-per-day crushed leach facility and a ROM leach system. This SX/EW leaching operation has a capacity of approximately 200 million pounds of copper per year.

The Cerro Verde expansion project commenced operations in September 2015. The project expanded the concentrator facilities from 120,000 metric tons of ore per day to 360,000 metric tons of ore per day. Cerro Verde's expanded operations benefit from its large-scale, long-lived reserves and cost efficiencies.

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The available fleet consists of twenty 290-metric ton haul trucks and ninety-three 230-metric ton haul trucks loaded by ten electric shovels with bucket sizes ranging in size from 33 to 57 cubic meters and two hydraulic shovels with a bucket size of 21 cubic meters. This fleet is capable of moving an average of approximately 910,000 metric tons of material per day.

Cerro Verde's production totaled 1.1 billion pounds of copper and 27 million pounds of molybdenum in 2017, 1.1 billion pounds of copper and 21 million pounds of molybdenum in 2016, and 545 million pounds of copper and 7 million pounds of molybdenum in 2015.

Cerro Verde is located in a desert environment with rainfall averaging 1.5 inches per year and is in an active seismic zone. The highest bench elevation is 2,750 meters above sea level, and the ultimate pit bottom is expected to be 1,570 meters above sea level. The Peruvian general mining law and Cerro Verde's mining stability agreement grant the surface rights of mining concessions located on government land. Additional government land, if obtained after 1997, must be leased or purchased. Cerro Verde has a mining concession covering approximately 178,000 acres, including access to 14,500 acres granted through an easement from the Regional Government of Arequipa, plus 212 acres of owned property, and 367 acres of rights-of-way outside the mining concession area.

Cerro Verde receives electrical power, including hydro-generated power, under long-term contracts with Kallpa Generación SA, ElectroPeru and Engie Energia Peru S.A.

Water for our Cerro Verde processing operations comes from renewable sources through a series of storage reservoirs on the Rio Chili watershed that collect water primarily from seasonal precipitation. In 2015, Cerro Verde completed the construction of a wastewater treatment plant that intercepts raw sewage that would otherwise be discharged into the Rio Chili and processes it for both use at the Cerro Verde mine and for recharge of treated water into the Rio Chili. We believe the Cerro Verde operation has sufficient water resources to support current operations. For further discussion of risks associated with the availability of water, see Item 1A. "Risk Factors."

## El Abra

We own a 51 percent interest in El Abra, and the remaining 49 percent interest is held by the state-owned copper enterprise Corporación Nacional del Cobre de Chile (CODELCO).

El Abra is an open-pit copper mining complex that has been in operation since 1996 and is located 47 miles north of Calama in Chile's El Loa province, Region II. The site is accessible by paved highway and by rail.

The El Abra mine is a porphyry copper deposit that has sulfide and oxide mineralization. The predominant primary sulfide copper minerals are bornite and chalcopyrite. There is a minor amount of secondary sulfide mineralization as chalcocite. The oxide copper minerals are chrysocolla and pseudomalachite. There are lesser amounts of copper-bearing clays and tenorite.

The El Abra operation consists of an open-pit copper mine and a SX/EW facility with a capacity of 500 million pounds of copper cathode per year from a 125,000 metric ton-per-day crushed leach circuit and a similar-sized ROM leaching operation. The available fleet consists of twenty-two 266-metric ton haul trucks loaded by four shovels with buckets ranging in size from 29 to 41 cubic meters, which are capable of moving an average of 214,000 metric tons of material per day.

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El Abra's copper production totaled 173 million pounds in 2017, 220 million pounds in 2016 and 324 million pounds in 2015. Beginning in the second half of 2015, El Abra operated at reduced rates to achieve lower operating and labor costs, defer capital expenditures and extend the life of the existing operations. El Abra is expected to operate at full capacity during 2018.

We continue to evaluate a major expansion at El Abra to process additional sulfide material and to achieve higher recoveries. Exploration results in recent years at El Abra indicate a significant sulfide resource, which could potentially support a major mill project similar to facilities recently constructed at Cerro Verde. Future investments will be dependent on technical studies, which are being advanced, economic factors and market conditions.

El Abra is located in a desert environment with rainfall averaging less than one inch per year and is in an active seismic zone. The highest bench elevation is 4,180 meters above sea level, and the ultimate pit bottom is expected to be 3,430 meters above sea level. El Abra controls a total of approximately 151,300 acres of mining claims covering the ore deposit, stockpiles, process plant, and water wellfield and pipeline. In addition, El Abra has land surface rights for the road between the processing plant and the mine, the water wellfield, power transmission lines and for the water pipeline from the Salar de Ascotán aquifer.

El Abra currently receives electrical power under a long-term contract with Engie Energia Chile S.A. Water for our El Abra processing operations comes from the continued pumping of groundwater from the Salar de Ascotán aquifer pursuant to regulatory approval. We believe El Abra has sufficient water rights and regulatory approvals to support current operations. For a discussion of risks associated with the availability of water, refer to Item 1A. "Risk Factors."

Indonesia

Ownership. PT-FI is a limited liability company organized under the laws of the Republic of Indonesia. We directly own 81.28 percent of the outstanding common stock of PT-FI and indirectly own 9.36 percent through our wholly owned subsidiary, PT Indocopper Investama. In late 2017, the Indonesian government transferred its 9.36 percent ownership interest in PT-FI to PT Indonesia Asahan Aluminium (Inalum), a state-owned enterprise that is owned 100 percent by the Indonesian government.

PT-FI has an unincorporated joint venture with Rio Tinto, under which Rio Tinto has a 40 percent interest in certain assets and future production exceeding specified annual amounts of copper, gold and silver through 2022 in Block A of PT-FI's Contract of Work (COW), and after 2022, a 40 percent interest in all production from Block A. The Block A area is where all of PT-FI's proven and probable mineral reserves and all of its current mining operations are located. Refer to Note 3 for further discussion of the joint venture agreement.



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Contract of Work. PT-FI conducts its current exploration and mining operations in Indonesia through a COW with the Indonesian government. The COW governs our rights and obligations relating to taxes, exchange controls, royalties, repatriation and other matters, and was concluded pursuant to the 1967 Foreign Capital Investment Law, which expresses Indonesia's foreign investment policy and provides basic guarantees of remittance rights and protection against nationalization, a framework for economic incentives and basic rules regarding other rights and obligations of foreign investors. Specifically, the COW provides that the Indonesian government will not nationalize or expropriate PT-FI's mining operations. Any disputes regarding the provisions of the COW are subject to international arbitration.

PT-FI's original COW was entered into in 1967 and was replaced by the current COW in 1991. The initial term of the current COW expires in 2021, but the COW explicitly provides that it can be extended for two 10-year periods subject to Indonesian government approval, which pursuant to the COW cannot be withheld or delayed unreasonably. The COW allows us to conduct exploration, mining and production activities in the 24,700-acre Block A area. Under the COW, PT-FI has rights to conduct exploration activities in the Block B area currently covering 502,000 acres.

Under the COW, PT-FI pays royalties on copper, gold and silver in the concentrate it sells. A large part of the mineral royalties under Indonesian government regulations is designated to the provinces from which the minerals are extracted. In connection with its fourth concentrator mill expansion completed in 1998, PT-FI agreed to pay the Indonesian government additional royalties, which were not required by the COW, to provide further support to the local governments and to the people of the Indonesian province of Papua. Additionally, under a Memorandum of Understanding (MOU) entered into with the Indonesian government in July 2014, PT-FI agreed to increase royalty rates. PT-FI's royalties totaled \$173 million in 2017, \$131 million in 2016 and \$114 million in 2015. Refer to Note 13 for further discussion of PT-FI's royalty rates.

Regulatory Matters. Following the issuance of new regulations by the Indonesian government in early 2017 (which resulted in a temporary suspension of PT-FI's concentrate exports), PT-FI entered into a MOU in April 2017 confirming that the COW would continue to be valid and honored until replaced by a mutually agreed IUPK and investment stability agreement.

Following a framework understanding reached in August 2017, the parties have been engaged in negotiation and documentation of a special mining license (IUPK) and accompanying documentation for assurances on legal and fiscal terms to replace the COW while providing PT-FI with long-term mining rights through 2041. In addition, the IUPK would provide that PT-FI construct a smelter within five years of reaching a definitive agreement and include agreement for the divestment of 51 percent of the project area interests to Indonesian participants at fair market value. The parties continue to negotiate documentation on a comprehensive agreement for PT-FI's extended operations and to reach agreement on timing, process and governance matters relating to the divestment, with a mutual objective of completing negotiations and the required documentation during the first half of 2018.

In December 2017, PT-FI was granted an extension of its temporary IUPK through June 30, 2018, to enable exports to continue while negotiations on a definitive agreement proceed. In February 2018, PT-FI received an extension of its export license through February 15, 2019.

Until a definitive agreement is reached, PT-FI has reserved all rights under its COW, including dispute resolution procedures. We cannot predict whether PT-FI will be successful in reaching a satisfactory agreement on the terms of its long-term mining rights. If PT-FI is unable to reach a definitive agreement with the Indonesian government on its long-term mining rights, we intend to reduce or defer investments significantly in underground development projects and will pursue dispute resolution procedures under the COW. Refer to Note 13 and Item 1A. "Risk Factors" for further discussion of these regulatory matters and risks associated with operations in Indonesia.

Grasberg Minerals District. PT-FI operates in the remote highlands of the Sudirman Mountain Range in the province of Papua, Indonesia, which is on the western half of the island of New Guinea. We and our predecessors have been the only operator of exploration and mining activities in Block A since 1967.

The Grasberg minerals district has three operating mines, the Grasberg open pit, the Deep Ore Zone (DOZ) underground mine and the Big Gossan underground mine. In September 2015, PT-FI initiated pre-commercial production, which represents ore extracted during the development phase for the purpose of obtaining access to the ore body, at the Deep Mill Level Zone (DMLZ) underground mine.

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As further discussed in MD&A, PT-FI also has several projects in progress in the Grasberg minerals district related to the development of the large-scale, long-lived, high-grade underground ore bodies located beneath and nearby the Grasberg open pit. In aggregate, these underground ore bodies are expected to produce large-scale quantities of copper and gold following the transition from the Grasberg open pit. Substantial progress has been made to prepare for the transition to mining of the Grasberg Block Cave underground mine. Mine development activities are sufficiently advanced to commence caving in early 2019. The ore flow system and underground rail line are expected to be installed during 2018.

PT-FI's production, including our joint venture partner's share, totaled 1.0 billion pounds of copper and 1.6 million ounces of gold in 2017, 1.1 billion pounds of copper and 1.1 million ounces of gold in 2016, and 752 million pounds of copper and 1.2 million ounces of gold in 2015.

Our principal source of power for all our Indonesian operations is a coal-fired power plant that we built in 1998. Diesel generators supply peaking and backup electrical power generating capacity. A combination of naturally occurring mountain streams and water derived from our underground operations provides water for our operations. Our Indonesian operations are in an active seismic zone and experience average annual rainfall of approximately 200 inches.

### Grasberg Open Pit

PT-FI began open-pit mining of the Grasberg ore body in 1990 and is currently mining the final phase of the Grasberg open pit, which contains high copper and gold ore grades. PT-FI expects to mine high-grade ore over the next several quarters prior to transitioning to the Grasberg Block Cave underground mine in the first half of 2019. Production from the ore stockpiles, which are located outside of the pit limits, is expected to continue through the end of 2019. Production in the open pit is currently at the 3,200- to 3,400-meter elevation level and totaled 37 million metric tons of ore in 2017, which provided 72 percent of PT-FI's 2017 mill feed.

The current open-pit equipment fleet consists of over 500 units. The larger mining equipment directly associated with production includes an available fleet of 99 haul trucks with payloads of 218 metric tons and 15 shovels with bucket sizes ranging from 17 to 42 cubic meters, which are capable of moving an average of 340,000 metric tons of material per day.

Crushing and conveying systems are integral to the Grasberg mine and provide the capacity to transport more than 250,000 metric tons of ore per day. Ore milled from the Grasberg open pit averaged 101,800 metric tons per day in 2017, 119,700 metric tons per day in 2016 and 115,900 metric tons per day in 2015.

### DOZ Underground Mine

The DOZ ore body lies vertically below the now depleted Intermediate Ore Zone. PT-FI began production from the DOZ ore body in 1989 using open-stope mining methods, but suspended production in 1991 in favor of production from the Grasberg open pit. Production resumed in September 2000 using the block-cave method and is at the 3,110-meter elevation level.

The DOZ is a mature block-cave mine that previously operated at 80,000 metric tons of ore per day. Current operating rates from the DOZ underground mine are driven by the value of the incremental DOZ ore grade compared to the ore from the Grasberg open pit and ore grade material from the development of the DMLZ and Grasberg Block Cave underground mines. Ore milled from the DOZ underground mine averaged 31,200 metric tons of ore per day in 2017, 38,000 metric tons of ore per day in 2016 and 43,700 metric tons of ore per day in 2015. Production at the DOZ underground mine is expected to continue through 2021.

The DOZ mine fleet consists of 159 pieces of mobile equipment. The primary mining equipment directly associated with production and development includes an available fleet of 45 LHD units and 22 haul trucks. Each production LHD unit typically carries approximately 11 metric tons of ore. Using ore passes and chutes, the LHD units transfer ore into 55-metric ton capacity haul trucks. The trucks dump into two gyratory crushers, and the ore is then conveyed to the surface stockpiles for processing.

The success of the development of the DOZ mine, one of the world's largest underground mines, provides confidence in the future development of PT-FI's large-scale, underground ore bodies.

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### DMLZ Underground Mine

The DMLZ ore body lies below the DOZ underground mine at the 2,590-meter elevation and represents the downward continuation of mineralization in the Ertsberg East Skarn system and neighboring Ertsberg porphyry. Ore milled from the DMLZ underground mine averaged 3,200 metric tons of ore per day in 2017, 4,400 metric tons per day in 2016, and 2,900 metric tons per day in 2015. During 2017 and late January 2018, the DMLZ underground mine was impacted by mining-induced seismic activity, which is not uncommon in block cave mining. To mitigate the impact of these events, PT-FI implemented a revised mine sequence; upgraded support systems, blasting and re-entry protocols; and improved mine monitoring and analysis processes. Development activities and mining are taking place in unaffected areas while impacted areas are being assessed, rehabilitated and prepared to be placed back into use. Targeted production rates once the DMLZ underground mine reaches full capacity are expected to approximate 80,000 metric tons of ore per day in 2021. Production at the DMLZ underground mine is expected to continue through 2041.

The DMLZ mine fleet consists of over 230 pieces of mobile equipment, which includes 27 LHD units and 15 haul trucks used in production and development activities.

### Big Gossan Underground Mine

The Big Gossan underground mine was on care-and-maintenance status during most of 2017 and production restarted in fourth-quarter 2017. The Big Gossan mine lies underground and adjacent to the current mill site. It is a tabular, near vertical ore body with approximate dimensions of 1,200 meters along strike and 800 meters down dip with varying thicknesses from 20 meters to 120 meters. The mine utilizes a blasthole stoping method with delayed paste backfill. Stopes of varying sizes are mined and the ore dropped down passes to a truck haulage level. Trucks are chute loaded and transport the ore to a jaw crusher. The crushed ore is then hoisted vertically via a two-skip production shaft to a level where it is loaded onto a conveyor belt. The belt carries the ore to one of the main underground conveyors where the ore is transferred and conveyed to the surface stockpiles for processing.

The Big Gossan mine fleet consists of over 72 pieces of mobile equipment, which includes 9 LHD units and 9 haul trucks used in development and production activities.

**Description of Ore Bodies.** Our Indonesia ore bodies are located within and around two main igneous intrusions, the Grasberg monzodiorite and the Ertsberg diorite. The host rocks of these ore bodies include both carbonate and clastic rocks that form the ridge crests and upper flanks of the Sudirman Range, and the igneous rocks of monzonitic to dioritic composition that intrude them. The igneous-hosted ore bodies (the Grasberg open pit and block cave, and portions of the DOZ block cave) occur as vein stockworks and disseminations of copper sulfides, dominated by chalcopyrite and, to a lesser extent, bornite. The sedimentary-rock hosted ore bodies (portions of the DOZ and all of the Big Gossan) occur as “magnetite-rich, calcium/magnesian skarn” replacements, whose location and orientation are strongly influenced by major faults and by the chemistry of the carbonate rocks along the margins of the intrusions.

The copper mineralization in these skarn deposits is dominated by chalcopyrite, but higher bornite concentrations are common. Moreover, gold occurs in significant concentrations in all of the district’s ore bodies, though rarely visible to the naked eye. These gold concentrations usually occur as inclusions within the copper sulfide minerals, though, in some deposits, these concentrations can also be strongly associated with pyrite.

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The following diagram indicates the relative elevations (in meters) of our reported Indonesia ore bodies. The following map, which encompasses an area of approximately 42 square kilometers (approximately 16 square miles), indicates the relative positions and sizes of our reported Indonesia ore bodies and their locations.

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## Smelting Facilities and Other Mining Properties

Atlantic Copper. Our wholly owned Atlantic Copper smelter and refinery is located on land concessions from the Huelva, Spain, port authorities, which are scheduled to expire in 2027.

The design capacity of the smelter is approximately 295,000 metric tons of copper per year, and the refinery has a capacity of 285,000 metric tons of copper per year. Atlantic Copper produced 283,100 metric tons of copper anode from its smelter and 271,400 metric tons of copper cathode from its refinery in 2017; 296,900 metric tons of copper anode from its smelter and 285,800 metric tons of copper cathode from its refinery in 2016; and 293,100 metric tons of copper anode from its smelter and 284,800 metric tons of copper cathode from its refinery in 2015.

Following is a summary of Atlantic Copper's concentrate purchases from third parties and our copper mining operations for the years ended December 31:

	2017	2016	2015
Third parties	67 %	77 %	71 %
North America copper mines	18	13	23
South America mining	15	7	3
Indonesia mining	—	3	3
	100 %	100 %	100 %

Atlantic Copper's major maintenance turnarounds typically occur approximately every eight years, with shorter-term maintenance turnarounds in the interim. Atlantic Copper completed a 68-day major maintenance turnaround in 2013 and a 27-day maintenance turnaround in 2017. The next 14-day maintenance turnaround is scheduled for 2019.

PT Smelting. PT-FI's COW required us to construct, or cause to be constructed, a smelter in Indonesia if we and the Indonesian government determined that such a project would be economically viable. In 1995, following the completion of a feasibility study, we entered into agreements relating to the formation of PT Smelting, an Indonesian company, and the construction of the copper smelter and refinery in Gresik, Indonesia. PT Smelting owns and operates the smelter and refinery. PT-FI owns 25 percent of PT Smelting, with the remainder owned by Mitsubishi Materials Corporation (60.5 percent), Mitsubishi Corporation RtM Japan Ltd. (9.5 percent) and JX Nippon Mining & Metals Corporation (5 percent).

PT-FI's contract with PT Smelting requires PT-FI to supply 100 percent of the copper concentrate requirements (at market rates subject to a minimum or maximum treatment charge rate) necessary for PT Smelting to produce 205,000 metric tons of copper annually on a priority basis. PT-FI may also sell copper concentrate to PT Smelting at market rates for quantities in excess of 205,000 metric tons of copper annually. PT-FI supplied 93 percent of PT Smelting's concentrate requirements in 2017, 88 percent in 2016 and 80 percent in 2015.

In early 2017, the Indonesian government issued new regulations to address exports of unrefined metals, including copper concentrate and anode slimes, and other matters related to the mining sector. These regulations permit the export of anode slimes, which is necessary for PT Smelting to continue operating. As a result of labor disturbances and a delay in the renewal of its export license for anode slimes, PT Smelting's operations were shut down from mid-January 2017 until early March 2017. In March 2017, PT Smelting's anode slimes export license was renewed through March 1, 2018. On February 15, 2018, PT Smelting submitted an application to renew its export license.

PT Smelting produced 245,800 metric tons of copper anode from its smelter and 247,800 metric tons of copper cathode from its refinery in 2017; 255,700 metric tons of copper anode from its smelter and 241,700 metric tons of copper cathode from its refinery in 2016; and 199,700 metric tons of copper anode from its smelter and 198,400 metric tons of copper cathode from its refinery in 2015. Following a temporary suspension in July 2015, PT Smelting operated at approximately 80 percent capacity from September 2015 to November 2015 when required repairs of an

acid plant cooling tower that was damaged during the suspension were completed.

PT Smelting's maintenance turnarounds (which range from two weeks to a month to complete) typically are expected to occur approximately every two years, with short-term maintenance turnarounds in the interim. PT Smelting completed a 25-day maintenance turnaround during 2016, and the next major maintenance turnaround is scheduled for third-quarter 2018.

Miami Smelter. We own and operate a smelter at our Miami mining operation in Arizona. The smelter has been operating for approximately 100 years and has been upgraded numerous times during that period to implement new



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technologies, improve production and comply with air quality requirements. The Miami smelter has completed the installation of emission control equipment that will allow it to operate in compliance with air quality standards effective in 2018 (refer to Item 1A. “Risk Factors” for further discussion).

The Miami smelter processes copper concentrate primarily from our North America copper mines. Concentrate processed through the smelter totaled 612,600 metric tons in 2017, 673,300 metric tons in 2016 and 686,700 metric tons in 2015. In addition, because sulphuric acid is a by-product of smelting concentrate, the Miami smelter is also the most significant source of sulphuric acid for our North America leaching operations.

Major maintenance turnarounds (which take approximately three weeks to complete) are anticipated to occur approximately every three years for the Miami smelter, with short-term maintenance turnarounds in the interim. The Miami smelter completed a major maintenance turnaround in second-quarter 2017, and the next major maintenance turnaround is scheduled for 2020.

**Rod & Refining Operations.** Our Rod & Refining operations consist of conversion facilities located in North America, including a refinery in El Paso, Texas; rod mills in El Paso, Texas, Norwich, Connecticut, and Miami, Arizona; and a specialty copper products facility in Bayway, New Jersey. We refine our copper anode production from our Miami smelter at our El Paso refinery. The El Paso refinery has the potential to operate at an annual production capacity of about 900 million pounds of copper cathode, which is sufficient to refine all of the copper anode we produce at our Miami smelter. Our El Paso refinery also produces nickel carbonate, copper telluride and autoclaved slimes material containing gold, silver, platinum and palladium.

**Molybdenum Conversion Facilities.** We process molybdenum concentrate at our conversion plants in the U.S. and Europe into such products as technical-grade molybdic oxide, ferromolybdenum, pure molybdic oxide, ammonium molybdates and molybdenum disulfide. We operate molybdenum roasters in Sierrita, Arizona; Fort Madison, Iowa; and Rotterdam, the Netherlands, and we operate a molybdenum pressure-leach plant in Bagdad, Arizona. We also produce ferromolybdenum for customers worldwide at our conversion plant located in Stowmarket, United Kingdom.

**Freeport Cobalt.** In March 2013, we acquired a cobalt chemical refinery in Kokkola, Finland, and the related sales and marketing business which provided direct end-market access for the cobalt hydroxide production at the Tenke mine. The joint venture operates under the name Freeport Cobalt, and we are the operator with an effective 56 percent ownership interest. The remaining effective ownership interest is held by Lundin Mining Corporation (24 percent) and La Générale des Carrières et des Mines (20 percent). The Kokkola refinery has an annual refining capacity of approximately 15,000 metric tons of cobalt.

As further discussed in Note 2, FCX expects to sell its interest in Freeport Cobalt, which is classified as held for sale at December 31, 2017.

**Other North America Copper Mines.** We also have five non-operating copper mines – Ajo, Bisbee, Tohono, Twin Buttes and Christmas, which are located in Arizona – that have been on care-and-maintenance status for several years and would require new or updated environmental studies, new permits, and additional capital investment, which could be significant, to return them to operating status.

### Mining Development Projects and Exploration

Capital expenditures for mining operations totaled \$1.4 billion (including \$0.9 billion for major projects) in 2017, \$1.6 billion (including \$1.2 billion for major projects) in 2016 and \$3.3 billion (including \$2.4 billion for major projects) in 2015. Capital expenditures for major projects during the three years ended December 31, 2017, were primarily associated with the Cerro Verde expansion project and ongoing underground development activities at Grasberg. Refer to MD&A for projected capital expenditures for the year 2018. If PT-FI is unable to reach a definitive

agreement with the Indonesian government on its long-term mining rights, we intend to reduce or defer investments significantly in underground development projects and will pursue dispute resolution procedures under PT-FI's COW.

We have several projects and potential opportunities to expand production volumes, extend mine lives and develop large-scale underground ore bodies. As further discussed in MD&A, our near-term major development projects primarily include the underground development activities in the Grasberg minerals district and development of the Lone Star oxide project. Considering the long-term nature and large size of our development projects, actual costs and timing could vary from estimates. Additionally, in response to market conditions and Indonesian regulatory

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uncertainty, the timing of our expenditures will continue to be reviewed. As further discussed in “Mining Operations - Indonesia,” PT-FI also committed to commence construction of a new smelter during a five year timeframe after obtaining an investment stability agreement providing equivalent rights with the same level of legal and fiscal certainty provided under PT-FI’s COW. Refer to Item 1A. “Risk Factors” for further discussion of Indonesia regulatory matters. We continue to review our mine development and processing plans to maximize the value of our mineral reserves.

We also have an additional long-term underground mine development project in the Grasberg minerals district for the Kucing Liar ore body, which lies on the southern flank of and underneath the southern portion of the Grasberg open pit at the 2,605-meter elevation level. We expect to mine the Kucing Liar ore body using the block-cave method; aggregate capital cost estimates for development of the Kucing Liar ore body are projected to approximate \$2.6 billion (which are expected to be made between 2019 and 2031). Additionally, our current mine development plans include approximately \$5.7 billion of capital expenditures at our processing facilities to optimize the handling of underground ore types once the Grasberg open-pit operations cease. We expect substantially all of these expenditures to be made between 2019 and 2034. The timing and development of this project is currently being reviewed.

Our mining exploration activities are generally associated with our existing mines focusing on opportunities to expand reserves and resources to support development of additional future production capacity. Exploration results continue to indicate opportunities for significant future potential reserve additions in North America and South America. Exploration spending associated with mining operations totaled \$72 million in 2017, \$44 million in 2016 and \$82 million in 2015. Exploration spending is expected to approximate \$65 million for the year 2018.

### Sources and Availability of Energy, Natural Resources and Raw Materials

Our copper mining operations require significant energy, principally diesel, electricity, coal and natural gas, most of which is obtained from third parties under long-term contracts. Energy represented 18 percent of our copper mine site operating costs in 2017, including purchases of approximately 196 million gallons of diesel fuel; 7,900 gigawatt hours of electricity at our North America and South America copper mining operations (we generate all of our power at our Indonesia mining operation); 700 thousand metric tons of coal for our coal power plant in Indonesia; and 1 million MMBtu (million British thermal units) of natural gas at certain of our North America mines. Based on current cost estimates, energy will approximate 20 percent of our copper mine site operating costs in 2018.

Our mining operations also require significant quantities of water for mining, ore processing and related support facilities. The loss of water rights for any of our mines, in whole or in part, or shortages of water to which we have rights, could require us to curtail or shut down mining operations. For a further discussion of risks and legal proceedings associated with the availability of water, refer to Item 1A. “Risk Factors” and Item 3. “Legal Proceedings.”

Sulphuric acid is used in the SX/EW process and is produced as a by-product of the smelting process at our smelters and from our sulfur burners at the Safford mine. Sulphuric acid needs in excess of the sulphuric acid produced by our operations are purchased from third parties.

### Community and Human Rights

We have adopted policies that govern our working relationships with the communities where we operate and are designed to guide our practices and programs in a manner that respects human rights and the culture of the local people impacted by our operations. We continue to make significant expenditures on community development, education, training and cultural programs, which include:

- comprehensive job training programs
- clean water and sanitation projects

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public health programs, including malaria control and human immunodeficiency virus

- agricultural assistance programs
- small and medium enterprise development programs
  - basic education programs
- cultural promotion and preservation programs
- community infrastructure development
- charitable donations

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In December 2000, we endorsed the joint U.S. State Department-British Foreign Office Voluntary Principles on Human Rights and Security (Voluntary Principles). We participated in developing these Voluntary Principles with other major natural resource companies and international human rights organizations and they are incorporated into our human rights policy. The Voluntary Principles provide guidelines for our security programs, including interaction with host-government security personnel, private security contractors and our internal security employees.

In February 2015, we updated our human rights policy to align our due diligence practices with the United Nations Guiding Principles on Business and Human Rights (UN Guiding Principles), and in August 2017, we updated our human rights policy to reflect our full commitment to the UN Guiding Principles. We have embarked on a program to plan and conduct site-level human rights impact assessments (HRIA) at operations with higher potential risks. HRIAs help us to embed human rights considerations into our business practices, including site-level sustainable development risk registers. In 2017, we completed a HRIA at our Cerro Verde operation in Peru. We also participate in a multi-industry human rights working group to gain insight from peer companies.

We believe that our social and economic development programs are responsive to the issues raised by the local communities near our areas of operation and help us maintain good relations with the surrounding communities and avoid disruptions of mining operations. As part of our ongoing commitment to sustainable community development, we make significant investments in social programs, including in-kind support and administration, across our global operations. Over the last five years, these investments have averaged \$166 million per year. Nevertheless, social and political instability in the areas of our operations may adversely impact our mining operations. Refer to Item 1A. “Risk Factors” for further discussion.

South America. Cerro Verde has provided a variety of community support projects over the years. Following engagements with regional and local governments, civic leaders and development agencies, in 2006, Cerro Verde committed to support the costs for a new potable water treatment plant to serve Arequipa. In addition, an agreement was reached with the Peruvian government for development of a water storage network that was financed by Cerro Verde and a distribution network that was financed by the Cerro Verde Civil Association.

Cerro Verde reached an agreement with the Regional Government of Arequipa, the National Government, SEDAPAR and other local institutions to allow it to finance, engineer and construct a wastewater treatment plant for the city of Arequipa, which was completed in 2015. The wastewater treatment plant supplements existing water supplies to support Cerro Verde’s concentrator expansion and also improves the local water quality, enhances agriculture products grown in the area and reduces the risk of waterborne illnesses. In addition to these projects, Cerro Verde annually makes significant community development investments in the Arequipa region.

Security Matters. Consistent with our operating permits in Peru and our commitment to protect our employees and property, we have taken steps to provide a safe and secure working environment. As part of its security program, Cerro Verde maintains its own internal security department. Both employees and contractors perform functions such as protecting company facilities, monitoring shipments of supplies and products, assisting in traffic control and aiding in emergency response operations. The security department receives human rights and Voluntary Principles training annually. Some contractors assigned to protection of expatriate personnel are armed. These contractors also receive training in defensive driving and firearms handling. Cerro Verde’s costs for its internal civilian security department totaled \$8 million in 2017 and \$6 million in both 2016 and 2015.

Cerro Verde, like all businesses and residents of Peru, relies on the Peruvian government for the maintenance of public order, upholding the rule of law and the protection of personnel and property. The Peruvian government is responsible for employing police personnel and directing their operations. Cerro Verde has limited public security forces in support of its operation, with the arrangement defined through an MOU with the Peruvian National Police. Cerro Verde’s share of support costs for government-provided security approximated \$1 million in each of the years

2017, 2016 and 2015.

Indonesia. In 1996, PT-FI established the Freeport Partnership Fund for Community Development (the Partnership Fund) through which PT-FI has made available funding and technical assistance to support community development initiatives in the areas of health, education and economic development. PT-FI has committed through 2018 to provide one percent of its annual revenue for the development of the local people in its area of operations through the Partnership Fund. PT-FI recognized \$44 million in 2017, \$33 million in 2016 and \$27 million in 2015 for this commitment.

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The Amungme and Kamoro Community Development Organization (Lembaga Pengembangan Masyarakat Amungme dan Kamoro or LPMMAK) oversees disbursement of the program funds we contribute to the Partnership Fund. LPMMAK is governed by a board of commissioners and a board of directors, which are comprised of representatives from the local Amungme and Kamoro tribal communities, government leaders, church leaders, and one representative of PT-FI on each board. The Amungme and Kamoro people are original inhabitants of the land in our area of operations. In addition to the Partnership Fund, PT-FI annually makes significant investments in public health, education, community infrastructure and economic development.

**Security Matters.** Consistent with our COW in Indonesia and our commitment to protect our employees and property, we have taken steps to provide a safe and secure working environment. As part of its security program, PT-FI maintains its own internal security department. Both employees and contractors are unarmed and perform functions such as protecting company facilities, monitoring shipments of supplies and products, assisting in traffic control and aiding in emergency response operations. The security department receives human rights training annually.

PT-FI's share of costs for its internal civilian security department totaled \$54 million in 2017 and \$58 million for both 2016 and 2015.

PT-FI, and all businesses and residents of Indonesia, rely on the Indonesian government for the maintenance of public order, upholding the rule of law and the protection of personnel and property. The Grasberg minerals district has been designated by the Indonesian government as one of Indonesia's vital national assets. This designation results in the police, and to a lesser extent, the military, playing a significant role in protecting the area of our operations. The Indonesian government is responsible for employing police and military personnel and directing their operations.

From the outset of PT-FI's operations, the Indonesian government has looked to PT-FI to provide logistical and infrastructure support and assistance for these necessary services because of the limited resources of the Indonesian government and the remote location of and lack of development in Papua. PT-FI's financial support for the Indonesian government security institutions assigned to the operations area represents a prudent response to its requirements to protect its workforce and property, better ensuring that personnel are properly fed and lodged, and have the logistical resources to patrol PT-FI's roads and secure its operating area. In addition, the provision of such support is consistent with PT-FI's obligations under the COW, reflects our philosophy of responsible corporate citizenship, and is in keeping with our commitment to pursue practices that will promote human rights.

PT-FI's share of support costs for the government-provided security was \$23 million in 2017, \$20 million in 2016 and \$21 million in 2015. This supplemental support consists of various infrastructure and other costs, such as food, housing, fuel, travel, vehicle repairs, allowances to cover incidental and administrative costs, and community assistance programs conducted by the military and police.

Refer to Item 1A. "Risk Factors" for further discussion of security risks in Indonesia.

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## Mining Production and Sales Data

	Years Ended December 31,					
	Production			Sales		
	2017	2016	2015	2017	2016	2015
COPPER (millions of recoverable pounds) (FCX's net interest in %)						
North America						
Morenci (72%) <sup>a</sup>	737	848	902	713	855	915
Bagdad (100%)	173	177	210	164	180	222
Safford (100%)	150	230	202	154	229	198
Sierrita (100%)	160	162	189	154	162	196
Miami (100%)	19	25	43	18	27	46
Chino (100%)	215	308	314	217	308	319
Tyrone (100%)	61	76	84	61	75	89
Other (100%)	3	5	3	3	5	3
Total North America	1,518	1,831	1,947	1,484	1,841	1,988
South America						
Cerro Verde (53.56%)	1,062	1,108	545	1,062	1,105	544
El Abra (51%)	173	220	324	173	227	327
Total South America	1,235	1,328	869	1,235	1,332	871
Indonesia						
Grasberg (90.64%) <sup>b</sup>	984	1,063	752	981	1,054	744
Consolidated - continuing operations	3,737	4,222	3,568	3,700	4,227	3,603
Discontinued operations <sup>d</sup>	—	425	449	—	424	467
Total	3,737	4,647	4,017	3,700	4,651	4,070
Less noncontrolling interests	670	909	680	670	910	688
Net	3,067	3,738	3,337	3,030	3,741	3,382
Average realized price per pound (continuing operations)				\$2.93	\$2.28	\$2.42
GOLD (thousands of recoverable ounces)						
North America (100%) <sup>a</sup>	23	27	25	22	25	23
Indonesia (90.64%) <sup>b</sup>	1,554	1,061	1,232	1,540	1,054	1,224
Consolidated	1,577	1,088	1,257	1,562	1,079	1,247
Less noncontrolling interests	145	99	115	144	99	115
Net	1,432	989	1,142	1,418	980	1,132
Average realized price per ounce				\$1,268	\$1,238	\$1,129
MOLYBDENUM (millions of recoverable pounds)						
Henderson (100%)	12	10	25	N/A	N/A	N/A
Climax (100%)	20	16	23	N/A	N/A	N/A
North America copper mines (100%) <sup>a</sup>	33	33	37	N/A	N/A	N/A
Cerro Verde (53.56%)	27	21	7	N/A	N/A	N/A
Consolidated	92	80	92	95	74	89
Less noncontrolling interest	13	9	3	12	6	4
Net	79	71	89	83	68	85
Average realized price per pound				\$9.33	\$8.33	\$8.70

<sup>a</sup> Amounts are net of Morenci's undivided joint venture partners' interest; effective May 31, 2016, FCX's undivided interest in Morenci was prospectively reduced from 85 percent to 72 percent (refer to Note 2 for further discussion).

<sup>b</sup> Amounts are net of Grasberg's joint venture partner interest, which varies in accordance with terms of the joint venture agreement (refer to Note 3). Under the joint venture agreement, PT-FI's share of copper production and sales was 99 percent in 2017 and 100 percent in both 2016 and 2015. PT-FI's share of gold production and sales was 100 percent in 2017, 2016, and 2015.



- c. Consolidated sales volumes exclude purchased copper of 273 million pounds in 2017, 188 million pounds in 2016 and 121 million pounds in 2015.
- d. In November 2016, we completed the sale of our interest in TFHL, through which we held an interest in the Tenke mine, which is reported as a discontinued operation for all periods presented (refer to Note 2 for further discussion).

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## Mineral Reserves

Recoverable proven and probable reserves have been calculated in accordance with Industry Guide 7 as required by the Securities Exchange Act of 1934. Proven and probable reserves may not be comparable to similar information regarding mineral reserves disclosed in accordance with the guidance in other countries. Proven and probable reserves were determined by the use of mapping, drilling, sampling, assaying and evaluation methods generally applied in the mining industry, as more fully discussed below. The term “reserve,” as used in the reserve data presented here, means that part of a mineral deposit that can be economically and legally extracted or produced at the time of the reserve determination. The term “proven reserves” means reserves for which (i) quantity is computed from dimensions revealed in outcrops, trenches, workings or drill holes; (ii) grade and/or quality are computed from the results of detailed sampling; and (iii) the sites for inspection, sampling and measurements are spaced so closely and the geologic character is sufficiently defined that size, shape, depth and mineral content of reserves are well established. The term “probable reserves” means reserves for which quantity and grade are computed from information similar to that used for proven reserves but the sites for sampling are farther apart or are otherwise less adequately spaced. The degree of assurance, although lower than that for proven reserves, is high enough to assume continuity between points of observation.

Our mineral reserve estimates are based on the latest available geological and geotechnical studies. We conduct ongoing studies of our ore bodies to optimize economic values and to manage risk. We revise our mine plans and estimates of recoverable proven and probable mineral reserves as required in accordance with the latest available studies.

Estimated recoverable proven and probable reserves at December 31, 2017, were determined using \$2.00 per pound for copper, \$1,000 per ounce for gold and \$10 per pound for molybdenum. For the three-year period ended December 31, 2017, LME spot copper prices averaged \$2.50 per pound, London PM gold prices averaged \$1,223 per ounce and the weekly average price for molybdenum quoted by Metals Week averaged \$7.12 per pound. In late 2015, we incorporated changes in the commercial pricing structure for our molybdenum-based chemical products to enable continuation of chemical-grade production.

The recoverable proven and probable reserves presented in the table below represent the estimated metal quantities from which we expect to be paid after application of estimated metallurgical recovery rates and smelter recovery rates, where applicable. Recoverable reserves are that part of a mineral deposit that we estimate can be economically and legally extracted or produced at the time of the reserve determination.

	Recoverable Proven and Probable Mineral Reserves Estimated at December 31, 2017		
	Copper (billion pounds)	Gold (million ounces)	Molybdenum (billion pounds)
North America	33.5	0.3	2.22
South America	28.1	—	0.62
Indonesia <sup>b</sup>	25.1	23.2	—
Consolidated basis <sup>c</sup>	86.7	23.5	2.84
Net equity interest <sup>d</sup>	71.3	21.3	2.56

<sup>a</sup> Consolidated recoverable copper reserves include 2.1 billion pounds in leach stockpiles and 0.7 billion pounds in mill stockpiles (refer to “Mill and Leach Stockpiles” for further discussion).

<sup>b</sup> Recoverable proven and probable reserves from Indonesia reflect estimates of minerals that can be recovered through the end of 2041. Refer to Note 13 and to Item 1A. “Risk Factors” for discussion of PT-FI’s COW and Indonesian regulatory matters.

Consolidated reserves represent estimated metal quantities after reduction for joint venture partner interests at the Morenci mine in North America and the Grasberg minerals district in Indonesia (refer to Note 3 for further discussion of our joint ventures). Excluded from the table above were our estimated recoverable proven and probable reserves of 273.4 million ounces of silver in North America, South America and Indonesia, which were determined using \$15 per ounce.

Net equity interest reserves represent estimated consolidated metal quantities further reduced for noncontrolling interest ownership (refer to Note 3 for further discussion of our ownership in subsidiaries). Excluded from the table above were our estimated recoverable proven and probable reserves of 218.2 million ounces of silver in North America, South America and Indonesia.

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		Recoverable Proven and Probable Mineral Reserves Estimated at December 31, 2017									
		Proven Reserves					Probable Reserves				
		Average Ore Grade					Average Ore Grade				
Processing Method	Metric tons	Copper %	Gold g/t	Moly %	Silver g/t	Metric tons	Copper %	Gold g/t	Moly %	Silver g/t	
North America											
Morenci	Mill	572	0.40	—	0.02	—	115	0.37	—	0.02	—
	Crushed leach	290	0.46	—	—	—	80	0.36	—	—	—
	ROM leach	1,603	0.19	—	—	—	474	0.17	—	—	—
Bagdad	Mill	1,001	0.34	—	<sup>a</sup> 0.02	1.42	132	0.31	—	<sup>a</sup> 0.02	1.31
	ROM leach	190	0.19	—	—	—	82	0.18	—	—	—
Safford, including Lone Star	Crushed leach	555	0.46	—	—	—	107	0.42	—	—	—
Sierrita	Mill	2,064	0.24	—	<sup>a</sup> 0.03	1.42	181	0.19	—	<sup>a</sup> 0.02	1.13
Chino, including Cobre	Mill	107	0.55	0.04	0.01	0.47	62	0.55	0.03	—	<sup>a</sup> 0.46
	ROM leach	99	0.33	—	—	—	8	0.31	—	—	—
Tyrone	ROM leach	6	0.44	—	—	—	3	0.37	—	—	—
Henderson	Mill	60	—	—	0.18	—	14	—	—	0.14	—
Climax	Mill	147	—	—	0.16	—	13	—	—	0.09	—
		6,694					1,271				
South America											
Cerro Verde	Mill	885	0.37	—	0.01	1.94	2,586	0.37	—	0.01	1.94
	Crushed leach	31	0.41	—	—	—	44	0.28	—	—	—
	ROM leach	14	0.22	—	—	—	17	0.20	—	—	—
El Abra	Crushed leach	270	0.48	—	—	—	74	0.47	—	—	—
	ROM leach	37	0.19	—	—	—	13	0.20	—	—	—
		1,237					2,734				
Indonesia											
DMLZ	Mill	76	1.00	0.83	—	4.70	361	0.90	0.74	—	4.33
Grasberg open pit	Mill	12	1.93	4.69	—	5.58	22	0.95	1.53	—	2.58
DOZ	Mill	25	0.56	0.75	—	2.15	54	0.54	0.76	—	2.01
Big Gossan	Mill	18	2.32	0.98	—	14.40	40	2.18	0.91	—	12.64
Grasberg Block Cave <sup>b</sup>	Mill	335	1.17	0.90	—	3.83	628	0.93	0.63	—	3.36
Kucing Liar <sup>b</sup>	Mill	136	1.33	1.13	—	7.14	224	1.20	1.03	—	6.08
		602					1,329				
Total FCX - 100% Basis		8,533					5,334				

a. Grade not shown because of rounding.

b. Would require additional capital investment, which could be significant, to bring into production.

The reserve table above and the tables on the following pages utilize the abbreviations described below:

g/t – grams per metric ton

Moly – Molybdenum

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Recoverable Proven and Probable Mineral Reserves Estimated at December 31, 2017 (continued)										
Processing Method	Proven and Probable Million metric tons	Average Ore Grade				Recoveries <sup>a</sup>				
		Copper %	Gold g/t	Moly %	Silver g/t	Copper %	Gold %	Moly %	Silver %	
North America										
Morenci										
Mill	687	0.39	—	0.02	—	80.6	—	49.2	—	
Crushed leach	370	0.44	—	—	—	79.4	—	—	—	
ROM leach	2,077	0.18	—	—	—	41.1	—	—	—	
Bagdad										
Mill	1,133	0.34	—	<sup>b</sup> 0.02	1.41	85.8	59.1	68.5	49.3	
ROM leach	272	0.19	—	—	—	22.1	—	—	—	
Safford, including Lone Star										
Crushed leach	662	0.45	—	—	—	72.7	—	—	—	
Sierrita										
Mill	2,245	0.23	—	<sup>b</sup> 0.03	1.40	83.2	59.2	80.0	49.3	
Chino, including Cobre										
Mill	169	0.55	0.04	0.01	0.47	78.9	77.9	40.0	78.5	
ROM leach	107	0.33	—	—	—	47.4	—	—	—	
Tyrone										
ROM leach	9	0.42	—	—	—	58.9	—	—	—	
Henderson										
Mill	74	—	—	0.17	—	—	—	88.4	—	
Climax										
Mill	160	—	—	0.15	—	—	—	89.6	—	
	7,965									
South America										
Cerro Verde										
Mill	3,471	0.37	—	0.01	1.94	86.4	—	54.4	44.8	
Crushed leach	75	0.33	—	—	—	81.1	—	—	—	
ROM leach	31	0.21	—	—	—	53.3	—	—	—	
El Abra										
Crushed leach	344	0.48	—	—	—	58.2	—	—	—	
ROM leach	50	0.19	—	—	—	47.3	—	—	—	
	3,971									
Indonesia										
DMLZ										
Mill	437	0.91	0.76	—	4.39	86.9	79.5	—	64.4	
Grasberg open pit										
Mill	34	1.29	2.64	—	3.63	94.0	90.8	—	47.6	
DOZ										
Mill	79	0.54	0.76	—	2.05	90.1	81.9	—	68.7	
Big Gossan										
Mill	58	2.22	0.93	—	13.18	91.4	66.4	—	63.7	
Grasberg Block Cave <sup>c</sup>										
Mill	963	1.01	0.72	—	3.52	84.4	64.6	—	57.3	
Kucing Liar <sup>c</sup>										
Mill	360	1.25	1.07	—	6.48	84.5	44.3	—	39.1	
	1,931									
Total FCX - 100% Basis	13,867									

a. Recoveries are net of estimated mill and smelter losses.

b. Grade not shown because of rounding.

c. Would require additional capital investment, which could be significant, to bring into production.

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## Recoverable Proven and Probable Mineral Reserves

Estimated at December 31, 2017

(continued)

	FCX's Interest	Processing Method	Recoverable Reserves			
			Copper billion lbs.	Gold million ozs.	Moly billion lbs.	Silver million ozs.
North America						
Morenci	72%	Mill	4.8	—	0.14	—
		Crushed leach	2.8	—	—	—
		ROM leach	3.5	—	—	—
Bagdad	100%	Mill	7.2	0.1	0.36	25.3
		ROM leach	0.3	—	—	—
Safford, including Lone Star	100%	Crushed leach	4.8	—	—	—
Sierrita	100%	Mill	9.7	0.1	1.01	49.8
Chino, including Cobre	100%	Mill	1.6	0.1	0.01	2.0
		ROM leach	0.4	—	—	—
Tyrone	100%	ROM leach	—	<sup>a</sup> —	—	—
Henderson	100%	Mill	—	—	0.24	—
Climax	100%	Mill	—	—	0.48	—
			35.1	0.3	2.24	77.1
Recoverable metal in stockpiles <sup>b</sup>			1.7	—	0.02	—
100% operations			36.8	0.3	2.26	77.1
Consolidated <sup>c</sup>			33.5	0.3	2.22	77.1
Net equity interest <sup>d</sup>			33.5	0.3	2.22	77.1
South America						
Cerro Verde	53.56%	Mill	24.3	—	0.61	97.2
		Crushed leach	0.4	—	—	—
		ROM leach	0.1	—	—	—
El Abra	51%	Crushed leach	2.1	—	—	—
		ROM leach	0.1	—	—	—
			27.0	—	0.61	97.2
Recoverable metal in stockpiles <sup>b</sup>			1.1	—	0.01	2.1
100% operations			28.1	—	0.62	99.3
Consolidated <sup>c</sup>			28.1	—	0.62	99.3
Net equity interest <sup>d</sup>			15.0	—	0.34	53.2
Indonesia						
DMLZ	e	Mill	7.7	8.5	—	39.8
Grasberg open pit	e	Mill	0.9	2.6	—	1.8
DOZ	e	Mill	0.9	1.6	—	3.6
Big Gossan	e	Mill	2.6	1.2	—	15.6
Grasberg Block Cave	e	Mill	18.1	14.5	—	62.5
Kucing Liar	e	Mill	8.4	5.4	—	29.3
			38.6	33.8	—	152.6
Recoverable metal in stockpiles <sup>b</sup>			0.2	0.1	—	0.5
100% operations			38.8	33.9	—	153.1
Consolidated <sup>c</sup>			25.1	23.2	—	97.0

Net equity interest <sup>d</sup>	22.8	21.0	—	87.9
Total FCX – 100% basis	103.7	34.2	2.88	329.5
Total FCX – Consolidated basis	86.7	23.5	2.84	273.4
Total FCX – Net equity interest <sup>e</sup>	71.3	21.3	2.56	218.2

a. Pounds not shown because of rounding.

b. Refer to “Mill and Leach Stockpiles” for additional information.

Consolidated reserves represent estimated metal quantities after reduction for joint venture partner interests at the c. Morenci mine in North America and the Grasberg minerals district in Indonesia. Refer to Note 3 for further discussion of our joint ventures.

d. Net equity interest represents estimated consolidated metal quantities further reduced for noncontrolling interest ownership. Refer to Note 3 for further discussion of our ownership in subsidiaries.

e. Our joint venture agreement with Rio Tinto provides that PT-FI will receive cash flow from specified annual amounts of copper, gold and silver through 2022, calculated by reference to its proven and probable reserves as of December 31, 1994, and 60 percent of all remaining cash flow.

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In defining our open-pit reserves, we apply a “variable cutoff grade” strategy. The objective of this strategy is to maximize the net present value of our operations. We use a “break-even cutoff grade” to define the in-situ reserves for our underground ore bodies. The break-even cutoff grade is defined for a metric ton of ore as that equivalent copper grade, once produced and sold, that generates sufficient revenue to cover all operating and administrative costs associated with our production.

Our copper mines may contain other commercially recoverable metals, such as gold, molybdenum and silver. We value all commercially recoverable metals in terms of a copper equivalent percentage to determine a single cutoff grade. Copper equivalent percentage is used to express the relative value of multi-metal ores in terms of one metal. The calculation expresses the relative value of the ore using estimates of contained metal quantities, metals prices as used for reserve determination, recovery rates, treatment charges and royalties. Our molybdenum properties use a molybdenum cutoff grade.

The table below shows the minimum cutoff grade by process for each of our existing ore bodies as of December 31, 2017:

	Copper Equivalent Cutoff Grade (Percent)			Molybdenum Cutoff Grade (Percent)
	Mill	Crushed Leach	ROM Leach	Mill
North America				
Morenci	0.22	0.12	0.03	—
Bagdad	0.12	—	0.06	—
Safford, including Lone Star	—	0.12	—	—
Sierrita	0.17	—	—	—
Chino, including Cobre	0.23	—	0.06	—
Tyrone	—	—	0.06	—
Henderson	—	—	—	0.12
Climax	—	—	—	0.05
South America				
Cerro Verde	0.17	0.14	0.11	—
El Abra	—	0.10	0.06	—
Indonesia				
DMLZ	0.90	—	—	—
Grasberg open pit	0.25	—	—	—
DOZ	1.02	—	—	—
Big Gossan	1.69	—	—	—
Grasberg Block Cave	0.77	—	—	—
Kucing Liar	0.97	—	—	—



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Drill hole spacing data is used by mining professionals, such as geologists and geological engineers, in determining the suitability of data coverage (on a relative basis) in a given deposit type and mining method scenario so as to achieve a given level of confidence in the resource estimate. Drill hole spacing is only one of several criteria necessary to establish resource classification. Drilling programs are typically designed to achieve an optimum sample spacing to support the level of confidence in results that apply to a particular stage of development of a mineral deposit.

The following table sets forth the average drill hole spacing based on average sample distance or drill pattern spacing for proven and probable ore reserves by process type:

	Mining Unit	Average Drill Hole Spacing (in Meters)			
		Proven		Probable	
		Mill	Leach	Mill	Leach
North America					
Morenci	Open Pit	86	86	122	122
Bagdad	Open Pit	86	86	122	122
Safford, including Lone Star	Open Pit	—	86	—	122
Sierrita	Open Pit	73	—	104	—
Chino	Open Pit	43	86	86	122
Cobre	Open Pit	61	61	91	91
Tyrone	Open Pit	—	86	—	86
Henderson	Block Cave	47	—	96	—
Climax	Open Pit	61	—	91	—
South America					
Cerro Verde	Open Pit	55	55	110	110
El Abra	Open Pit	—	75	—	120
Indonesia					
DMLZ	Block Cave	22	—	64	—
Grasberg open pit	Open Pit	26	—	55	—
DOZ	Block Cave	23	—	57	—
Big Gossan	Open Stope	12	—	36	—
Grasberg Block Cave	Block Cave	28	—	68	—
Kucing Liar		39	—	96	—

Block  
Cave

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Production Sequencing

The following chart illustrates our current plans for sequencing and producing our proven and probable reserves at each of our ore bodies and the years in which we currently expect production from each ore body and from related stockpiles. The chart also shows the term of PT-FI's COW. Production volumes are typically lower in the first few years for each ore body as development activities are ongoing and as the mine ramps up to full production and production volumes may also be lower as the mine reaches the end of its life. The sequencing dates shown in the chart below include development activity that results in metal production. The ultimate timing of the start of production from our undeveloped mines is dependent upon a number of factors, including the results of our exploration and development efforts, and may vary from the dates shown below. In addition, we develop our mine plans based on maximizing the net present value from the ore bodies. Significant additional capital expenditures will be required at many of these mines in order to achieve the life-of-mine plans reflected below.

Mill and Leach Stockpiles

Mill and leach stockpiles generally contain lower grade ores that have been extracted from an ore body and are available for copper recovery. Mill stockpiles contain sulfide ores and recovery of metal is through milling, concentrating, smelting and refining or, alternatively, by concentrate leaching. Leach stockpiles contain oxide ores and certain secondary sulfide ores and recovery of metal is through exposure to acidic solutions that dissolve contained copper and deliver it in solution to extraction processing facilities.

Because it is impracticable to determine copper contained in mill and leach stockpiles by physical count, reasonable estimation methods are employed. The quantity of material delivered to mill and leach stockpiles is based on surveyed volumes of mined material and daily production records. Sampling and assaying of blasthole cuttings determine the estimated copper grades of material delivered to mill and leach stockpiles.

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Expected copper recovery rates for mill stockpiles are determined by metallurgical testing. The recoverable copper in mill stockpiles, once entered into the production process, can be produced into copper concentrate almost immediately.

Expected copper recovery rates for leach stockpiles are determined using small-scale laboratory tests, small- to large-scale column testing (which simulates the production process), historical trends and other factors, including mineralogy of the ore and rock type. Total copper recovery in leach stockpiles can vary significantly from a low percentage to more than 90 percent depending on several variables, including processing methodology, processing variables, mineralogy and particle size of the rock. For newly placed material on active stockpiles, as much as 80 percent of total copper recovery may be extracted during the first year, and the remaining copper may be recovered over many years. Processes and recovery rates are monitored regularly, and recovery rate estimates are adjusted periodically as additional information becomes available and as related technology changes.

Following are our stockpiles and the estimated recoverable copper contained within those stockpiles as of December 31, 2017:

	Million Metric Tons	Average Ore Grade (%)	Recovery Rate (%)	Recoverable Copper (billion pounds)	
Mill stockpiles					
Cerro Verde	112	0.29	73.7	0.6	
Grasberg minerals district	26	0.58	62.7	0.2	
	138			0.8	
Leach stockpiles					
Morenci	6,398	0.24	2.0	0.7	
Bagdad	499	0.25	0.4	—	a
Safford, including Lone Star	262	0.45	9.1	0.2	
Sierrita	650	0.15	10.3	0.2	
Miami	498	0.39	1.9	0.1	
Chino, including Cobre	1,728	0.25	4.1	0.4	
Tyrone	1,138	0.28	1.6	0.1	
Cerro Verde	560	0.49	4.1	0.2	
El Abra	698	0.44	4.6	0.3	
	12,431			2.2	
Total FCX - 100% basis				3.0	
Total FCX - Consolidated basis <sup>b</sup>				2.8	
Total FCX - Net equity interest <sup>c</sup>				2.3	

a. Amounts not shown because of rounding.

Consolidated stockpiles represent estimated metal quantities after reduction for joint venture partner interests at the b. Morenci mine in North America and the Grasberg minerals district in Indonesia. Refer to Note 3 for further discussion of our joint ventures.

Net equity interest represents estimated consolidated metal quantities further reduced for noncontrolling interest

c. ownership. Refer to Note 3 for further discussion of our ownership in subsidiaries.

Mineralized Material

We hold various properties containing mineralized material that we believe could be brought into production should market conditions warrant. However, permitting and significant capital expenditures would be required before operations could commence at these properties. Mineralized material is a mineralized body that has been delineated by appropriately spaced drilling and/or underground sampling to support the reported tonnage and average metal grades. Such a deposit cannot qualify as recoverable proven and probable reserves until legal and economic feasibility are confirmed based upon a comprehensive evaluation of development costs, unit costs, grades, recoveries and other material factors. Estimated mineralized materials as presented on the following page were assessed using prices of \$2.20 per pound for copper, \$1,000 per ounce for gold, \$12 per pound for molybdenum and \$20 per ounce for silver.

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## Mineralized Material

Estimated at December 31, 2017

	FCX's Interest	Milling Material					Leaching Material		Total Mineralized Material Million metric tons
		Million metric tons	Copper %	Gold g/t	Moly %	Silver g/t	Million metric tons	Copper %	
North America									
Morenci	72%	260	0.31	—	0.02	—	639	0.24	899
Bagdad	100%	986	0.27	—	<sup>a</sup> 0.02	1.2	7	0.20	993
Safford, including Lone Star	100%	274	0.61	0.10	—	1.9	195	0.34	469
Sierrita	100%	1,597	0.18	—	<sup>a</sup> 0.02	1.1	—	—	1,597
Chino, including Cobre	100%	122	0.52	0.03	0.01	0.5	15	0.30	137
Tyrone	100%	—	—	—	—	—	56	0.32	56
Henderson	100%	104	—	—	0.14	—	—	—	104
Climax	100%	378	—	—	0.16	—	—	—	378
Ajo	100%	438	0.40	0.06	0.01	0.9	—	—	438
Cochise/Bisbee	100%	255	0.46	—	—	—	—	—	255
Sanchez	100%	—	—	—	—	—	144	0.30	144
Tohono	100%	230	0.71	—	—	—	271	0.66	501
Twin Buttes	100%	75	0.61	—	0.04	6.3	46	0.22	121
Christmas	100%	202	0.40	0.05	—	<sup>a</sup> 1.0	—	—	202
South America									
Cerro Verde	53.56%	969	0.36	—	0.02	1.9	6	0.24	975
El Abra	51%	1,898	0.44	0.02	0.01	1.4	202	0.28	2,100
Indonesia									
Grasberg minerals district	54.38% <sup>b</sup>	1,887	0.74	0.65	—	3.7	—	—	1,887
Total FCX - 100% basis		9,675					1,581		11,256 <sup>c</sup>
Total FCX - Consolidated basis <sup>d</sup>		8,847					1,402		10,249
Total FCX - Net equity interest <sup>e</sup>		7,361					1,300		8,661

a. Amounts not shown because of rounding.

b. FCX's interest in the Grasberg minerals district reflects our 60 percent joint venture ownership further reduced by noncontrolling interest ownership.

c. Excludes mineralized material of 72 million metric tons associated with Kisanfu, which in accordance with accounting guidelines is included in assets held for sale (refer to Note 2).

d. Consolidated basis represents estimated mineralized materials after reduction for joint venture partner interests in the Morenci mine in North America and the Grasberg minerals district in Indonesia. Refer to Note 3 for further discussion of our joint ventures.

e. Net equity interest represents estimated consolidated mineralized material further reduced for noncontrolling interest ownership. Refer to Note 3 for further discussion of our ownership in subsidiaries.

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## OIL AND GAS OPERATIONS

As further discussed in Note 2, during 2016 and 2017, we completed the sales of substantially all of our oil and gas properties, including our Deepwater Gulf of Mexico (GOM), onshore California and Haynesville oil and gas properties, and property interests in the GOM Shelf and the Madden area in central Wyoming. As a result, our portfolio of oil and gas assets includes oil and natural gas production onshore in South Louisiana and on the GOM Shelf and oil production offshore California, which had estimated proved developed reserves of 10.1 million barrels of oil equivalents (MMBOE) at December 31, 2017.

## Exploration and Development Activities

During 2017, capital expenditures associated with oil and gas properties totaled \$34 million, primarily associated with changes in capital expenditure accruals. We have no plans to incur significant capital expenditures associated with oil and gas properties in future periods. Capital expenditures for our oil and gas operations totaled \$1.2 billion in 2016 (including \$0.6 billion incurred for GOM and \$0.5 billion for changes in capital expenditure accruals) and \$3.0 billion in 2015 (including \$2.6 billion incurred for GOM).

## Production and Sales Data

For the year 2017, oil and gas sales were not material and totaled 4.6 MMBOE. The following table presents oil and gas production and sales data for the years ended December 31, 2016 and 2015:

	2016	2015
<b>GOM</b>		
Oil (million barrels, or MMBbls)	22.9	22.2
Natural gas (billion cubic feet, or Bcf)	39.0 <sup>a</sup>	35.9 <sup>a</sup>
NGLs (MMBbls)	1.7	2.2
MMBOE	31.1	30.3
<b>California</b>		
Oil (MMBbls)	11.4	12.9
Natural gas (Bcf)	1.8 <sup>b</sup>	2.2 <sup>b</sup>
NGLs (MMBbls)	0.1	0.2
MMBOE	11.8	13.5
<b>Haynesville/Madden/Other</b>		
Oil (MMBbls)	0.1	0.2
Natural gas (Bcf)	24.3	51.6
MMBOE	4.2	8.8
<b>Total U.S. oil and gas operations</b>		
Oil (MMBbls)	34.4	35.3
Natural gas (Bcf)	65.1	89.7
NGLs (MMBbls)	1.8	2.4
MMBOE	47.1	52.6

a. Net of fuel used in operations totaling 3.8 Bcf in 2016 and 1.1 Bcf in 2015.

b. Net of fuel used in operations totaling 0.1 Bcf in 2016 and 0.6 Bcf in 2015.

## Productive Wells

At December 31, 2017, the total number of active producing oil and gas wells was not significant. At December 31, 2016, we had working interests in 120 gross (94 net) active producing oil wells and 640 gross (100 net) active producing natural gas wells. At December 31, 2015, we had working interests in 3,060 gross (2,976 net) active

producing oil wells and 1,759 gross (213 net) active producing natural gas wells.



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## Drilling Activities

There were no exploratory or development wells drilled during 2017 or in progress at December 31, 2017. The following table provides the total number of wells that we drilled during the years ended December 31, 2016 and 2015:

	2016		2015	
	Gross	Net	Gross	Net
Exploratory				
Productive:				
Oil	2	2	2	1
Gas	1	—	31	5
Dry	—	—	4	3
	3	2	37	9
Development				
Productive:				
Oil	8	5	7	3
Gas	1	—	17	2
Dry	—	—	2	2
	9	5	26	7
	12	7	63	16

## Item 1A. Risk Factors.

This report contains “forward-looking statements” within the meaning of United States (U.S.) federal securities laws. Forward-looking statements are all statements other than statements of historical facts, such as projections or expectations relating to ore grades and milling rates; production and sales volumes; unit net cash costs; operating cash flows; anticipated tax refunds resulting from U.S. tax reform; capital expenditures; exploration efforts and results; development and production activities and costs; liquidity; tax rates; the impact of copper, gold and molybdenum price changes; the impact of deferred intercompany profits on earnings; reserve estimates; future dividend payments; and share purchases and sales.

We undertake no obligation to update any forward-looking statements. We caution readers that forward-looking statements are not guarantees of future performance and our actual results may differ materially from those anticipated, projected or assumed in the forward-looking statements. Important factors that can cause our actual results to differ materially from those anticipated in the forward-looking statements include the following:

## Financial risks

Fluctuations in the market prices of copper, gold and molybdenum have caused and may continue to cause significant volatility in our financial performance and in the trading prices of our debt and common stock. Extended declines in the market prices of copper, gold and, to a lesser extent, molybdenum could adversely affect our earnings, cash flows and asset values and, if sustained, may adversely affect our ability to repay debt.

Our financial results will vary with fluctuations in the market prices of the commodities we produce, primarily copper and gold, and to a lesser extent molybdenum. An extended decline in market prices of these commodities could have a material adverse effect on our financial results, the value of our assets and/or our ability to repay our debt and meet our other fixed obligations; and may depress the trading prices of our common stock and of our publicly traded debt securities.

Additionally, if market prices for our primary commodities decline for a sustained period of time, we may have to revise our operating plans, including curtailing production, reducing operating costs and capital expenditures and discontinuing certain exploration and development programs. We may be unable to decrease our costs in an amount sufficient to offset reductions in revenues, in which case we may incur losses, and those losses may be material.

Fluctuations in commodities prices are caused by varied and complex factors beyond our control, including global supply and demand balances and inventory levels; global economic and political conditions; international regulatory,

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trade and tax policies; commodities investment activity and speculation; the price and availability of substitute products; and changes in technology.

Copper prices may be affected by demand from China, which has become the largest consumer of refined copper in the world, and by changes in demand for industrial, commercial and residential products containing copper. Copper prices have fluctuated historically, with London Metal Exchange (LME) spot copper prices ranging from \$1.96 per pound to \$3.27 per pound during the three years ended December 31, 2017. LME spot copper prices averaged \$2.80 per pound in 2017, \$2.21 per pound in 2016 and \$2.49 per pound in 2015. The LME spot copper price was \$3.25 per pound on December 31, 2017, and \$3.22 per pound on January 31, 2018.

Factors affecting gold prices may include the relative strength of the U.S. dollar to other currencies, inflation and interest rate expectations, purchases and sales of gold by governments and central banks, demand from China and India, two of the world's largest consumers of gold, and global demand for jewelry containing gold. The London PM gold price averaged \$1,257 per ounce in 2017, \$1,250 per ounce in 2016 and \$1,160 per ounce in 2015. The London PM gold price was \$1,297 per ounce on December 31, 2017, and \$1,345 per ounce on January 31, 2018.

The Metals Week Molybdenum Dealer Oxide weekly average price averaged \$8.21 per pound in 2017, \$6.47 per pound in 2016 and \$6.66 per pound in 2015. The Metals Week Molybdenum Dealer Oxide weekly average price was \$10.15 per pound on December 31, 2017, and \$11.87 per pound on January 31, 2018.

As further discussed in Notes 4 and 5, non-cash charges for inventory adjustments totaled \$8 million in 2017 and \$36 million in 2016 primarily for molybdenum, and \$338 million in 2015 for copper and molybdenum, and long-lived mining asset impairments totaled \$37 million in 2015. Declines in copper, gold and/or molybdenum prices could result in additional metals inventory adjustments and impairment charges for our long-lived assets. Other events that could result in impairment of our long-lived assets include, but are not limited to, decreases in estimated proven and probable mineral reserves and any event that might have a material adverse effect on mine production costs.

Our debt and other financial commitments may limit our financial and operating flexibility.

At December 31, 2017, our total consolidated debt was \$13.1 billion (see Note 8) and our total consolidated cash was \$4.4 billion. We also have various other financial commitments, including reclamation and environmental obligations, take-or-pay contracts and leases. For further information, refer to the risk factor below relating to mine closure and reclamation regulations and plugging and abandonment obligations related to our remaining oil and gas properties. Our level of indebtedness and other financial commitments could have important consequences to our business, including the following:

• Limiting our flexibility in planning for, or reacting to, changes in the industry in which we operate;

• Increasing our vulnerability to general adverse economic and industry conditions;

• Limiting our ability to fund future working capital, capital expenditures and/or material contingencies, to engage in future development activities, or to otherwise realize the value of our assets and opportunities fully because of the need to dedicate a substantial portion of our cash flows from operations to payments on our debt;

• Requiring us to sell assets to reduce debt; or

• Placing us at a competitive disadvantage compared to our competitors that have less debt and/or fewer financial commitments.

Any failure to comply with the financial and other covenants in our debt agreements may result in an event of default that would allow the creditors to accelerate maturities of the related debt, which in turn may trigger cross-acceleration or cross-default provisions in other debt agreements. Our available cash and liquidity may not be sufficient to fully repay borrowings under our debt instruments that are accelerated upon an event of default.

From August 2015 through November 2016, we sold 326.5 million shares of our common stock under registered at-the-market equity programs, which generated \$3.5 billion in gross proceeds (refer to Note 10). In addition, during 2016, we issued 48.1 million shares of our common stock in connection with the settlement of two drilling rig

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contracts (refer to Note 13) and 27.7 million shares of our common stock in exchange for \$369 million of FCX senior notes (refer to Note 10). Any additional issuance of equity capital to fund operations, reduce debt, improve our financial position or for other purposes, may have a negative impact on our stock price.

As of January 31, 2018, our senior unsecured debt was rated “BB-“ with a stable outlook by Standard & Poor’s (S&P), “BB+” with a negative outlook by Fitch Ratings (Fitch), and “Ba2” with a stable outlook by Moody’s Investors Service (Moody’s). There is no assurance that our credit ratings will not be downgraded in the future.

Mine closure and reclamation regulations impose substantial costs on our operations and include requirements that we provide financial assurance supporting those obligations. We also have plugging and abandonment obligations related to our remaining oil and gas properties, and are required to provide bonds or other forms of financial assurance in connection with those properties. Changes in or the failure to comply with these requirements could have a material adverse effect on us.

We are required by U.S. federal and state laws and regulations to provide financial assurance sufficient to allow a third party to implement approved closure and reclamation plans for our mining properties if we are unable to do so. The U.S. Environmental Protection Agency (EPA) and state agencies may also require financial assurance for investigation and remediation actions that are required under settlements of enforcement actions under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) or similar state laws. Refer to Note 12 for additional information regarding our financial assurance obligations.

With respect to our mining operations, most of our financial assurance obligations are imposed by state laws that vary significantly by jurisdiction, depending on how each state regulates land use and groundwater quality. Although Section 108(b) of CERCLA has required EPA to identify classes of facilities that must establish evidence of financial responsibility since it was adopted in 1980, currently there are no financial assurance requirements for active mining operations under CERCLA. In August 2014, several environmental organizations initiated litigation against EPA to require it to set a schedule for adopting financial assurance regulations under CERCLA governing the hard rock mining industry. EPA and the environmental organizations reached a joint agreement and submitted it to the U.S. Court of Appeals for the District of Columbia Circuit for approval. Notwithstanding industry objections, the court approved the agreement on January 29, 2016, thereby requiring EPA to propose financial assurance regulations for the hard rock mining industry by December 1, 2016, and to provide notice of its final action by December 1, 2017. The proposed regulations were published on January 11, 2017, and the public comment period closed on July 11, 2017. The proposed rules were vigorously opposed by the mining industry, other industry commenters, and states and other federal agencies that have mine closure and reclamation programs. We and others in the industry submitted comments to inform EPA that, if adopted without material modification, the rules would impose financial responsibility obligations on U.S. hard rock mining operations that are unnecessary, duplicative of existing state and other federal requirements, and unreasonable. Our initial calculations also suggested that the financial responsibility amounts would be difficult, if not impossible, for us and others to meet with corporate resources, and would be extremely expensive, if not impossible, to finance with third-party financial instruments such as letters of credit, bonds or insurance. On December 1, 2017, EPA announced that it was withdrawing its proposed rules and would not issue any final financial assurance regulations for the hard rock mining industry. EPA indicated that its decision was based on its interpretation of the statute and analysis of its record developed for this rule making, including comments on federal and state regulatory controls governing the hard rock mining sector, and federal and state financial responsibility requirements. Environmental organizations have announced that they will file suit challenging EPA’s decision after the final decision has been published in the Federal Register. We and others in the industry will continue to participate in the legal process and oppose any re-proposal of rules similar to what EPA proposed on December 1, 2016, as a re-proposal of similar rules would severely harm the international competitiveness of the U.S. hard rock mining industry and would materially and adversely affect our cash flows, results of operations and financial condition.

We are also subject to financial assurance requirements in connection with our remaining oil and gas properties under both state and federal laws, including financial responsibility required under the Oil Pollution Act of 1990 to cover containment and cleanup costs resulting from an oil spill. In 2016, the U.S. Bureau of Ocean Energy Management (BOEM) issued revised requirements for lessees operating in federal waters to secure the cost of plugging, abandoning, decommissioning and/or removing wells, platforms and pipelines at the end of production. The revised requirements eliminate previously provided waivers from requirements to post security. In early 2017, the BOEM announced a delay in the implementation of certain aspects of the rules pending further review. The BOEM has been discussing the rules with industry representatives, and implementation remains on hold at this time. If implemented, the new requirements could require us to post security in the form of bonds or similar

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assurances. The cost for bonds or other forms of assurances can be substantial, and there is no assurance that they can be obtained in all cases.

As of December 31, 2017, our financial assurance obligations totaled \$1.2 billion for closure and reclamation/restoration costs of U.S. mining sites, and \$0.6 billion for plugging and abandonment obligations of our remaining oil and gas properties (refer to Note 12). A substantial portion of our financial assurance obligations are satisfied by FCX and subsidiary guarantees and financial capability demonstrations. Our ability to continue to provide guarantees and financial capability demonstrations depends on state and other regulatory requirements, our financial performance and our financial condition. Other forms of assurance, such as letters of credit and surety bonds, are costly to provide and, depending on our financial condition and market conditions, may be difficult or impossible to obtain. Failure to provide the required financial assurance could result in the closure of the affected properties.

Refer to Notes 1 and 12, for further discussion of our environmental and asset retirement obligations.

Unanticipated litigation or negative developments in pending litigation or with respect to other contingencies could have a material adverse effect on our cash flows, results of operations and financial condition.

We are involved in numerous legal proceedings and subject to other contingencies that have arisen or may arise in the ordinary course of our business or are associated with environmental issues arising from legacy operations conducted over the years by Freeport Minerals Corporation (FMC) and its affiliates, including those described in Note 12 and in Item 3. "Legal Proceedings" involving matters such as remediation, restoration and reclamation of environmental contamination, claims of personal injury or property damage arising from such contamination or from exposure to substances such as lead, arsenic, asbestos, talc and other allegedly toxic substances, disputes over water rights, and disputes with foreign governments or regulatory authorities over royalties, taxes, rights and obligations under concession or other agreements, or other matters. We are also involved periodically in other reviews, inquiries, investigations and other proceedings initiated by or involving government agencies, some of which may result in adverse judgments, settlements, fines, penalties, injunctions or other relief. In addition, from time to time we are involved in disputes over the allocation of environmental remediation obligations at Superfund and other sites. The outcome of litigation is inherently uncertain and adverse developments or outcomes can result in significant monetary damages, penalties, other sanctions or injunctive relief against us, limitations on our property rights, or regulatory interpretations that increase our operating costs. Management does not believe, based on currently available information, that the outcome of any individual legal proceeding will have a material adverse effect on our financial condition, although individual or cumulative outcomes could be material to our operating results for a particular period, depending on the nature and magnitude of the outcome and the operating results for the period.

With respect to the asbestos exposure cases described in Note 12, there has been an increase in the number of cases against FMC and certain affiliates alleging exposure to talc contaminated with asbestos and to talc that is not alleged to be contaminated with asbestos. There have been a number of large jury awards in single plaintiff cases primarily brought by consumers against makers of common consumer products containing talc and alleging serious health risks, including mesothelioma and ovarian cancer allegedly associated with long-term use of such products. Prior affiliates were involved in talc mining, and some of those affiliates have been named as defendants in some of those cases. We have indemnification rights against a successor to those businesses, and the successor has acknowledged those indemnification obligations, subject to certain reservations, and has taken responsibility for all cases we have tendered to it. However, the indemnitor may have limited financial resources and limited amounts of insurance available to meet those obligations.

International risks

Our international operations are subject to political, social and geographic risks of doing business in countries outside the U.S.

We are a U.S.-based mining company with substantial assets located outside of the U.S. We conduct international mining operations in Indonesia, Peru and Chile. Accordingly, in addition to the usual risks associated with conducting business in countries outside the U.S., our business may be adversely affected by political, economic and social uncertainties in each of these countries.



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Risks of conducting business in countries outside of the U.S. include:

• Renegotiation, cancellation or forced modification of existing contracts;

• Expropriation or nationalization of property;

• Changes in the host country's laws, regulations and policies, including those relating to labor, taxation, royalties, divestment, imports, exports, trade regulations, currency and environmental matters, which because of rising "resource nationalism" in countries around the world, may impose increasingly onerous requirements on foreign operations and investment;

• Political instability, bribery, extortion, corruption, civil strife, acts of war, guerrilla activities, insurrection and terrorism;

• Changes in the aspirations and expectations of local communities in which we operate with respect to our contributions to employee health and safety, infrastructure and community development and other factors that may affect our social license to operate, all of which lead to increased costs;

• Changes in U.S. trade, tax, immigration or other policies that may harm relations with foreign countries or result in retaliatory policies;

• Foreign exchange controls and movements in foreign currency exchange rates; and

• The risk of having to submit to the jurisdiction of an international court or arbitration panel or having to enforce the judgment of an international court or arbitration panel against a sovereign nation within its own territory.

Our insurance does not cover most losses caused by the above described risks. Accordingly, our exploration, development and production activities outside of the U.S. may be substantially affected by many unpredictable factors beyond our control, some of which could have a material adverse effect on our cash flows, results of operations and financial condition.

Our international operations must comply with the U.S. Foreign Corrupt Practices Act and similar anti-corruption and anti-bribery laws of the other jurisdictions in which we operate. There has been a substantial increase in the global enforcement of these laws in recent years. Any violation of those laws could result in significant criminal or civil fines and penalties, litigation, and loss of operating licenses or permits, and may damage our reputation, which could have a material adverse effect on our cash flows, results of operations and financial condition.

We are involved in several significant tax proceedings and other tax disputes with the Indonesian and Peruvian tax authorities (refer to Note 12 for further discussion of these matters). Other risks specific to certain countries in which we operate are discussed in more detail below.

Because our Grasberg mining operation in Indonesia is a significant operating asset, our business may continue to be adversely affected by political, economic and social uncertainties in Indonesia.

Our mining operations in Indonesia are conducted by our subsidiary PT Freeport Indonesia (PT-FI) pursuant to a Contract of Work (COW) with the Indonesian government. Maintaining a good working relationship with the Indonesian government is important to us because of the significance of our Indonesia operations to our business, and because our mining operations there are among Indonesia's most significant business enterprises. Partially because of their significance to Indonesia's economy, the environmentally sensitive area in which they are located, and the

number of people employed, our Indonesia operations have been the subject of political debates and of criticism in the Indonesian press, and have been the target of protests and occasional violence. For further discussion of the history of PT-FI's COW, refer to Note 13.

The initial term of PT-FI's COW expires in 2021, but the COW explicitly provides that it can be extended for two 10-year periods subject to Indonesian government approval, which cannot be withheld or delayed unreasonably. PT-FI has been engaged in discussions with officials of the Indonesian government since 2012 regarding various provisions of its COW, including extending its term. Notwithstanding provisions in the COW prohibiting it from doing so, the Indonesian government has sought to modify existing mining contracts, including PT-FI's COW, to address

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provisions contained in the mining law enacted in 2009 and mining regulations adopted thereunder, including provisions that conflict with the COW, such as the size of contract concessions, government revenues, domestic processing of minerals, divestment, provision of local goods and services, conversion from a COW to a licensing framework for extension periods, and a requirement that extensions may be applied for only within two years prior to a COW's expiration.

Regulations published pursuant to the 2009 mining law in January 2014 imposed, among other things, a progressive export duty on copper concentrate and restricted exports of copper concentrate and anode slimes (a by-product of the copper refining process containing metals, including gold) after January 12, 2017. Despite PT-FI's rights under its COW to export concentrate without the payment of duties, PT-FI was unable to obtain administrative approval for exports and operated at approximately half of its capacity from mid-January 2014 through July 2014.

In July 2014, PT-FI entered into a Memorandum of Understanding (MOU) with the Indonesian government, in which, subject to concluding an agreement to extend PT-FI's operations beyond 2021 on acceptable terms, PT-FI agreed to construct new smelter capacity in Indonesia and to divest an additional 20.64 percent interest at fair value. Under the MOU, PT-FI provided a \$115 million assurance bond to support its commitment for smelter development, agreed to pay higher royalty rates and agreed to pay export duties until certain smelter development milestones were met. The MOU also anticipated an amendment of the COW within six months to address other matters. In January 2015, the MOU was extended to July 25, 2015, and it expired on that date. The Indonesian government has continued to impose the increased royalty rates, export duties and smelter assurance bond.

In October 2015, the Indonesian government provided a letter of assurance to PT-FI indicating that it would revise regulations allowing it to approve the extension of PT-FI's operations beyond 2021, and provide the same rights and the same level of legal and fiscal certainty provided under the current COW.

In January and February 2017, the Indonesian government issued new regulations pursuant to the 2009 mining law to address exports of unrefined metals, including copper concentrate and anode slimes, and other matters related to the mining sector. The new regulations permit the continuation of copper concentrate exports for a five-year period through January 2022, subject to various conditions, including conversion from a contract of work to a special mining license (known as an IUPK, which does not provide the same level of fiscal and legal protections as PT-FI's COW, which remains in effect), a commitment to the completion of smelter construction in five years and payment of export duties to be determined by the Ministry of Finance. In addition, the new regulations enable application for extension of mining rights five years before expiration of the IUPK and require foreign IUPK holders to divest 51 percent to Indonesian interests no later than the tenth year of production. Export licenses would be valid for one-year periods, subject to review every six months, depending on smelter construction progress.

Following the issuance of the January and February 2017 regulations and discussions with the Indonesian government, PT-FI advised the government that it was prepared to convert its COW to an IUPK, subject to extension of its long-term mining rights to 2041 and obtaining an investment stability agreement providing contractual rights with the same level of legal and fiscal certainty provided under its COW, and provided that the COW would remain in effect until it is replaced by a mutually satisfactory alternative. PT-FI also committed to commence construction of a new smelter during a five-year time frame after approval of the extension of its long-term mining rights.

On January 12, 2017, PT-FI suspended exports in response to Indonesian regulations in effect at the time. In addition, as a result of labor disturbances and a delay in the renewal of its export license for anode slimes, PT Smelting's (PT-FI's 25-percent-owned copper smelter and refinery located in Gresik, Indonesia) operations were shut down from mid-January 2017 until early March 2017. On February 10, 2017, PT-FI was forced to suspend production as a result of limited storage capacity at PT-FI and PT Smelting. On April 21, 2017, the Indonesian government issued a permit to PT-FI that allowed exports to resume for a six-month period, and PT-FI commenced export shipments.

In mid-February 2017, pursuant to the COW's dispute resolution provisions, PT-FI provided formal notice to the Indonesian government of an impending dispute listing the government's breaches and violations of the COW as described in the risk factor below "PT-FI's COW may be subject to termination if we do not comply with our contractual obligations, and if a dispute arises, we may have to submit to the jurisdiction of an international arbitration panel."

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As a result of the 2017 regulatory restrictions and uncertainties regarding long-term investment stability, PT-FI took actions to adjust its cost structure, slow investments in its underground development projects and new smelter, and place certain of its workforce on furlough programs.

In late March 2017, the Indonesian government amended the regulations to enable PT-FI to retain its COW until replaced with an IUPK accompanied by an investment stability agreement, and to grant PT-FI a temporary IUPK. In April 2017, PT-FI entered into a MOU with the Indonesian government confirming that the COW would continue to be valid and honored until replaced by a mutually agreed IUPK and investment stability agreement. In the MOU, PT-FI agreed to continue to pay a 5.0 percent export duty during this period. Subsequently, the Customs Office of the Minister of Finance refused to recognize the 5.0 percent export duty under the MOU and imposed a 7.5 percent export duty under the Ministry of Finance regulations. Since resuming exports on April 21, 2017, PT-FI has paid the 7.5 percent export duty under protest while the matter is pending in Indonesia Tax Court proceedings.

Following a framework understanding reached in August 2017, the parties have engaged in negotiation and documentation of a special mining license and accompanying documentation for assurances on legal and fiscal terms to replace the COW while providing PT-FI with long-term mining rights through 2041. In addition, the IUPK would provide that PT-FI would construct a new smelter in Indonesia within five years of reaching a definitive agreement and include agreement for the divestment of 51 percent of the project area interests to Indonesian participants at fair market value. Execution of a definitive agreement will require approval by our Board of Directors (the Board) and our joint venture partner, Rio Tinto plc (Rio Tinto), as well as the modification or revocation of current regulations and the implementation of new regulations by the Indonesian government.

In late 2017, the Indonesian government (including the regional government of Papua Province and Mimika Regency) and PT Indonesia Asahan Aluminium (Inalum), a state-owned enterprise, which will lead the government's consortium of investors, agreed to form a special purpose company to acquire Grasberg project area interests. Inalum is wholly owned by the Indonesian government and currently holds 9.36 percent of PT-FI's outstanding common stock. We are engaged in discussions with Inalum and Rio Tinto regarding potential arrangements that would result in the Inalum consortium acquiring interests that would meet the Indonesian government's 51 percent ownership objective in a manner satisfactory to all parties, and in a structure that would provide for continuity of our management of PT-FI's operations and governance of the business. The parties continue to negotiate documentation on a comprehensive agreement for PT-FI's extended operations and to reach agreement on timing, process and governance matters relating to the divestment. The parties have a mutual objective of completing negotiations and the required documentation during the first half of 2018.

In December 2017, PT-FI was granted an extension of its temporary IUPK through June 30, 2018, to enable exports to continue while negotiations on a definitive agreement proceed. In February 2018, PT-FI received an extension of its export license through February 15, 2019. On February 15, 2018, PT Smelting submitted an application to renew its anode slimes export license, which expires March 1, 2018.

Until a definitive agreement is reached, PT-FI has reserved all rights under its COW, including dispute resolution procedures. We cannot predict whether PT-FI will be successful in reaching a satisfactory agreement on the terms of its long-term mining rights. If PT-FI is unable to reach a definitive agreement with the Indonesian government on its long-term rights, we intend to reduce or defer investments significantly in underground development projects, which would have a material adverse effect on our future production, cash flow, results of operations and financial position, and could result in asset impairments, inventory write downs, difficulty in meeting covenants under our credit facilities, and a significant reduction in our reported mineral reserves.

In 2018, Indonesia will hold elections for legislators at the provincial and district levels, including the Province of Papua and Mimika Regency, and national legislative elections will be held in 2019. The presidential election will be

held in April 2019, with a run-off in August 2019, if required. Political considerations leading up to these elections could impact our progress in reaching a definitive agreement with the Indonesian government on our long-term rights and the outcome of these elections could affect the country's policies pertaining to foreign investment.

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PT-FI's COW may be subject to termination if we do not comply with our contractual obligations, and if a dispute arises, we may have to submit to the jurisdiction of an international arbitration panel.

PT-FI's COW was entered into under Indonesia's 1967 Foreign Capital Investment Law, which provides guarantees of remittance rights and protection against nationalization. The COW may be subject to termination by the Indonesian government if we do not satisfy our contractual obligations, which include the payment of royalties and taxes to the government and the satisfaction of certain mining, environmental, safety and health requirements.

Recently adopted Indonesian laws and regulations conflict with the mining rights established under the COW. Although the COW grants to PT-FI the unencumbered right to operate in accordance with the COW, government agencies have sought and continue to seek to impose additional restrictions on PT-FI that could affect exploration and operating requirements. For further discussion, refer to the above risk factor "Because our Grasberg mining operation in Indonesia is a significant operating asset, our business may continue to be adversely affected by political, economic and social uncertainties in Indonesia."

PT-FI's COW requires that disputes with the Indonesian government be submitted to international arbitration. In mid-February 2017, pursuant to the COW's formal dispute resolution provisions, PT-FI provided formal notice to the Indonesian government of an impending dispute listing the government's breaches and violations of the COW, including, but not limited to, the following:

• Restrictions on PT-FI's basic right to export mining products in violation of the COW;

• Imposition of export duties other than those taxes and other charges expressly provided for in the COW;

• Imposition of surface water taxes in excess of the restrictions imposed by the COW (refer to Note 12 for further discussion of these assessments);

• Requirement for PT-FI to build a smelter, while such requirements are not contained in the COW;

• Unreasonable withholding and delay in granting approval of two successive ten-year extensions of the term of the COW; and

• Imposition of divestment requirements that are not provided for in the COW.

If the dispute is not resolved, PT-FI may commence arbitration under the United Nations Commission on International Trade Law Arbitration Rules to enforce all provisions of the COW and seek damages, specifically in respect of the issuance of the January 11, 2017, regulations which are not in accordance with honoring the contractual commitments of the Indonesian government and PT-FI under the COW. The arbitration proceedings would take place in Jakarta, Indonesia, and for limited purposes, would be overseen by the Indonesian courts under the Indonesian Arbitration Act. The international arbitration process is complex and could take considerable time to complete, and there is no assurance that we will prevail. If we prevail, we will face the additional risk of having to enforce the judgment of an international arbitration panel against Indonesia within its own territory. Additionally, our operations may be materially and adversely affected while resolution of a dispute is pending.

At times, certain government officials and others in Indonesia have questioned the validity of contracts entered into by the Indonesian government prior to May 1998 (i.e., during the Suharto regime, which lasted over 30 years), including PT-FI's COW, which was signed in December 1991. We cannot provide assurance that the validity of, or our compliance with, the COW will not be challenged for political or other reasons.

We will not mine all of our ore reserves in Indonesia before the initial term of our COW expires.

Our proven and probable ore reserves in Indonesia reflect estimates of minerals that can be recovered through the end of 2041, and our current mine plan and planned operations are based on the assumption that we will receive the two 10-year extensions. As a result, we will not mine all of these ore reserves during the initial term of the current COW. Prior to the end of 2021, we expect to mine 12 percent of aggregate proven and probable recoverable ore at December 31, 2017, representing 18 percent of PT-FI's share of recoverable copper reserves and 29 percent of its share of recoverable gold reserves. There can be no assurance that the Indonesian government will approve our COW extensions. For further discussion, refer to the above risk factors "Because our



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Grasberg mining operation in Indonesia is a significant operating asset, our business may continue to be adversely affected by political, economic and social uncertainties in Indonesia” and “PT-FI’s COW may be subject to termination if we do not comply with our contractual obligations, and if a dispute arises, we may have to submit to the jurisdiction of an international arbitration panel.”

### Operational risks

Our mining operations are subject to operational risks that could adversely affect our business.

Our mines are very large in scale and, by their nature are subject to significant operational risks, some of which are outside of our control, and many of which are not covered fully, or in some cases even partially, by insurance. These operational risks, which could materially and adversely affect our business, operating results and cash flow, include earthquakes, rainstorms, floods, and other natural disasters; equipment failures; accidents; wall failures and rock slides in our open-pit mines, and structural collapses of our underground mines or tailings impoundments; and lower than expected ore grades or recovery rates.

The waste rock (including overburden) and tailings produced in our mining operations represent our largest volume of waste material. Managing the volume of waste rock and tailings presents significant environmental, safety and engineering challenges and risks. We maintain large leach pads and tailings impoundments containing viscous material, which are effectively large dams that must be engineered, constructed and monitored to assure structural stability and avoid leakages or structural collapse. Our tailings impoundments in arid areas must have effective programs to suppress fugitive dust emissions, and we must effectively monitor and treat acid rock drainage at all of our operations. In Indonesia, we use a river transport system for tailings management, which presents other risks, as discussed below.

The failure of tailings and other impoundments at any of our mining operations could cause severe property and environmental damage and loss of life, and we apply significant financial resources and both internal and external technical resources to the effective, safe management of all those facilities. The importance of careful design, management and monitoring of large impoundments was emphasized in recent years by large scale tailings dam failures at unaffiliated mines, which caused extensive property and environmental damage and resulted in the loss of life. Our tailing stewardship program, which involves designated Engineers of Record and periodic oversight by external Tailing Review Boards at numerous operations, complies with the Tailings Governance Framework adopted in December 2016 by International Council on Mining and Metals. We continue to augment our existing practices in an effort to reduce the risk of catastrophic failure of tailings storage facilities.

Labor unrest, violence, activism and civil and religious strife could disrupt our operations and may adversely affect our business, financial condition, results of operations and prospects.

As of December 31, 2017, approximately 40 percent of our global labor force was covered by collective bargaining agreements and approximately 15 percent of our global labor force was covered by agreements that have expired and are currently being negotiated or will expire during 2018.

Labor agreements are negotiated on a periodic basis, and may not be renewed on reasonably satisfactory terms to us or at all. If we do not successfully negotiate new collective bargaining agreements with our union workers, we may incur prolonged strikes and other work stoppages at our mining operations, which could adversely affect our financial condition and results of operations. Additionally, if we enter into a new labor agreement with any union that significantly increases our labor costs relative to our competitors, our ability to compete may be materially and adversely affected. Refer to Items 1. and 2., “Business and Properties,” for additional information regarding labor matters, and expiration dates of such agreements.

We could also experience labor disruptions such as work stoppages, work slowdowns, union organizing campaigns, strikes, or lockouts that could adversely affect our operations. For example, during third-quarter 2016, PT-FI experienced labor productivity issues and a 10-day work stoppage that began in late September 2016. These labor productivity issues continued during fourth-quarter 2016 and the first half of 2017. Significant reductions in productivity or protracted work stoppages at one or more of our operations could significantly reduce our production and sales volumes, which could adversely affect our cash flow, results of operations and financial condition.

Indonesia has long faced separatist movements and civil and religious strife in a number of provinces. Several separatist groups have sought increased political independence for the province of Papua, where our Grasberg

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minerals district is located. In Papua, there have been sporadic attacks on civilians by separatists and sporadic but highly publicized conflicts between separatists and the Indonesian military and police. In addition, illegal miners have periodically clashed with police who have attempted for years to move them away from our facilities. Social, economic and political instability in Papua could materially and adversely affect us if it results in damage to our property or interruption of our Indonesia operations.

In 2009, a series of shooting incidents occurred within the PT-FI project area, including along the road leading to our mining and milling operations. The shooting incidents continued on a sporadic basis through January 11, 2015. During this time, there were 20 fatalities and 59 injuries to our employees, contractor employees, government security personnel and civilians. The next shooting incident occurred in August 2017, and a series of shooting incidents has continued on a sporadic basis through February 16, 2018. From August 2017 through February 16, 2018, there have been 24 shooting incidents within the PT-FI project area and five shooting incidents in nearby areas, which resulted in 16 injuries to PT-FI's workforce and one civilian injury. Additionally, during law enforcement actions, government security personnel incurred seven injuries and two fatalities. The safety of our workforce is a critical concern, and PT-FI continues to work with the Indonesian government to address security issues. The investigation of these incidents is ongoing. We also continue to limit the use of the road leading to our mining and milling operations to secured convoys, including transport of personnel by armored vehicles in designated areas.

We cannot predict whether additional incidents will occur that could disrupt or suspend our Indonesian operations. If other disruptive incidents occur, they could adversely affect our results of operations and financial condition in ways that we cannot predict at this time.

Our mining operations depend on the availability of secure water supplies.

Our mining operations require physical availability and secure legal rights to significant quantities of water for mining and ore processing activities, and related support facilities. Most of our North America and South America mining operations are in areas where competition for water supplies is significant. Continuous production at our mines is dependent on many factors, including our ability to maintain our water rights and claims, and the continuing physical availability of the water supplies.

In Arizona, where our operations use both surface and ground water, we are a participant in an active general stream adjudication in which the Arizona courts have been attempting, for over 40 years, to quantify and prioritize surface water claims for the Gila River, one of the state's largest river systems, which primarily affects our Morenci, Safford and Sierrita mines. The adjudication is addressing the state law claims of thousands of competing users, including us, as well as significant federal water claims that are potentially adverse to the state law claims of both surface water and groundwater users. Groundwater is treated differently from surface water under Arizona law, which historically allowed landowners to pump subsurface water, subject only to the requirement of putting it to "reasonable use." However, court decisions in the adjudication have concluded that underground water is often hydrologically connected to surface water so that it actually is surface water and is therefore subject to the Arizona doctrine of prior appropriation, as a result of which it would be subject to the adjudication and potentially unavailable to groundwater pumpers in the absence of valid surface water claims, which historic groundwater pumpers typically do not have. Any re-characterization of groundwater as surface water could affect the ability of consumers, farmers, ranchers, municipalities, and industrial users like us to continue to access water supplies that have been relied on for decades. Because we are a user of both groundwater and surface water in Arizona, we are an active participant in the adjudication proceeding.

Water for our Cerro Verde operation in Peru comes from renewable sources through a series of storage reservoirs on the Rio Chili watershed that collects water primarily from seasonal precipitation. As a result of occasional drought conditions, temporary supply shortages are possible that could affect our Cerro Verde operations. In January 2016, the

Peruvian government declared a temporary state of emergency with respect to the water supply in the Rio Chili Basin because of drought conditions. As a result, the Cerro Verde water rights from the Rio Chili were temporarily decreased during February 2016.

Water for our El Abra mining operation in Chile comes from the continued pumping of groundwater from the Salar de Ascotán aquifer. In 2010, El Abra obtained regulatory approval for the continued pumping of groundwater from the Salar de Ascotán aquifer for its sulfide processing plant, which began operations in 2011. The agreement to pump from this aquifer is subject to continued monitoring of the aquifer level to ensure that environmentally sensitive areas are not impacted by our pumping. If impact occurs, we would have to reduce pumping to restore water levels, which could have an adverse effect on production from El Abra.

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Although we typically have sufficient water for our Indonesian operations, lower rainfall could affect our water supply availability from time to time.

Although each of our mining operations currently has access to sufficient water supplies to support current operational demands, as discussed above some supplies are subject to adjudication proceedings, the outcome of which we cannot predict, and the availability of additional supplies that may be required for potential future expansions is uncertain. While we are taking actions to acquire additional back-up water supplies, such supplies may not be available at acceptable cost, or at all, so that the loss of a water right or currently available water supply could force us to curtail operations or force premature closures, thereby increasing and/or accelerating costs or foregoing profitable operations.

In addition to the usual risks encountered in the mining industry, our Indonesia mining operations involve additional risks because they are located in very remote areas and on unusually difficult terrain.

The Grasberg minerals district is located in steep mountainous terrain in a remote area of Indonesia. These conditions have required us to overcome special engineering difficulties and develop extensive infrastructure facilities. In addition, the area receives considerable rainfall, which has led to periodic floods and mudslides. The mine site is also in an active seismic area and has experienced earth tremors from time to time. Our insurance may not sufficiently cover an unexpected natural or operating disaster.

Underground mining operations can be particularly dangerous, and in May 2013, a tragic accident, which resulted in 28 fatalities and 10 injuries, occurred at PT-FI when the rock structure above the underground ceiling of a training facility collapsed. PT-FI temporarily suspended mining and processing activities at the Grasberg complex to conduct inspections and resumed open-pit mining and concentrating activities on June 24, 2013, and underground operations on July 9, 2013. No assurance can be given that similar events will not occur in the future.

We must continually replace reserves depleted by production, but our exploration activities may not result in additional discoveries.

Our existing mineral reserves will be depleted over time by production from our operations. Because our profits are primarily derived from our mining operations, our ability to replenish our mineral reserves is essential to our long-term success. Our exploration projects involve many risks, require substantial expenditures and may not result in the discovery of additional deposits that can be produced profitably. We may not be able to discover, enhance, develop or acquire reserves in sufficient quantities to maintain or grow our current reserve levels, which could negatively affect our cash flow, results of operations and financial condition.

Development projects are inherently risky and may require more capital than anticipated, which could adversely affect our business.

Consolidated capital expenditures are expected to approximate \$2.1 billion for 2018, including \$1.2 billion for major projects primarily associated with underground development activities in the Grasberg minerals district and development of the Lone Star oxide project. Refer to the risk factor "Because our Grasberg mining operation in Indonesia is a significant operating asset, our business may continue to be adversely affected by political, economic and social uncertainties in Indonesia" for further discussion of regulatory matters in Indonesia that may impact future investments in PT-FI's underground development projects.

There are many risks and uncertainties inherent in all development projects. The economic feasibility of development projects is based on many factors, including the accuracy of estimated reserves, estimated capital and operating costs, and estimated future prices of the relevant commodity. The capital expenditures and time required to develop new

mines or other projects are considerable, and changes in costs or timing can adversely affect project economics.

New development projects have no operating history upon which to base estimates of future cash flow. The actual costs, production rates and economic returns of our development projects may differ materially from our estimates, which may have a material adverse impact on our cash flows, results of operations and financial condition.

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Our operations are subject to extensive regulations, some of which require permits and other approvals. These regulations increase our costs and in some circumstances may delay or suspend our operations.

Our operations are subject to extensive and complex laws and regulations that are subject to change and to changing interpretation by governmental agencies and other bodies vested with broad supervisory authority. As a natural resource company, compliance with environmental legal requirements is an integral and costly part of our business. For additional information, see “Environmental risks” below. We are also subject to extensive regulation of worker health and safety, including the requirements of the U.S. Occupational Safety and Health Act and similar laws of other jurisdictions. In the U.S., the operation of our mines is subject to regulation by the U.S. Mine Safety and Health Administration (MSHA) under the Federal Mine Safety and Health Act of 1977. MSHA inspects our mines on a regular basis and issues citations and orders when it believes a violation has occurred. If such inspections result in an alleged violation, we may be subject to fines and penalties and, in instances of alleged significant violations, our mining operations could be subject to temporary or extended closures.

Many other governmental bodies regulate other aspects of our operations, and our failure to comply with these legal requirements can result in substantial penalties. In addition, new laws and regulations or changes to existing laws and regulations and new interpretations of existing laws and regulations by courts or regulatory authorities occur regularly, but are difficult to predict. Any such variations could have a material adverse effect on our cash flow, results of operations and financial condition.

Our business may be adversely affected by information technology disruptions.

Cybersecurity incidents are increasing in frequency, evolving in nature and include, but are not limited to, installation of malicious software, unauthorized access to data and other electronic security breaches that could lead to disruptions in systems, unauthorized release of confidential or otherwise protected information and the corruption of data. We have experienced cybersecurity incidents in the past and may experience them in the future. We believe we have implemented appropriate measures to mitigate potential risks. However, given the unpredictability of the timing, nature and scope of information technology disruptions, we could be subject to manipulation or improper use of our systems and networks or financial losses from remedial actions, any of which could have a material adverse effect on our cash flow, results of operations and financial condition.

### Environmental risks

Our operations are subject to complex, evolving and increasingly stringent environmental laws and regulations. Compliance with environmental regulatory requirements involves significant costs and may constrain existing operations or expansion opportunities.

Our operations, both in the U.S. and internationally, are subject to extensive environmental laws and regulations governing the generation, storage, treatment, transportation and disposal of hazardous substances; solid waste disposal; air emissions; wastewater discharges; remediation, restoration and reclamation of environmental contamination, including mine closures and reclamation; well plug and abandonment requirements; protection of endangered and protected species and designation of critical habitats; and other related matters. In addition, we must obtain regulatory permits and approvals to start, continue and expand operations.

Our Miami, Arizona, smelter processes approximately half of the aggregate copper concentrate produced by our North America copper mines. EPA regulations required us to invest approximately \$230 million in new pollution control equipment to reduce sulfur dioxide (SO<sub>2</sub>) to meet both regional haze requirements and to allow the state of Arizona to demonstrate compliance with EPA’s SO<sub>2</sub> ambient air quality standards. The new SO<sub>2</sub> pollution control equipment was operational as of the January 1, 2018, deadline imposed by EPA. We also obtained regulatory approvals to increase

the smelter's annual throughput to one million tons of copper concentrate, which has the additional benefit of increasing the production of sulphuric acid for use in our copper leach operations.

Laws such as CERCLA and similar state laws may expose us to joint and several liability for environmental damages caused by our operations, or by previous owners or operators of properties we acquired or are currently operating or at sites where we sent materials for processing, recycling or disposal. As discussed in more detail in the next risk factor, we have substantial obligations for environmental remediation on mining properties previously owned or operated by FMC and certain of its affiliates. Noncompliance with these laws and regulations could result in material penalties or other liabilities. In addition, compliance with these laws may from time to time result in delays in or changes to our development or expansion plans. Compliance with these laws and regulations imposes



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substantial costs, which we expect will continue to increase over time because of increased regulatory oversight, adoption of increasingly stringent environmental standards, as well as other factors.

New or revised environmental regulatory requirements are frequently proposed, many of which result in substantially increased costs for our business, including those regarding financial assurance in the financial risk factor above. In addition, in 2015, EPA promulgated rules that could reclassify certain mineral processing materials as “hazardous waste” under the federal Resource Conservation and Recovery Act (RCRA) and subject the industry to significant new and costly waste management requirements. These rules were challenged by multiple parties in court. In a decision issued in 2017, the court agreed in significant part with the challenges raised by the industry parties, and vacated key parts of the rule governing when hazardous process materials are considered “discarded” and, therefore, subject to regulation as solid waste under RCRA and EPA regulatory pronouncements.

EPA has also adopted rules that bring remote “tributaries” into the regulatory definition of “waters of the United States” that are protected by the Clean Water Act, thereby imposing significant additional restrictions on land uses in remote areas with only tenuous connections to active waterways. These rules, adopted in 2015, were challenged by multiple states and industry parties. EPA has moved forward to rescind these rules even as litigation challenging them is ongoing. On February 6, 2018, EPA published a final notice delaying the effective date of these rules to February 2020, which will allow it time to reconsider the definition of “waters of the United States.” This final notice has been challenged by states and environmental groups. In the meantime, EPA intends to administer the regulations in place prior to the 2015 rules and has asked for input on how it should define the scope of the Clean Water Act in future rulemaking.

Regulations have been considered at various governmental levels to increase federal financial responsibility requirements both for mine closure and reclamation and for oil and gas decommissioning. Adoption of these or similar new environmental regulations or more stringent application of existing regulations may materially increase our costs, threaten certain operating activities and constrain our expansion opportunities.

In February 2016, the Department of the Interior’s Fish & Wildlife Service (FWS) adopted final rules that broaden the regulatory definitions of “critical habitat” and “destruction or adverse modification,” both of which are integral to the FWS’s implementation of the Endangered Species Act, which protects federally-listed endangered and threatened species. The new rules increase FWS’s discretion to limit uses of land and water courses that may become suitable habitat for listed species in the future, or that are occasionally used by protected species. The new rules may limit the ability of landowners, including us, to obtain federal permits or authorizations needed for expansion of our operations, and may also affect our ability to obtain, retain or deliver water to some operations. In November 2016, the new rules were challenged in court by a coalition of states. In 2017, the Department of Interior indicated that it intends to reconsider these rules as part of its plans to modernize the implementation of the Endangered Species Act. Also in 2017, the FWS withdrew certain proposed designations of critical habitat affecting our properties.

We incurred environmental capital expenditures and other environmental costs (including our joint venture partners’ shares) to comply with applicable environmental laws and regulations that affect our operations totaling \$0.5 billion in 2017 and \$0.4 billion in each of 2016 and 2015. For 2018, we expect to incur approximately \$0.5 billion of aggregate environmental capital expenditures and other environmental costs. The timing and amounts of estimated payments could change as a result of changes in regulatory requirements, changes in scope and costs of reclamation and plug and abandonment activities, the settlement of environmental matters and the rate at which actual spending occurs on continuing matters.

We incur significant costs for remediating environmental conditions on properties that have not been operated in many years.

FMC and its subsidiaries, and many of their affiliates and predecessor companies, have been involved in exploration, mining, milling, smelting and manufacturing in the U.S. for more than a century. Activities that occurred in the late 19th century and the 20th century prior to the advent of modern environmental laws were not subject to environmental regulation and were conducted before American industrial companies fully understood the long-term effects of their operations on the surrounding environment.

With the passage of CERCLA in 1980, companies like FMC became legally responsible for remediating hazardous substances released into the environment from properties owned or operated by them as well as properties where they arranged for disposal of such substances, irrespective of when the release to the environment occurred or who

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caused it. That liability is often asserted on a joint and several basis with other prior and subsequent owners, operators and arrangers, meaning that each owner or operator of the property is, and each arranger may be, held fully responsible for the remediation, although in many cases some or all of the other responsible parties no longer exist, do not have the financial ability to respond or cannot be found. As a result, because of our acquisition of FMC in 2007, many of the subsidiary companies we now own are potentially responsible for a wide variety of environmental remediation projects throughout the U.S., and we expect to spend substantial sums annually for many years to address those remediation issues. We are also subject to claims where the release of hazardous substances is alleged to have damaged natural resources. At December 31, 2017, we had more than 100 active remediation projects in 26 U.S. states. In addition, FMC and certain affiliates and predecessor companies were parties to agreements relating to the transfer of businesses or properties that contained indemnification provisions relating to environmental matters, and from time to time these provisions become the source of claims against us.

At December 31, 2017, we had \$1.4 billion recorded in our consolidated balance sheet for environmental obligations attributable to CERCLA or analogous state programs and for estimated future costs associated with environmental matters at closed facilities or closed portions of operating facilities. Our environmental obligation estimates are primarily based upon:

- Our knowledge and beliefs about complex scientific and historical facts and circumstances that in many cases occurred many decades ago;

- Our beliefs and assumptions regarding the nature, extent and duration of remediation activities that we will be required to undertake and the estimated costs of those remediation activities, which are subject to varying interpretations; and

- Our beliefs regarding the requirements that are imposed on us by existing laws and regulations and, in some cases, the clarification of uncertain regulatory requirements that could materially affect our environmental obligation estimates.

Significant adjustments to these estimates are likely to occur in the future as additional information becomes available. The actual environmental costs may exceed our current and future accruals for these costs, and any such changes could be material.

In addition, remediation standards imposed by EPA and state environmental agencies have generally become more stringent over time and may become even more stringent in the future. Imposition of more stringent remediation standards, particularly for arsenic and lead in soils, poses a risk that additional remediation work could be required at our active remediation sites and at sites that we have already remediated to the satisfaction of the responsible governmental agencies, and may increase the risk of toxic tort litigation.

Refer to Note 12 for further discussion of our environmental obligations.

Our Indonesia mining operations create difficult and costly environmental challenges, and future changes in environmental laws, or unanticipated environmental impacts from those operations, could require us to incur increased costs.

Mining operations on the scale of our Indonesia operations involve significant environmental risks and challenges. Our primary challenge is to dispose of the large amount of crushed and ground rock material, called tailings, that results from the process by which we physically separate the copper-, gold- and silver-bearing materials from the ore that we mine. Our tailings management plan, which has been approved by the Indonesian government, uses the unnavigable river system in the highlands near our mine to transport the tailings to an engineered area in the lowlands where the tailings and natural sediments are managed in a deposition area. Lateral levees have been constructed to

help contain the footprint of the tailings and to limit their impact in the lowlands.

Another major environmental challenge is managing overburden, which is the rock that must be moved aside in the mining process to reach the ore. In the presence of air, water and naturally occurring bacteria, some overburden can generate acid rock drainage, or acidic water containing dissolved metals that, if not properly managed, can adversely affect the environment. In addition, overburden stockpiles are subject to erosion caused by the large amounts of rainfall, with the eroded stockpile material eventually being deposited in the lowlands tailings management area; this additional material, while predicted in our environmental studies, influences the deposition of finer tailings material in the estuary.

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In October 2017, Indonesia's Ministry of Environment and Forestry (the Ministry) notified PT-FI of administrative sanctions related to certain activities the Ministry indicated are not reflected in its environmental permit. The Ministry also notified PT-FI that certain operational activities were inconsistent with factors set forth in its environmental permitting studies and that additional monitoring and improvements need to be undertaken related to air quality, water drainage, treatment and handling of certain wastes, and tailings management. PT-FI has been engaged in a process to update its permits through submissions and dialogue with the Ministry, which began in late 2014. PT-FI believes that it has submitted the required documentation to update its permits, and is in the process of addressing other points raised by the Ministry.

From time to time, certain Indonesian government officials have raised questions with respect to our tailings and overburden management plans, including a suggestion that we implement a pipeline system rather than the river transport system for tailings management and disposition. Because our Indonesia mining operations are remotely located in steep mountainous terrain and in an active seismic area, a pipeline system would be costly, difficult to construct and maintain, and more prone to catastrophic failure, and could therefore involve significant potentially adverse environmental issues. Based on our own studies and others conducted by third parties we do not believe that a pipeline system is necessary or practical.

Regulation of greenhouse gas emissions and climate change issues may increase our costs and adversely affect our operations.

Our copper mining operations require significant energy, principally diesel, electricity, coal and natural gas, most of which is obtained from third parties under long-term contracts. Energy represented 18 percent of our copper mine site operating costs in 2017.

Carbon-based energy is a significant input in our operations, although the use of diesel in our haul trucks, coal for power generation, and availability of renewable energy for purchased power varies significantly depending on site production and country-specific circumstances. The potential physical impacts of climate change on our operations are highly uncertain, and would vary by operation based on particular geographic circumstances. As a result of the Paris Agreement reached during the 21<sup>st</sup> Conference of the Parties to the United Nations Framework Convention on Climate Change in 2015, a number of governments have pledged "Nationally Determined Contributions" to control and reduce greenhouse gas emissions. Although EPA finalized regulations governing greenhouse gas emissions from new, modified, and existing power plants (known as the Clean Power Plan), implementation of these rules has been delayed with the goal of revising the Clean Power Plan. Increased regulation of greenhouse gas emissions may increase our costs.

### Other risks

Our holding company structure may impact our ability to service debt and our stockholders' ability to receive dividends.

We are a holding company with no material assets other than the capital stock and intercompany receivables of our subsidiaries. As a result, our ability to repay our indebtedness and pay dividends is dependent on the generation of cash flow by our subsidiaries and their ability to make such cash available to us, by dividend, loan, debt repayment or otherwise. Our subsidiaries do not have any obligation to make funds available to us to repay our indebtedness or pay dividends. Dividends from subsidiaries that are not wholly owned are shared with other equity owners. Cash at our international operations is also typically subject to foreign withholding taxes upon repatriation into the U.S.

In addition, our subsidiaries may not be able to, or be permitted to, make distributions to us or repay loans to us, to enable us to repay our indebtedness or pay dividends. Each of our subsidiaries is a distinct legal entity and, under certain circumstances, legal restrictions, as well as the financial condition and operating requirements of our subsidiaries, may limit our ability to obtain cash from our subsidiaries. Certain of our subsidiaries are parties to credit agreements that restrict their ability to make distributions or loan repayments to us if such subsidiary is in default under such agreements, or to transfer substantially all of the assets of such subsidiary without the consent of the lenders.

Our rights to participate in any distribution of our subsidiaries' assets upon their liquidation, reorganization or insolvency would generally be subject to the prior claims of the subsidiaries' creditors, including any trade creditors.

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Anti-takeover provisions in our charter documents and Delaware law may make an acquisition of us more difficult.

Anti-takeover provisions in our charter documents and Delaware law may make an acquisition of us more difficult. These provisions:

Authorize the Board to issue preferred stock without stockholder approval and to designate the rights, preferences and privileges of each class; if issued, such preferred stock would increase the number of outstanding shares of our capital stock and could include terms that may deter an acquisition of us;

Establish advance notice requirements for nominations to the Board or for proposals that can be presented at stockholder meetings;

Limit who may call stockholder meetings; and

Require the approval of the holders of two thirds of our outstanding common stock to enter into certain business combination transactions, subject to certain exceptions, including if the consideration to be received by our common stockholders in the transaction is deemed to be a fair price.

These provisions may discourage potential takeover attempts, discourage bids for our common stock at a premium over market price or adversely affect the market price of, and the voting and other rights of the holders of, our common stock. These provisions could also discourage proxy contests and make it more difficult for stockholders to elect directors other than the candidates nominated by the Board.

In addition, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, which may prohibit large stockholders from consummating a merger with, or acquisition of, us.

These provisions may deter an acquisition of us that might otherwise be attractive to stockholders.

Item 1B. Unresolved Staff Comments.

Not applicable.

Item 3. Legal Proceedings.

We are involved in numerous legal proceedings that arise in the ordinary course of our business or are associated with environmental issues arising from legacy operations conducted over the years by Freeport Minerals Corporation (FMC) and its affiliates. We are also involved periodically in reviews, inquiries, investigations and other proceedings initiated by or involving government agencies, some of which may result in adverse judgments, settlements, fines, penalties, injunctions or other relief. Management does not believe, based on currently available information, that the outcome of any legal proceeding will have a material adverse effect on our financial condition; although individual outcomes could be material to our operating results for a particular period, depending on the nature and magnitude of the outcome and the operating results for the period. Below is a discussion of our material water rights legal proceedings. Refer to Note 12 for discussion of our other material legal proceedings.

### Water Rights Legal Proceedings

Our operations in the western United States (U.S.) require significant secure quantities of water for mining, ore processing and related support facilities. Continuous operation of our mines is dependent on, among other things, our

ability to maintain our water rights and claims and the continuing physical availability of the water supplies. In the arid western U.S., where certain of our mines are located, water rights are often contested, and disputes over water rights are generally time-consuming, expensive and not necessarily dispositive unless they resolve both actual and potential claims. The loss of a water right, or a currently available water supply could force us to curtail operations, or force premature closures, thereby increasing and/or accelerating costs or foregoing profitable operations.

At our North America operations, certain of our water supplies are supported by surface water rights, which give us the right to use public waters for a statutorily defined beneficial use at a designated location. In Arizona, where our



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operations use both surface and groundwater, we are a participant in an active general stream adjudication in which the Arizona courts have been attempting, for over 40 years, to quantify and prioritize surface water claims for the Gila River, one of the state's largest river systems, which primarily affect our Morenci, Safford and Sierrita mines. The adjudication is addressing the state law claims of thousands of competing users, including us, as well as significant federal water claims that are potentially adverse to the state law claims of both surface water and groundwater users. Groundwater is treated differently from surface water under Arizona law, which historically allowed land owners to pump unlimited quantities of subsurface water, subject only to the requirement of putting it to "reasonable use." However, court decisions in the adjudication have concluded that certain underground water constitutes "subflow" that is to be treated legally as surface water and is therefore subject to the Arizona doctrine of prior appropriation. This category of underground water is subject to the adjudication and potentially unavailable to groundwater pumpers in the absence of valid surface water claims, which historic groundwater pumpers typically do not have. Any re-characterization of groundwater as surface water could affect the ability of consumers, farmers, ranchers, municipalities, and industrial users like us to continue to access water supplies that have been relied on for decades. Because we are a user of both groundwater and surface water in Arizona, we are an active participant in the adjudication proceeding.

In Re The General Adjudication of All Rights to Use Water in the Gila River System and Sources, Maricopa County, Superior Court, Cause Nos. W-1 (Salt), W-2 (Verde), W-3 (Upper Gila), and W-4 (San Pedro). This case was originally initiated in 1974 with the filing of a petition with the Arizona State Land Department and was consolidated and transferred to the Maricopa County Superior Court in 1981. The principal parties, in addition to us, include: the state of Arizona; the Gila Valley Irrigation District; the Franklin Irrigation District; the San Carlos Irrigation and Drainage District; the Salt River Project; the San Carlos Apache Tribe; the Gila River Indian Community (GRIC); and the U.S. on behalf of those tribes, on its own behalf, and on behalf of the White Mountain Apache Tribe, the Fort McDowell Mohave-Apache Indian Community, the Salt River Pima-Maricopa Indian Community, and the Payson Community of Yavapai Apache Indians.

Prior to January 1, 1983, various Indian tribes filed suits in the U.S. District Court in Arizona claiming superior rights to water being used by many other water users, including us, and claiming damages for prior use in derogation of their allegedly superior rights. These federal proceedings have either been stayed pending the Arizona Superior Court adjudications or have been settled.

The Maricopa County Superior Court issued a decision in 2005 in the Gila River adjudication that directed the Arizona Department of Water Resources (ADWR) to prepare detailed recommendations regarding the delineation of the "subflow" zone of the San Pedro River, a tributary of the Gila River. According to the court, the subflow zone is the subsurface area adjacent to the river consisting of the floodplain Holocene alluvium. Underground water within the subflow zone is presumed to constitute appropriable subflow rather than groundwater. Although we have minimal interests in the San Pedro River Basin, a decision that re-characterizes groundwater in that basin as appropriable surface water may set a precedent for other river systems in Arizona that could have material implications for many commercial, industrial, municipal and agricultural users of groundwater, including our Arizona operations.

In June 2009, ADWR produced its recommended subflow zone delineation, which was objected to by numerous parties. Following a series of hearings and court rulings, ADWR submitted a revised subflow zone delineation report in 2014. The court held hearings in 2015 to address the parties' comments and objections. In 2017, the court approved ADWR's revised delineation, and no party has appealed that decision.

Also in 2014, ADWR submitted a proposal for the next projects that it believes should be undertaken in the case, including the development of procedures for "cone of depression" analyses to determine whether a well located outside of the subflow zone creates a cone of depression that intersects the subflow zone and causes a 0.1 foot drawdown. Based on the cone of depression analyses, wells outside of the subflow zone could be subject to the jurisdiction of the

adjudication court. In the absence of a valid surface water claim to support the pumping, owners of wells deemed to be depleting the subflow zone through their cones of depression may be required to refrain from pumping or pay damages.

On January 27, 2017, ADWR issued a report containing its recommended cone of depression test, and on January 31, 2017, the Special Master issued an order initiating proceedings on the Cone of Depression Test Methodology developed by ADWR. Parties filed preliminary objections to the proposed methodology contained in ADWR's report on March 6, 2017. On March 15, 2017, the Special Master held a status conference to determine the timing and scope of proceedings necessary to resolve the objections, including the submission of supplemental objections and

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expert reports. Following the status conference, the Special Master established a discovery schedule leading up to a trial in March 2018 concerning ADWR's recommended cone of depression test. During the course of these proceedings, it has been established that ADWR's current recommended cone of depression test is for the purpose of establishing which wells are subject to the jurisdiction of the adjudication court. This phase of current cone of depression testing will not satisfy the burden of proving that a well is pumping subflow, nor will it establish how much of a well's production is subflow versus groundwater. These matters will be determined by a subsequent "subflow depletion test," which has not yet been formulated. The Special Master has ordered ADWR to produce an initial report on the subflow depletion test by November 16, 2018. The parties' comments to ADWR's initial report are due on January 18, 2019.

As part of the Gila River adjudication, the U.S. has asserted numerous claims for express and implied "reserved" surface water and groundwater rights on Indian and non-Indian federal lands throughout Arizona. These claims are related to reservations of federal land for specific purposes (e.g., Indian reservations, national parks, military bases and wilderness areas). Unlike state law-based water rights, federal reserved water rights are given priority in the prior appropriation system based on the date the land was reserved, not the date that water was first used on the land. In addition, federal reserved water rights, if recognized by the court, may enjoy greater protection from groundwater pumping than is accorded to state law-based water rights.

Because federal reserved water rights have not yet been quantified, the task of determining how much water each federal reservation may use has been left to the Gila River adjudication court. Several "contested cases" to quantify reserved water rights for particular federal reservations in Arizona are currently pending in the adjudication. For instance, *In re Aravaipa Canyon Wilderness Area* is a contested case to resolve the U.S.'s claims to water for the Aravaipa Canyon Wilderness Area. These claims went to trial in 2015 and the parties are awaiting a decision. *In Re Fort Huachuca* concerns the U.S.'s claims to water for an Army base. Trial concluded in February 2017, and the parties are awaiting a decision. *In Re Redfield Canyon Wilderness Area* is a contested case concerning U.S. claims for another wilderness area. Trial occurred in May 2017, and the matter will be taken under advisement following the completion of post-trial briefings. *In Re San Pedro Riparian National Conservation Area* involves U.S. claims for a national conservation area, and the case is scheduled for trial in April and May 2018.

In multiple instances, the U.S. asserts a right to all water in a particular watershed that was not effectively appropriated under state law prior to the establishment of the federal reservation. This creates risks for both surface water users and groundwater users because such expansive claims may severely impede current and future uses of water within the same watershed. Federal reserved rights present additional risks to water users aside from the significant quantities of water claimed by the U.S. Of particular significance, federal reserved rights enjoy greater protection from groundwater pumping than is accorded to state law-based water rights.

Because there are numerous federal reservations in watersheds across Arizona, the reserved water right claims of the U.S. pose a significant risk to multiple operations, including Morenci and Safford in the Upper Gila River watershed, and Sierrita in the Santa Cruz watershed. Because federal reserved water rights may adversely affect water uses at each of these operations, we have been actively involved in litigation over these claims.

Given the legal and technical complexity of these adjudications, their long history, and their long-term legal, economic and political implications, it is difficult to predict the timing or the outcome of these proceedings. If we are unable to satisfactorily resolve the issues being addressed in the adjudications, our ability to pump groundwater could be diminished or curtailed, and our operations at Morenci, Safford and Sierrita mines could be adversely affected unless we are able to acquire alternative resources.



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## Item 4. Mine Safety Disclosures.

The safety and health of all employees is our highest priority. Management believes that safety and health considerations are integral to, and compatible with, all other functions in the organization and that proper safety and health management will enhance production and reduce costs. Our approach towards the health and safety of our workforce is to continuously improve performance through implementing robust management systems and providing adequate training, safety incentive and occupational health programs.

Our objective is zero work place injuries and occupational illnesses. We measure progress toward achieving our objective against regularly established benchmarks, including measuring company-wide Total Recordable Incident Rates (TRIR). Our TRIR (including contractors) was 0.75 per 200,000 man-hours worked in 2017, 0.64 per 200,000 man-hours worked in 2016 and 0.56 per 200,000 man-hours worked in 2015. The metal mining sector industry average reported by the U.S. Mine Safety and Health Administration was 1.93 per 200,000 man-hours worked in 2016 and 2.02 per 200,000 man-hours worked in 2015. The metal mining sector industry average for 2017 was not available at the time of this filing.

Refer to Exhibit 95.1 for mine safety disclosures required in accordance with Section 1503(a) of the Dodd-Frank Wall Street Reform and Consumer Protection Act and Item 104 of Regulation S-K.

## Executive Officers of the Registrant.

Certain information as of January 31, 2018, about our executive officers is set forth in the following table and accompanying text:

Name	Age	Position or Office
Richard C. Adkerson	71	Vice Chairman of the Board, President and Chief Executive Officer
Kathleen L. Quirk	54	Executive Vice President, Chief Financial Officer and Treasurer
Harry M. "Red" Conger, IV	62	President and Chief Operating Officer - Americas
Michael J. Arnold	65	Executive Vice President and Chief Administrative Officer

Richard C. Adkerson has served as Vice Chairman of the Board since June 2013, President since January 2008 and also from April 1997 to March 2007, Chief Executive Officer since December 2003 and a director since October 2006. Mr. Adkerson previously served as Chief Financial Officer from October 2000 to December 2003.

Kathleen L. Quirk has served as Executive Vice President since March 2007, Chief Financial Officer since December 2003 and Treasurer since February 2000. Ms. Quirk previously served as Senior Vice President from December 2003 to March 2007. Ms. Quirk also serves on the Board of Directors of Vulcan Materials Company.

Harry M. "Red" Conger, IV has served as Chief Operating Officer - Americas since July 2015, and as President - Americas since 2007. Mr. Conger has also served as President and Chief Operating Officer - Rod and Refining since 2014. He served as Chief Operating Officer - Africa Mining from July 2015 to December 2016. Prior to 2007, he served in a number of senior operations positions at Phelps Dodge Corporation.

Michael J. Arnold has served as Executive Vice President since March 2007 and Chief Administrative Officer since December 2003.

## PART II

## Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities.

## Unregistered Sales of Equity Securities

None.

## Common Stock

Our common shares trade on the New York Stock Exchange (NYSE) under the symbol "FCX." The FCX share price is reported daily in the financial press under "FMCG" in most listings of NYSE securities. The table below shows the NYSE composite tape common share price ranges during 2017 and 2016:

	2017		2016	
	High	Low	High	Low
First Quarter	\$17.06	\$11.91	\$11.45	\$3.52
Second Quarter	\$13.83	\$11.05	\$14.06	\$8.76
Third Quarter	\$15.75	\$11.71	\$13.59	\$9.43
Fourth Quarter	\$19.45	\$13.22	\$16.42	\$9.24

At January 31, 2018, there were 13,413 holders of record of our common stock.

## Common Stock Dividends

In December 2015, the FCX Board of Directors (the Board) suspended the annual common stock dividend. Accordingly, there were no common stock dividends paid in 2017 or 2016. In February 2018, the Board reinstated a cash dividend on our common stock. The Board intends to declare a quarterly dividend of \$0.05 per share, with the initial dividend expected to be paid May 1, 2018. The declaration of dividends is at the discretion of our Board and will depend upon our financial results, cash requirements, future prospects and other factors deemed relevant.

## Issuer Purchases of Equity Securities

The following table sets forth information with respect to shares of FCX common stock purchased by us during the three months ended December 31, 2017:

Period	(a) Total Number of Shares Purchased	(b) Average Price Paid Per Share	(c) Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs <sup>a</sup>	(d) Maximum Number of Shares That May Yet Be Purchased Under the Plans or Programs <sup>a</sup>
October 1-31, 2017	—	\$	—	23,685,500
November 1-30, 2017	—	—	—	23,685,500
December 1-31, 2017	—	—	—	23,685,500
Total	—	—	—	23,685,500

a.

On July 21, 2008, the Board approved an increase in our open-market share purchase program for up to 30 million shares. The program does not have an expiration date.

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## Item 6. Selected Financial Data.

## FREEPORT-McMoRan INC.

## SELECTED FINANCIAL AND OPERATING DATA

	Years Ended December 31,				
	2017	2016 <sup>a</sup>	2015	2014	2013 <sup>a</sup>
<b>CONSOLIDATED FINANCIAL DATA</b>					
(In millions, except per share amounts)					
Revenues	\$16,403	\$14,830 <sup>b</sup>	\$14,607 <sup>b</sup>	\$20,001 <sup>b</sup>	\$19,331 <sup>b</sup>
Operating income (loss) <sup>c</sup>	\$3,633 <sup>d</sup>	\$(2,792) <sup>e</sup>	\$(13,512) <sup>f</sup>	\$(298) <sup>g</sup>	\$4,820 <sup>h</sup>
Net income (loss) from continuing operations	\$2,029 <sup>i,j,k</sup>	\$(3,832) <sup>j,k</sup>	\$(12,180) <sup>l</sup>	\$(1,022) <sup>j,k</sup>	\$3,053 <sup>j,k,m</sup>
Net income (loss) from discontinued operations <sup>n</sup>	\$66	\$(193) <sup>o</sup>	\$91	\$277	\$388
Net income (loss) attributable to common stock	\$1,817	\$(4,154) <sup>o</sup>	\$(12,236)	\$(1,308)	\$2,658
Basic net income (loss) per share attributable to common stock:					
Continuing operations	\$1.21	\$(2.96) <sup>o</sup>	\$(11.32) <sup>o</sup>	\$(1.37) <sup>o</sup>	\$2.45
Discontinued operations	0.04	(0.20) <sup>o</sup>	0.01	0.11	0.20
	\$1.25	\$(3.16) <sup>o</sup>	\$(11.31) <sup>o</sup>	\$(1.26) <sup>o</sup>	\$2.65
Basic weighted-average common shares outstanding	1,447	1,318	1,082	1,039	1,002
Diluted net income (loss) per share attributable to common stock:					
Continuing operations	\$1.21	\$(2.96) <sup>o</sup>	\$(11.32) <sup>o</sup>	\$(1.37) <sup>o</sup>	\$2.44
Discontinued operations	0.04	(0.20) <sup>o</sup>	0.01	0.11	0.20
	\$1.25	\$(3.16) <sup>o</sup>	\$(11.31) <sup>o</sup>	\$(1.26) <sup>o</sup>	\$2.64
Diluted weighted-average common shares outstanding	1,454	1,318	1,082	1,039	1,006
Dividends declared per share of common stock	\$—	\$—	\$0.2605	\$1.25	\$2.25
Operating cash flows	\$4,682	\$3,729	\$3,220	\$5,631	\$6,139
Capital expenditures	\$1,410	\$2,813	\$6,353	\$7,215	\$5,286
At December 31:					
Cash and cash equivalents	\$4,447	\$4,245	\$177	\$298	\$1,864
Property, plant, equipment and mine development costs, net	\$22,836	\$23,219	\$23,986	\$22,649	\$20,401
Oil and gas properties, net	\$8	\$74	\$7,093	\$19,274	\$23,359
Assets held for sale, including current portion <sup>p</sup>	\$598	\$344	\$5,306	\$5,339	\$5,128
Total assets	\$37,302	\$37,317	\$46,577	\$58,674	\$63,385
Total debt, including current portion	\$13,117	\$16,027	\$20,324	\$18,741	\$20,476
Redeemable noncontrolling interest	\$—	\$—	\$764	\$751	\$716
Total stockholders' equity	\$7,977	\$6,051	\$7,828	\$18,287	\$20,934

The selected consolidated financial data shown above is derived from our audited consolidated financial statements. These historical results are not necessarily indicative of results that you can expect for any future period. You should read this data in conjunction with Items 7. and 7A. Management's Discussion and Analysis of Financial Condition and Results of Operations and Quantitative and Qualitative Disclosures about Market Risks (MD&A) and Item 8. Financial Statements and Supplementary Data thereto contained in our annual report on Form 10-K for the year ended December 31, 2017. All references to income or losses per share are on a diluted basis, unless otherwise noted.

<sup>a</sup> In 2016 we sold substantially all of our oil and gas properties. The year 2013 includes the results of oil and gas operations beginning June 1, 2013.

<sup>b</sup> Includes net noncash mark-to-market (losses) gains associated with crude oil and natural gas derivative contracts totaling \$(41) million (\$41) million to net loss attributable to common stock or \$(0.03) per share) in 2016, \$(319) million (\$(198) million to net loss attributable to common stock or \$(0.18) per share) in 2015, \$627 million (\$389 million to net loss attributable to common stock or \$0.37 per share) in 2014 and \$(312) million (\$(194) million to



net income attributable to common stock or \$(0.19) per share) for the seven-month period from June 1, 2013, to December 31, 2013.

c. Includes net charges (credits) for adjustments to environmental obligations and related litigation reserves of \$210 million (\$210 million to net income attributable to common stock or \$0.14 per share) in 2017, \$(16) million (\$(16) million to net loss attributable to common stock or \$(0.01) per share) in 2016, \$43 million (\$28 million to net loss attributable to common stock or \$0.03 per share) in 2015, \$76 million (\$50 million to net loss attributable to common stock or \$0.05 per share) in 2014 and \$19 million (\$17 million to net income attributable to common stock or \$0.02 per share) in 2013.

d. Includes net charges (credits) totaling \$57 million to operating income (\$1) million to net income attributable to common stock or less than \$0.01 per share) consisting of charges totaling \$125 million for workforce reductions at PT Freeport Indonesia (PT-FI) and \$26 million at mining operations primarily for asset impairments and metals inventory adjustments, partly offset by net gains on

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sales of assets totaling \$81 million primarily associated with oil and gas transactions and net credits of \$13 million at oil and gas operations mostly associated with drillship settlement.

Includes net charges totaling \$4.9 billion to operating loss (\$4.8 billion to net loss attributable to common stock or \$3.67 per share) consisting of (i) \$4.3 billion for impairment of oil and gas properties, (ii) \$926 million for drillship settlements/idle rig and contract termination costs, (iii) \$196 million for other charges at oil and gas operations e. primarily associated with inventory adjustments, asset impairment and other restructuring charges and (iv) \$69 million for charges at mining operations for metals inventory adjustments, PT-FI asset retirement and Cerro Verde social commitments, partly offset by (v) net gains on sales of assets totaling \$649 million mostly associated with the Morenci and Timok transactions, partly offset by estimated losses associated with assets held for sale.

Includes net charges totaling \$13.8 billion to operating loss (\$12.0 billion to net loss attributable to common stock or \$11.10 per share) consisting of (i) \$13.1 billion for impairment of oil and gas properties, (ii) \$338 million for metals inventory adjustments, (iii) \$188 million for charges at oil and gas operations primarily associated with other asset f. impairment and inventory adjustments, idle/terminated rig costs and prior year mineral tax assessments related to the California properties, (iv) \$145 million for charges at mining operations primarily associated with asset impairment, restructuring and other net charges and (v) \$18 million for executive retirement benefits, partly offset by (vi) a net gain of \$39 million for the sale of our interest in the Luna Energy power facility.

Includes net charges totaling \$4.8 billion to operating loss (\$3.6 billion to net loss attributable to common stock or \$3.46 per share) consisting of (i) \$3.7 billion for impairment of oil and gas properties, (ii) \$1.7 billion to impair the full carrying value of goodwill, (iii) \$46 million for charges at oil and gas operations primarily associated with g. idle/terminated rig costs and inventory adjustments and (iv) \$6 million for adjustments to molybdenum inventories, partly offset by (v) net gains on sales of assets of \$717 million primarily from the sale of our 80 percent interests in the Candelaria and Ojos del Salado mining operations.

Includes net charges totaling \$232 million to operating income (\$137 million to net income attributable to common stock or \$0.14 per share) consisting of (i) \$80 million for transaction and related costs principally associated with oil and gas acquisitions, (ii) \$76 million associated with updated mine plans at Morenci that resulted in a loss in h. recoverable leach stockpiles, (iii) \$37 million for restructuring an executive employment arrangement, (iv) \$36 million associated with a labor agreement at Cerro Verde and (v) \$3 million for adjustments to molybdenum inventories.

Includes net charges at Cerro Verde related to (i) Peruvian government claims for disputed royalties for prior years totaling \$186 million to net income attributable to common stock or \$0.13 per share (consisting of \$203 million to operating income, \$145 million to interest expense and \$7 million to provision for income taxes, net of \$169 million i. to noncontrolling interests) and (ii) other tax related matters for prior years totaling \$14 million to net income attributable to common stock or \$0.01 per share (consisting of \$11 million to operating income, \$8 million to interest expense, \$1 million to other income and \$7 million to provision for income taxes, net of \$13 million to noncontrolling interests).

Includes after-tax net gains (losses) on early extinguishment and exchanges of debt totaling \$21 million (\$0.01 per j. share) in 2017, \$26 million (\$0.02 per share) in 2016, \$3 million (less than \$0.01 per share) in 2014 and \$(28) million (\$(0.03) per share) in 2013.

As further discussed in “Consolidated Results - Income Taxes” contained in MD&A, amounts include net tax credits (charges) of \$438 million (\$0.30 per share) in 2017, \$370 million (\$374 million, net of noncontrolling interests or k. \$0.28 per share) in 2016 and \$(121) million (\$(103) million, net of noncontrolling interests or \$(0.10) per share) in 2014. In addition, the year 2013 includes a net tax benefit of \$199 million (\$0.20 per share) for reductions in our valuation allowances resulting from the oil and gas acquisitions.

Includes a gain of \$92 million (\$92 million to net loss attributable to common stock or \$0.09 per share) related to net l. proceeds received from insurance carriers and other third parties related to the shareholder derivative litigation settlement.

m. Includes a gain of \$128 million (\$0.13 per share) related to our preferred stock investments in and the subsequent acquisition of McMoRan Exploration Co.

n.

Discontinued operations reflects the results of TF Holdings Limited (TFHL), through which we held an interest in the Tenke Fungurume (Tenke) mine until it was sold on November 16, 2016, and includes charges for allocated interest expense associated with the portion of the term loan that was required to be repaid as a result of the sale. Net income from discontinued operations in 2017 primarily reflects adjustments to the fair value of the potential \$120 million contingent consideration related to the November 2016 sale, which totaled \$74 million at December 31, 2017, and will continue to be adjusted through December 31, 2019. Also includes a net charge of \$198 million for the loss on disposal in 2016.

<sup>o</sup>. Includes a gain on redemption of a redeemable noncontrolling interest of \$199 million (\$0.15 per share) associated with the settlement of a preferred stock obligation at our Plains Offshore Operations Inc. subsidiary.

<sup>p</sup>. In accordance with accounting guidelines, the assets and liabilities of TFHL, Freeport Cobalt and the Kisanfu exploration project have been presented as held for sale in the consolidated balance sheets for all periods presented.

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## FREEPORT-McMoRan INC.

## SELECTED FINANCIAL AND OPERATING DATA (Continued)

	Years Ended December 31,				
	2017	2016	2015	2014	2013
<b>CONSOLIDATED MINING (CONTINUING OPERATIONS)<sup>a,b</sup></b>					
<b>Copper (millions of recoverable pounds)</b>					
Production	3,737	4,222	3,568	3,457	3,669
Sales, excluding purchases	3,700	4,227	3,603	3,463	3,632
Average realized price per pound	\$2.93	\$2.28	\$2.42	\$3.09	\$3.32
<b>Gold (thousands of recoverable ounces)</b>					
Production	1,577	1,088	1,257	1,214	1,250
Sales, excluding purchases	1,562	1,079	1,247	1,248	1,204
Average realized price per ounce	\$1,268	\$1,238	\$1,129	\$1,231	\$1,315
<b>Molybdenum (millions of recoverable pounds)</b>					
Production	92	80	92	95	94
Sales, excluding purchases	95	74	89	95	93
Average realized price per pound	\$9.33	\$8.33	\$8.70	\$12.74	\$11.85
<b>NORTH AMERICA COPPER MINES</b>					
<b>Operating Data, Net of Joint Venture Interests</b>					
<b>Copper (millions of recoverable pounds)</b>					
Production	1,518	1,831	1,947	1,670	1,431
Sales, excluding purchases	1,484	1,841	1,988	1,664	1,422
Average realized price per pound	\$2.85	\$2.24	\$2.47	\$3.13	\$3.36
<b>Molybdenum (millions of recoverable pounds)</b>					
Production	33	33	37	33	32
<b>100% Operating Data</b>					
<b>Solution extraction/electrowinning (SX/EW) operations</b>					
Leach ore placed in stockpiles (metric tons per day)	679,000	737,400	913,000	1,011,500	1,009,200
Average copper ore grade (percent)	0.28	0.31	0.26	0.25	0.22
Copper production (millions of recoverable pounds)	1,121	1,224	1,134	963	889
<b>Mill operations</b>					
Ore milled (metric tons per day)	299,500	300,500	312,100	273,800	246,500
<b>Average ore grade (percent):</b>					
Copper	0.39	0.47	0.49	0.45	0.39
Molybdenum	0.03	0.03	0.03	0.03	0.03
Copper recovery rate (percent)	86.4	85.5	85.4	85.8	85.3
Copper production (millions of recoverable pounds)	683	854	972	828	642
<b>SOUTH AMERICA MINING<sup>b</sup></b>					
<b>Copper (millions of recoverable pounds)</b>					
Production	1,235	1,328	869	1,151	1,323
Sales	1,235	1,332	871	1,135	1,325
Average realized price per pound	\$2.97	\$2.31	\$2.38	\$3.08	\$3.30
<b>Molybdenum (millions of recoverable pounds)</b>					
Production	27	21	7	11	13
<b>SX/EW operations</b>					
Leach ore placed in stockpiles (metric tons per day)	142,800	149,100	208,400	246,400	275,900
Average copper ore grade (percent)	0.37	0.41	0.44	0.48	0.50

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Copper production (millions of recoverable pounds)	255	328	430	491	448
Mill operations					
Ore milled (metric tons per day)	360,100	353,400	152,100	180,500	192,600
Average ore grade:					
Copper (percent)	0.44	0.43	0.46	0.54	0.65
Molybdenum (percent)	0.02	0.02	0.02	0.02	0.02
Copper recovery rate (percent)	81.2	85.8	81.5	88.1	90.9
Copper production (millions of recoverable pounds)	980	1,000	439	660	875

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## FREEPORT-McMoRan INC.

## SELECTED FINANCIAL AND OPERATING DATA (Continued)

	Years Ended December 31,				
	2017	2016	2015	2014	2013
<b>INDONESIA MINING</b>					
Operating Data, Net of Joint Venture Interest					
Copper (millions of recoverable pounds)					
Production	984	1,063	752	636	915
Sales	981	1,054	744	664	885
Average realized price per pound	\$3.00	\$2.32	\$2.33	\$3.01	\$3.58
Gold (thousands of recoverable ounces)					
Production	1,554	1,061	1,232	1,130	1,142
Sales	1,540	1,054	1,224	1,168	1,096
Average realized price per ounce	\$1,268	\$1,237	\$1,129	\$1,229	\$1,312
100% Operating Data					
Ore milled (metric tons per day)	140,400	165,700	162,500	120,500	179,200
Average ore grade:					
Copper (percent)	1.01	0.91	0.67	0.79	0.76
Gold (grams per metric ton)	1.15	0.68	0.79	0.99	0.69
Recovery rates (percent):					
Copper	91.6	91.0	90.4	90.3	90.0
Gold	85.0	82.2	83.4	83.2	80.0
Production:					
Copper (millions of recoverable pounds)	996	1,063	752	651	928
Gold (thousands of recoverable ounces)	1,554	1,061	1,232	1,132	1,142
<b>MOLYBDENUM MINES</b>					
Molybdenum production (millions of recoverable pounds)	32	26	48	51	49
Ore milled (metric tons per day)	22,500	18,300	34,800	39,400	35,700
Average molybdenum ore grade (percent)	0.20	0.21	0.20	0.19	0.19
<b>OIL AND GAS OPERATIONS<sup>c</sup></b>					
Sales Volumes:					
Oil (million barrels)	1.8	34.4	35.3	40.1	26.6
Natural gas (billion cubic feet)	15.8	65.1	89.7	80.8	54.2
Natural gas liquids (NGLs) (million barrels)	0.2	1.8	2.4	3.2	2.4
Million barrels of oil equivalents	4.6	47.1	52.6	56.8	38.1
Average Realizations:					
Oil (per barrel)	\$40.71	\$39.13	\$57.11	\$90.00	98.32
Natural gas (per million British thermal units)	\$3.18	\$2.38	\$2.59	\$4.23	3.99
NGLs (per barrel)	\$30.65	\$18.11	\$18.90	\$39.73	38.20
<b>AFRICA MINING (DISCONTINUED OPERATIONS)<sup>d</sup></b>					
Copper (millions of recoverable pounds)					
Production	—	425	449	447	462
Sales	—	424	467	425	454
Average realized price per pound	—	\$2.10	\$2.42	\$3.06	\$3.21
Cobalt (millions of contained pounds)					
Production	—	32	35	29	28

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Sales	—	33	35	30	25
Average realized price per pound	—	\$ 7.45	\$ 8.21	\$ 9.66	\$ 8.02
Ore milled (metric tons per day)	—	15,200	14,900	14,700	14,900
Average ore grade (percent):					
Copper	—	4.18	4.00	4.06	4.22
Cobalt	—	0.44	0.43	0.34	0.37
Copper recovery rate (percent)	—	93.6	94.0	92.6	91.4

a. Excludes the results from Africa mining, which is reported as discontinued operations.

b. Includes the results of the Candelaria and Ojos del Salado mines prior to their sale in November 2014.

Represents the results of our oil and gas operations beginning June 1, 2013. In June 2014, we completed the sale of the Eagle Ford shale assets, in July 2016, we completed the sale of the Haynesville shale assets and in December

c. 2016, we completed the sales of the Deepwater Gulf of Mexico and onshore California oil and gas properties. In March 2017, we completed the sale of property interests in the Madden area and in July 2017, we completed the sale of certain property interests in the Gulf of Mexico Shelf.

d. On November 16, 2016, we completed the sale of our interest in TFHL, through which we held an interest in the Tenke mine.

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## Ratio of Earnings to Fixed Charges

For the ratio of earnings to fixed charges calculation, earnings consist of income (loss) from continuing operations before income taxes, noncontrolling interests in consolidated subsidiaries, equity in affiliated companies' net earnings (losses), cumulative effect of accounting changes and fixed charges. Fixed charges include interest and that portion of rent deemed representative of interest. The ratio of earnings to fixed charges and preferred stock dividends is the same as the ratio of earnings to fixed charges for the years presented because no shares of FCX preferred stock were outstanding during these years. Our ratio of earnings to fixed charges was as follows for the years presented:

	Years Ended December 31,				
	2017	2016	2015	2014	2013
Ratio of earnings to fixed charges	4.1x	— <sup>a</sup>	— <sup>a</sup>	— <sup>a</sup>	6.8x

As a result of the losses recorded in 2016, 2015 and 2014, the ratio coverage was less than 1:1. To achieve coverage a. of 1:1, FCX would have needed to generate additional earnings of \$3.5 billion in 2016, \$14.3 billion in 2015 and \$1.0 billion in 2014.

#### Items 7. and 7A. Management's Discussion and Analysis of Financial Condition and Results of Operations and Quantitative and Qualitative Disclosures About Market Risk.

In Management's Discussion and Analysis of Financial Condition and Results of Operations and Quantitative and Qualitative Disclosures About Market Risk (MD&A), "we," "us" and "our" refer to Freeport-McMoRan Inc. (FCX) and its consolidated subsidiaries. The results of operations reported and summarized below are not necessarily indicative of future operating results (refer to "Cautionary Statement" for further discussion). References to "Notes" are Notes included in our Notes to Consolidated Financial Statements. Throughout MD&A, all references to earnings or losses per share are on a diluted basis, unless otherwise noted. Additionally, in accordance with accounting guidelines, TF Holdings Limited (TFHL), through which we held a controlling interest in the Tenke Fungurume (Tenke) mine until it was sold on November 16, 2016, is reported as a discontinued operation for all periods presented.

#### OVERVIEW

We are a leading international mining company with headquarters in Phoenix, Arizona. We operate large, long-lived, geographically diverse assets with significant proven and probable reserves of copper, gold and molybdenum. We are the world's largest publicly traded copper producer. Our portfolio of assets includes the Grasberg minerals district in Indonesia, one of the world's largest copper and gold deposits; and significant mining operations in the Americas, including the large-scale Morenci minerals district in North America and the Cerro Verde operation in South America.

We have taken actions to restore our balance sheet strength through a combination of asset sale transactions and capital market transactions. We completed approximately \$6.7 billion in asset sale transactions (mostly in 2016), including the sale of substantially all of our oil and gas properties, our interest in TFHL and the sale of an additional 13 percent undivided interest in the Morenci minerals district (refer to Note 2 for further discussion of dispositions). During 2016, we also completed a registered at-the-market offering of our common stock, which generated \$1.5 billion in gross proceeds through the sale of 116.5 million shares of our common stock, and redeemed \$369 million in senior notes for 27.7 million shares of our common stock (refer to Note 10 for further discussion). Additionally, in 2016, we settled \$1.1 billion in aggregate drillship contracts for \$755 million, of which \$540 million was funded with 48.1 million shares of our common stock (refer to Notes 10 and 13 for further discussion).

These actions, combined with cash flow from operations, resulted in net reductions of debt totaling \$2.9 billion during 2017 and \$4.3 billion during 2016 and an increase in consolidated cash from \$177 million at December 31, 2015, to \$4.2 billion at December 31, 2016, and \$4.4 billion at December 31, 2017. We continue to manage costs and capital spending and, subject to commodity prices and operational results, expect to generate significant operating cash flows



for further debt reduction during 2018.

Net income (loss) attributable to common stock totaled \$1.8 billion in 2017, \$(4.2) billion in 2016 and \$(12.2) billion in 2015. Our results in 2017 benefited from higher copper prices and higher gold sales volumes. Our prior years' results were unfavorably impacted by charges for the impairment of oil and gas properties totaling \$4.3 billion in 2016 and \$11.6 billion in 2015. Refer to "Consolidated Results" for discussion of items impacting our consolidated results for the three years ended December 31, 2017.

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At December 31, 2017, we had \$4.4 billion in consolidated cash and cash equivalents and \$13.1 billion in total debt. We had no borrowings and \$3.5 billion available under our revolving credit facility.

We believe that we have a high-quality portfolio of long-lived copper assets positioned to generate long-term value. We have commenced a project to develop the Lone Star oxide ores near the Safford operation in eastern Arizona. We are also pursuing other opportunities to enhance net present values, and we continue to advance studies for future development of our copper resources, the timing of which will be dependent on market conditions.

We have significant mineral reserves, resources and future development opportunities within our portfolio of mining assets. At December 31, 2017, our estimated consolidated recoverable proven and probable mineral reserves totaled 86.7 billion pounds of copper, 23.5 million ounces of gold and 2.84 billion pounds of molybdenum, which were determined using \$2.00 per pound for copper, \$1,000 per ounce for gold and \$10 per pound for molybdenum. Refer to “Critical Accounting Estimates – Mineral Reserves” for further discussion.

During 2017, production from our mines totaled 3.7 billion pounds of copper, 1.6 million ounces of gold and 92 million pounds of molybdenum. Following is a summary of the geographic locations of our consolidated copper, gold and molybdenum production in 2017:

	Copper	Gold	Molybdenum	
North America	41 %	1 %	71 %	<sup>a</sup>
South America	33	—	29	
Indonesia	26	99	—	
	100 %	100 %	100 %	

<sup>a</sup> Our Henderson and Climax molybdenum mines produced 35 percent of consolidated molybdenum production, and our North America copper mines produced 36 percent.

Copper production from the Grasberg mine in Indonesia, Morenci mine in North America and Cerro Verde mine in Peru together totaled 74 percent of our consolidated copper production in 2017.

As further discussed in Note 13 and “Operations – Indonesia Mining,” PT Freeport Indonesia (PT-FI) continues to actively engage with Indonesian government officials to address regulatory changes that conflict with its contractual rights in a manner that provides long-term stability for PT-FI’s operations and investment plans, and protects value for our shareholders. Following a framework understanding reached in August 2017, the parties have been engaged in negotiation and documentation of a special license (IUPK) and accompanying documentation for assurances on legal and fiscal terms to provide PT-FI with long-term rights through 2041. In addition, the IUPK would provide that PT-FI construct a smelter within five years of reaching a definitive agreement and include agreement for the divestment of 51 percent of the project area interests to Indonesian participants at fair market value. The parties continue to negotiate documentation on a comprehensive agreement for PT-FI’s extended operations and to reach agreement on timing, process and governance matters relating to the divestment. The parties have a mutual objective of completing negotiations and the required documentation during the first half of 2018.

**OUTLOOK**

We continue to view the long-term outlook for our business positively, supported by limitations on supplies of copper and by the requirements for copper in the world’s economy. Our financial results vary as a result of fluctuations in market prices primarily for copper, gold and molybdenum, as well as other factors. World market prices for these commodities have fluctuated historically and are affected by numerous factors beyond our control. Because we cannot control the price of our products, the key measures that management focuses on in operating our business are sales volumes, unit net cash costs, operating cash flow and capital expenditures.

Refer to “Operations – Indonesia Mining” for further discussion of Indonesia regulatory matters, which could have a significant impact on future results.

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## Sales Volumes

Following are projected consolidated sales volumes for 2018 and actual consolidated sales volumes from continuing operations for 2017:

	2018 (Projected)	2017 (Actual)
Copper (millions of recoverable pounds):		
North America copper mines	1,495	1,484
South America mining	1,235	1,235
Indonesia mining	1,200	981
Total	3,930	3,700
Gold (thousands of recoverable ounces)	2,440	1,562
Molybdenum (millions of recoverable pounds)	91	<sup>a</sup> 95

<sup>a</sup> Projected molybdenum sales include 35 million pounds produced by our Molybdenum mines and 56 million pounds produced by our North America and South America copper mines.

Consolidated sales for first-quarter 2018 are expected to approximate 1.0 billion pounds of copper, 675 thousand ounces of gold and 24 million pounds of molybdenum. Projected sales volumes are dependent on operational performance and other factors. For other important factors that could cause results to differ materially from projections, refer to “Cautionary Statement.”

## Unit Net Cash Costs

Assuming average prices of \$1,300 per ounce of gold and \$10.00 per pound of molybdenum for 2018 and achievement of current sales volume and cost estimates, consolidated unit net cash costs (net of by-product credits) for our copper mines are expected to average \$0.97 per pound of copper in 2018. The impact of price changes in 2018 on consolidated unit net cash costs would approximate \$0.03 per pound for each \$50 per ounce change in the average price of gold and \$0.025 per pound for each \$2 per pound change in the average price of molybdenum. Quarterly unit net cash costs vary with fluctuations in sales volumes and realized prices, primarily for gold and molybdenum. Refer to “Consolidated Results – Production and Delivery Costs” for further discussion of consolidated production costs for our mining operations.

## Consolidated Operating Cash Flow

Our consolidated operating cash flows vary with sales volumes, prices realized from copper, gold and molybdenum sales, production costs, income taxes, other working capital changes and other factors. Based on current sales volume and cost estimates, and assuming average prices of \$3.15 per pound of copper, \$1,300 per ounce of gold and \$10.00 per pound of molybdenum, our consolidated operating cash flows are estimated to exceed \$5.8 billion in 2018 (including \$0.3 billion in working capital sources and timing of other tax payments). Estimated consolidated operating cash flows in 2018 also reflect a projected income tax provision of \$2.2 billion (refer to “Consolidated Results - Income Taxes” for further discussion of our projected income tax rate for the year 2018). The impact of price changes in 2018 on consolidated operating cash flows would approximate \$360 million for each \$0.10 per pound change in the average price of copper, \$115 million for each \$50 per ounce change in the average price of gold and \$130 million for each \$2 per pound change in the average price of molybdenum.

## Consolidated Capital Expenditures

Consolidated capital expenditures are expected to approximate \$2.1 billion in 2018, including \$1.2 billion for major mining projects, primarily associated with underground development activities in the Grasberg minerals district and development of the Lone Star oxide project. If PT-FI is unable to reach a definitive agreement with the Indonesian government on its long-term mining rights, we intend to reduce or defer investments significantly in underground development projects and will pursue dispute resolution procedures under PT-FI’s Contract of Work (COW).



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MARKETS

World prices for copper, gold and molybdenum can fluctuate significantly. During the period from January 2008 through December 2017, the London Metal Exchange (LME) spot copper price varied from a low of \$1.26 per pound in 2008 to a record high of \$4.60 per pound in 2011; the London Bullion Market Association (London) PM gold price fluctuated from a low of \$713 per ounce in 2008 to a record high of \$1,895 per ounce in 2011, and the Metals Week Molybdenum Dealer Oxide weekly average price ranged from a low of \$4.46 per pound in 2015 to a high of \$33.88 per pound in 2008. Copper, gold and molybdenum prices are affected by numerous factors beyond our control as described further in our “Risk Factors” contained in Part I, Item 1A. of our annual report on Form 10-K for the year ended December 31, 2017.

This graph presents LME spot copper prices and combined reported stocks of copper at the LME, Commodity Exchange Inc., a division of the New York Mercantile Exchange (NYMEX), and the Shanghai Futures Exchange from January 2008 through December 2017. Beginning in mid-2014, copper prices declined because of concerns about slowing growth rates in China, a stronger United States (U.S.) dollar and a broad-based decline in commodity prices, but began to improve in fourth-quarter 2016 and throughout 2017. For the year 2017, LME spot copper prices ranged from a low of \$2.48 per pound to a high of \$3.27 per pound, averaged \$2.80 per pound and closed at \$3.25 per pound on December 31, 2017. The LME spot copper price was \$3.22 per pound on January 31, 2018.

We believe the underlying long-term fundamentals of the copper business remain positive, supported by the significant role of copper in the global economy and a challenging long-term supply environment attributable to difficulty in replacing existing large mines’ output with new production sources. Future copper prices are expected to be volatile and are likely to be influenced by demand from China and emerging markets, as well as economic activity in the U.S. and other industrialized countries, the timing of the development of new supplies of copper and production levels of mines and copper smelters.

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This graph presents London PM gold prices from January 2008 through December 2017. An improving economic outlook, stronger U.S. dollar and positive equity performance contributed to lower demand for gold since 2014. During 2017, London PM gold prices ranged from a low of \$1,151 per ounce to a high of \$1,346 per ounce, averaged \$1,257 per ounce and closed at \$1,297 per ounce on December 31, 2017. The London PM gold price was \$1,345 per ounce on January 31, 2018.

This graph presents the Metals Week Molybdenum Dealer Oxide weekly average price from January 2008 through December 2017. Molybdenum prices have declined since mid-2014 because of weaker demand from global steel and stainless steel producers but have improved beginning in mid-2016. During 2017, the weekly average price for molybdenum ranged from a low of \$6.98 per pound to a high of \$10.15 per pound, averaged \$8.21 per pound and was \$10.15 per pound on December 31, 2017. The Metals Week Molybdenum Dealer Oxide weekly average price was \$11.87 per pound on January 31, 2018.

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## CRITICAL ACCOUNTING ESTIMATES

MD&A is based on our consolidated financial statements, which have been prepared in conformity with generally accepted accounting principles (GAAP) in the U.S. The preparation of these statements requires that we make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses. We base these estimates on historical experience and on assumptions that we consider reasonable under the circumstances; however, reported results could differ from those based on the current estimates under different assumptions or conditions. The areas requiring the use of management's estimates are also discussed in Note 1 under the subheading "Use of Estimates." Management has reviewed the following discussion of its development and selection of critical accounting estimates with the Audit Committee of our Board of Directors (the Board).

## Mineral Reserves

Recoverable proven and probable reserves are the part of a mineral deposit that can be economically and legally extracted or produced at the time of the reserve determination. The determination of reserves involves numerous uncertainties with respect to the ultimate geology of the ore bodies, including quantities, grades and recovery rates. Estimating the quantity and grade of mineral reserves requires us to determine the size, shape and depth of our ore bodies by analyzing geological data, such as samplings of drill holes, tunnels and other underground workings. In addition to the geology of our mines, assumptions are required to determine the economic feasibility of mining these reserves, including estimates of future commodity prices and demand, the mining methods we use and the related costs incurred to develop and mine our reserves. Our estimates of recoverable proven and probable mineral reserves are prepared by and are the responsibility of our employees. A majority of these estimates are reviewed annually and verified by independent experts in mining, geology and reserve determination.

At December 31, 2017, our consolidated estimated recoverable proven and probable reserves were determined using \$2.00 per pound for copper, \$1,000 per ounce for gold and \$10 per pound for molybdenum. The following table summarizes changes in our estimated consolidated recoverable proven and probable copper, gold and molybdenum reserves during 2017 and 2016:

	Copper <sup>a</sup> (billion pounds)	Gold (million ounces)	Molybdenum (billion pounds)
Consolidated reserves at December 31, 2015	99.5	27.1	3.05
Net additions	0.5	0.1	—
Production	(4.6 )	(1.1 )	(0.08 )
Sale of interest in Tenke	(6.8 )	—	—
Sale of 13 percent interest in Morenci	(1.8 )	—	(0.02 )
Consolidated reserves at December 31, 2016	86.8	26.1	2.95
Net additions (revisions)	3.6	<sup>b</sup> (1.0 )	(0.02 )
Production	(3.7 )	(1.6 )	(0.09 )
Consolidated reserves at December 31, 2017	86.7	23.5	2.84

<sup>a</sup> Includes estimated recoverable metals contained in stockpiles. See below for additional discussion of recoverable copper in stockpiles.

<sup>b</sup> Includes 4.4 billion pounds associated with the Lone Star project located near the Safford mine.

Refer to Note 20 for further information regarding estimated recoverable proven and probable mineral reserves.

As discussed in Note 1, we depreciate our life-of-mine mining and milling assets and values assigned to proven and probable mineral reserves using the unit-of-production (UOP) method based on our estimated recoverable proven and probable mineral reserves. Because the economic assumptions used to estimate mineral reserves may change from



period to period and additional geological data is generated during the course of operations, estimates of reserves may change, which could have a significant impact on our results of operations, including changes to prospective depreciation rates and impairments of long-lived asset carrying values. Excluding impacts associated with changes in the levels of finished goods inventories and based on projected copper sales volumes, if estimated copper reserves at our mines were 10 percent higher at December 31, 2017, we estimate that our annual depreciation, depletion and amortization (DD&A) expense for 2018 would decrease by \$45 million (\$24 million to net income attributable to common stockholders), and a 10 percent decrease in copper reserves would increase DD&A expense by \$55 million (\$29 million to net income attributable to common stockholders). We perform annual assessments of our existing assets in connection with the review of mine operating and development plans. If it is

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determined that assigned asset lives do not reflect the expected remaining period of benefit, any change could affect prospective DD&A rates.

As discussed below and in Note 1, we review and evaluate our long-lived assets for impairment when events or changes in circumstances indicate that the related carrying amount of such assets may not be recoverable, and changes to our estimates of recoverable proven and probable mineral reserves could have an impact on our assessment of asset recoverability. Refer to “Risk Factors” contained in Part I, Item 1A. of our annual report on Form 10-K for the year ended December 31, 2017, for further discussion of Indonesian regulatory matters that could have a material adverse affect on our cash flow, results of operations and financial position, and could result in asset impairments at PT-FI.

### Recoverable Copper in Stockpiles

We record, as inventory, applicable costs for copper contained in mill and leach stockpiles that are expected to be processed in the future based on proven processing technologies. Mill and leach stockpiles are evaluated periodically to ensure that they are stated at the lower of weighted-average cost or net realizable value (refer to Note 4 and “Consolidated Results” for further discussion of inventory adjustments recorded for the three years ended December 31, 2017). Accounting for recoverable copper from mill and leach stockpiles represents a critical accounting estimate because (i) it is impracticable to determine copper contained in mill and leach stockpiles by physical count, thus requiring management to employ reasonable estimation methods and (ii) recovery rates from leach stockpiles can vary significantly. Refer to Note 1 for further discussion of our accounting policy for recoverable copper in stockpiles.

At December 31, 2017, estimated consolidated recoverable copper was 2.1 billion pounds in leach stockpiles (with a carrying value of \$2.2 billion) and 0.7 billion pounds in mill stockpiles (with a carrying value of \$660 million), compared with 2.2 billion pounds in leach stockpiles (with a carrying value of \$2.2 billion) and 1.0 billion pounds in mill stockpiles (with a carrying value of \$746 million) at December 31, 2016.

### Impairment of Long-Lived Assets

As discussed in Note 1, we assess the carrying values of our long-lived mining assets when events or changes in circumstances indicate that the related carrying amounts of such assets may not be recoverable. In evaluating our long-lived mining assets for recoverability, we use estimates of pre-tax undiscounted future cash flows of our individual mines. Estimates of future cash flows are derived from current business plans, which are developed using near-term metal price forecasts reflective of the current price environment and management’s projections for long-term average metal prices. In addition to near- and long-term metal price assumptions, other key assumptions include estimates of commodity-based and other input costs; proven and probable mineral reserves estimates, including the timing and cost to develop and produce the reserves; value beyond proven and probable mineral reserve estimates (refer to Note 1); and the use of appropriate discount rates in the measurement of fair value. We believe our estimates and models used to determine fair value are similar to what a market participant would use. As quoted market prices are unavailable for our individual mining operations, fair value is determined through the use of after-tax discounted estimated future cash flows.

As a result of declining copper and molybdenum prices, during the second half of 2015, we evaluated our long-lived mining assets for impairment, which resulted in charges of \$37 million at our Tyrone mine, net of a revision to asset retirement obligations (AROs). Refer to Note 5 for further discussion of price assumptions used in our December 31, 2015, evaluations of the recoverability of our copper and molybdenum mines. At December 31, 2016 and 2017, we concluded there were no events or changes in circumstances that would indicate that the carrying amount of our long-lived mining assets might not be recoverable.

In addition to decreases in future metal price assumptions, other events that could result in future impairment of our long-lived mining assets include, but are not limited to, decreases in estimated recoverable proven and probable mineral reserves and any event that might otherwise have a material adverse effect on mine site production levels or

costs. Refer to “Risk Factors” contained in Part I, Item 1A. of our annual report on Form 10-K for the year ended December 31, 2017, for further discussion of Indonesian regulatory matters that could have a material adverse affect on our cash flow, results of operations and financial position, and could result in asset impairments at PT-FI.

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### Environmental Obligations

Our current and historical operating activities are subject to various national, state and local environmental laws and regulations that govern the protection of the environment, and compliance with those laws requires significant expenditures. Environmental expenditures are charged to expense or capitalized, depending upon their future economic benefits. The guidance provided by U.S. GAAP requires that liabilities for contingencies be recorded when it is probable that obligations have been incurred, and the cost can be reasonably estimated. At December 31, 2017, environmental obligations recorded in our consolidated balance sheet totaled \$1.4 billion, which reflect obligations for environmental liabilities attributed to the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) or analogous state programs and for estimated future costs associated with environmental matters. Refer to Notes 1 and 12 for further discussion of environmental obligations, including a summary of changes in our estimated environmental obligations for the three years ended December 31, 2017.

Accounting for environmental obligations represents a critical accounting estimate because changes to environmental laws and regulations and/or circumstances affecting our operations could result in significant changes to our estimates, which could have a significant impact on our results of operations. We perform a comprehensive annual review of our environmental obligations and also review changes in facts and circumstances associated with these obligations at least quarterly. Judgments and estimates are based upon currently available facts, existing technology, presently enacted laws and regulations, remediation experience, whether or not we are a potentially responsible party (PRP), the ability of other PRPs to pay their allocated portions and take into consideration reasonably possible outcomes. Our cost estimates can change substantially as additional information becomes available regarding the nature or extent of site contamination, updated cost assumptions (including increases and decreases to cost estimates), changes in the anticipated scope and timing of remediation activities, the settlement of environmental matters, required remediation methods and actions by or against governmental agencies or private parties.

### Asset Retirement Obligations

We record the fair value of our estimated AROs associated with tangible long-lived assets in the period incurred. Fair value is measured as the present value of cash flow estimates after considering inflation and a market risk premium. Our cost estimates are reflected on a third-party cost basis and comply with our legal obligation to retire tangible long-lived assets in the period incurred. These cost estimates may differ from financial assurance cost estimates for reclamation activities because of a variety of factors, including obtaining updated cost estimates for reclamation activities, the timing of reclamation activities, changes in scope and the exclusion of certain costs not considered reclamation and closure costs. At December 31, 2017, AROs recorded in our consolidated balance sheet totaled \$2.6 billion, including \$0.6 billion associated with our remaining oil and gas operations. Refer to Notes 1 and 12 for further discussion of reclamation and closure costs, including a summary of changes in our AROs for the three years ended December 31, 2017.

Generally, ARO activities are specified by regulations or in permits issued by the relevant governing authority, and management judgment is required to estimate the extent and timing of expenditures. Accounting for AROs represents a critical accounting estimate because (i) we will not incur most of these costs for a number of years, requiring us to make estimates over a long period, (ii) reclamation and closure laws and regulations could change in the future and/or circumstances affecting our operations could change, either of which could result in significant changes to our current plans, (iii) the methods used or required to plug and abandon non-producing oil and gas wellbores, remove platforms, tanks, production equipment and flow lines, and restore the wellsite could change, (iv) calculating the fair value of our AROs requires management to estimate projected cash flows, make long-term assumptions about inflation rates, determine our credit-adjusted, risk-free interest rates and determine market risk premiums that are appropriate for our operations and (v) given the magnitude of our estimated reclamation, mine closure and wellsite abandonment and restoration costs, changes in any or all of these estimates could have a significant impact on our results of operations.

### Taxes

In preparing our annual consolidated financial statements, we estimate the actual amount of income taxes currently payable or receivable as well as deferred income tax assets and liabilities attributable to temporary differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. Deferred income tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which these temporary differences are expected to be recovered or settled. The effect on deferred income tax assets and liabilities of a change in tax rates or laws is recognized in income in the period in which such changes are enacted.

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Our operations are in multiple jurisdictions where uncertainties arise in the application of complex tax regulations. Some of these tax regimes are defined by contractual agreements with the local government, while others are defined by general tax laws and regulations. We and our subsidiaries are subject to reviews of our income tax filings and other tax payments, and disputes can arise with the taxing authorities over the interpretation of our contracts or laws. Final taxes paid may be dependent upon many factors, including negotiations with taxing authorities. In certain jurisdictions, we must pay a portion of the disputed amount to the local government in order to formally appeal an assessment. Such payment is recorded as a receivable if we believe the amount is collectible.

A valuation allowance is provided for those deferred income tax assets for which the weight of available evidence suggests that the related benefits will not be realized. In determining the amount of the valuation allowance, we consider estimated future taxable income or loss as well as feasible tax planning strategies in each jurisdiction. If we determine that we will not realize all or a portion of our deferred income tax assets, we will increase our valuation allowance. Conversely, if we determine that we will ultimately be able to realize all or a portion of the related benefits for which a valuation allowance has been provided, all or a portion of the related valuation allowance will be reduced.

Our valuation allowances totaled \$4.6 billion at December 31, 2017, which covered U.S. federal and state deferred tax assets, including all of our U.S. foreign tax credit carryforwards, U.S. federal net operating loss carryforwards, U.S. federal capital loss carryforwards, foreign net operating loss carryforwards, and substantially all of our U.S. state net operating loss carryforwards.

The Tax Cuts and Jobs Act (the Act) enacted on December 22, 2017, includes significant modifications to existing U.S. tax laws and creates many new complex tax provisions. The Act reduces the corporate income tax rate to 21 percent, eliminates the corporate alternative minimum tax (AMT), provides for a refund of AMT credit carryover, maintains hard minerals percentage depletion, allows for immediate expensing of certain qualified property and generally broadens the tax base. The Act also creates a territorial tax system (with a one-time mandatory tax on previously deferred foreign earnings), creates anti-base erosion rules that require companies to pay a minimum tax on foreign earnings and disallows certain payments from U.S. corporations to foreign related parties. Our income tax provision for 2017 includes provisional net tax credits associated with the Act totaling \$393 million, including the reversal of valuation allowances associated with anticipated refunds of AMT credits over the next four years (\$272 million, net of reserves) and a decrease in corporate income tax rates (\$121 million). Our income tax provision for 2017 was not impacted by the Act's one-time tax on deferred foreign earnings, as we have sufficient foreign tax credits to offset the tax. As the Act's tax provisions are numerous and complex, we continue to evaluate their impact. Refer to Note 11 for further discussion.

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## CONSOLIDATED RESULTS

	Years Ended December 31,		
	2017	2016	2015
SUMMARY FINANCIAL DATA	(in millions, except per share amounts)		
Revenues <sup>a,b</sup>	\$16,403	\$14,830 <sup>c</sup>	\$14,607 <sup>c</sup>
Operating income (loss) <sup>a,d,e,f,g,h</sup>	\$3,633	\$(2,792) <sup>i</sup>	\$(13,512) <sup>i</sup>
Net income (loss) from continuing operations <sup>j</sup>	\$2,029 <sup>k,l,m</sup>	\$(3,832) <sup>l,m</sup>	\$(12,180) <sup>n</sup>
Net income (loss) from discontinued operations <sup>o</sup>	\$66	\$(193 )	\$91
Net income (loss) attributable to common stock	\$1,817	\$(4,154) <sup>p</sup>	\$(12,236)
Diluted net income (loss) per share attributable to common stock:			
Continuing operations	\$1.21	\$(2.96 )	\$(11.32 )
Discontinued operations	0.04	(0.20 )	0.01
	\$1.25	\$(3.16 )	\$(11.31 )
Diluted weighted-average common shares outstanding	1,454	1,318	1,082
Operating cash flows <sup>q</sup>	\$4,682	\$3,729	\$3,220
Capital expenditures	\$1,410	\$2,813	\$6,353
At December 31:			
Cash and cash equivalents	\$4,447	\$4,245	\$177
Total debt, including current portion	\$13,117	\$16,027	\$20,324

a. As further detailed in Note 16, following is a summary of revenues and operating income (loss) by operating division (in millions):

	Years Ended December 31,		
	2017	2016	2015
Revenues			
North America copper mines	\$4,565	\$4,374	\$5,126
South America mining	3,694	2,938	1,934
Indonesia mining	4,445	3,295	2,653
Molybdenum mines	268	186	348
Rod & Refining	4,482	3,862	4,154
Atlantic Copper Smelting & Refining	2,032	1,830	1,970
Corporate, other & eliminations	(3,083 )	(1,655 )	(1,578 )
Total revenues	\$16,403	\$14,830	\$14,607
Operating income (loss)			
North America copper mines	\$1,365	\$1,479	\$648
South America mining	916	618	67
Indonesia mining	2,020	1,027	449
Molybdenum mines	(38 )	(96 )	(72 )
Rod & Refining	2	16	16
Atlantic Copper Smelting & Refining	20	72	67
Corporate, other & eliminations	(652 )	(5,908 )	(14,687 )
Total operating income (loss)	\$3,633	\$(2,792 )	\$(13,512)

Includes favorable (unfavorable) adjustments to provisionally priced concentrate and cathode copper sales recognized in prior periods totaling \$81 million (\$34 million to net income attributable to common stock or \$0.02 b. per share) in 2017, \$5 million (\$2 million to net loss attributable to common stock or less than \$0.01 per share) in 2016 and \$(100) million (\$50) million to net loss attributable to common stock or \$(0.05) per share) in 2015. Refer to "Revenues" for further discussion.

c.

Includes net noncash mark-to-market losses associated with crude oil and natural gas derivative contracts totaling \$41 million (\$41 million to net loss attributable to common stock or \$0.03 per share) in 2016 and \$319 million (\$198 million to net loss attributable to common stock or \$0.18 per share) in 2015. Refer to “Revenues” for further discussion.

d. Includes net charges at mining operations totaling \$143 million (\$84 million to net income attributable to common stock or \$0.06 per share) in 2017, primarily associated with workforce reductions at PT-FI; \$33 million (\$14 million to net loss attributable to common stock or \$0.01 per share) in 2016, primarily for PT-FI asset retirement and Cerro Verde social commitments and \$145 million (\$90 million to net loss attributable to common stock or \$0.08 per share) in 2015 for asset impairment, restructuring and other net charges. The year 2015 also includes \$18 million (\$12 million to net loss attributable to common stock or \$0.01 per share) for executive retirement benefits.



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e. Includes charges for metals inventory adjustments totaling \$8 million (\$8 million to net income attributable to common stock or less than \$0.01 per share) in 2017, \$36 million (\$36 million to net loss attributable to common stock or \$0.03 per share) in 2016 and \$338 million (\$217 million to net loss attributable to common stock or \$0.20 per share) in 2015.

f. Includes net (credits) charges at oil and gas operations totaling \$(13) million (\$(13) million to net income attributable to common stock or \$(0.01) per share) in 2017, primarily for drillship settlements, partly offset by contract termination costs; \$1.1 billion (\$1.1 billion to net loss attributable to common stock or \$0.84 per share) in 2016, primarily for drillship settlements/idle rig costs, the termination of contracts for support vessels and equipment, inventory adjustments, asset impairment and restructuring charges; and \$188 million (\$117 million to net loss attributable to common stock or \$0.11 per share) in 2015, primarily for asset impairments, inventory adjustments and idle rig costs.

g. Includes net gain on sales of assets totaling \$81 million (\$81 million to net income attributable to common stock or \$0.06 per share) in 2017, \$649 million (\$649 million to net loss attributable to common stock or \$0.49 per share) in 2016 and \$39 million (\$25 million to net loss attributable to common stockholders or \$0.02 per share) in 2015.

Refer to Note 2 and “Net Gain on Sales of Assets” below for further discussion.

h. Includes net charges (credits) for adjustments to environmental obligations and related litigation reserves of \$210 million (\$210 million to net income attributable to common stock or \$0.14 per share) in 2017, \$(16) million (\$(16) million to net loss attributable to common stock or \$(0.01) per share) in 2016 and \$43 million (\$28 million to net loss attributable to common stock or \$0.03 per share) in 2015.

i. Includes charges to reduce the carrying value of oil and gas properties pursuant to full cost accounting rules of \$4.3 billion (\$4.3 billion to net loss attributable to common stock or \$3.28 per share) in 2016 and \$13.1 billion (\$11.6 billion to net loss attributable to common stockholders or \$10.72 per share) in 2015.

j. We defer recognizing profits on intercompany sales until final sales to third parties occur. Refer to “Operations - Smelting & Refining” for a summary of net impacts from changes in these deferrals.

k. Includes net charges at Cerro Verde related to (i) Peruvian government claims for disputed royalties for prior years totaling \$186 million to net income attributable to common stock or \$0.13 per share (consisting of \$203 million to operating income, \$145 million to interest expense and \$7 million to provision for income taxes, net of \$169 million to noncontrolling interests) and (ii) other tax related matters for prior years totaling \$14 million to net income attributable to common stock or \$0.01 per share (consisting of \$11 million to operating income, \$8 million to interest expense, \$1 million to other income and \$7 million to provision for income taxes, net of \$13 million to noncontrolling interests).

l. Includes net gains on early extinguishment and exchanges of debt totaling \$21 million (\$0.01 per share) in 2017 and \$26 million (\$0.02 per share) in 2016. Refer to Note 8 for further discussion.

m. Includes net tax credits of \$438 million (\$0.30 per share) in 2017 and \$374 million (\$0.28 per share) in 2016. Refer to “Income Taxes” below for further discussion.

n. Includes a gain of \$92 million (\$0.09 per share) related to net proceeds received from insurance carriers and other third parties related to the shareholder derivative litigation settlement.

o. Net income from discontinued operations in 2017 primarily reflects adjustments to the fair value of the potential \$120 million in contingent consideration related to the November 2016 sale of our interest in TFHL, which totaled \$74 million at December 31, 2017, and will continue to be adjusted through December 31, 2019. The years 2016 and 2015 reflect the results of TFHL through the November 16, 2016, sale date and include charges for allocated interest expense associated with the portion of our term loan that was required to be repaid as a result of the sale of our interest in TFHL. Net loss from discontinued operations for 2016 also includes a net charge of \$198 million (\$0.15 per share) for the loss on disposal. Refer to Note 2 and “Net Income (Loss) from Discontinued Operations” below for further discussion.

p. Includes a gain on redemption of noncontrolling interest of \$199 million for the settlement of our preferred stock obligation at our Plains Offshore Operations Inc. (Plains Offshore) subsidiary.

q. Includes net working capital sources and timing of other tax payments of \$589 million in 2017, \$87 million in 2016 and \$407 million in 2015.



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	Years Ended		
	December 31,		
	2017	2016 <sup>a</sup>	2015 <sup>a</sup>
<b>SUMMARY OPERATING DATA</b>			
Copper (millions of recoverable pounds)			
Production	3,737	4,222	3,568
Sales, excluding purchases	3,700	4,227	3,603
Average realized price per pound	\$2.93	\$2.28	\$2.42
Site production and delivery costs per pound <sup>b</sup>	\$1.61	\$1.42	\$1.81
Unit net cash costs per pound <sup>b</sup>	\$1.20	\$1.26	\$1.57
Gold (thousands of recoverable ounces)			
Production	1,577	1,088	1,257
Sales, excluding purchases	1,562	1,079	1,247
Average realized price per ounce	\$1,268	\$1,238	\$1,129
Molybdenum (millions of recoverable pounds)			
Production	92	80	92
Sales, excluding purchases	95	74	89
Average realized price per pound	\$9.33	\$8.33	\$8.70

<sup>a</sup> Excludes results from the Tenke mine, which is reported as a discontinued operation. Copper sales from the Tenke mine totaled 424 million pounds in 2016 and 467 million pounds in 2015.

<sup>b</sup> Reflects per pound weighted-average production and delivery costs and unit net cash costs (net of by-product credits) for all copper mines, before net noncash and other costs. For reconciliations of the per pound unit costs by operating division to production and delivery costs applicable to sales reported in our consolidated financial statements, refer to "Product Revenues and Production Costs."

## Revenues

Consolidated revenues totaled \$16.4 billion in 2017, \$14.8 billion in 2016 and \$14.6 billion in 2015. Revenues from our mining operations primarily include the sale of copper concentrate, copper cathode, copper rod, gold and molybdenum. Revenue from our oil and gas operations include the sale of oil, natural gas and natural gas liquids (NGLs). Following is a summary of changes in our consolidated revenues between periods (in millions):

	2017	2016
Consolidated revenues - prior year	\$14,830	\$14,607
Mining operations:		
(Lower) higher sales volumes:		
Copper	(1,201 )	1,508
Gold	598	(190 )
Molybdenum	175	(128 )
Higher (lower) averaged realized prices:		
Copper	2,405	(592 )
Gold	47	117
Molybdenum	95	(27 )
Net adjustments for prior year provisionally priced copper sales	76	105
Higher revenues from purchased copper	361	117
Higher (lower) Atlantic Copper revenues	201	(140 )
Oil and gas operations:		
Lower oil sales volumes	(1,269 )	(40 )
Higher (lower) oil average realized prices, excluding derivative contracts	3	(228 )
Net mark-to-market adjustments on derivative contracts	35	(122 )

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Other, including intercompany eliminations	47	(157 )
Consolidated revenues - current year	\$16,403	\$14,830

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### Mining Operations

**Sales Volumes.** Consolidated copper sales volumes totaled 3.7 billion pounds in 2017, 4.2 billion pounds in 2016 and 3.6 billion pounds in 2015. Lower copper sales volumes in 2017, compared to 2016, primarily reflect lower sales volumes in North America mainly caused by lower ore grades. Higher copper sales volumes in 2016, compared to 2015, primarily reflect higher volumes from Cerro Verde and PT-FI; partly offset by lower sales volumes in North America, primarily reflecting reduced mining rates and the impact of the May 2016 sale of an additional 13 percent undivided interest in Morenci.

Consolidated gold sales volumes totaled 1.6 million ounces in 2017, 1.1 million ounces in 2016 and 1.25 million ounces in 2015. Higher gold sales volumes in 2017, compared with 2016, primarily reflect higher ore grades at PT-FI. Lower gold sales volumes in 2016, compared with 2015, primarily reflect lower ore grades at PT-FI.

Consolidated molybdenum sales volumes totaled 95 million pounds in 2017, 74 million pounds in 2016 and 89 million pounds in 2015. Higher molybdenum sales volumes in 2017, compared with 2016, primarily reflect increased demand and higher production. Lower molybdenum sales volumes in 2016, compared with 2015, primarily reflect reduced operating rates in response to weak demand.

Refer to “Operations” for further discussion of sales volumes at our operating divisions.

**Metals Realized Prices.** Our consolidated revenues can vary significantly as a result of fluctuations in the market prices of copper, gold and molybdenum. Our average realized prices were 29 percent higher for copper, 2 percent higher for gold and 12 percent higher for molybdenum in 2017, compared with 2016. In 2016, our average realized prices were 6 percent lower for copper, 10 percent higher for gold and 4 percent lower for molybdenum, compared with 2015.

**Provisionally Priced Copper Sales.** Impacts of net adjustments for prior year provisionally priced sales primarily relate to copper sales. Substantially all of our copper concentrate and cathode sales contracts provide final copper pricing in a specified future month (generally one to four months from the shipment date) based primarily on quoted LME monthly average spot copper prices (refer to “Disclosures About Market Risks-Commodity Price Risk” for further discussion). Revenues include favorable (unfavorable) net adjustments to prior years’ provisionally priced copper sales totaling \$81 million in 2017, \$5 million in 2016 and \$(100) million in 2015.

**Purchased Copper.** We purchased copper cathode primarily for processing by our Rod & Refining operations. Purchased copper volumes totaled 273 million pounds in 2017, 188 million pounds in 2016 and 121 million pounds in 2015.

**Atlantic Copper Revenues.** Atlantic Copper revenues totaled \$2.0 billion in 2017, \$1.8 billion in 2016 and \$2.0 billion in 2015. Higher Atlantic Copper revenues in 2017, compared with 2016, primarily reflect higher copper prices. Lower Atlantic Copper revenues in 2016, compared with 2015, primarily reflect lower copper prices.

### Oil & Gas Operations

**Oil Sales Volumes.** Oil sales volumes totaled 1.8 million barrels (MMBbls) in 2017, 34.4 MMBbls in 2016 and 35.3 MMBbls in 2015. Lower volumes in 2017, compared with 2016 and 2015, reflect the sale of substantially all of our oil and gas properties in late 2016. Refer to “Operations” for further discussion of sales volumes at our oil and gas operations.

**Realized Oil Prices Excluding Derivative Contracts.** Our average realized price per barrel for oil (excluding the impact of derivative contracts) of \$40.71 in 2017 was 4 percent higher than our average realized price of \$38.96 in 2016. Our average realized price for oil (excluding the impact of derivative contracts) of \$38.96 in 2016 was 15 percent lower

than our average realized price of \$45.58 per barrel for 2015.

Oil and Gas Derivative Contracts. During 2016 and 2015, we had derivative contracts that were not designated as hedging instruments; accordingly, they were recorded at fair value with the mark-to-market gains and losses recorded in revenues each period (refer to Note 14 for further discussion of oil and gas derivative contracts). Net mark-to-market (losses) gains on oil and gas derivative contracts totaled \$(35) million in 2016 and \$87 million in 2015. We did not have any oil and gas derivative contracts in 2017 and do not have any in place for future periods.

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### Production and Delivery Costs

Consolidated production and delivery costs totaled \$10.3 billion in 2017 and \$10.7 billion in both 2016 and 2015. Lower production and delivery costs in 2017, compared to 2016, primarily reflected lower costs related to our oil and gas operations because of the sale of substantially all of our oil and gas properties in late 2016, partly offset by charges of \$203 million in 2017 related to disputed Cerro Verde royalties for prior years (refer to Note 12 for further discussion) and charges of \$120 million at PT-FI for workforce reductions.

Production and delivery costs in 2016, compared to 2015, reflected lower costs associated with the impact of cost reduction initiatives, offset by higher charges for drillship settlements/idle rig and contract termination costs at U.S. oil and gas operations (which totaled \$926 million in 2016, compared to \$26 million in 2015).

### Mining Unit Site Production and Delivery Costs

Site production and delivery costs for our copper mining operations primarily include labor, energy and commodity-based inputs, such as sulphuric acid, reagents, liners, tires and explosives. Consolidated unit site production and delivery costs (before net noncash and other costs) for our copper mines averaged \$1.61 per pound of copper in 2017, \$1.42 per pound in 2016 and \$1.81 per pound in 2015. Higher consolidated unit site production and delivery costs in 2017, compared with 2016, primarily reflected lower consolidated copper sales volumes and higher mining, milling and employee costs at our South America mining operations. Lower consolidated unit site production and delivery costs in 2016, compared with 2015, primarily reflected higher copper sales volumes and the impact of cost reduction initiatives. Refer to “Operations – Unit Net Cash Costs” for further discussion of unit net cash costs associated with our operating divisions, and to “Product Revenues and Production Costs” for reconciliations of per pound costs by operating division to production and delivery costs applicable to sales reported in our consolidated financial statements.

Our copper mining operations require significant amounts of energy, principally diesel, electricity, coal and natural gas, most of which is obtained from third parties under long-term contracts. Energy represented 18 percent of our copper mine site operating costs in 2017, including purchases of approximately 196 million gallons of diesel fuel; 7,900 gigawatt hours of electricity at our North America and South America copper mining operations (we generate all of our power at our Indonesia mining operation); 700 thousand metric tons of coal for our coal power plant in Indonesia; and 1 million MMBtu (million British thermal units) of natural gas at certain of our North America mines. Based on current cost estimates, energy will approximate 20 percent of our copper mine site operating costs for 2018.

### Depreciation, Depletion and Amortization

Depreciation will vary under the UOP method as a result of changes in sales volumes and the related UOP rates at our mining operations. Consolidated DD&A totaled \$1.7 billion in 2017, \$2.5 billion in 2016 and \$3.2 billion in 2015. Lower DD&A in 2017, compared with 2016, primarily reflected the impact of the sale of substantially all of our oil and gas properties in late 2016. Lower DD&A in 2016, compared with 2015, primarily reflected lower DD&A rates as a result of impairment of oil and gas properties, partly offset by higher DD&A at the Cerro Verde mine.

### Impairment of Oil and Gas Properties

Under the full cost accounting rules, we recognized impairment charges totaling \$4.3 billion in 2016 and \$13.0 billion in 2015 for U.S. oil and gas properties. We also recognized impairment charges of \$18 million in 2016 and \$164 million in 2015 for international oil and gas properties, primarily related to Morocco. Refer to Note 1 for further discussion.

### Metals Inventory Adjustments

We recorded adjustments to copper and molybdenum inventory carrying values totaling \$8 million in 2017, \$36 million in 2016 and \$338 million in 2015. Refer to Notes 1 and 4 for further discussion.

**Selling, General and Administrative Expenses**

Consolidated selling, general and administrative expenses totaled \$484 million in 2017, \$607 million in 2016 and \$558 million in 2015. Selling, general and administrative expenses included \$17 million in 2017 for oil and gas contract termination costs, \$85 million in 2016 for oil and gas restructuring costs and \$18 million in 2015 for executive retirement benefits.

Consolidated selling, general and administrative expenses were net of capitalized general and administrative expenses at our oil and gas operations totaling \$78 million in 2016 and \$124 million in 2015.



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### Mining Exploration and Research Expenses

Consolidated exploration and research expenses for our mining operations totaled \$94 million in 2017, \$64 million in 2016 and \$107 million in 2015. Our mining exploration activities are generally associated with our existing mines and focus on opportunities to expand reserves and resources to support development of additional future production capacity. Exploration results continue to indicate opportunities for significant future potential reserve additions in North America and South America. Exploration spending is expected to approximate \$65 million in 2018.

### Environmental Obligations and Shutdown Costs

Environmental obligation costs reflect net revisions to our long-term environmental obligations, which vary from period to period because of changes to environmental laws and regulations, the settlement of environmental matters and/or circumstances affecting our operations that could result in significant changes in our estimates (refer to “Critical Accounting Estimates – Environmental Obligations” for further discussion). Shutdown costs include care-and-maintenance costs and any litigation, remediation or related expenditures associated with closed facilities or operations. Net charges for environmental obligations and shutdown costs totaled \$251 million in 2017, \$20 million in 2016 and \$78 million in 2015. Higher costs in 2017 primarily reflect adjustments to environmental obligations resulting from revised cost estimates. Refer to Note 12 for further discussion of environmental obligations and litigation matters.

### Net Gain on Sales of Assets

Net gain on sales of assets totaled \$81 million in 2017, primarily associated with oil and gas transactions and adjustments to assets held for sale.

Net gain on sales of assets totaled \$649 million in 2016, primarily related to the gains recognized for the Morenci and Timok transactions, partly offset by estimated losses on assets held for sale. Net gain on sales of assets for the year 2016 also included \$183 million for contingent consideration, including \$150 million associated with the sale of the Deepwater Gulf of Mexico (GOM) oil and gas properties, which is payable to us as the buyer realizes future cash flows in connection with a third-party production handling agreement, and \$33 million for the fair value of the potential \$150 million in contingent consideration from the sale of the onshore California oil and gas properties, which in accordance with accounting guidelines will continue to be adjusted to fair value through December 31, 2020.

Net gain on sales of assets totaled \$39 million in 2015 related to the sale of our one-third interest in the Luna Energy power facility in New Mexico.

Refer to Note 2 for further discussion of dispositions.

### Interest Expense, Net

Interest expense, net, includes \$145 million in 2017 associated with disputed Cerro Verde royalties (refer to Note 12 for further discussion). Consolidated interest costs (before capitalization, excluding interest expense associated with disputed Cerro Verde royalties) totaled \$777 million in 2017, \$854 million in 2016 and \$832 million in 2015. Lower interest expense in 2017, compared to 2016, reflects a decrease in total debt.

Capitalized interest varies with the level of expenditures for our development projects and average interest rates on our borrowings, and totaled \$121 million in 2017, \$99 million in 2016 and \$215 million in 2015. Refer to “Operations” and “Capital Resources and Liquidity – Investing Activities” for further discussion of current development projects.

### Net Gain on Early Extinguishment and Exchanges of Debt

Net gain on early extinguishment of debt totaled \$21 million in 2017, primarily related to the redemption of certain senior notes. Net gain on exchanges and early extinguishment of debt totaled \$26 million in 2016, primarily related to the redemption of certain senior notes in exchange for common stock, partly offset by losses associated with

prepayments of an unsecured bank term loan and fees associated with the exchange of Freeport-McMoRan Oil & Gas LLC senior notes for new FCX senior notes. Refer to Note 8 for further discussion.

Other Income, Net

Other income, net, primarily included foreign currency translation adjustments and interest income, and totaled \$49 million in both 2017 and 2016, and \$1 million in 2015. The year 2015 also included a gain of \$92 million associated

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with net proceeds received from insurance carriers and other third parties related to the shareholder derivative litigation.

## Income Taxes

Following is a summary of the approximate amounts used in the calculation of our consolidated income tax (provision) benefit from continuing operations for the years ended December 31 (in millions, except percentages):

	2017			2016		
	Income (Loss) <sup>a</sup>	Effective Tax Rate	Income Tax (Provision) Benefit	Income (Loss) <sup>a</sup>	Effective Tax Rate	Income Tax (Provision) Benefit
U.S.	\$41	(156)%	\$ 64	<sup>b</sup> \$(865 )	41%	\$ 357 <sup>c</sup>
South America	1,059	41%	(439 )	501	43%	(216 ) <sup>d</sup>
Indonesia	2,033	43%	(869 )	1,058	42%	(442 )
U.S. tax reform	—	N/A	393 <sup>e</sup>	—	N/A	—
Cerro Verde royalty dispute	(348 )	N/A	(7 ) <sup>f</sup>	—	N/A	—
Impairment of oil and gas properties	—	N/A	—	(4,317 )	N/A	— <sup>g</sup>
Eliminations and other	117	N/A	(25 )	151	N/A	(70 )
Consolidated FCX	\$2,902	30%	\$ (883 )	\$(3,472)	(11)%	\$ (371 )
	2015					
			Income Tax (Provision) Benefit			
U.S.	\$(1,626 ) <sup>h</sup>	44%	\$ 720			
South America	(40 )	(10)%	(4 )			
Indonesia	430	45%	(195 )			
Impairment of oil and gas properties	(13,144 )	N/A	1,546 <sup>g</sup>			
Eliminations and other	252	N/A	(116 )			
Consolidated FCX	\$(14,128)	14%	\$ 1,951			

a. Represents income (loss) from continuing operations by geographic location before income taxes and equity in affiliated companies' net earnings.

b. Includes net tax credits of \$24 million associated with changes in valuation allowances; also includes net tax credits of \$21 million associated with AMT credit carryforwards. These credits are not related to the benefit resulting from U.S. tax reform presented separately in the above table (refer to footnote e below).

c. Includes tax credits of \$357 million associated with AMT credits, changes to valuation allowances and net operating loss carryback claims.

d. Includes a net tax credit of \$13 million (\$17 million net of noncontrolling interests) related to changes in Peruvian tax rules.

e. As further discussed in Note 11, the Act enacted on December 22, 2017, includes significant modifications to existing U.S. tax laws and creates many new complex tax provisions. The Act reduces the corporate income tax rate to 21 percent, eliminates the corporate AMT, provides for a refund of AMT credit carryover, maintains hard minerals percentage depletion, allows for immediate expensing of certain qualified property and generally broadens the tax base. The Act also creates a territorial tax system (with a one-time mandatory tax on previously deferred foreign earnings), creates anti-base erosion rules that require companies to pay a minimum tax on foreign earnings and disallows certain payments from U.S. corporations to foreign related parties. Our income tax provision for the year 2017 includes provisional net tax credits associated with the Act totaling \$393 million, including the reversal of valuation allowances associated with anticipated refunds of AMT credits over the next four years (\$272 million, net of reserves) and a decrease in corporate income tax rates (\$121 million). Our income tax provision for the year 2017

was not impacted by the Act's one-time tax on deferred foreign earnings, as we have sufficient foreign tax credits to offset the tax. As the Act's tax provisions are numerous and complex, we continue to evaluate their impact.

f. Includes tax charges of \$136 million for disputed royalties and other related mining taxes for the period October 2011 through the year 2013, mostly offset by a tax benefit of \$129 million associated with disputed royalties and other related mining taxes for the period December 2006 through the year 2013.

g. Net of tax charges to establish valuation allowances against U.S. federal and state deferred tax assets that will not generate a future benefit.

h. Includes a gain of \$92 million related to net proceeds received from insurance carriers and other third parties related to the shareholder derivative litigation settlement for which there was no related tax provision.

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Our consolidated effective income tax rate is a function of the combined effective tax rates for the jurisdictions in which we operate. Accordingly, variations in the relative proportions of jurisdictional income result in fluctuations to our consolidated effective income tax rate. Assuming achievement of current sales volume and cost estimates and average prices of \$3.15 per pound for copper, \$1,300 per ounce for gold and \$10.00 per pound for molybdenum for 2018, we estimate our consolidated effective tax rate for the year 2018 will approximate 37 percent and would decrease with higher prices.

Refer to Note 11 for further discussion of income taxes.

### Net Income (Loss) from Discontinued Operations

As further discussed in Note 2, in November 2016, we completed the sale of our interest in TFHL, through which we had an effective 56 percent interest in the Tenke copper and cobalt concessions in the Democratic Republic of Congo. In accordance with accounting guidelines, the results of TFHL have been reported as discontinued operations for all periods presented.

Net income from discontinued operations totaled \$66 million in 2017, primarily reflecting adjustments to the fair value of the potential \$120 million contingent consideration related to the sale, which totaled \$74 million at December 31, 2017, and will continue to be adjusted through December 31, 2019. Net (loss) income from discontinued operations of \$(193) million in 2016 and \$91 million in 2015 included allocated interest expense of \$39 million in 2016 and \$28 million in 2015 associated with the portion of the term loan that was required to be repaid as a result of the sale of our interest in TFHL. The year 2016 also included \$198 million for the estimated loss on disposal.

### Gain on Redemption and Preferred Dividends Attributable to Redeemable Noncontrolling Interest

In connection with the December 2016 sale of the Deepwater GOM oil and gas properties, we settled a preferred stock obligation at our Plains Offshore subsidiary, which resulted in the recognition of a \$199 million gain on redemption. Refer to Note 2 for further discussion.

## OPERATIONS

### North America Copper Mines

We operate seven open-pit copper mines in North America – Morenci, Bagdad, Safford, Sierrita and Miami in Arizona, and Chino and Tyrone in New Mexico. All of the North America mining operations are wholly owned, except for Morenci.

We record our undivided joint venture interest in Morenci using the proportionate consolidation method. On May 31, 2016, we completed the sale of an additional 13 percent undivided interest in Morenci. As a result of the transaction, our undivided interest in Morenci was prospectively reduced from 85 percent to 72 percent. Refer to Note 2 for further discussion.

The North America copper mines include open-pit mining, sulfide ore concentrating, leaching and solution extraction/electrowinning (SX/EW) operations. A majority of the copper produced at our North America copper mines is cast into copper rod by our Rod & Refining segment. The remainder of our North America copper sales is in the form of copper cathode or copper concentrate, a portion of which is shipped to Atlantic Copper (our wholly owned smelter). Molybdenum concentrate, gold and silver are also produced by certain of our North America copper mines.

Operating and Development Activities. We have significant undeveloped reserves and resources in North America and a portfolio of potential long-term development projects. Future investments will be undertaken based on the results of economic and technical feasibility studies, and are dependent on market conditions. We continue to study opportunities to reduce the capital intensity of our potential long-term development projects.

Through exploration drilling, we have identified a significant resource at our wholly owned Lone Star project located near the Safford operation in eastern Arizona. We have commenced a project to develop the Lone Star oxide ores with first production expected by the end of 2020. Total estimated capital costs, including mine equipment and pre-production stripping, approximates \$850 million and will benefit from the utilization of existing infrastructure at the adjacent Safford operation. Production from the Lone Star oxide ores is expected to average approximately 200 million pounds of copper per year with an approximate 20-year mine life. The project also advances the potential for

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development of a larger-scale district opportunity. We are conducting additional drilling as we continue to evaluate longer term opportunities available from the significant sulfide potential in the Lone Star/Safford minerals district.

Operating Data. Following is summary operating data for the North America copper mines for the years ended December 31:

	2017	2016	2015
Operating Data, Net of Joint Venture Interests			
Copper (millions of recoverable pounds)			
Production	1,518	1,831	1,947
Sales, excluding purchases	1,484	1,841	1,988
Average realized price per pound	\$ 2.85	\$ 2.24	\$ 2.47
Molybdenum (millions of recoverable pounds)			
Production <sup>a</sup>	33	33	37
100% Operating Data			
SX/EW operations			
Leach ore placed in stockpiles (metric tons per day)	679,000	737,400	913,000
Average copper ore grade (percent)	0.28	0.31	0.26
Copper production (millions of recoverable pounds)	1,121	1,224	1,134
Mill operations			
Ore milled (metric tons per day)	299,500	300,500	312,100
Average ore grade (percent):			
Copper	0.39	0.47	0.49
Molybdenum	0.03	0.03	0.03
Copper recovery rate (percent)	86.4	85.5	85.4
Copper production (millions of recoverable pounds)	683	854	972

<sup>a</sup> Refer to “Consolidated Results” for our consolidated molybdenum sales volumes, which include sales of molybdenum produced at the North America copper mines.

Copper sales volumes from our North America copper mines decreased to 1.5 billion pounds in 2017, compared with 1.8 billion pounds in 2016, primarily reflecting lower ore grades. The year 2016 included approximately 60 million pounds of copper from the 13 percent undivided interest in Morenci that we sold in May 2016.

Copper sales volumes from our North America copper mines decreased to 1.8 billion pounds in 2016, compared with 2.0 billion pounds in 2015, primarily reflecting the impact of the May 2016 sale of an additional 13 percent undivided interest in Morenci and reduced mining rates.

North America copper sales are estimated to approximate 1.5 billion pounds of copper in 2018. Refer to “Outlook” for projected molybdenum sales volumes.

Unit Net Cash Costs. Unit net cash costs per pound of copper is a measure intended to provide investors with information about the cash-generating capacity of our mining operations expressed on a basis relating to the primary metal product for our respective operations. We use this measure for the same purpose and for monitoring operating performance by our mining operations. This information differs from measures of performance determined in accordance with U.S. GAAP and should not be considered in isolation or as a substitute for measures of performance determined in accordance with U.S. GAAP. This measure is presented by other metals mining companies, although our measure may not be comparable to similarly titled measures reported by other companies.





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## Gross Profit per Pound of Copper and Molybdenum

The following tables summarize unit net cash costs and gross profit per pound of copper at our North America copper mines for the years ended December 31. Refer to “Product Revenues and Production Costs” for an explanation of the “by-product” and “co-product” methods and a reconciliation of unit net cash costs per pound to production and delivery costs applicable to sales reported in our consolidated financial statements.

	2017			2016		
	By-Product Method	Co-Product Method	Molybdenum <sup>a</sup>	By-Product Method	Co-Product Method	Molybdenum <sup>a</sup>
	Copper	Copper		Copper	Copper	
Revenues, excluding adjustments	\$2.85	\$2.85	\$ 7.80	\$2.24	\$2.24	\$ 6.34
Site production and delivery, before net noncash and other costs shown below	1.64	1.54	5.78	1.42	1.35	4.93
By-product credits	(0.17 )	—	—	(0.12 )	—	—
Treatment charges	0.10	0.10	—	0.11	0.10	—
Unit net cash costs	1.57	1.64	5.78	1.41	1.45	4.93
DD&A	0.29	0.27	0.54	0.29	0.27	0.60
Metals inventory adjustments	—	—	—	—	—	—
Noncash and other costs, net	0.06	0.06	0.07	0.05	0.05	0.06
Total unit costs	1.92	1.97	6.39	1.75	1.77	5.59
Revenue adjustments, primarily for pricing on prior period open sales	—	—	—	—	—	—
Gross profit per pound	\$0.93	\$0.88	\$ 1.41	\$0.49	\$0.47	\$ 0.75
Copper sales (millions of recoverable pounds)	1,481	1,481		1,836	1,836	
Molybdenum sales (millions of recoverable pounds) <sup>a</sup>			33			33

Reflects sales of molybdenum produced by certain of the North America copper mines to our molybdenum sales company at market-based pricing.

Our North America copper mines have varying cost structures because of differences in ore grades and characteristics, processing costs, by-product credits and other factors. During 2017, average unit net cash costs (net of by-product credits) for the North America copper mines ranged from \$1.32 per pound to \$2.35 per pound at the individual mines and averaged \$1.57 per pound. Higher average unit net cash costs (net of by-product credits) in 2017, compared with \$1.41 per pound in 2016, primarily reflected lower copper sales volumes.

Because certain assets are depreciated on a straight-line basis, North America’s average unit depreciation rate may vary with asset additions and the level of copper production and sales.

Average unit net cash costs (net of by-product credits) for our North America copper mines are expected to approximate \$1.67 per pound of copper in 2018, based on achievement of current sales volume and cost estimates, and assuming an average molybdenum price of \$10.00 per pound. North America’s average unit net cash costs in 2018 would change by approximately \$0.04 per pound for each \$2 per pound change in the average price of molybdenum.

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	2016			2015		
	By-Product Method	Co-Product Copper	Molybdenum <sup>a</sup>	By-Product Method	Co-Product Copper	Molybdenum <sup>a</sup>
Revenues, excluding adjustments	\$2.24	\$2.24	\$ 6.34	\$2.47	\$2.47	\$ 7.02
Site production and delivery, before net noncash and other costs shown below	1.42	1.35	4.93	1.68	1.59	5.61
By-product credits	(0.12 )	—	—	(0.13 )	—	—
Treatment charges	0.11	0.10	—	0.12	0.12	—
Unit net cash costs	1.41	1.45	4.93	1.67	1.71	5.61
DD&A	0.29	0.27	0.60	0.28	0.27	0.53
Metals inventory adjustments	—	—	—	0.07	0.07	0.07
Noncash and other costs, net	0.05	0.05	0.06	0.12	<sup>b</sup> 0.11	0.16
Total unit costs	1.75	1.77	5.59	2.14	2.16	6.37
Revenue adjustments, primarily for pricing on prior period open sales	—	—	—	(0.01 )	(0.01 )	—
Gross profit per pound	\$0.49	\$0.47	\$ 0.75	\$0.32	\$0.30	\$ 0.65
Copper sales (millions of recoverable pounds)	1,836	1,836		1,985	1,985	
Molybdenum sales (millions of recoverable pounds) <sup>a</sup>			33			37

Reflects sales of molybdenum produced by certain of the North America copper mines to our molybdenum sales company at market-based pricing.

b. Includes \$99 million (\$0.05 per pound) in 2015 for asset impairment, restructuring and other net charges.

Unit net cash costs (net of by-product credits) for our North America copper mines decreased to \$1.41 per pound of copper in 2016, compared with \$1.67 per pound in 2015, primarily reflecting cost reduction initiatives.

### South America Mining

We operate two copper mines in South America – Cerro Verde in Peru (in which we own a 53.56 percent interest) and El Abra in Chile (in which we own a 51 percent interest), which are consolidated in our financial statements.

South America mining includes open-pit mining, sulfide ore concentrating, leaching and SX/EW operations. Production from our South America mines is sold as copper concentrate or cathode under long-term contracts. Our South America mines also sell a portion of their copper concentrate and cathode to Atlantic Copper. In addition to copper, the Cerro Verde mine produces molybdenum concentrate and silver.

**Operating and Development Activities.** The Cerro Verde expansion project, which commenced operations in September 2015, achieved capacity operating rates in early 2016. The project expanded the concentrator facilities' capacity from 120,000 metric tons of ore per day to 360,000 metric tons of ore per day. Cerro Verde's expanded operations benefit from its large-scale, long-lived reserves and cost efficiencies.

Beginning in the second half of 2015, El Abra operated at reduced rates to achieve lower operating and labor costs, defer capital expenditures and extend the life of the existing operations. El Abra's is expected to operate at full capacity during 2018.

Exploration results in recent years at El Abra indicate a significant sulfide resource, which could potentially support a major mill project similar to facilities recently constructed at Cerro Verde. We continue to evaluate a potential major expansion at El Abra to process additional sulfide material and to achieve higher recoveries. Future investments will depend on technical studies, which are being advanced, economic factors and market conditions.



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Operating Data. Following is summary operating data for our South America mining operations for the years ended December 31.

	2017	2016	2015
Copper (millions of recoverable pounds)			
Production	1,235	1,328	869
Sales	1,235	1,332	871
Average realized price per pound	\$ 2.97	\$ 2.31	\$ 2.38
Molybdenum (millions of recoverable pounds)			
Production <sup>a</sup>	27	21	7
SX/EW operations			
Leach ore placed in stockpiles (metric tons per day)	142,800	149,100	208,400
Average copper ore grade (percent)	0.37	0.41	0.44
Copper production (millions of recoverable pounds)	255	328	430
Mill operations			
Ore milled (metric tons per day)	360,100	353,400	152,100
Average ore grade (percent):			
Copper	0.44	0.43	0.46
Molybdenum	0.02	0.02	0.02
Copper recovery rate (percent)	81.2	85.8	81.5
Copper production (millions of recoverable pounds)	980	1,000	439

Refer to “Consolidated Results” for our consolidated molybdenum sales volumes, which include sales of molybdenum produced at Cerro Verde.

Lower consolidated copper sales volumes from South America of 1.2 billion pounds in 2017, compared with 1.3 billion in 2016, primarily reflected lower recovery rates at Cerro Verde and lower ore grades at El Abra.

Copper sales volumes from our South America mining operations totaled 1.3 billion pounds in 2016, and were higher compared with 871 million pounds in 2015, primarily reflecting Cerro Verde’s expanded operations.

Copper sales from South America mines are expected to approximate 1.2 billion pounds of copper in 2018. Refer to “Outlook” for projected molybdenum sales volumes.

Unit Net Cash Costs. Unit net cash costs per pound of copper is a measure intended to provide investors with information about the cash-generating capacity of our mining operations expressed on a basis relating to the primary metal product for our respective operations. We use this measure for the same purpose and for monitoring operating performance by our mining operations. This information differs from measures of performance determined in accordance with U.S. GAAP and should not be considered in isolation or as a substitute for measures of performance determined in accordance with U.S. GAAP. This measure is presented by other metals mining companies, although our measure may not be comparable to similarly titled measures reported by other companies.

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## Gross Profit per Pound of Copper

The following tables summarize unit net cash costs and gross profit per pound of copper at our South America mining operations for the years ended December 31. Unit net cash costs per pound of copper are reflected under the by-product and co-product methods as the South America mining operations also had sales of molybdenum, gold and silver. Refer to “Product Revenues and Production Costs” for an explanation of the “by-product” and “co-product” methods and a reconciliation of unit net cash costs per pound to production and delivery costs applicable to sales reported in our consolidated financial statements.

	2017		2016		2015	
	By-Product Method	Co-Product Method	By-Product Method	Co-Product Method	By-Product Method	Co-Product Method
Revenues, excluding adjustments	\$2.97	\$ 2.97	\$2.31	\$ 2.31	\$2.38	\$ 2.38
Site production and delivery, before net noncash and other costs shown below	1.59	1.49	1.26	1.20	1.60	1.56
By-product credits	(0.18 )	—	(0.10 )	—	(0.05 )	—
Treatment charges	0.22	0.22	0.24	0.24	0.19	0.19
Royalty on metals	0.01	0.01	0.01	—	—	—
Unit net cash costs	1.64	1.72	1.41	1.44	1.74	1.75
DD&A	0.43	0.39	0.41	0.39	0.40	0.39
Metals inventory adjustments	—	—	—	—	0.08	0.08
Noncash and other costs, net	0.19	<sup>a</sup> 0.18	0.03	0.03	0.05	0.05
Total unit costs	2.26	2.29	1.85	1.86	2.27	2.27
Revenue adjustments, primarily for pricing on prior period open sales	0.03	0.03	0.01	0.01	(0.03 )	(0.03 )
Gross profit per pound	\$0.74	\$ 0.71	\$0.47	\$ 0.46	\$0.08	\$ 0.08
Copper sales (millions of recoverable pounds)	1,235	1,235	1,332	1,332	871	871

<sup>a</sup> Includes charges totaling \$203 million (\$0.16 per pound of copper) associated with disputed Cerro Verde royalties for prior years (refer to Note 12 for further discussion).

During 2017, unit net cash costs (net of by-product credits) for the South America mines were \$1.58 per pound of copper for the Cerro Verde mine and \$2.00 per pound for the El Abra mine, and averaged \$1.64 per pound. Higher average unit net cash costs (net of by-product credits) for our South America mining operations in 2017, compared with \$1.41 per pound in 2016, primarily reflected lower sales volumes and higher mining, milling and employee costs at Cerro Verde, partly offset by higher by-product credits.

Unit net cash costs (net of by-product credits) for our South America mining operations decreased to \$1.41 per pound of copper in 2016, compared with \$1.74 per pound in 2015, primarily reflecting higher copper sales volumes and efficiencies associated with the Cerro Verde expansion.

Revenues from Cerro Verde’s concentrate sales are recorded net of treatment charges, which will vary with Cerro Verde’s sales volumes and the price of copper.

Because certain assets are depreciated on a straight-line basis, South America’s unit depreciation rate may vary with asset additions and the level of copper production and sales.

Revenue adjustments primarily result from changes in prices on provisionally priced copper sales recognized in prior periods. Refer to “Consolidated Results - Revenues” for further discussion of adjustments to prior period provisionally priced copper sales.

Average unit net cash costs (net of by-product credits) for our South America mining operations are expected to approximate \$1.63 per pound of copper in 2018, based on current sales volume and cost estimates, and assuming average prices of \$10.00 per pound of molybdenum in 2018.

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### Indonesia Mining

Indonesia mining includes PT-FI's Grasberg minerals district, one of the world's largest copper and gold deposits, in Papua, Indonesia. We own 90.64 percent of PT-FI, including 9.36 percent owned through our wholly owned subsidiary, PT Indocopper Investama.

PT-FI proportionately consolidates an unincorporated joint venture with Rio Tinto plc (Rio Tinto), under which Rio Tinto has a 40 percent interest in certain assets and a 40 percent interest through 2022 in production exceeding specified annual amounts of copper, gold and silver. After 2022, all production and related revenues and costs are shared 60 percent PT-FI and 40 percent Rio Tinto. Refer to Note 3 for further discussion of our joint venture with Rio Tinto. Under the joint venture arrangements, PT-FI was allocated nearly 100 percent of copper, gold and silver production and sales for each of the three years ended December 31, 2017. At December 31, 2017, the amounts allocated 100 percent to PT-FI remaining to be produced totaled 4.7 billion pounds of copper, 7.1 million ounces of gold and 12.7 million ounces of silver. Based on the current mine plans, PT-FI anticipates that it will be allocated most of the production and related revenues and costs through 2022.

PT-FI produces copper concentrate that contains significant quantities of gold and silver. Substantially all of PT-FI's copper concentrate is sold under long-term contracts, and in 2017, approximately 46 percent of PT-FI's copper concentrate was sold to PT Smelting (PT-FI's 25 percent-owned smelter and refinery in Gresik, Indonesia).

Regulatory Matters. Following the issuance of new regulations by the Indonesian government in early 2017 (which resulted in a temporary suspension of PT-FI's concentrate exports), PT-FI entered into a Memorandum of Understanding in April 2017 confirming that the COW would continue to be valid and honored until replaced by a mutually agreed IUPK and investment stability agreement.

Following a framework understanding reached in August 2017, the parties have been engaged in negotiation and documentation of an IUPK and accompanying documentation for assurances on legal and fiscal terms to replace the COW while providing PT-FI with long-term mining rights through 2041. In addition, the IUPK would provide that PT-FI construct a smelter within five years of reaching a definitive agreement and include agreement for the divestment of 51 percent of the project area interests to Indonesian participants at fair market value. The parties continue to negotiate documentation on a comprehensive agreement for PT-FI's extended operations and to reach agreement on timing, process and governance matters relating to the divestment, with a mutual objective of completing negotiations and the required documentation during the first half of 2018.

In December 2017, PT-FI was granted an extension of its temporary IUPK through June 30, 2018, to enable exports to continue while negotiations on a definitive agreement proceed. In February 2018, PT-FI received an extension of its export license through February 15, 2019.

Until a definitive agreement is reached, PT-FI has reserved all rights under its COW, including dispute resolution procedures. We cannot predict whether PT-FI will be successful in reaching a satisfactory agreement on the terms of its long-term mining rights. If PT-FI is unable to reach a definitive agreement with the Indonesian government on its long-term mining rights, we intend to reduce or defer investments significantly in underground development projects and will pursue dispute resolution procedures under PT-FI's COW. Refer to Note 13 and "Risk Factors" contained in Part I, Item 1A. of our annual report on Form 10-K for the year ended December 31, 2017, for further discussion of these regulatory matters and risks associated with operations in Indonesia.

Refer to Note 12 for discussion of Indonesia tax matters, including surface water tax assessments that PT-FI is seeking to address in connection with the ongoing negotiations to resolve PT-FI's long-term mining rights.

Operating and Development Activities. PT-FI is currently mining the final phase of the Grasberg open pit, which

contains high copper and gold ore grades. PT-FI expects to mine high-grade ore over the next several quarters prior to transitioning to the Grasberg Block Cave underground mine in the first half of 2019.

PT-FI has several projects in the Grasberg minerals district related to the development of its large-scale, long-lived, high-grade underground ore bodies. In aggregate, these underground ore bodies are expected to produce large-scale quantities of copper and gold following the transition from the Grasberg open pit. Substantial progress has been made to prepare for the transition to mining of the Grasberg Block Cave underground mine. Mine development activities are sufficiently advanced to commence caving in early 2019. The ore flow system and underground rail line are expected to be installed during 2018.



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Subject to reaching a definitive agreement to support PT-FI's long-term investment plans, estimated annual capital spending on these projects would average \$0.9 billion per year (\$0.7 billion per year net to PT-FI) over the next five years. Considering the long-term nature and size of these projects, actual costs could vary from these estimates. In response to market conditions and Indonesian regulatory uncertainty, the timing of these expenditures continues to be reviewed. If PT-FI is unable to reach a definitive agreement with the Indonesian government on its long-term mining rights, we intend to reduce or defer investments significantly in underground development projects and will pursue dispute resolution procedures under PT-FI's COW.

The following provides additional information on the continued development of the Common Infrastructure project, the Grasberg Block Cave underground mine and the Deep Mill Level Zone (DMLZ) ore body that lies below the Deep Ore Zone (DOZ) underground mine. Our current plans and mineral reserves in Indonesia assume that PT-FI's long-term mining rights will be extended through 2041, as stated in the COW.

**Common Infrastructure and Grasberg Block Cave Mine.** In 2004, PT-FI commenced its Common Infrastructure project to provide access to its large undeveloped underground ore bodies located in the Grasberg minerals district through a tunnel system located approximately 400 meters deeper than its existing underground tunnel system. In addition to providing access to our underground ore bodies, the tunnel system will enable PT-FI to conduct future exploration in prospective areas associated with currently identified ore bodies. The tunnel system was completed to the Big Gossan terminal, and the Big Gossan mine was first brought into production in 2010. The Big Gossan underground mine was on care-and-maintenance status during most of 2017 and production restarted in fourth-quarter 2017. Development of the DMLZ and Grasberg Block Cave underground mines is advancing using the Common Infrastructure project tunnels as access.

The Grasberg Block Cave underground mine accounts for approximately half of our recoverable proven and probable reserves in Indonesia. Production from the Grasberg Block Cave mine is expected to commence in early 2019, following the end of mining of the Grasberg open pit. Targeted production rates once the Grasberg Block Cave mining operation reaches full capacity are expected to approximate 130,000 to 160,000 metric tons of ore per day. PT-FI continues to review its operating plans to determine the optimum mine plan for the Grasberg Block Cave underground mine.

Aggregate mine development capital for the Grasberg Block Cave mine and associated Common Infrastructure is expected to approximate \$6.4 billion (incurred between 2008 to 2023), with PT-FI's share totaling approximately \$5.9 billion. Aggregate project costs totaling \$3.3 billion have been incurred through December 31, 2017 (\$0.5 billion during 2017).

**DMLZ.** The DMLZ ore body lies below the DOZ mine at the 2,590-meter elevation and represents the downward continuation of mineralization in the Ertsberg East Skarn system and neighboring Ertsberg porphyry. In September 2015, PT-FI initiated pre-commercial production that represents ore extracted during the development phase for the purpose of obtaining access to the ore body. During 2017 and late January 2018, the DMLZ underground mine was impacted by mining-seismic activity, which is not uncommon in block cave mining. To mitigate the impact of these events, PT-FI implemented a revised mine sequence; upgraded support systems, blasting and re-entry protocols; and improved mine monitoring and analysis processes. Development activities and mining are taking place in unaffected areas while impacted areas are being assessed, rehabilitated and prepared to be placed back into use. PT-FI expects DMLZ to ramp up to full capacity of 80,000 metric tons of ore per day in 2021.

Drilling efforts continue to determine the extent of the ore body. Aggregate mine development capital costs for the DMLZ underground mine are expected to approximate \$3.1 billion (incurred between 2009 and 2021), with PT-FI's share totaling approximately \$1.9 billion. Aggregate project costs totaling \$2.1 billion have been incurred through December 31, 2017 (\$0.3 billion during 2017).



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Operating Data. Following is summary operating data for our Indonesia mining operations for the years ended December 31.

	2017	2016	2015
Operating Data, Net of Joint Venture Interest			
Copper (millions of recoverable pounds)			
Production	984	1,063	752
Sales	981	1,054	744
Average realized price per pound	\$ 3.00	\$ 2.32	\$ 2.33
Gold (thousands of recoverable ounces)			
Production	1,554	1,061	1,232
Sales	1,540	1,054	1,224
Average realized price per ounce	\$ 1,268	\$ 1,237	\$ 1,129

## 100% Operating Data

Ore milled (metric tons per day):<sup>a</sup>

Grasberg open pit	101,800	119,700	115,900
DOZ underground mine	31,200	38,000	43,700
DMLZ underground mine	3,200	4,400	2,900
Grasberg Block Cave underground mine	3,600	2,700	—
Big Gossan underground mine	600	900	—
Total	140,400	165,700	162,500

Average ore grade:

Copper (percent)	1.01	0.91	0.67
Gold (grams per metric ton)	1.15	0.68	0.79

Recovery rates (percent):

Copper	91.6	91.0	90.4
Gold	85.0	82.2	83.4

Production (recoverable):

Copper (millions of pounds)	996	1,063	752
Gold (thousands of ounces)	1,554	1,061	1,232

<sup>a</sup> Amounts represent the approximate average daily throughput processed at PT-FI's mill facilities from each producing mine and from development activities that result in metal production.

Sales volumes from our Indonesia mining operations totaled 981 million pounds of copper and 1.5 million ounces of gold in 2017, compared with 1.1 billion pounds of copper and 1.1 million ounces of gold in 2016. Lower copper sales in 2017, compared to 2016, primarily reflected the impact of regulatory restrictions on PT-FI's concentrate exports at the beginning of 2017 (see discussion above in "Regulatory Matters"), partly offset by higher copper ore grades. Higher gold sales volumes in 2017 primarily reflected higher gold ore grades.

Sales volumes from our Indonesia mining operations totaled 1.1 billion pounds of copper and 1.1 million ounces of gold in 2016, compared with 744 million pounds of copper and 1.2 million ounces of gold in 2015. Higher copper sales volumes in 2016 primarily reflected higher copper ore grades. Lower gold sales volumes in 2016 primarily reflected lower gold ore grades.

Assuming achievement of planned operating rates during 2018, consolidated sales volumes from Indonesia mining are expected to approximate 1.2 billion pounds of copper and 2.4 million ounces of gold in 2018. Indonesia mining's projected sales volumes in 2018 are dependent on a number of factors, including operational performance, workforce

productivity, the timing of shipments and whether PT-FI will be able to resolve complex regulatory matters in Indonesia and continue to operate after June 30, 2018.

Unit Net Cash Costs. Unit net cash costs per pound of copper is a measure intended to provide investors with information about the cash-generating capacity of our mining operations expressed on a basis relating to the primary metal product for our respective operations. We use this measure for the same purpose and for monitoring operating performance by our mining operations. This information differs from measures of performance determined in accordance with U.S. GAAP and should not be considered in isolation or as a substitute for measures of

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performance determined in accordance with U.S. GAAP. This measure is presented by other metal mining companies, although our measure may not be comparable to similarly titled measures reported by other companies.

## Gross Profit per Pound of Copper and per Ounce of Gold

The following tables summarize the unit net cash costs and gross profit per pound of copper and per ounce of gold at our Indonesia mining operations for the years ended December 31. Refer to “Product Revenues and Production Costs” for an explanation of “by-product” and “co-product” methods and a reconciliation of unit net cash costs per pound to production and delivery costs applicable to sales reported in our consolidated financial statements.

	2017			2016		
	By-Product Method	Co-Product Method		By-Product Method	Co-Product Method	
		Copper	Gold		Copper	Gold
Revenues, excluding adjustments	\$3.00	\$3.00	\$1,268	\$2.32	\$2.32	\$1,237
Site production and delivery, before net noncash and other costs shown below	1.58	0.94	398	1.63	1.05	559
Gold and silver credits	(2.05 )	—	—	(1.30 )	—	—
Treatment charges	0.27	0.16	67	0.28	0.18	97
Export duties	0.12	0.07	30	0.09	0.06	31
Royalty on metals	0.17	0.10	47	0.13	0.07	47
Unit net cash costs	0.09	1.27	542	0.83	1.36	734
DD&A	0.57	0.34	142	0.36	0.24	125
Noncash and other costs, net	0.17	<sup>a</sup> 0.10	42	0.05	0.03	17
Total unit costs	0.83	1.71	726	1.24	1.63	876
Revenue adjustments, primarily for pricing on prior period open sales	0.04	0.04	6	—	—	16
PT Smelting intercompany loss	(0.02 )	(0.01 )	(7 )	(0.02 )	(0.02 )	(8 )
Gross profit per pound/ounce	\$2.19	\$1.32	\$541	\$1.06	\$0.67	\$369
Copper sales (millions of recoverable pounds)	981	981		1,054	1,054	
Gold sales (thousands of recoverable ounces)			1,540			1,054

<sup>a</sup> Includes \$120 million (\$0.12 per pound of copper) of costs charged directly to production and delivery costs as a result of workforce reductions.

A significant portion of PT-FI’s costs are fixed, and unit costs vary depending on volumes and other factors. As a result of higher gold and silver credits, Indonesia had unit net cash costs (including gold and silver credits) of \$0.09 per pound of copper in 2017, compared with \$0.83 per pound in 2016.

Treatment charges vary with the volume of metals sold and the price of copper, and royalties vary with the volume of metals sold and the prices of copper and gold.

PT-FI’s export duties totaled \$115 million in 2017, \$95 million in 2016 and \$109 million in 2015. PT-FI’s royalties totaled \$173 million in 2017, \$131 million in 2016 and \$114 million in 2015. Refer to Note 13 for further discussion of PT-FI’s export duties and royalties.

Higher DD&A in 2017, compared with 2016, primarily related to higher amortization of asset retirement costs associated with revised estimates at the end of 2016 for an overburden stockpile. Because certain assets are depreciated on a straight-line basis, PT-FI’s unit depreciation rate varies with the level of copper production and sales.

Revenue adjustments primarily result from changes in prices on provisionally priced copper sales recognized in prior periods. Refer to “Consolidated Results - Revenues” for further discussion of adjustments to prior period provisionally priced copper sales.

PT Smelting intercompany loss represents the change in the deferral of 25 percent of PT-FI’s profit on sales to PT Smelting. Refer to “Operations - Smelting & Refining” for further discussion.

Assuming an average gold price of \$1,300 per ounce for 2018 and achievement of the sales volume and cost estimates, unit net cash credits (net of gold and silver credits) for Indonesia mining are expected to approximate

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\$0.57 per pound of copper in 2018. Indonesia mining's unit net cash credits for 2018 would change by approximately \$0.09 per pound for each \$50 per ounce change in the average price of gold. Because of the fixed nature of a large portion of Indonesia's costs, unit net cash credits/costs vary from quarter to quarter depending on copper and gold volumes.

	2016			2015		
	By-Product Method	Co-Product Method	Gold	By-Product Method	Co-Product Method	Gold
Revenues, excluding adjustments	\$2.32	\$2.32	\$1,237	\$2.33	\$2.33	\$1,129
Site production and delivery, before net noncash and other costs shown below	1.63	1.05	559	2.39	1.32	638
Gold and silver credits	(1.30 )	—	—	(1.91 )	—	—
Treatment charges	0.28	0.18	97	0.31	0.17	83
Export duties	0.09	0.06	31	0.15	0.08	39
Royalty on metals	0.13	0.07	47	0.15	0.09	41
Unit net cash costs	0.83	1.36	734	1.09	1.66	801
DD&A	0.36	0.24	125	0.39	0.22	105
Noncash and other costs, net	0.05	0.03	17	0.05	0.03	14
Total unit costs	1.24	1.63	876	1.53	1.91	920
Revenue adjustments, primarily for pricing on prior period open sales	—	—	16	(0.07 )	(0.06 )	7
PT Smelting intercompany (loss) profit	(0.02 )	(0.02 )	(8 )	0.01	0.01	4
Gross profit per pound/ounce	\$1.06	\$0.67	\$369	\$0.74	\$0.37	\$220
Copper sales (millions of recoverable pounds)	1,054	1,054		744	744	
Gold sales (thousands of recoverable ounces)			1,054			1,224

Unit net cash costs (net of gold and silver credits) for our Indonesia mining operations of \$0.83 per pound of copper in 2016 were lower than unit net cash costs of \$1.09 per pound in 2015, primarily reflecting higher copper sales volumes, partly offset by lower gold and silver credits.

**Molybdenum Mines**

We have two wholly owned molybdenum mines – the Henderson underground mine and the Climax open-pit mine, both in Colorado. The Henderson and Climax mines produce high-purity, chemical-grade molybdenum concentrate, which is typically further processed into value-added molybdenum chemical products. The majority of the molybdenum concentrate produced at the Henderson and Climax mines, as well as from our North America and South America copper mines, is processed at our own conversion facilities.

**Operating and Development Activities.** In response to market conditions, the Henderson molybdenum mine continues to operate at reduced rates.

Production from the Molybdenum mines totaled 32 million pounds of molybdenum in 2017, 26 million pounds in 2016 and 48 million pounds in 2015. Refer to “Consolidated Results” for our consolidated molybdenum operating data, which includes sales of molybdenum produced at our Molybdenum mines, and from our North America and South America copper mines, and refer to “Outlook” for projected consolidated molybdenum sales volumes.

**Unit Net Cash Costs Per Pound of Molybdenum.** Unit net cash costs per pound of molybdenum is a measure intended to provide investors with information about the cash-generating capacity of our mining operations expressed on a basis relating to the primary metal product for our respective operations. We use this measure for the same purpose

and for monitoring operating performance by our mining operations. This information differs from measures of performance determined in accordance with U.S. GAAP and should not be considered in isolation or as a substitute for measures of performance determined in accordance with U.S. GAAP. This measure is presented by other metals mining companies, although our measure may not be comparable to similarly titled measures reported by other companies.

Average unit net cash costs for our molybdenum mines totaled \$7.79 per pound of molybdenum in 2017, \$8.36 per pound in 2016 and \$7.11 per pound in 2015. The decrease in the average unit net cash costs for molybdenum in 2017, compared to 2016, primarily reflected higher sales volumes. The increase in the average unit net cash costs



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for molybdenum in 2016, compared to 2015, primarily reflected lower volumes. Assuming achievement of current sales volume and cost estimates, we estimate unit net cash costs for the Molybdenum mines to average \$9.00 per pound of molybdenum in 2018. Refer to “Product Revenues and Production Costs” for a reconciliation of unit net cash costs per pound to production and delivery costs applicable to sales reported in our consolidated financial statements.

**Smelting & Refining**

We wholly own and operate a smelter in Arizona (Miami smelter), a refinery in Texas (El Paso refinery) and a smelter and refinery in Spain (Atlantic Copper). Additionally, PT-FI owns 25 percent of a smelter and refinery in Gresik, Indonesia (PT Smelting). Treatment charges for smelting and refining copper concentrate consist of a base rate per pound of copper and per ounce of gold and are generally fixed. Treatment charges represent a cost to our mining operations and income to Atlantic Copper and PT Smelting. Thus, higher treatment charges benefit our smelter operations and adversely affect our mining operations. Our North America copper mines are less significantly affected by changes in treatment charges because these operations are largely integrated with our Miami smelter and El Paso refinery. Through this form of downstream integration, we are assured placement of a significant portion of our concentrate production.

Atlantic Copper smelts and refines copper concentrate and markets refined copper and precious metals in slimes. Following is a summary of Atlantic Copper’s concentrate purchases from our copper mining operations and third parties for the years ended December 31:

	2017	2016	2015
Third parties	67 %	77 %	71 %
North America copper mines	18	13	23
South America mining	15	7	3
Indonesia mining	—	3	3
	100 %	100 %	100 %

PT-FI’s contract with PT Smelting provides for PT-FI to supply 100 percent of the copper concentrate requirements (subject to a minimum or maximum treatment charge rate) necessary for PT Smelting to produce 205,000 metric tons of copper annually on a priority basis. PT-FI may also sell copper concentrate to PT Smelting at market rates for quantities in excess of 205,000 metric tons of copper annually. PT-FI supplied 93 percent of PT Smelting’s concentrate requirements in 2017, 88 percent in 2016 and 80 percent in 2015. PT Smelting processed 46 percent in 2017, 42 percent in 2016 and 37 percent in 2015 of PT-FI’s concentrate production. On February 15, 2018, PT Smelting submitted an application to renew its export license, which expires March 1, 2018.

We defer recognizing profits on sales from our mining operations to Atlantic Copper and on 25 percent of PT-FI’s sales to PT Smelting until final sales to third parties occur. Changes in these deferrals attributable to variability in intercompany volumes resulted in net (reductions) additions to net income attributable to common stock of \$(21) million (\$(0.01) per share) in 2017, \$(8) million (\$(0.01) per share) in 2016 and \$42 million (\$0.04 per share) in 2015. Our net deferred profits on our inventories at Atlantic Copper and PT Smelting to be recognized in future periods’ net income attributable to common stock totaled \$96 million at December 31, 2017. Quarterly variations in ore grades, the timing of intercompany shipments and changes in product prices will result in variability in our net deferred profits and quarterly earnings.

**Oil and Gas Operations**

During 2016 and 2017, we completed the sales of our Deepwater GOM, onshore California and Haynesville oil and gas properties, and property interests in the GOM Shelf and in the Madden area of central Wyoming. As a result, our portfolio of oil and gas assets includes oil and natural gas production onshore in South Louisiana and on the GOM Shelf and oil production offshore California. At December 31, 2017, we had \$8 million remaining in our consolidated balance sheet for proved oil and gas properties, and no amounts recorded for unproved oil and gas properties.



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U.S. Oil and Gas Operations. Following is summary operating results for the U.S. oil and gas operations for the years ended December 31:

	2017	2016	2015
Sales Volumes			
Oil (MMBbls)	1.8	34.4	35.3
Natural gas (billion cubic feet)	15.8	65.1	89.7
NGLs (MMBbls)	0.2	1.8	2.4
MMBOE	4.6	47.1	52.6
Average Realizations			
Oil (per barrel)	\$40.71	\$39.13 <sup>a</sup>	\$57.11 <sup>a</sup>
Natural gas (per MMBtu)	\$3.18	\$2.38	\$2.59
NGLs (per barrel)	\$30.65	\$18.11	\$18.90

<sup>a</sup> Excludes noncash mark-to-market losses on derivative contracts totaling \$41 million in 2016 and \$319 million in 2015.

The average realized price for oil was \$40.71 per barrel in 2017 (74 percent of the average Brent crude oil price of \$54.81 per barrel). Excluding the impact of realized cash gains on derivative contracts, which totaled \$0.17 per barrel in 2016 and \$11.53 per barrel in 2015, average realized prices for oil were \$38.96 per barrel in 2016 (86 percent of the average Brent crude oil price of \$45.13 per barrel) and \$45.58 per barrel in 2015 (85 percent of the average Brent crude oil price of \$53.64 per barrel).

The average realized price for natural gas was \$3.18 per MMBtu in 2017, \$2.38 per MMBtu in 2016 and \$2.59 per MMBtu in 2015, compared to the NYMEX natural gas price average of \$3.10 per MMBtu in 2017 contracts, \$2.46 per MMBtu in 2016 contracts and \$2.66 per MMBtu in 2015 contracts.

## CAPITAL RESOURCES AND LIQUIDITY

Our consolidated operating cash flows vary with prices realized from copper, gold and molybdenum; our sales volumes; production costs; income taxes; other working capital changes; and other factors. We have taken actions to restore our balance sheet strength through a combination of asset sale and capital market transactions. These actions, combined with cash flow from operations, resulted in significant debt reductions during 2017 and 2016. We believe that we have a high-quality portfolio of long-lived copper assets positioned to generate long-term value. We have commenced a project to develop the Lone Star oxide ores near the Safford operation in eastern Arizona. We are also pursuing other opportunities to enhance net present values, and we continue to advance studies for future development of our copper resources, the timing of which will be dependent on market conditions.

### Cash

Following is a summary of the U.S. and international components of consolidated cash and cash equivalents available to the parent company, net of noncontrolling interests' share, taxes and other costs at December 31, 2017 (in billions):

Cash at domestic companies	\$3.3
Cash at international operations	1.1
Total consolidated cash and cash equivalents	4.4
Noncontrolling interests' share	(0.4 )
Cash, net of noncontrolling interests' share	4.0
Withholding taxes and other	—
Net cash available	\$4.0

Cash held at our international operations is generally used to support our foreign operations' capital expenditures, operating expenses, debt repayments, working capital and other tax payments or other cash needs. Management believes that sufficient liquidity is available in the U.S. from cash balances and availability from our revolving credit facility. We have not elected to permanently reinvest earnings from our foreign subsidiaries, and we have recorded deferred tax liabilities for foreign earnings that are available to be repatriated to the U.S. Refer to Note 11 for discussion of U.S. tax reform. From time to time, our foreign subsidiaries distribute earnings to the U.S. through dividends that are subject to applicable withholding taxes and noncontrolling interests' share.

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## Debt

Following is a summary of our total debt and related weighted-average interest rates at December 31, 2017 (in billions, except percentages):

		Weighted- Average Interest Rate
Senior Notes	\$11.8	4.4%
Cerro Verde credit facility	1.3	3.5%
Total debt	\$13.1	4.3%

At December 31, 2017, we had no borrowings, \$13 million in letters of credit issued and availability of \$3.5 billion under our revolving credit facility.

Refer to “Financing Activities” below and Note 8 for further discussion of debt.

## Operating Activities

We generated consolidated operating cash flows totaling \$4.7 billion in 2017 (including \$0.6 billion in working capital sources and timing of other tax payments), \$3.7 billion in 2016 (including \$87 million in working capital sources and timing of other tax payments) and \$3.2 billion in 2015 (net of \$0.4 billion in working capital sources and timing of other tax payments).

Higher operating cash flows for 2017, compared with 2016, primarily reflected the impact of higher copper prices and an increase in working capital sources from income tax refunds and other tax receivable collections, partly offset by increases in inventories.

Higher operating cash flows for 2016, compared with 2015, primarily reflected the impact of cost reduction efforts, partly offset by a decrease in working capital sources mostly resulting from higher trade receivables, partly offset by lower tax payments by our international mining operations.

Subject to future commodity prices for copper, gold and molybdenum, we expect estimated consolidated operating cash flows in 2018, plus available cash and availability under our credit facility to be sufficient to fund our budgeted capital expenditures, scheduled debt maturities, noncontrolling interest distributions and other cash requirements for the year. Refer to “Outlook” for further discussion of projected operating cash flows in 2018, and to “Operations - Indonesia Mining” and “Risk Factors” contained in Part I, Item 1A. of our annual report on Form 10-K for the year ended December 31, 2017, for discussion of regulatory matters in Indonesia, which may have a significant impact on future results.

## Investing Activities

Capital Expenditures. Capital expenditures, including capitalized interest, totaled \$1.4 billion in 2017, including \$0.9 billion for major mining projects; \$2.8 billion in 2016, consisting of \$1.6 billion for mining operations (including \$1.2 billion for major projects) and \$1.2 billion for oil and gas operations; and \$6.4 billion in 2015, consisting of \$3.3 billion for mining operations (including \$2.4 billion for major projects) and \$3.0 billion for oil and gas operations.

Lower capital expenditures in 2017, compared with 2016, primarily reflected a decrease in oil and gas exploration and development activities as a result of the sale of substantially all of our oil and gas properties in late 2016.

Lower capital expenditures in 2016, compared with 2015, primarily reflected a decrease in oil and gas exploration and development activities in Deepwater GOM and lower spending for major mining projects, mostly resulting from the completion of the Cerro Verde expansion project.

Refer to “Outlook” for further discussion of projected capital expenditures in 2018.

Dispositions. Proceeds, net of closing adjustments, from asset sales totaled \$6.4 billion in 2016, primarily associated with the sales of our interest in TFHL; the Deepwater GOM; onshore California and Haynesville oil and gas properties; an additional 13 percent undivided interest in Morenci; and an interest in the Timok exploration project in Serbia.

Refer to Note 2 for further discussion of these dispositions.

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## Financing Activities

Debt Transactions. Net repayments of debt in 2017 totaled \$2.9 billion, primarily for the redemption and repayment of senior notes.

Net repayments of debt in 2016 totaled \$3.9 billion, primarily for the repayment of an unsecured bank term loan and payments on the Cerro Verde credit facility.

Net proceeds from debt in 2015 totaled \$1.6 billion primarily, reflecting borrowings of \$1.4 billion under Cerro Verde's credit facility to fund its expansion project.

Refer to Note 8 for further discussion of debt transactions.

Equity Transactions. Net proceeds from the sale of common stock of \$1.5 billion in 2016 and \$1.9 billion in 2015 reflected sales of our common stock under registered at-the-market equity offerings.

Refer to Note 10 for further discussion of equity transactions.

Dividends. The Board reduced our annual common stock dividend from \$1.25 per share to \$0.20 per share in March 2015, and subsequently suspended the annual common stock dividend in December 2015. In February 2018, the Board reinstated a cash dividend on our common stock. The Board intends to declare a quarterly dividend of \$0.05 per share, with the initial dividend expected to be paid May 1, 2018. The declaration of dividends is at the discretion of the Board and will depend upon our financial results, cash requirements, future prospects and other factors deemed relevant.

We paid dividends on our common stock totaling \$2 million in 2017, \$6 million in 2016, and \$605 million in 2015 (including \$115 million for a special dividend paid in accordance with the settlement terms of the shareholder derivative litigation). Dividends paid in 2017 and 2016 all relate to accumulated dividends paid for vested stock-based compensation.

Cash dividends and other distributions paid to noncontrolling interests totaled \$174 million in 2017, \$693 million in 2016 (including \$582 million for the redemption of a redeemable noncontrolling interest) and \$120 million in 2015. These payments will vary based on the operating results and cash requirements of our consolidated subsidiaries.

## CONTRACTUAL OBLIGATIONS

We have contractual and other long-term obligations, including debt maturities, which we expect to fund with available cash, projected operating cash flows, availability under our revolving credit facility or future financing transactions, if necessary. Following is a summary of these various obligations at December 31, 2017, excluding amounts related to assets held for sale (in millions):

	Total	2018	2019 to 2020	2021 to 2022	Thereafter
Debt maturities <sup>a</sup>	\$ 13,105	\$ 1,414	\$ 1,006	\$ 4,171	\$ 6,514
Scheduled interest payment obligations <sup>b</sup>	5,400	546	1,042	885	2,927
ARO and environmental obligations <sup>c</sup>	8,251	420	819	551	6,461
Take-or-pay contracts <sup>d</sup>	3,408	2,383	628	127	270
Operating lease obligations	208	34	44	35	95
Total <sup>e</sup>	\$ 30,372	\$ 4,797	\$ 3,539	\$ 5,769	\$ 16,267

a. Reflects principal amounts. In addition, debt excludes \$112 million related to assets held for sale.

b. Scheduled interest payment obligations were calculated using stated coupon rates for fixed-rate debt and interest rates applicable at December 31, 2017, for variable-rate debt.

Represents estimated cash payments, on an undiscounted and unescalated basis, associated with ARO and environmental activities (including \$659 million for our oil and gas operations). The timing and the amount of these payments could change as a result of changes in regulatory requirements, changes in scope and timing of ARO activities, the settlement of environmental matters and as actual spending occurs. Refer to Note 12 for additional discussion of environmental and ARO matters.

c. Represents contractual obligations for purchases of goods or services agreements enforceable and legally binding and that specify all significant terms, and primarily include the procurement of copper concentrate (\$2.4 billion), electricity (\$0.4



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billion) and transportation services (\$0.3 billion). Some of our take-or-pay contracts are settled based on the prevailing market rate for the service or commodity purchased, and in some cases, the amount of the actual obligation may change over time because of market conditions. Obligations for copper concentrate provide for deliveries of specified volumes to Atlantic Copper at market-based prices. Electricity obligations are primarily for long-term power purchase agreements in North America and contractual minimum demand at the South America mines. Transportation obligations are primarily for South America contracted ocean freight. Amounts exclude approximately \$0.8 billion in total contractual obligations related to assets held for sale, which is primarily for the procurement of cobalt. Obligations for cobalt provide for deliveries of specified volumes to Freeport Cobalt (an asset held for sale) at market-based prices.

This table excludes certain other obligations in our consolidated balance sheets, such as estimated funding for pension, postretirement and other employee benefit obligations as the funding may vary from year to year based on changes in the fair value of plan assets and actuarial assumptions, commitments and contingencies totaling \$98 million and unrecognized tax benefits totaling \$291 million where the timing of settlement is not determinable, and other less significant amounts. This table also excludes purchase orders for inventory and other goods and services, as purchase orders typically represent authorizations to purchase rather than binding agreements.

In addition to our debt maturities and other contractual obligations discussed above, we have other commitments, which we expect to fund with available cash, projected operating cash flows, available credit facilities or future financing transactions, if necessary. These include (i) PT-FI's commitment to provide one percent of its annual revenue for the development of the local people in its area of operations through the Freeport Partnership Fund for Community Development, (ii) Cerro Verde's scheduled installment payments for disputed mining royalty assessments and (iii) other commercial commitments, including standby letters of credit, surety bonds and guarantees. Refer to Notes 12 and 13 for further discussion.

## CONTINGENCIES

### Environmental

The cost of complying with environmental laws is a fundamental and substantial cost of our business. At December 31, 2017, we had \$1.4 billion recorded in our consolidated balance sheet for environmental obligations attributed to CERCLA or analogous state programs and for estimated future costs associated with environmental obligations that are considered probable based on specific facts and circumstances.

We incurred environmental capital expenditures and other environmental costs (including our joint venture partners' shares) to comply with applicable environmental laws and regulations that affect our operations totaling \$0.5 billion in 2017 and \$0.4 billion in each of 2016 and 2015. For 2018, we expect to incur approximately \$0.5 billion of aggregate environmental capital expenditures and other environmental costs. The timing and amount of estimated payments could change as a result of changes in regulatory requirements, changes in scope and timing of reclamation and plug and abandonment activities, the settlement of environmental matters and the rate at which actual spending occurs on continuing matters.

Refer to Note 12 and "Risk Factors" contained in Part I, Item 1A. of our annual report on Form 10-K for the year ended December 31, 2017, for further information about environmental regulation, including significant environmental matters.

### Asset Retirement Obligations

We recognize AROs as liabilities when incurred, with the initial measurement at fair value. These obligations, which are initially estimated based on discounted cash flow estimates, are accreted to full value over time through charges to cost of sales. Mine reclamation costs for disturbances are recorded as an ARO and as a related asset retirement cost (ARC) (included in property, plant, equipment and mine development costs) in the period of disturbance. Oil and gas

plugging and abandonment costs are recognized as an ARO and as a related ARC (included in oil and gas properties) in the period in which the well is drilled or acquired. Our cost estimates are reflected on a third-party cost basis and comply with our legal obligation to retire tangible, long-lived assets. At December 31, 2017, we had \$2.6 billion recorded in our consolidated balance sheet for AROs, including \$0.6 billion related to our oil and gas properties. Spending on AROs totaled \$71 million in 2017, \$188 million in 2016 and \$132 million in 2015 (including \$30 million in 2017, \$133 million in 2016 and \$92 million in 2015 for our oil and gas operations). For 2018, we expect to incur approximately \$0.3 billion in aggregate ARO payments (including \$157 million for our oil and gas operations). Refer to Note 12 for further discussion.

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## Litigation and Other Contingencies

Refer to Notes 2 and 12 and “Legal Proceedings” contained in Part I, Item 3. of our annual report on Form 10-K for the year ended December 31, 2017, for further discussion of contingencies associated with legal proceedings and other matters.

## DISCLOSURES ABOUT MARKET RISKS

## Commodity Price Risk

Our consolidated revenues from our mining operations include the sale of copper concentrate, copper cathode, copper rod, gold, molybdenum and other metals by our North America and South America mines, the sale of copper concentrate (which also contains significant quantities of gold and silver) by our Indonesia mining operations, the sale of molybdenum in various forms by our molybdenum operations, and the sale of copper cathode, copper anode and gold in anode and slimes by Atlantic Copper. Our financial results will vary with fluctuations in the market prices of the commodities we produce, primarily copper and gold, and to a lesser extent molybdenum and silver. For projected sensitivities of our operating cash flow to changes in commodity prices, refer to “Outlook.” World market prices for these commodities have fluctuated historically and are affected by numerous factors beyond our control. Refer to “Risk Factors” contained in Part I, Item 1A. of our annual report on Form 10-K for the year ended December 31, 2017, for further discussion of financial risks associated with fluctuations in the market prices of the commodities we sell.

During 2017, our mined copper was sold 59 percent in concentrate, 19 percent as cathode and 22 percent as rod from North America operations. Substantially all of our copper concentrate and cathode sales contracts provide final copper pricing in a specified future month (generally one to four months from the shipment date) based primarily on quoted LME monthly average spot copper prices. We receive market prices based on prices in the specified future period, which results in price fluctuations recorded through revenues until the date of settlement. We record revenues and invoice customers at the time of shipment based on then-current LME prices, which results in an embedded derivative on our provisionally priced concentrate and cathode sales that is adjusted to fair value through earnings each period, using the period-end forward prices, until final pricing on the date of settlement. To the extent final prices are higher or lower than what was recorded on a provisional basis, an increase or decrease to revenues is recorded each reporting period until the date of final pricing. Accordingly, in times of rising copper prices, our revenues benefit from adjustments to the final pricing of provisionally priced sales pursuant to contracts entered into in prior periods; in times of falling copper prices, the opposite occurs.

Following are the favorable (unfavorable) impacts of net adjustments to the prior years’ provisionally priced copper sales for the years ended December 31 (in millions, except per share amounts):

	2017	2016	2015
Revenues	\$81	\$ 5	\$(100 )
Net income attributable to common stock	\$34	\$ 2	\$(50 )
Net income per share attributable to common stock	\$0.02	\$ —	\$(0.05)

At December 31, 2017, we had provisionally priced copper sales at our copper mining operations totaling 438 million pounds of copper (net of intercompany sales and noncontrolling interests) recorded at an average price of \$3.28 per pound, subject to final pricing over the next several months. We estimate that each \$0.05 change in the price realized from the December 31, 2017, provisional price recorded would have an approximate \$13 million effect on 2018 net income attributable to common stock. The LME spot copper price closed at \$3.22 per pound on January 31, 2018.

## Foreign Currency Exchange Risk

The functional currency for most of our operations is the U.S. dollar. Substantially all of our revenues and a significant portion of our costs are denominated in U.S. dollars; however, some costs and certain asset and liability accounts are denominated in local currencies, including the Indonesian rupiah, Australian dollar, Peruvian sol, Chilean

peso and euro. We recognized foreign currency translation (losses) gains on balances denominated in foreign currencies totaling \$(5) million in 2017, \$32 million in 2016 and \$(90) million in 2015, primarily at our Indonesia and South America mines. Generally, our operating results are positively affected when the U.S. dollar strengthens in relation to those foreign currencies and are adversely affected when the U.S. dollar weakens in relation to those foreign currencies.

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Following is a summary of estimated annual payments and the impact of changes in foreign currency rates on our annual operating costs:

	Exchange Rate per \$1 at December 31,			Estimated Annual Payments  (in local currency)	(in millions of U.S. dollars) <sup>b</sup>	10% Change in Exchange Rate (in millions of U.S. dollars) <sup>a</sup>	
	2017	2016	2015			Increase	Decrease
<b>Indonesia</b>							
Rupiah	13,480	13,369	13,726	9.8 trillion	\$ 727	\$(66)	\$ 81
Australian dollar	1.28	1.39	1.37	215 million	\$ 168	\$(15)	\$ 19
<b>South America</b>							
Peruvian sol	3.25	3.36	3.41	1.7 billion	\$ 509	\$(46)	\$ 57
Chilean peso	615	670	710	105 billion	\$ 171	\$(16)	\$ 19
<b>Atlantic Copper</b>							
Euro	0.83	0.95	0.92	137 million	\$ 164	\$(15)	\$ 18

<sup>a</sup> Reflects the estimated impact on annual operating costs assuming a 10 percent increase or decrease in the exchange rate reported at December 31, 2017.

<sup>b</sup> Based on exchange rates at December 31, 2017.

**Interest Rate Risk**

At December 31, 2017, we had total debt maturities based on principal amounts of \$13.1 billion, of which approximately 10 percent was variable-rate debt with interest rates based on the London Interbank Offered Rate. The table below presents average interest rates for our scheduled maturities of principal for our outstanding debt (excluding fair value adjustments and amounts related to assets held for sale) and the related fair values at December 31, 2017 (in millions, except percentages):

	2018	2019	2020	2021	2022	Thereafter	Fair Value
Fixed-rate debt	\$1,414	—	\$1,001	\$600	\$2,296	\$6,514	\$11,989
Average interest rate	2.4 %	—	3.1 %	4.0 %	4.1 %	5.1 %	4.4 %
Variable-rate debt	—	—	\$5	\$750	\$525	—	\$1,280
Average interest rate	—	—	3.5 %	3.5 %	3.5 %	—	3.5 %

**NEW ACCOUNTING STANDARDS**

Refer to Note 1 for discussion of recently issued accounting standards and their projected impact on our future financial statements and disclosures.

**OFF-BALANCE SHEET ARRANGEMENTS**

Refer to Note 13 for discussion of off-balance sheet arrangements.

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PRODUCT REVENUES AND PRODUCTION COSTS

Mining Product Revenues and Unit Net Cash Costs

Unit net cash costs per pound of copper and molybdenum are measures intended to provide investors with information about the cash-generating capacity of our mining operations expressed on a basis relating to the primary metal product for the respective operations. We use this measure for the same purpose and for monitoring operating performance by our mining operations. This information differs from measures of performance determined in accordance with U.S. GAAP and should not be considered in isolation or as a substitute for measures of performance determined in accordance with U.S. GAAP. These measures are presented by other metals mining companies, although our measures may not be comparable to similarly titled measures reported by other companies.

We present gross profit per pound of copper in the following tables using both a “by-product” method and a “co-product” method. We use the by-product method in our presentation of gross profit per pound of copper because (i) the majority of our revenues are copper revenues, (ii) we mine ore, which contains copper, gold, molybdenum and other metals, (iii) it is not possible to specifically assign all of our costs to revenues from the copper, gold, molybdenum and other metals we produce, (iv) it is the method used to compare mining operations in certain industry publications and (v) it is the method used by our management and the Board to monitor operations and to compare mining operations in certain industry publications. In the co-product method presentations, shared costs are allocated to the different products based on their relative revenue values, which will vary to the extent our metals sales volumes and realized prices change.

We show revenue adjustments for prior period open sales as separate line items. Because these adjustments do not result from current period sales, these amounts have been reflected separately from revenues on current period sales. Noncash and other costs, which are removed from site production and delivery costs in the calculation of unit net cash costs, consist of items such as stock-based compensation costs, start-up costs, inventory adjustments, long-lived asset impairments, restructuring and/or unusual charges. As discussed above, gold, molybdenum and other metal revenues at copper mines are reflected as credits against site production and delivery costs in the by-product method. The following schedules are presentations under both the by-product and co-product methods together with reconciliations to amounts reported in our consolidated financial statements.

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## North America Copper Mines Product Revenues, Production Costs and Unit Net Cash Costs

Year Ended December 31, 2017

(In millions)

	By-Product Method	Co-Product Copper	Method Molybdenum <sup>a</sup>	Other <sup>b</sup>	Total
Revenues, excluding adjustments	\$ 4,215	\$ 4,215	\$ 254	\$ 90	\$ 4,559
Site production and delivery, before net noncash and other costs shown below	2,429	2,277	188	52	2,517
By-product credits	(256)	) —	—	—	—
Treatment charges	157	150	—	7	157
Net cash costs	2,330	2,427	188	59	2,674
DD&A	423	397	18	8	423
Metals inventory adjustments	2	2	—	—	2
Noncash and other costs, net	88	85	2	1	88
Total costs	2,843	2,911	208	68	3,187
Revenue adjustments, primarily for pricing on prior period open sales	4	4	—	—	4
Gross profit	\$ 1,376	\$ 1,308	\$ 46	\$ 22	\$ 1,376
Copper sales (millions of recoverable pounds)	1,481	1,481			
Molybdenum sales (millions of recoverable pounds) <sup>a</sup>			33		

Gross profit per pound of copper/molybdenum:

Revenues, excluding adjustments	\$ 2.85	\$ 2.85	\$ 7.80
Site production and delivery, before net noncash and other costs shown below	1.64	1.54	5.78
By-product credits	(0.17)	) —	—
Treatment charges	0.10	0.10	—
Unit net cash costs	1.57	1.64	5.78
DD&A	0.29	0.27	0.54
Metals inventory adjustments	—	—	—
Noncash and other costs, net	0.06	0.06	0.07
Total unit costs	1.92	1.97	6.39
Revenue adjustments, primarily for pricing on prior period open sales	—	—	—
Gross profit per pound	\$ 0.93	\$ 0.88	\$ 1.41

Reconciliation to Amounts Reported

(In millions)

	Revenues	Production and Delivery	DD&A	Metals Inventory Adjustments
Totals presented above	\$ 4,559	\$ 2,517	\$ 423	\$ 2
Treatment charges	(52)	) 105	—	—
Noncash and other costs, net	—	88	—	—
Revenue adjustments, primarily for pricing on prior period open sales	4	—	—	—
Eliminations and other	54	57	2	—

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North America copper mines	4,565	2,767	425	2
Other mining <sup>c</sup>	14,921	10,652	1,195	1
Corporate, other & eliminations	(3,083 )	(3,119 )	94	5
As reported in FCX's consolidated financial statements	\$ 16,403	\$ 10,300	\$ 1,714	\$ 8

a. Reflects sales of molybdenum produced by certain of the North America copper mines to our molybdenum sales company at market-based pricing.

b. Includes gold and silver product revenues and production costs.

c. Represents the combined total for all other mining operations, including South America mining, Indonesia mining,

Molybdenum mines, Rod & Refining and Atlantic Copper Smelting & Refining, as presented in Note 16.



Table of ContentsNorth America Copper Mines Product Revenues, Production Costs and Unit Net Cash Costs  
Year Ended December 31, 2016

(In millions)	By-Product Co-Product Method				Total
	Method	Copper	Molybdenum <sup>a</sup>	Other <sup>b</sup>	
Revenues, excluding adjustments	\$ 4,113	\$ 4,113	\$ 213	\$ 94	\$ 4,420
Site production and delivery, before net noncash and other costs shown below	2,613	2,474	166	58	2,698
By-product credits	(222 )	—	—	—	—
Treatment charges	193	185	—	8	193
Net cash costs	2,584	2,659	166	66	2,891
DD&A	527	496	20	11	527
Metals inventory adjustments	1	1	—	—	1
Noncash and other costs, net	87	84	2	1	87
Total costs	3,199	3,240	188	78	3,506
Revenue adjustments, primarily for pricing on prior period open sales	(1 )	(1 )	—	—	(1 )
Gross profit	\$ 913	\$ 872	\$ 25	\$ 16	\$ 913
Copper sales (millions of recoverable pounds)	1,836	1,836			
Molybdenum sales (millions of recoverable pounds) <sup>a</sup>			33		

## Gross profit per pound of copper/molybdenum:

Revenues, excluding adjustments	\$ 2.24	\$ 2.24	\$ 6.34
Site production and delivery, before net noncash and other costs shown below	1.42	1.35	4.93
By-product credits	(0.12 )	—	—
Treatment charges	0.11	0.10	—
Unit net cash costs	1.41	1.45	4.93
DD&A	0.29	0.27	0.60
Metals inventory adjustments	—	—	—
Noncash and other costs, net	0.05	0.05	0.06
Total unit costs	1.75	1.77	5.59
Revenue adjustments, primarily for pricing on prior period open sales	—	—	—
Gross profit per pound	\$ 0.49	\$ 0.47	\$ 0.75

## Reconciliation to Amounts Reported

(In millions)	Production			Metals
	Revenues	and Delivery	DD&A	Inventory Adjustments
Totals presented above	\$ 4,420	\$ 2,698	\$ 527	\$ 1
Treatment charges	(90 )	103	—	—
Noncash and other costs, net	—	87	—	—
Revenue adjustments, primarily for pricing on prior period open sales	(1 )	—	—	—
Eliminations and other	45	44	3	—
North America copper mines	4,374	2,932	530	1

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Other mining <sup>c</sup>	12,111	9,299	1,044	15
Corporate, other & eliminations	(1,655	) (1,534	) 956	20
As reported in FCX's consolidated financial statements	\$ 14,830	\$ 10,697	\$ 2,530	\$ 36

a. Reflects sales of molybdenum produced by certain of the North America copper mines to our molybdenum sales company at market-based pricing.

b. Includes gold and silver product revenues and production costs.

c. Represents the combined total for all other mining operations, including South America mining, Indonesia mining,

Molybdenum mines, Rod & Refining and Atlantic Copper Smelting & Refining, as presented in Note 16.

Table of ContentsNorth America Copper Mines Product Revenues, Production Costs and Unit Net Cash Costs  
Year Ended December 31, 2015

(In millions)	By-Product Co-Product Method			Total	
	Method	Copper	Molybdenum <sup>a</sup> Other <sup>b</sup>		
Revenues, excluding adjustments	\$ 4,907	\$ 4,907	\$ 261	\$ 102	\$ 5,270
Site production and delivery, before net noncash and other costs shown below	3,339	3,161	209	71	3,441
By-product credits	(261 )	—	—	—	—
Treatment charges	240	233	—	7	240
Net cash costs	3,318	3,394	209	78	3,681
DD&A	558	528	20	10	558
Metals inventory adjustments	142	139	2	1	142
Noncash and other costs, net	233	<sup>c</sup> 225	6	2	233
Total costs	4,251	4,286	237	91	4,614
Revenue adjustments, primarily for pricing on prior period open sales	(28 )	(28 )	—	—	(28 )
Gross profit	\$ 628	\$ 593	\$ 24	\$ 11	\$ 628
Copper sales (millions of recoverable pounds)	1,985	1,985			
Molybdenum sales (millions of recoverable pounds) <sup>a</sup>			37		

## Gross profit per pound of copper/molybdenum:

Revenues, excluding adjustments	\$ 2.47	\$ 2.47	\$ 7.02
Site production and delivery, before net noncash and other costs shown below	1.68	1.59	5.61
By-product credits	(0.13 )	—	—
Treatment charges	0.12	0.12	—
Unit net cash costs	1.67	1.71	5.61
DD&A	0.28	0.27	0.53
Metals inventory adjustments	0.07	0.07	0.07
Noncash and other costs, net	0.12	<sup>c</sup> 0.11	0.16
Total unit costs	2.14	2.16	6.37
Revenue adjustments, primarily for pricing on prior period open sales	(0.01 )	(0.01 )	—
Gross profit per pound	\$ 0.32	\$ 0.30	\$ 0.65

## Reconciliation to Amounts Reported

(In millions)	Revenues	Production and Delivery	DD&A	Metals Inventory Adjustments
Totals presented above	\$ 5,270	\$ 3,441	\$ 558	142
Treatment charges	(150 )	90	—	—
Noncash and other costs, net	—	233	—	—
Revenue adjustments, primarily for pricing on prior period open sales	(28 )	—	—	—
Eliminations and other	34	35	2	—
North America copper mines	5,126	3,799	560	142

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Other mining <sup>d</sup>	11,059	9,535	790	84
Corporate, other & eliminations	(1,578 )	(2,641 )	1,890	112
As reported in FCX's consolidated financial statements	\$ 14,607	\$ 10,693	\$ 3,240	\$ 338

a. Reflects sales of molybdenum produced by certain of the North America copper mines to our molybdenum sales company at market-based pricing.

b. Includes gold and silver product revenues and production costs.

c. Includes \$99 million (\$0.05 per pound) for asset impairment, restructuring and other net charges.

d. Represents the combined total for all other mining operations, including South America mining, Indonesia mining, Molybdenum mines, Rod & Refining and Atlantic Copper Smelting & Refining, as presented in Note 16.

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## South America Mining Product Revenues, Production Costs and Unit Net Cash Costs

Year Ended December 31, 2017

(In millions)

	By-Product Method	Co-Product Copper	Method Other <sup>a</sup>	Total
Revenues, excluding adjustments	\$ 3,668	\$3,668	\$267	\$3,935
Site production and delivery, before net noncash and other costs shown below	1,960	1,838	171	2,009
By-product credits	(218 )	—	—	—
Treatment charges	272	272	—	272
Royalty on metals	8	7	1	8
Net cash costs	2,022	2,117	172	2,289
DD&A	525	489	36	525
Noncash and other costs, net	241	<sup>b</sup> 224	17	241
Total costs	2,788	2,830	225	3,055
Revenue adjustments, primarily for pricing on prior period open sales	41	41	—	41
Gross profit	\$ 921	\$879	\$42	\$921
Copper sales (millions of recoverable pounds)	1,235	1,235		

Gross profit per pound of copper:

Revenues, excluding adjustments	\$ 2.97	\$2.97		
Site production and delivery, before net noncash and other costs shown below	1.59	1.49		
By-product credits	(0.18 )	—		
Treatment charges	0.22	0.22		
Royalty on metals	0.01	0.01		
Unit net cash costs	1.64	1.72		
DD&A	0.43	0.39		
Noncash and other costs, net	0.19	<sup>b</sup> 0.18		
Total unit costs	2.26	2.29		
Revenue adjustments, primarily for pricing on prior period open sales	0.03	0.03		
Gross profit per pound	\$ 0.74	\$0.71		

## Reconciliation to Amounts Reported

(In millions)

	Revenues	Production and Delivery	DD&A
Totals presented above	\$ 3,935	\$2,009	\$525
Treatment charges	(272 )	—	—
Royalty on metals	(8 )	—	—
Noncash and other costs, net	—	241	—
Revenue adjustments, primarily for pricing on prior period open sales	41	—	—
Eliminations and other	(2 )	(6 )	—
South America mining	3,694	2,244	525

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Other mining <sup>c</sup>	15,792	11,175	1,095
Corporate, other & eliminations	(3,083 )	(3,119 )	94
As reported in FCX's consolidated financial statements	\$ 16,403	\$ 10,300	\$ 1,714

a. Includes silver sales of 3.8 million ounces (\$16.74 per ounce average realized price). Also reflects sales of molybdenum produced by Cerro Verde to our molybdenum sales company at market-based pricing.

b. Includes charges totaling \$203 million (\$0.16 per pound of copper) associated with disputed Cerro Verde royalties for prior years.

c. Represents the combined total for all other mining operations, including North America copper mines, Indonesia mining, Molybdenum mines, Rod & Refining and Atlantic Copper Smelting & Refining, as presented in Note 16.

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## South America Mining Product Revenues, Production Costs and Unit Net Cash Costs

Year Ended December 31, 2016

(In millions)

	By-Product Method	Co-Product Copper	Method Other <sup>a</sup>	Total
Revenues, excluding adjustments	\$ 3,077	\$3,077	\$ 176	\$3,253
Site production and delivery, before net noncash and other costs shown below	1,681	1,601	120	1,721
By-product credits	(136	) —	—	—
Treatment charges	320	320	—	320
Royalty on metals	7	6	1	7
Net cash costs	1,872	1,927	121	2,048
DD&A	552	523	29	552
Noncash and other costs, net	40	38	2	40
Total costs	2,464	2,488	152	2,640
Revenue adjustments, primarily for pricing on prior period open sales	11	11	—	11
Gross profit	\$ 624	\$600	\$ 24	\$ 624

Copper sales (millions of recoverable pounds)

1,332      1,332

Gross profit per pound of copper:

Revenues, excluding adjustments	\$ 2.31	\$2.31
Site production and delivery, before net noncash and other costs shown below	1.26	1.20
By-product credits	(0.10	) —
Treatment charges	0.24	0.24
Royalty on metals	0.01	—
Unit net cash costs	1.41	1.44
DD&A	0.41	0.39
Noncash and other costs, net	0.03	0.03
Total unit costs	1.85	1.86
Revenue adjustments, primarily for pricing on prior period open sales	0.01	0.01
Gross profit per pound	\$ 0.47	\$0.46

## Reconciliation to Amounts Reported

(In millions)

	Revenues	Production and Delivery	DD&A
Totals presented above	\$ 3,253	\$1,721	\$552
Treatment charges	(320	) —	—
Royalty on metals	(7	) —	—
Noncash and other costs, net	—	40	—
Revenue adjustments, primarily for pricing on prior period open sales	11	—	—
Eliminations and other	1	(3	) 1
South America mining	2,938	1,758	553

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Other mining <sup>b</sup>	13,547	10,473	1,021
Corporate, other & eliminations	(1,655 )	(1,534 )	956
As reported in FCX's consolidated financial statements	\$ 14,830	\$ 10,697	\$ 2,530

a. Includes silver sales of 3.7 million ounces (\$18.05 per ounce average realized price). Also reflects sales of molybdenum produced by Cerro Verde to our molybdenum sales company at market-based pricing.

b. Represents the combined total for all other mining operations, including North America copper mines, Indonesia mining, Molybdenum mines, Rod & Refining and Atlantic Copper Smelting & Refining, as presented in Note 16.



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## South America Mining Product Revenues, Production Costs and Unit Net Cash Costs

Year Ended December 31, 2015

(In millions)

	By-Product Method	Co-Product Copper	Method Other <sup>a</sup>	Total
Revenues, excluding adjustments	\$ 2,075	\$2,075	\$65	\$ 2,140
Site production and delivery, before net noncash and other costs shown below	1,393	1,355	59	1,414
By-product credits	(44	) —	—	—
Treatment charges	161	161	—	161
Royalty on metals	4	4	—	4
Net cash costs	1,514	1,520	59	1,579
DD&A	352	341	11	352
Metals inventory adjustments	73	73	—	73
Noncash and other costs, net	41	41	—	41
Total costs	1,980	1,975	70	2,045
Revenue adjustments, primarily for pricing on prior period open sales	(28	) (28	) —	(28
Gross profit (loss)	\$ 67	\$72	\$(5	) \$ 67

Copper sales (millions of recoverable pounds)

871                      871

Gross profit per pound of copper:

Revenues, excluding adjustments	\$ 2.38	\$2.38
Site production and delivery, before net noncash and other costs shown below	1.60	1.56
By-product credits	(0.05	) —
Treatment charges	0.19	0.19
Royalty on metals	—	—
Unit net cash costs	1.74	1.75
DD&A	0.40	0.39
Metals inventory adjustments	0.08	0.08
Noncash and other costs, net	0.05	0.05
Total unit costs	2.27	2.27
Revenue adjustments, primarily for pricing on prior period open sales	(0.03	) (0.03
Gross profit per pound	\$ 0.08	\$0.08

Reconciliation to Amounts Reported

(In millions)

	Revenues	Production and Delivery	DD&A	Metals Inventory Adjustments
Totals presented above	\$ 2,140	\$1,414	\$352	\$ 73
Treatment charges	(161	) —	—	—
Royalty on metals	(4	) —	—	—
Noncash and other costs, net	—	41	—	—
Revenue adjustments, primarily for pricing on prior period open sales	(28	) —	—	—

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Eliminations and other	(13	) (17	) —	—
South America mining	1,934	1,438	352	73
Other mining <sup>b</sup>	14,251	11,896	998	153
Corporate, other & eliminations	(1,578	) (2,641	) 1,890	112
As reported in FCX's consolidated financial statements	\$ 14,607	\$ 10,693	\$ 3,240	\$ 338

<sup>a.</sup> Includes silver sales of 2.0 million ounces (\$14.48 per ounce average realized price). Also reflects sales of molybdenum produced by Cerro Verde to our molybdenum sales company at market-based pricing.

<sup>b.</sup> Represents the combined total for all other mining operations, including North America copper mines, Indonesia mining, Molybdenum mines, Rod & Refining and Atlantic Copper Smelting & Refining, as presented in Note 16.

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## Indonesia Mining Product Revenues, Production Costs and Unit Net Cash Costs

Year Ended December 31, 2017

(In millions)

	By-Product Method	Co-Product Copper	Method Gold	Silver <sup>a</sup>	Total
Revenues, excluding adjustments	\$ 2,945	\$ 2,945	\$ 1,952	\$ 49	\$ 4,946
Site production and delivery, before net noncash and other costs shown below	1,552	924	612	16	1,552
Gold and silver credits	(2,010 )	—	—	—	—
Treatment charges	261	156	103	2	261
Export duties	115	68	46	1	115
Royalty on metals	173	98	73	2	173
Net cash costs	91	1,246	834	21	2,101
DD&A	556	331	220	5	556
Noncash and other costs, net	163	<sup>b</sup> 97	64	2	163
Total costs	810	1,674	1,118	28	2,820
Revenue adjustments, primarily for pricing on prior period open sales	39	39	9	—	48
PT Smelting intercompany loss	(28 )	(17 )	(11 )	—	(28 )
Gross profit	\$ 2,146	\$ 1,293	\$ 832	\$ 21	\$ 2,146
Copper sales (millions of recoverable pounds)	981	981			
Gold sales (thousands of recoverable ounces)			1,540		

Gross profit per pound of copper/per ounce of gold:

Revenues, excluding adjustments	\$ 3.00	\$ 3.00	\$ 1,268
Site production and delivery, before net noncash and other costs shown below	1.58	0.94	398
Gold and silver credits	(2.05 )	—	—
Treatment charges	0.27	0.16	67
Export duties	0.12	0.07	30
Royalty on metals	0.17	0.10	47
Unit net cash costs	0.09	1.27	542
DD&A	0.57	0.34	142
Noncash and other costs, net	0.17	<sup>b</sup> 0.10	42
Total unit costs	0.83	1.71	726
Revenue adjustments, primarily for pricing on prior period open sales	0.04	0.04	6
PT Smelting intercompany loss	(0.02 )	(0.01 )	(7 )
Gross profit per pound/ounce	\$ 2.19	\$ 1.32	\$ 541

## Reconciliation to Amounts Reported

(In millions)

	Revenues	Production and Delivery	DD&A
Totals presented above	\$ 4,946	\$ 1,552	\$ 556
Treatment charges	(261 )	—	—
Export duties	(115 )	—	—

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Royalty on metals	(173 )	—	—
Noncash and other costs, net	—	163	—
Revenue adjustments, primarily for pricing on prior period open sales	48	—	—
PT Smelting intercompany loss	—	28	—
Indonesia mining	4,445	1,743	556
Other mining <sup>c</sup>	15,041	11,676	1,064
Corporate, other & eliminations	(3,083 )	(3,119 )	94
As reported in FCX's consolidated financial statements	\$ 16,403	\$ 10,300	\$ 1,714

a. Includes silver sales of 3.0 million ounces (\$16.56 per ounce average realized price).

b. Includes \$120 million (\$0.12 per pound of copper) of costs charged directly to production and delivery costs as a result of workforce reductions.

c. Represents the combined total for all other mining operations, including North America copper mines, South America mining, Molybdenum mines, Rod & Refining and Atlantic Copper Smelting & Refining, as presented in Note 16.

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## Indonesia Mining Product Revenues, Production Costs and Unit Net Cash Costs

Year Ended December 31, 2016

(In millions)

	By-Product Method	Co-Product Copper	Method Gold	Silver <sup>a</sup>	Total
Revenues, excluding adjustments	\$ 2,448	\$2,448	\$1,304	\$ 50	\$3,802
Site production and delivery, before net noncash and other costs shown below	1,717	1,106	589	22	1,717
Gold and silver credits	(1,371	) —	—	—	—
Treatment charges	297	191	102	4	297
Export duties	95	61	33	1	95
Royalty on metals	131	79	50	2	131
Net cash costs	869	1,437	774	29	2,240
DD&A	384	247	132	5	384
Noncash and other costs, net	51	33	17	1	51
Total costs	1,304	1,717	923	35	2,675
Revenue adjustments, primarily for pricing on prior period open sales	(1	) (1	) 17	—	16
PT Smelting intercompany loss	(26	) (17	) (9	) —	(26
Gross profit	\$ 1,117	\$713	\$389	\$ 15	\$1,117
Copper sales (millions of recoverable pounds)	1,054	1,054			
Gold sales (thousands of recoverable ounces)			1,054		

Gross profit per pound of copper/per ounce of gold:

Revenues, excluding adjustments	\$ 2.32	\$2.32	\$1,237	
Site production and delivery, before net noncash and other costs shown below	1.63	1.05	559	
Gold and silver credits	(1.30	) —	—	
Treatment charges	0.28	0.18	97	
Export duties	0.09	0.06	31	
Royalty on metals	0.13	0.07	47	
Unit net cash costs	0.83	1.36	734	
DD&A	0.36	0.24	125	
Noncash and other costs, net	0.05	0.03	17	
Total unit costs	1.24	1.63	876	
Revenue adjustments, primarily for pricing on prior period open sales	—	—	16	
PT Smelting intercompany loss	(0.02	) (0.02	) (8	)
Gross profit per pound/ounce	\$ 1.06	\$0.67	\$369	

## Reconciliation to Amounts Reported

(In millions)

	Revenues	Production and Delivery	DD&A
Totals presented above	\$ 3,802	\$1,717	\$384
Treatment charges	(297	) —	—
Export duties	(95	) —	—

Royalty on metals	(131	)	—	—
Noncash and other costs, net	—		51	—
Revenue adjustments, primarily for pricing on prior period open sales	16		—	—
PT Smelting intercompany loss	—		26	—
Indonesia mining	3,295		1,794	384
Other mining <sup>b</sup>	13,190		10,437	1,190
Corporate, other & eliminations	(1,655	)	(1,534	) 956
As reported in FCX's consolidated financial statements	\$ 14,830		\$ 10,697	\$ 2,530

a. Includes silver sales of 2.9 million ounces (\$17.09 per ounce average realized price).

Represents the combined total for all other mining operations, including North America copper mines, South America mining, Molybdenum mines, Rod & Refining and Atlantic Copper Smelting & Refining, as presented in Note 16.

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## Indonesia Mining Product Revenues, Production Costs and Unit Net Cash Costs

Year Ended December 31, 2015

(In millions)

	By-Product Co-Product Method				Total
	Method	Copper	Gold	Silver <sup>a</sup>	
Revenues, excluding adjustments	\$ 1,735	\$1,735	\$ 1,382	\$ 31	\$3,148
Site production and delivery, before net noncash and other costs shown below	1,780	981	781	18	1,780
Gold and silver credits	(1,422 )	—	—	—	—
Treatment charges	231	127	101	3	231
Export duties	109	60	48	1	109
Royalty on metals	114	63	50	1	114
Net cash costs	812	1,231	980	23	2,234
DD&A	293	161	129	3	293
Noncash and other costs, net	38	21	17	—	38
Total costs	1,143	1,413	1,126	26	2,565
Revenue adjustments, primarily for pricing on prior period open sales	(50 )	(50 )	8	1	(41 )
PT Smelting intercompany profit	10	5	5	—	10
Gross profit	\$ 552	\$277	\$269	\$ 6	\$552
Copper sales (millions of recoverable pounds)	744	744			
Gold sales (thousands of recoverable ounces)			1,224		

Gross profit per pound of copper/per ounce of gold:

Revenues, excluding adjustments	\$ 2.33	\$2.33	\$ 1,129
Site production and delivery, before net noncash and other costs shown below	2.39	1.32	638
Gold and silver credits	(1.91 )	—	—
Treatment charges	0.31	0.17	83
Export duties	0.15	0.08	39
Royalty on metals	0.15	0.09	41
Unit net cash costs	1.09	1.66	801
DD&A	0.39	0.22	105
Noncash and other costs, net	0.05	0.03	14
Total unit costs	1.53	1.91	920
Revenue adjustments, primarily for pricing on prior period open sales	(0.07 )	(0.06 )	7
PT Smelting intercompany profit	0.01	0.01	4
Gross profit per pound/ounce	\$ 0.74	\$0.37	\$220

## Reconciliation to Amounts Reported

(In millions)

	Revenues	Production and Delivery	DD&A
Totals presented above	\$ 3,148	\$1,780	\$293
Treatment charges	(231 )	—	—
Export duties	(109 )	—	—

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Royalty on metals	(114	)	—	—	
Noncash and other costs, net	—		38	—	
Revenue adjustments, primarily for pricing on prior period open sales	(41	)	—	—	
PT Smelting intercompany profit	—		(10	)	—
Indonesia mining	2,653		1,808	293	
Other mining <sup>b</sup>	13,532		11,526	1,057	
Corporate, other & eliminations	(1,578	)	(2,641	)	1,890
As reported in FCX's consolidated financial statements	\$ 14,607		\$ 10,693	\$ 3,240	

a. Includes silver sales of 2.1 million ounces (\$14.81 per ounce average realized price).

Represents the combined total for all other mining operations, including North America copper mines, South America mining, Molybdenum mines, Rod & Refining and Atlantic Copper Smelting & Refining, as presented in Note 16.



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## Molybdenum Mines Product Revenues, Production Costs and Unit Net Cash Costs

(In millions)	Years Ended December 31,		
	2017	2016	2015
Revenues, excluding adjustments <sup>a</sup>	\$295	\$208	\$ 388
Site production and delivery, before net noncash and other costs shown below	223	195	299
Treatment charges and other	27	22	40
Net cash costs	250	217	339
DD&A	76	68	97
Metals inventory adjustments	1	15	11
Noncash and other costs, net	6	4	13
Total costs	333	304	460
Gross loss	\$(38 )	\$(96 )	\$ (72 )

Molybdenum sales (millions of recoverable pounds) <sup>a</sup>	32	26	48
--	----	----	----

## Gross loss per pound of molybdenum:

Revenues, excluding adjustments <sup>a</sup>	\$9.22	\$8.02	\$ 8.14
Site production and delivery, before net noncash and other costs shown below	6.94	7.50	6.27
Treatment charges and other	0.85	0.86	0.84
Unit net cash costs	7.79	8.36	7.11
DD&A	2.39	2.62	2.04
Metals inventory adjustments	0.02	0.58	0.22
Noncash and other costs, net	0.21	0.15	0.28
Total unit costs	10.41	11.71	9.65
Gross loss per pound	\$(1.19 )	\$(3.69 )	\$ (1.51 )

## Reconciliation to Amounts Reported

(In millions)

Year Ended December 31, 2017	Revenues	Production		Metals
		and Delivery	DD&A	Inventory Adjustments
Totals presented above	\$295	\$223	\$76	\$ 1
Treatment charges and other	(27 )	—	—	—
Noncash and other costs, net	—	6	—	—
Molybdenum mines	268	229	76	1
Other mining <sup>c</sup>	19,218	13,190	1,544	2
Corporate, other & eliminations	(3,083 )	(3,119 )	94	5
As reported in FCX's consolidated financial statements	\$16,403	\$10,300	\$1,714	\$ 8
Year Ended December 31, 2016				
Totals presented above	\$208	\$195	\$68	\$ 15
Treatment charges and other	(22 )	—	—	—
Noncash and other costs, net	—	4	—	—
Molybdenum mines	186	199	68	15
Other mining <sup>c</sup>	16,299	12,032	1,506	1
Corporate, other & eliminations	(1,655 )	(1,534 )	956	20

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As reported in FCX's consolidated financial statements \$ 14,830 \$ 10,697 \$ 2,530 \$ 36

Year Ended December 31, 2015

Totals presented above	\$388	\$299	\$97	\$ 11
Treatment charges and other	(40 )	—	—	—
Noncash and other costs, net	—	13	—	—
Molybdenum mines	348	312	97	11
Other mining <sup>c</sup>	15,837	13,022	1,253	215
Corporate, other & eliminations	(1,578 )	(2,641 )	1,890	112
As reported in FCX's consolidated financial statements	\$ 14,607	\$ 10,693	\$ 3,240	\$ 338

Reflects sales of the Molybdenum mines' production to the molybdenum sales company at market-based pricing. On a consolidated basis, realizations are based on the actual contract terms for sales to third parties; as a result, the consolidated average realized price per pound of molybdenum will differ from the amounts reported in this table.

b. Includes restructuring charges of \$7 million (\$0.15 per pound).

Represents the combined total for all other mining operations, including North America copper mines, South America mining, Indonesia mining, Rod & Refining and Atlantic Copper Smelting & Refining, as presented in Note

<sup>c</sup> 16. Also includes amounts associated with the molybdenum sales company, which includes sales of molybdenum produced by the Molybdenum mines and by certain of the North America and South America copper mines.

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CAUTIONARY STATEMENT

Our discussion and analysis contains forward-looking statements in which we discuss our potential future performance. Forward-looking statements are all statements other than statements of historical facts, such as projections or expectations relating to ore grades and milling rates, production and sales volumes, unit net cash costs, operating cash flows, anticipated tax refunds resulting from U.S. tax reform, capital expenditures, exploration efforts and results, development and production activities and costs, liquidity, tax rates, the impact of copper, gold and molybdenum price changes, the impact of deferred intercompany profits on earnings, reserve estimates, future dividend payments, and share purchases and sales. The words “anticipates,” “may,” “can,” “plans,” “believes,” “estimates,” “expects,” “projects,” “targets,” “intends,” “likely,” “will,” “should,” “to be,” “potential” and any similar expressions are intended to identify those assertions as forward-looking statements. Our discussion also contains forward-looking statements and estimates regarding the anticipated effects of the Tax Cuts and Jobs Act enacted on December 22, 2017. These statements and estimates are based on our current interpretation of this legislation, which may change as a result of additional implementation guidance, changes in assumptions, and potential future refinements of or revisions to calculations.

We caution readers that forward-looking statements are not guarantees of future performance and actual results may differ materially from those anticipated, projected or assumed in the forward-looking statements. Important factors that can cause our actual results to differ materially from those anticipated in the forward-looking statements include supply of and demand for, and prices of copper, gold and molybdenum; mine sequencing; production rates; potential inventory adjustments; potential impairment of long-lived mining assets, the outcome of negotiations with the Indonesian government regarding PT-FI’s long-term mining rights; the potential effects of violence in Indonesia generally and in the province of Papua; industry risks; regulatory changes; political risks; labor relations; weather- and climate-related risks; environmental risks; litigation results (including the final disposition of Indonesian tax disputes and the outcome of Cerro Verde’s royalty dispute with the Peruvian national tax authority); and other factors described in more detail in Part I, Item 1A. “Risk Factors” of our annual report on Form 10-K for the year ended December 31, 2017. With respect to our operations in Indonesia, such factors include whether PT-FI will be able to resolve complex regulatory matters in Indonesia and continue to operate after June 30, 2018.

Investors are cautioned that many of the assumptions upon which our forward-looking statements are based are likely to change after the forward-looking statements are made, including for example commodity prices, which we cannot control, and production volumes and costs, some aspects of which we may not be able to control. Further, we may make changes to our business plans that could affect our results. We caution investors that we do not intend to update forward-looking statements more frequently than quarterly notwithstanding any changes in our assumptions, changes in business plans, actual experience or other changes, and we undertake no obligation to update any forward-looking statements.

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Item 8. Financial Statements and Supplementary Data.

MANAGEMENT'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING

Freeport-McMoRan Inc.'s (the Company's) management is responsible for establishing and maintaining adequate internal control over financial reporting. Internal control over financial reporting is defined in Rule 13a-15(f) or 15d-15(f) under the Securities Exchange Act of 1934 as a process designed by, or under the supervision of, the Company's principal executive and principal financial officers and effected by the Company's Board of Directors, management and other personnel, 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 and includes those policies and procedures that:

• Pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of the Company's assets;

• 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

• 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. 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.

Our management, including our principal executive officer and principal financial officer, assessed the effectiveness of our internal control over financial reporting as of the end of the fiscal year covered by this annual report on Form 10-K. In making this assessment, our management used the criteria set forth in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). Based on its assessment, management concluded that, as of December 31, 2017, our Company's internal control over financial reporting is effective based on the COSO criteria.

Ernst & Young LLP, an independent registered public accounting firm, who audited the Company's consolidated financial statements included in this Form 10-K, has issued an attestation report on the Company's internal control over financial reporting, which is included herein.

/s/ Richard C. Adkerson  
Richard C. Adkerson  
Vice Chairman of the Board,  
President and Chief Executive Officer

/s/ Kathleen L. Quirk  
Kathleen L. Quirk  
Executive Vice President,  
Chief Financial Officer and Treasurer

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

TO THE BOARD OF DIRECTORS AND STOCKHOLDERS OF  
FREEPORT-McMoRan INC.

Opinion on Internal Control over Financial Reporting

We have audited Freeport-McMoRan Inc.'s internal control over financial reporting as of December 31, 2017, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). In our opinion, Freeport-McMoRan Inc. (the Company) maintained, in all material respects, effective internal control over financial reporting as of December 31, 2017, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of Freeport-McMoRan Inc. as of December 31, 2017 and 2016, and the related consolidated statements of operations, comprehensive income (loss), equity and cash flows for each of the three years in the period ended December 31, 2017, and the related notes of the Company and our report dated February 20, 2018 expressed an unqualified opinion thereon.

Basis for Opinion

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

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects.

Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control Over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ Ernst & Young LLP  
Phoenix, Arizona  
February 20, 2018

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

TO THE BOARD OF DIRECTORS AND STOCKHOLDERS OF  
FREEPORT-McMoRan INC.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Freeport-McMoRan Inc. (the Company) as of December 31, 2017 and 2016, and the related consolidated statements of operations, comprehensive income (loss), equity and cash flows for each of the three years in the period ended December 31, 2017, and the related notes (collectively referred to as the “financial statements”). In our opinion, the financial statements present fairly, in all material respects, the consolidated financial position of the Company at December 31, 2017 and 2016, and the consolidated results of its operations and its cash flows for each of the three years in the period ended December 31, 2017, 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, 2017, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) and our report dated February 20, 2018 expressed an unqualified opinion thereon.

Basis for Opinion

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

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

/s/ Ernst & Young LLP

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

Phoenix, Arizona  
February 20, 2018

Table of ContentsFREEPORT-McMoRan INC.  
CONSOLIDATED STATEMENTS OF OPERATIONS

	Years Ended December 31,		
	2017	2016	2015
	(In millions, except per share amounts)		
Revenues	\$16,403	\$14,830	\$14,607
Cost of sales:			
Production and delivery	10,300	10,697	10,693
Depreciation, depletion and amortization	1,714	2,530	3,240
Impairment of oil and gas properties	—	4,317	13,144
Metals inventory adjustments	8	36	338
Total cost of sales	12,022	17,580	27,415
Selling, general and administrative expenses	484	607	558
Mining exploration and research expenses	94	64	107
Environmental obligations and shutdown costs	251	20	78
Net gain on sales of assets	(81)	(649)	(39)
Total costs and expenses	12,770	17,622	28,119
Operating income (loss)	3,633	(2,792)	(13,512)
Interest expense, net	(801)	(755)	(617)
Net gain on early extinguishment and exchanges of debt	21	26	—
Other income, net	49	49	1
Income (loss) from continuing operations before income taxes and equity in affiliated companies' net earnings (losses)	2,902	(3,472)	(14,128)
(Provision for) benefit from income taxes	(883)	(371)	1,951
Equity in affiliated companies' net earnings (losses)	10	11	(3)
Net income (loss) from continuing operations	2,029	(3,832)	(12,180)
Net income (loss) from discontinued operations	66	(193)	91
Net income (loss)	2,095	(4,025)	(12,089)
Net income attributable to noncontrolling interests:			
Continuing operations	(274)	(227)	(27)
Discontinued operations	(4)	(63)	(79)
Gain on redemption and preferred dividends attributable to redeemable noncontrolling interest	—	161	(41)
Net income (loss) attributable to common stockholders	\$1,817	\$(4,154)	\$(12,236)
Basic and diluted net income (loss) per share attributable to common stockholders:			
Continuing operations	\$1.21	\$(2.96)	\$(11.32)
Discontinued operations	0.04	(0.20)	0.01
	\$1.25	\$(3.16)	\$(11.31)
Weighted-average common shares outstanding:			
Basic	1,447	1,318	1,082
Diluted	1,454	1,318	1,082
Dividends declared per share of common stock	\$—	\$—	\$0.2605



The accompanying Notes to Consolidated Financial Statements are an integral part of these consolidated financial statements.

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FREEPORT-McMoRan INC.

## CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)

	Years Ended December 31,		
	2017	2016	2015
	(In millions)		
Net income (loss)	\$2,095	\$(4,025)	\$(12,089)
Other comprehensive income (loss), net of taxes:			
Unrealized gains on securities	1	2	—
Defined benefit plans:			
Actuarial gains (losses) arising during the period, net of taxes	14	(88)	(5)
Amortization or curtailment of unrecognized amounts included in net periodic benefit costs	54	44	38
Foreign exchange (losses) gains	—	(1)	8
Other comprehensive income (loss)	69	(43)	41
Total comprehensive income (loss)	2,164	(4,068)	(12,048)
Total comprehensive income attributable to noncontrolling interests	(286)	(292)	(106)
Gain on redemption and preferred dividends attributable to redeemable noncontrolling interest	—	161	(41)
Total comprehensive income (loss) attributable to common stockholders	\$1,878	\$(4,199)	\$(12,195)

The accompanying Notes to Consolidated Financial Statements are an integral part of these consolidated financial statements.

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FREEPORT-McMoRan INC.

## CONSOLIDATED STATEMENTS OF CASH FLOWS

	Years Ended December 31,		
	2017	2016	2015
	(In millions)		
Cash flow from operating activities:			
Net income (loss)	\$2,095	\$(4,025)	\$(12,089)
Adjustments to reconcile net income (loss) to net cash provided by operating activities:			
Depreciation, depletion and amortization	1,714	2,610	3,497
U.S. tax reform benefit	(393)	—	—
Net charges for Cerro Verde royalty dispute	355	—	—
Payments for Cerro Verde royalty dispute	(53)	(30)	(34)
Impairment of oil and gas properties	—	4,317	13,144
Oil and gas noncash drillship settlement costs and other adjustments	(33)	803	137
Oil and gas contract settlement payments	(70)	—	—
Metals inventory adjustments	8	36	338
Mining asset impairments and restructuring	40	20	119
Net gain on sales of assets	(81)	(649)	(39)
Stock-based compensation	71	86	85
Net charges for environmental and asset retirement obligations, including accretion	383	191	209
Payments for environmental and asset retirement obligations	(131)	(242)	(198)
Net charges for defined pension and postretirement plans	120	113	105
Pension plan contributions	(174)	(57)	(140)
Net gain on early extinguishment and exchanges of debt	(21)	(26)	—
Deferred income taxes	76	239	(2,039)
(Gain) loss on disposal of discontinued operations	(57)	198	—
Decrease (increase) in long-term mill and leach stockpiles	224	10	(212)
Other, net	20	48	(70)
Changes in working capital and other tax payments, excluding disposition amounts:			
Accounts receivable	427	(175)	813
Inventories	(393)	117	379
Other current assets	(28)	37	97
Accounts payable and accrued liabilities	110	(28)	(217)
Accrued income taxes and timing of other tax payments	473	136	(665)
Net cash provided by operating activities	4,682	3,729	3,220
Cash flow from investing activities:			
Capital expenditures:			
North America copper mines	(167)	(102)	(355)
South America	(115)	(382)	(1,722)
Indonesia	(875)	(1,025)	(901)
Molybdenum mines	(5)	(2)	(13)
Other, including oil and gas operations	(248)	(1,302)	(3,362)
Proceeds from sales of:			
Tenke Fungurume mine	—	2,664	—
Deepwater Gulf of Mexico and onshore California oil and gas properties	—	2,272	—
Additional interest in Morenci joint venture	—	996	—
Other assets	72	423	160
Other, net	(25)	8	(53)

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Net cash (used in) provided by investing activities	(1,363 )	3,550	(6,246 )
Cash flow from financing activities:			
Proceeds from debt	955	3,681	8,272
Repayments of debt	(3,812 )	(7,625 )	(6,677 )
Net proceeds from sale of common stock	—	1,515	1,936
Cash dividends and distributions paid:			
Common stock	(2 )	(6 )	(605 )
Noncontrolling interests, including redemption	(174 )	(693 )	(120 )
Stock-based awards net payments	(10 )	(6 )	(4 )
Debt financing costs and other, net	(12 )	(32 )	(16 )
Net cash (used in) provided by financing activities	(3,055 )	(3,166 )	2,786
Net increase (decrease) in cash and cash equivalents	264	4,113	(240 )
(Increase) decrease in cash and cash equivalents in assets held for sale	(62 )	(45 )	119
Cash and cash equivalents at beginning of year	4,245	177	298
Cash and cash equivalents at end of year	\$4,447	\$4,245	\$177

The accompanying Notes to Consolidated Financial Statements are an integral part of these consolidated financial statements.

Table of ContentsFREEPORT-McMoRan INC.  
CONSOLIDATED BALANCE SHEETS

	December 31,	
	2017	2016
	(In millions, except par value)	
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents	\$4,447	\$4,245
Trade accounts receivable	1,246	1,126
Income and other tax receivables	325	879
Inventories:		
Materials and supplies, net	1,305	1,306
Mill and leach stockpiles	1,422	1,338
Product	1,166	998
Other current assets	270	199
Assets held for sale	598	344
Total current assets	10,779	10,435
Property, plant, equipment and mine development costs, net	22,836	23,219
Oil and gas properties, subject to amortization, less accumulated amortization and impairments of \$27,445 and \$27,433, respectively	8	74
Long-term mill and leach stockpiles	1,409	1,633
Other assets	2,270	1,956
Total assets	\$37,302	\$37,317
<b>LIABILITIES AND EQUITY</b>		
Current liabilities:		
Accounts payable and accrued liabilities	\$2,321	\$2,393
Current portion of debt	1,414	1,232
Accrued income taxes	565	66
Current portion of environmental and asset retirement obligations	388	369
Liabilities held for sale	350	205
Total current liabilities	5,038	4,265
Long-term debt, less current portion	11,703	14,795
Environmental and asset retirement obligations, less current portion	3,631	3,487
Deferred income taxes	3,622	3,768
Other liabilities	2,012	1,745
Total liabilities	26,006	28,060
Equity:		
Stockholders' equity:		
Common stock, par value \$0.10, 1,578 shares and 1,574 shares issued, respectively	158	157
Capital in excess of par value	26,751	26,690
Accumulated deficit	(14,722 )	(16,540 )
Accumulated other comprehensive loss	(487 )	(548 )
Common stock held in treasury – 130 shares and 129 shares, respectively, at cost	(3,723 )	(3,708 )
Total stockholders' equity	7,977	6,051
Noncontrolling interests	3,319	3,206
Total equity	11,296	9,257

Total liabilities and equity \$37,302 \$37,317

The accompanying Notes to Consolidated Financial Statements are an integral part of these consolidated financial statements.

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FREEPORT-McMoRan INC.

## CONSOLIDATED STATEMENTS OF EQUITY

## Stockholders' Equity

	Common Stock		Capital in Excess of Par Value	(Accumulated Deficit) Retained Earnings	Accumulated Other Comprehensive Loss	Common Stock Held in Treasury		Total Stockholders' Equity	Non-controlling Interests	Total Equity
	Number of Shares	At Par Value				Number of Shares	At Cost			
	(In millions)									
Balance at January 1, 2015	1,167	\$ 117	\$ 22,281	\$ 128	\$ (544 )	128	\$(3,695)	\$ 18,287	\$ 4,187	\$ 22,474
Sale of common stock	206	20	1,916	—	—	—	—	1,936	—	1,936
Exercised and issued stock-based awards	1	—	3	—	—	—	—	3	—	3
Stock-based compensation, including tax reserve and the tender of shares	—	—	90	—	—	—	(7 )	83	7	90
Dividends	—	—	—	(279 )	—	—	—	(279 )	(91 )	(370 )
Changes in noncontrolling interests	—	—	(7 )	—	—	—	—	(7 )	7	—
Net loss attributable to common stockholders	—	—	—	(12,236 )	—	—	—	(12,236 )	—	(12,236 )
Net income attributable to noncontrolling interests, including discontinued operations	—	—	—	—	—	—	—	—	106	106
Other comprehensive income	—	—	—	—	41	—	—	41	—	41
Balance at December 31, 2015	1,374	137	24,283	(12,387 )	(503 )	128	(3,702 )	7,828	4,216	12,044
Issuance of common stock	197	20	2,346	—	—	—	—	2,366	—	2,366
Exercised and issued stock-based awards	3	—	—	—	—	—	—	—	—	—
Stock-based compensation, including tax reserve and the tender of shares	—	—	61	—	—	1	(6 )	55	—	55

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Forfeited dividends	—	—	—	1	—	—	—	1	(90)	(89)
Change in noncontrolling interests	—	—	—	—	—	—	—	—	(6)	(6)
Sale of interest in TF Holdings Limited	—	—	—	—	—	—	—	—	(1,206)	(1,206)
Net loss attributable to common stockholders	—	—	—	(4,154)	—	—	—	(4,154)	—	(4,154)
Net income attributable to noncontrolling interests, including discontinued operations	—	—	—	—	—	—	—	—	290	290
Other comprehensive (loss) income	—	—	—	—	(45)	—	—	(45)	2	(43)
Balance at December 31, 2016	1,574	157	26,690	(16,540)	(548)	129	(3,708)	6,051	3,206	9,257
Exercised and issued stock-based awards	4	1	5	—	—	—	—	6	—	6
Stock-based compensation, including the tender of shares	—	—	56	—	—	1	(15)	41	1	42
Forfeited dividends	—	—	—	1	—	—	—	1	(174)	(173)
Net income attributable to common stockholders	—	—	—	1,817	—	—	—	1,817	—	1,817
Net income attributable to noncontrolling interests, including discontinued operations	—	—	—	—	—	—	—	—	278	278
Other comprehensive income	—	—	—	—	61	—	—	61	8	69
Balance at December 31, 2017	1,578	\$ 158	\$ 26,751	\$ (14,722)	\$ (487)	130	\$ (3,723)	\$ 7,977	\$ 3,319	\$ 11,296

The accompanying Notes to Consolidated Financial Statements are an integral part of these consolidated financial statements.



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FREEPORT-McMoRan INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

**Basis of Presentation.** The consolidated financial statements of Freeport-McMoRan Inc. (FCX) include the accounts of those subsidiaries where it directly or indirectly has more than 50 percent of the voting rights and has the right to control significant management decisions. As of December 31, 2017, the most significant entities that FCX consolidates include its 90.64 percent-owned subsidiary PT Freeport Indonesia (PT-FI), and the following wholly owned subsidiaries: Freeport Minerals Corporation (FMC) and Atlantic Copper, S.L.U. (Atlantic Copper).

FCX acquired mining assets in North America, South America and Africa when it acquired Phelps Dodge Corporation (now known as FMC) in 2007. FCX acquired oil and gas operations when it acquired Plains Exploration & Production Company (PXP) and McMoRan Exploration Co. (MMR), collectively known as FCX Oil & Gas LLC (FM O&G, formerly FCX Oil & Gas Inc.), in 2013. Subsequent to the acquisitions, FCX completed sales of its Africa mining operations and substantially all of its oil and gas operations. Refer to Note 2 for further discussion.

FCX's unincorporated joint ventures with Rio Tinto plc (Rio Tinto), Sumitomo Metal Mining Arizona, Inc. (Sumitomo) and SMM Morenci, Inc. (an affiliate of Sumitomo Metal Mining Co., Ltd.) are reflected using the proportionate consolidation method (refer to Note 3 for further discussion). Investments in unconsolidated companies owned 20 percent or more are recorded using the equity method. Investments in companies owned less than 20 percent, and for which FCX does not exercise significant influence, are carried at cost. All significant intercompany transactions have been eliminated. Dollar amounts in tables are stated in millions, except per share amounts.

**Business Segments.** FCX has organized its mining operations into four primary divisions – North America copper mines, South America mining, Indonesia mining and Molybdenum mines, and operating segments that meet certain thresholds are reportable segments. FCX's reportable segments include the Morenci, Cerro Verde and Grasberg (Indonesia mining) copper mines, the Rod & Refining operations and Atlantic Copper Smelting & Refining. Refer to Note 16 for further discussion.

**Use of Estimates.** The preparation of FCX's financial statements in conformity with accounting principles generally accepted in the United States (U.S.) requires management to make estimates and assumptions that affect the amounts reported in these financial statements and accompanying notes. The more significant areas requiring the use of management estimates include minerals reserve estimation; asset lives for depreciation, depletion and amortization; environmental obligations; asset retirement obligations; estimates of recoverable copper in mill and leach stockpiles; deferred taxes and valuation allowances; reserves for contingencies and litigation; asset impairment, including estimates used to derive future cash flows associated with those assets; pension benefits; and valuation of derivative instruments. Actual results could differ from those estimates.

**Functional Currency.** The functional currency for the majority of FCX's foreign operations is the U.S. dollar. For foreign subsidiaries whose functional currency is the U.S. dollar, monetary assets and liabilities denominated in the local currency are translated at current exchange rates, and non-monetary assets and liabilities, such as inventories, property, plant, equipment and mine development costs, are translated at historical rates. Gains and losses resulting from translation of such account balances are included in other income, net, as are gains and losses from foreign currency transactions. Foreign currency (losses) gains totaled \$(5) million in 2017, \$32 million in 2016 and \$(90) million in 2015.

**Cash Equivalents.** Highly liquid investments purchased with maturities of three months or less are considered cash equivalents.

Inventories. Inventories include materials and supplies, mill and leach stockpiles, and product inventories. Inventories are stated at the lower of weighted-average cost or net realizable value (NRV).

Mill and Leach Stockpiles. Mill and leach stockpiles are work-in-process inventories for FCX's mining operations. Mill and leach stockpiles contain ore that has been extracted from an ore body and is available for copper recovery. Mill stockpiles contain sulfide ores, and recovery of metal is through milling, concentrating and smelting and refining or, alternatively, by concentrate leaching. Leach stockpiles contain oxide ores and certain secondary sulfide ores and recovery of metal is through exposure to acidic solutions that dissolve contained copper and deliver it in solution to extraction processing facilities (i.e., solution extraction and electrowinning (SX/EW)). The recorded cost of mill and leach stockpiles includes mining and haulage costs incurred to deliver ore to stockpiles, depreciation,

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depletion, amortization and site overhead costs. Material is removed from the stockpiles at a weighted-average cost per pound.

Because it is impracticable to determine copper contained in mill and leach stockpiles by physical count, reasonable estimation methods are employed. The quantity of material delivered to mill and leach stockpiles is based on surveyed volumes of mined material and daily production records. Sampling and assaying of blasthole cuttings determine the estimated copper grade of the material delivered to mill and leach stockpiles.

Expected copper recovery rates for mill stockpiles are determined by metallurgical testing. The recoverable copper in mill stockpiles, once entered into the production process, can be produced into copper concentrate almost immediately.

Expected copper recovery rates for leach stockpiles are determined using small-scale laboratory tests, small- to large-scale column testing (which simulates the production process), historical trends and other factors, including mineralogy of the ore and rock type. Total copper recovery in leach stockpiles can vary significantly from a low percentage to more than 90 percent depending on several variables, including processing methodology, processing variables, mineralogy and particle size of the rock. For newly placed material on active stockpiles, as much as 80 percent of the total copper recovery may occur during the first year, and the remaining copper may be recovered over many years.

Processes and recovery rates for mill and leach stockpiles are monitored regularly, and recovery rate estimates are adjusted periodically as additional information becomes available and as related technology changes. Adjustments to recovery rates will typically result in a future impact to the value of the material removed from the stockpiles at a revised weighted-average cost per pound of recoverable copper.

**Product Inventories.** Product inventories include raw materials, work-in-process and finished goods. Raw materials are primarily unprocessed concentrate at Atlantic Copper's smelting and refining operations. Work-in-process inventories are primarily copper concentrate at various stages of conversion into anode and cathode at Atlantic Copper's operations. Atlantic Copper's in-process inventories are valued at the weighted-average cost of the material fed to the smelting and refining process plus in-process conversion costs. Finished goods for mining operations represent salable products (e.g., copper and molybdenum concentrate, copper anode, copper cathode, copper rod, copper wire, molybdenum oxide, and high-purity molybdenum chemicals and other metallurgical products). Finished goods are valued based on the weighted-average cost of source material plus applicable conversion costs relating to associated process facilities. Costs of finished goods and work-in-process (i.e., not raw materials) inventories include labor and benefits, supplies, energy, depreciation, depletion, amortization, site overhead costs and other necessary costs associated with the extraction and processing of ore, including, depending on the process, mining, haulage, milling, concentrating, smelting, leaching, solution extraction, refining, roasting and chemical processing. Corporate general and administrative costs are not included in inventory costs.

**Property, Plant, Equipment and Mine Development Costs.** Property, plant, equipment and mine development costs are carried at cost. Mineral exploration costs, as well as drilling and other costs incurred for the purpose of converting mineral resources to proven and probable reserves or identifying new mineral resources at development or production stage properties, are charged to expense as incurred. Development costs are capitalized beginning after proven and probable mineral reserves have been established. Development costs include costs incurred resulting from mine pre-production activities undertaken to gain access to proven and probable reserves, including shafts, adits, drifts, ramps, permanent excavations, infrastructure and removal of overburden. Additionally, interest expense allocable to the cost of developing mining properties and to constructing new facilities is capitalized until assets are ready for their intended use.

Expenditures for replacements and improvements are capitalized. Costs related to periodic scheduled maintenance (i.e., turnarounds) are charged to expense as incurred. Depreciation for mining and milling life-of-mine assets, infrastructure and other common costs is determined using the unit-of-production (UOP) method based on total estimated recoverable proven and probable copper reserves (for primary copper mines) and proven and probable molybdenum reserves (for primary molybdenum mines). Development costs and acquisition costs for proven and probable mineral reserves that relate to a specific ore body are depreciated using the UOP method based on estimated recoverable proven and probable mineral reserves for the ore body benefited. Depreciation, depletion and amortization using the UOP method is recorded upon extraction of the recoverable copper or molybdenum from the ore body, at which time it is allocated to inventory cost and then included as a component of cost of goods sold.

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Other assets are depreciated on a straight-line basis over estimated useful lives of up to 39 years for buildings and three to 30 years for machinery and equipment, and mobile equipment.

Included in property, plant, equipment and mine development costs is value beyond proven and probable mineral reserves (VBPP), primarily resulting from FCX's acquisition of FMC in 2007. The concept of VBPP may be interpreted differently by different mining companies. FCX's VBPP is attributable to (i) mineralized material, which includes measured and indicated amounts, that FCX believes could be brought into production with the establishment or modification of required permits and should market conditions and technical assessments warrant, (ii) inferred mineral resources and (iii) exploration potential.

Carrying amounts assigned to VBPP are not charged to expense until the VBPP becomes associated with additional proven and probable mineral reserves and the reserves are produced or the VBPP is determined to be impaired. Additions to proven and probable mineral reserves for properties with VBPP will carry with them the value assigned to VBPP at the date acquired, less any impairment amounts. Refer to Note 5 for further discussion.

**Impairment of Long-Lived Mining Assets.** FCX assesses the carrying values of its long-lived mining assets for impairment when events or changes in circumstances indicate that the related carrying amounts of such assets may not be recoverable. In evaluating long-lived mining assets for recoverability, estimates of pre-tax undiscounted future cash flows of FCX's individual mines are used. An impairment is considered to exist if total estimated undiscounted future cash flows are less than the carrying amount of the asset. Once it is determined that an impairment exists, an impairment loss is measured as the amount by which the asset carrying value exceeds its fair value. The estimated undiscounted cash flows used to assess recoverability of long-lived assets and to measure the fair value of FCX's mining operations are derived from current business plans, which are developed using near-term price forecasts reflective of the current price environment and management's projections for long-term average metal prices. In addition to near- and long-term metal price assumptions, other key assumptions include estimates of commodity-based and other input costs; proven and probable mineral reserves estimates, including the timing and cost to develop and produce the reserves; VBPP estimates; and the use of appropriate discount rates in the measurement of fair value. FCX believes its estimates and models used to determine fair value are similar to what a market participant would use. As quoted market prices are unavailable for FCX's individual mining operations, fair value is determined through the use of after-tax discounted estimated future cash flows (i.e., Level 3 measurement).

**Oil and Gas Properties.** FCX follows the full cost method of accounting specified by the U.S. Securities and Exchange Commission's (SEC) rules whereby all costs associated with oil and gas property acquisition, exploration and development activities are capitalized into a cost center on a country-by-country basis. Such costs include internal general and administrative costs, such as payroll and related benefits and costs directly attributable to employees engaged in acquisition, exploration and development activities. General and administrative costs associated with production, operations, marketing and general corporate activities are charged to expense as incurred. Capitalized costs, along with estimated future costs to develop proved reserves and asset retirement costs that are not already included in oil and gas properties, net of related salvage value, are amortized to expense under the UOP method using engineers' estimates of the related, by-country proved oil and natural gas reserves.

The costs of unproved oil and gas properties were excluded from amortization until the properties were evaluated. Costs were transferred into the amortization base on an ongoing basis as the properties were evaluated and proved oil and natural gas reserves were established or if impairment was determined. Unproved oil and gas properties were assessed periodically, at least annually, to determine whether impairment had occurred. FCX assessed unproved oil and gas properties for impairment on an individual basis or as a group if properties were individually insignificant. The assessment considered the following factors, among others: intent to drill, remaining lease term, geological and geophysical evaluations, drilling results and activity, the assignment of proved reserves, the economic viability of development if proved reserves were assigned and other current market conditions. During any period in which these

factors indicated an impairment, the cumulative drilling costs incurred to date for such property and all or a portion of the associated leasehold costs were transferred to the full cost pool and were then subject to amortization. Including amounts determined to be impaired, FCX transferred \$4.9 billion of costs associated with unevaluated properties to the full cost pool in 2016 and \$6.4 billion in 2015. The transfer of costs into the amortization base involved a significant amount of judgment. Costs not subject to amortization consisted primarily of capitalized costs incurred for undeveloped acreage and wells in progress pending determination, together with capitalized interest for these projects. Following the completion of the sales of oil and gas properties discussed in Note 2, FCX had no unproved oil and gas properties in the consolidated balance sheets at December 31, 2017 or 2016. Interest costs totaling \$7 million in 2016 and \$58 million in 2015 were capitalized on oil and gas properties not subject to amortization and in the process of development.

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Proceeds from the sale of oil and gas properties are accounted for as reductions to capitalized costs unless the reduction causes a significant change in proved reserves, which, absent other factors, is generally described as a 25 percent or greater change, and significantly alters the relationship between capitalized costs and proved reserves attributable to a cost center, in which case a gain or loss is recognized.

**Impairment of Oil and Gas Properties.** Under the SEC full cost accounting rules, FCX reviews the carrying value of its oil and gas properties in the full cost pool for impairment each quarter on a country-by-country basis. Under these rules, capitalized costs of oil and gas properties (net of accumulated depreciation, depletion, amortization and impairment, and related deferred income taxes) for each cost center may not exceed a “ceiling” equal to:

- the present value, discounted at 10 percent, of estimated future net cash flows from the related proved oil and natural gas reserves, net of estimated future income taxes; plus
- the cost of the related unproved properties not being amortized; plus
- the lower of cost or estimated fair value of the related unproved properties included in the costs being amortized (net of related tax effects).

These rules require that FCX price its future oil and gas production at the twelve-month average of the first-day-of-the-month historical reference prices as adjusted for location and quality differentials. FCX’s reference prices are West Texas Intermediate (WTI) for oil and the Henry Hub price for natural gas. Such prices are utilized except where different prices are fixed and determinable from applicable contracts for the remaining term of those contracts. The reserve estimates exclude the effect of any crude oil and natural gas derivatives FCX has in place. The estimated future net cash flows also exclude future cash outflows associated with settling asset retirement obligations included in the net book value of the oil and gas properties. The rules require an impairment if the capitalized costs exceed this “ceiling.”

In 2016 and 2015, net capitalized costs with respect to FCX’s proved oil and gas properties exceeded the related ceiling test limitation; therefore, impairment charges of \$4.3 billion were recorded in 2016 and \$13.1 billion in 2015, primarily because of the lower twelve-month average of the first-day-of-the-month historical reference oil price and reserve revisions. The twelve-month average WTI reference oil price was \$51.34 per barrel at December 31, 2017, compared with \$42.75 per barrel at December 31, 2016, and \$50.28 per barrel at December 31, 2015.

**Deferred Mining Costs.** Stripping costs (i.e., the costs of removing overburden and waste material to access mineral deposits) incurred during the production phase of a mine are considered variable production costs and are included as a component of inventory produced during the period in which stripping costs are incurred. Major development expenditures, including stripping costs to prepare unique and identifiable areas outside the current mining area for future production that are considered to be pre-production mine development, are capitalized and amortized using the UOP method based on estimated recoverable proven and probable reserves for the ore body benefited. However, where a second or subsequent pit or major expansion is considered to be a continuation of existing mining activities, stripping costs are accounted for as a current production cost and a component of the associated inventory.

**Environmental Obligations.** Environmental expenditures are charged to expense or capitalized, depending upon their future economic benefits. Accruals for such expenditures are recorded when it is probable that obligations have been incurred and the costs can be reasonably estimated. Environmental obligations attributed to the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) or analogous state programs are considered probable when a claim is asserted, or is probable of assertion, and FCX, or any of its subsidiaries, have been associated with the site. Other environmental remediation obligations are considered probable based on specific facts and circumstances. FCX’s estimates of these costs are based on an evaluation of various factors, including currently available facts, existing technology, presently enacted laws and regulations, remediation experience, whether or not FCX is a potentially responsible party (PRP) and the ability of other PRPs to pay their allocated portions. With

the exception of those obligations assumed in the acquisition of FMC that were initially recorded at estimated fair values (refer to Note 12 for further discussion), environmental obligations are recorded on an undiscounted basis. Where the available information is sufficient to estimate the amount of the obligation, that estimate has been used. Where the information is only sufficient to establish a range of probable liability and no point within the range is more likely than any other, the lower end of the range has been used. Possible recoveries of some of these costs from other parties are not recognized in the consolidated financial statements until they become probable. Legal costs associated with environmental remediation (such as fees to outside law firms for work relating to determining the extent and type of remedial actions and the allocation of costs among PRPs) are included as part of the estimated obligation.



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Environmental obligations assumed in the acquisition of FMC, which were initially recorded at fair value and estimated on a discounted basis, are accreted to full value over time through charges to interest expense. Adjustments arising from changes in amounts and timing of estimated costs and settlements may result in increases and decreases in these obligations and are calculated in the same manner as they were initially estimated. Unless these adjustments qualify for capitalization, changes in environmental obligations are charged to operating income when they occur.

FCX performs a comprehensive review of its environmental obligations annually and also reviews changes in facts and circumstances associated with these obligations at least quarterly.

**Asset Retirement Obligations.** FCX records the fair value of estimated asset retirement obligations (AROs) associated with tangible long-lived assets in the period incurred. Retirement obligations associated with long-lived assets are those for which there is a legal obligation to settle under existing or enacted law, statute, written or oral contract or by legal construction. These obligations, which are initially estimated based on discounted cash flow estimates, are accreted to full value over time through charges to cost of sales. In addition, asset retirement costs (ARCs) are capitalized as part of the related asset's carrying value and are depreciated over the asset's respective useful life.

For mining operations, reclamation costs for disturbances are recognized as an ARO and as a related ARC (included in property, plant, equipment and mine development costs) in the period of the disturbance and depreciated primarily on a UOP basis. FCX's AROs for mining operations consist primarily of costs associated with mine reclamation and closure activities. These activities, which are site specific, generally include costs for earthwork, revegetation, water treatment and demolition.

For oil and gas properties, the fair value of the legal obligation is recognized as an ARO and as a related ARC (included in oil and gas properties) in the period in which the well is drilled or acquired and is amortized on a UOP basis together with other capitalized costs. Substantially all of FCX's oil and gas leases require that, upon termination of economic production, the working interest owners plug and abandon non-producing wellbores; remove platforms, tanks, production equipment and flow lines; and restore the wellsite.

At least annually, FCX reviews its ARO estimates for changes in the projected timing of certain reclamation and closure/restoration costs, changes in cost estimates and additional AROs incurred during the period. Refer to Note 12 for further discussion.

**Revenue Recognition.** FCX sells its products pursuant to sales contracts entered into with its customers. Revenue for all FCX's products is recognized when title and risk of loss pass to the customer and when collectibility is reasonably assured. The passing of title and risk of loss to the customer are based on terms of the sales contract, generally upon shipment or delivery of product.

Revenues from FCX's concentrate and cathode sales are recorded based on a provisional sales price or a final sales price calculated in accordance with the terms specified in the relevant sales contract. Revenues from concentrate sales are recorded net of treatment and all refining charges and the impact of derivative contracts. Moreover, because a portion of the metals contained in copper concentrate is unrecoverable as a result of the smelting process, FCX's revenues from concentrate sales are also recorded net of allowances based on the quantity and value of these unrecoverable metals. These allowances are a negotiated term of FCX's contracts and vary by customer. Treatment and refining charges represent payments or price adjustments to smelters and refiners that are generally fixed.

Under the long-established structure of sales agreements prevalent in the mining industry, copper contained in concentrate and cathode are generally provisionally priced at the time of shipment. The provisional prices are finalized in a specified future month (generally one to four months from the shipment date) based on quoted monthly average spot copper prices on the London Metal Exchange (LME) or the Commodity Exchange Inc. (COMEX), a division of

the New York Mercantile Exchange. FCX receives market prices based on prices in the specified future month, which results in price fluctuations recorded to revenues until the date of settlement. FCX records revenues and invoices customers at the time of shipment based on then-current LME or COMEX prices, which results in an embedded derivative (i.e., a pricing mechanism that is finalized after the time of delivery) that is required to be bifurcated from the host contract. The host contract is the sale of the metals contained in the concentrate or cathode at the then-current LME or COMEX price. FCX applies the normal purchases and normal sales scope exception in accordance with derivatives and hedge accounting guidance to the host contract in its

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concentrate or cathode sales agreements since these contracts do not allow for net settlement and always result in physical delivery. The embedded derivative does not qualify for hedge accounting and is adjusted to fair value through earnings each period, using the period-end forward prices, until the date of final pricing.

Gold sales are priced according to individual contract terms, generally the average London Bullion Market Association (London) price for a specified month near the month of shipment.

The majority of FCX's molybdenum sales are priced based on the average published Metals Week price, plus conversion premiums for products that undergo additional processing, such as ferromolybdenum and molybdenum chemical products, for the month prior to the month of shipment. In 2015, FCX incorporated changes in the commercial pricing structure for its molybdenum-based chemical products to enable continuation of chemical-grade production.

PT-FI concentrate sales and Sociedad Minera Cerro Verde S.A.A. (Cerro Verde, a subsidiary of FMC) metal sales are subject to certain royalties, which are recorded as a reduction to revenues. In addition, PT-FI concentrate sales are also subject to export duties since 2014, which are recorded as a reduction to revenues. Refer to Note 13 for further discussion.

Oil and gas revenue from FCX's interests in producing wells is recognized upon delivery and passage of title, net of any royalty interests or other profit interests in the produced product. Oil sales are primarily under contracts with prices based upon regional benchmarks. Gas sales are generally priced daily based on prices in the spot market. Gas revenue is recorded using the sales method for gas imbalances. If FCX's sales of production volumes for a well exceed its portion of the estimated remaining recoverable reserves of the well, a liability is recorded. No receivables are recorded for those wells on which FCX has taken less than its ownership share of production unless the amount taken by other parties exceeds the estimate of their remaining reserves. There were no material gas imbalances at December 31, 2017.

**Stock-Based Compensation.** Compensation costs for share-based payments to employees are measured at fair value and charged to expense over the requisite service period for awards that are expected to vest. The fair value of stock options is determined using the Black-Scholes-Merton option valuation model. The fair value for stock-settled restricted stock units (RSUs) is based on FCX's stock price on the date of grant. Shares of common stock are issued at the vesting date for stock-settled RSUs. The fair value of performance share units (PSUs) are determined using FCX's stock price and a Monte-Carlo simulation model. The fair value for liability-classified awards (i.e., cash-settled stock appreciation rights (SARs), cash-settled RSUs and cash-settled PSUs) is remeasured each reporting period using the Black-Scholes-Merton option valuation model for SARs and FCX's stock price for cash-settled RSUs and cash-settled PSUs. FCX has elected to recognize compensation costs for stock option awards and SARs that vest over several years on a straight-line basis over the vesting period, and for RSUs and cash-settled PSUs on the graded-vesting method over the vesting period. Refer to Note 10 for further discussion.

**Earnings Per Share.** FCX calculates its basic net income (loss) per share of common stock under the two-class method and calculates its diluted net income (loss) per share of common stock using the more dilutive of the two-class method or the treasury-stock method. Basic net income (loss) per share of common stock was computed by dividing net income (loss) attributable to common stockholders (after deducting accumulated dividends and undistributed earnings to participating securities) by the weighted-average shares of common stock outstanding during the year. Diluted net income (loss) per share of common stock was calculated by including the basic weighted-average shares of common stock outstanding adjusted for the effects of all potential dilutive shares of common stock, unless their effect would be anti-dilutive.



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Reconciliations of net income (loss) and weighted-average shares of common stock outstanding for purposes of calculating basic and diluted net income (loss) per share for the years ended December 31 follow:

	2017	2016	2015
Net income (loss) from continuing operations	\$2,029	\$(3,832)	\$(12,180)
Net income from continuing operations attributable to noncontrolling interests	(274 )	(227 )	(27 )
Gain on redemption and preferred dividends attributable to redeemable noncontrolling interest	—	161	(41 )
Accumulated dividends and undistributed earnings allocated to participating securities	(4 )	(3 )	(3 )
Net income (loss) from continuing operations attributable to common stockholders	\$1,751	\$(3,901)	\$(12,251)
Net income (loss) from discontinued operations	66	(193 )	91
Net income from discontinued operations attributable to noncontrolling interests	(4 )	(63 )	(79 )
Net income (loss) from discontinued operations attributable to common stockholders	\$62	\$(256 )	\$12
Net income (loss) attributable to common stockholders	\$1,813	\$(4,157)	\$(12,239)
Basic weighted-average shares of common stock outstanding (millions)	1,447	1,318	1,082
Add shares issuable upon exercise or vesting of dilutive stock options and RSUs (millions)	7	—	a —
Diluted weighted-average shares of common stock outstanding (millions)	1,454	1,318	1,082
Basic and diluted net income (loss) per share attributable to common stockholders:			
Continuing operations	\$1.21	\$(2.96 )	\$(11.32 )
Discontinued operations	0.04	(0.20 )	0.01
	\$1.25	\$(3.16 )	\$(11.31 )

a. Excludes approximately 12 million in 2016 and 9 million in 2015 associated with outstanding stock options with exercise prices less than the average market price of FCX's common stock and RSUs that were anti-dilutive.

Outstanding stock options with exercise prices greater than the average market price of FCX's common stock during the year are excluded from the computation of diluted net income (loss) per share of common stock. Stock options for 41 million shares of common stock were excluded in 2017, 46 million in 2016 and 45 million in 2015.

**New Accounting Standards.** In May 2014, the Financial Accounting Standards Board (FASB) issued an Accounting Standards Update (ASU) that provides a single comprehensive revenue recognition model, which replaces most existing revenue recognition guidance, and also requires expanded disclosures. The core principle of the model is that revenue is recognized when control of goods or services has been transferred to customers at an amount that reflects the consideration to which an entity expects to be entitled in exchange for those goods or services. FCX adopted this ASU January 1, 2018, under the modified retrospective approach applied to contracts that remain in force at the adoption date. FCX's revenue is primarily derived from arrangements in which the transfer of risks and rewards coincides with the fulfillment of performance obligations, and FCX has concluded that the adoption of this ASU does not result in changes to its existing revenue recognition policies or processes, and does not result in any financial statement impacts. FCX will begin making the required revenue recognition disclosures under the ASU beginning with its March 31, 2018, quarterly report on Form 10-Q.

In January 2016, FASB issued an ASU that amends the current guidance on the classification and measurement of financial instruments. This ASU makes limited changes to existing guidance and amends certain disclosure requirements. For public entities, this ASU is effective for interim and annual periods beginning after December 15, 2017. FCX adopted this ASU effective January 1, 2018, and adoption did not have a material impact on its financial

statements.

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In February 2016, FASB issued an ASU that will require lessees to recognize most leases on the balance sheet. This ASU allows lessees to make an accounting policy election to not recognize a lease asset and liability for leases with a term of 12 months or less and do not have a purchase option that is expected to be exercised. For public entities, this ASU is effective for interim and annual reporting periods beginning after December 15, 2018, with early adoption permitted. This ASU must be applied using the modified retrospective approach for leases that exist or are entered into after the beginning of the earliest comparative period in the financial statements. FCX is currently evaluating the impact this guidance will have on its financial statements.

In June 2016, FASB issued an ASU that changes the impairment model for most financial assets and certain other instruments, and will also require expanded disclosures. For public entities, this ASU is effective for interim and annual reporting periods beginning after December 15, 2019, with early adoption permitted. The provisions of the ASU must be applied as a cumulative-effect adjustment to retained earnings as of the beginning of the first reporting period in which the guidance is effective. FCX is currently evaluating the impact this ASU will have on its financial statements.

In November 2016, FASB issued an ASU that amends the classification and presentation of restricted cash and restricted cash equivalents on the statement of cash flows. The amendments require that a statement of cash flows explain the change during the period in the total of cash, cash equivalents and amounts generally described as restricted cash or restricted cash equivalents. Therefore, amounts generally described as restricted cash and restricted cash equivalents should be included with cash and cash equivalents when reconciling the beginning-of-period and end-of-period total amounts shown on the statement of cash flows. For public entities, this ASU is effective for interim and annual reporting periods beginning after December 15, 2017. FCX adopted this ASU effective January 1, 2018, and the statements of cash flows will be adjusted for all periods presented beginning with its March 31, 2018, quarterly report on Form 10-Q. The adoption of this ASU did not have a material impact on FCX's financial statements.

In March 2017, FASB issued an ASU that changes how entities with a defined benefit pension or other postretirement benefit plans present net periodic benefit cost in the income statement. This ASU requires the service cost component of net periodic benefit cost to be presented in the same income statement line item or items as other compensation costs for those employees who are receiving the retirement benefit. In addition, only the service cost component is eligible for capitalization when applicable (i.e., as a cost of inventory or an internally constructed asset). The other components of net periodic benefit cost are required to be presented separately from the service cost component and outside of operating income. These other components of net periodic benefit cost are not eligible for capitalization, and the income statement line item or items must be disclosed. For public entities, this ASU is effective for interim and annual reporting periods beginning after December 15, 2017. FCX adopted this ASU effective January 1, 2018, and its statements of operations will be adjusted for all periods presented beginning with its March 31, 2018, quarterly report on Form 10-Q. The adoption of this ASU did not have a material impact on FCX's financial statements.

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## NOTE 2. DISPOSITIONS

TF Holdings Limited - Discontinued Operations. FCX had a 70 percent interest in TF Holdings Limited (TFHL), which owns 80 percent of Tenke Fungurume Mining S.A. (TFM or Tenke) located in the Democratic Republic of Congo (DRC). On November 16, 2016, FCX completed the sale of its interest in TFHL to China Molybdenum Co., Ltd. (CMOC) for \$2.65 billion in cash (before closing adjustments) and contingent consideration of up to \$120 million in cash, consisting of \$60 million if the average copper price exceeds \$3.50 per pound and \$60 million if the average cobalt price exceeds \$20 per pound, both during calendar years 2018 and 2019. One-half of the proceeds from this transaction was used to repay borrowings under FCX's unsecured bank term loan. The contingent consideration is considered a derivative, and the fair value will be adjusted through December 31, 2019. The fair value of the contingent consideration derivative (included in other assets in the consolidated balance sheets) was \$74 million at December 31, 2017, and \$13 million at December 31, 2016. Gains resulting from changes in the fair value of the contingent consideration derivative (\$61 million in 2017 and \$13 million in 2016) are included in net income (loss) from discontinued operations and primarily resulted from higher cobalt prices. Future changes in the fair value of the contingent consideration derivative will continue to be recorded in discontinued operations.

In October 2016, La Générale des Carrières et des Mines (Gécamines), which is wholly owned by the DRC government and holds a 20 percent non-dilutable interest in TFM, filed an arbitration proceeding with the International Chamber of Commerce International Court of Arbitration challenging the sale of TFHL. In January 2017, a settlement agreement was entered into with Gécamines that resolved all claims brought by Gécamines against FCX, including the arbitration proceeding. The parties to the settlement are FCX, CMOC, Lundin Mining Corporation, TFHL, TFM, BHR Newwood Investment Management Limited and Gécamines. The settlement resulted in a charge of \$33 million to the 2016 loss on disposal.

In accordance with accounting guidance, FCX reported the results of operations of TFHL as discontinued operations in the consolidated statements of operations because the disposal represents a strategic shift that had a major effect on operations. The consolidated statements of comprehensive income (loss) were not impacted by discontinued operations as TFHL did not have any other comprehensive income (loss), and the consolidated statements of cash flows are reported on a combined basis without separately presenting discontinued operations.

Net income (loss) from discontinued operations in the consolidated statements of operations consists of the following:

	Years Ended December		
	31,		
	2017	2016	2015
Revenues <sup>a</sup>	\$13	\$959	\$1,270
Costs and expenses:			
Production and delivery costs	—	833	852
Depreciation, depletion and amortization	—	80	<sup>b</sup> 257
Interest expense allocated from parent <sup>c</sup>	—	39	28
Other costs and expenses, net	—	10	26
Income (loss) before income taxes and net gain (loss) on disposal	13	(3 )	107
Net gain (loss) on disposal	57	<sup>d</sup> (198 ) <sup>e</sup>	—
Net income (loss) before income taxes	70	(201 )	107
(Provision for) benefit from income taxes	(4 )	8	(16 )
Net income (loss) from discontinued operations	\$66	\$(193)	\$91

In accordance with accounting guidance, amounts are net of recognition (eliminations) of intercompany sales totaling \$13 million in 2017, \$(157) million in 2016 and \$(114) million in 2015.

<sup>b</sup> In accordance with accounting guidance, depreciation, depletion and amortization was not recognized subsequent to classification as assets held for sale, which occurred in May 2016.

<sup>c</sup>.



In accordance with accounting guidance, interest associated with FCX's unsecured bank term loan that was required to be repaid as a result of the sale of TFHL has been allocated to discontinued operations.

d. Includes a gain of \$61 million associated with the change in the fair value of contingent consideration.

e. Includes a charge of \$33 million associated with the settlement agreement entered into with Gécamines, partly offset by a gain of \$13 million for the fair value of contingent consideration.

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Cash flows from discontinued operations included in the consolidated statements of cash flows follow:

	Years Ended	
	December 31,	
	2016	2015
Net cash provided by operating activities	\$241	\$217
Net cash used in investing activities	(73 )	(253 )
Net cash used in financing activities	(123 )	(82 )
Increase (decrease) in cash and cash equivalents	\$45	\$(118)

Oil and Gas Operations. On July 31, 2017, FM O&G sold certain property interests in the Gulf of Mexico Shelf for cash consideration of \$62 million (before closing adjustments from the April 1, 2017, effective date). On March 17, 2017, FM O&G sold property interests in the Madden area in central Wyoming for cash consideration of \$17.5 million, before closing adjustments. Under the full cost accounting rules, the sales resulted in the recognition of gains of \$49 million in 2017 because the reserves associated with these properties were significant to the full cost pool.

On December 30, 2016, FM O&G completed the sale of its onshore California oil and gas properties to Sentinel Peak Resources California LLC (Sentinel) for cash consideration of \$592 million (before closing adjustments from the July 1, 2016, effective date) and contingent consideration of up to \$150 million, consisting of \$50 million per year for 2018, 2019 and 2020 if the price of Brent crude oil averages over \$70 per barrel in each of these calendar years. The contingent consideration is considered a derivative, and the fair value will be adjusted through the year 2020. The fair value of the contingent consideration derivative (included in other assets in the consolidated balance sheets) was \$34 million at December 31, 2017, and \$33 million at December 31, 2016. Future changes in the fair value of the contingent consideration derivative will continue to be recorded in operating income. Sentinel assumed abandonment obligations associated with the properties.

On December 15, 2016, FM O&G completed the sale of its Deepwater Gulf of Mexico (GOM) oil and gas properties to Anadarko Petroleum Corporation (Anadarko) for cash consideration of \$2.0 billion (before closing adjustments from the August 1, 2016, effective date) and up to \$150 million in contingent payments. The contingent payments were recorded under the loss recovery approach, whereby contingent gains are recorded up to the amount of any loss on the sale, and reduced the loss on the sale in 2016. The contingent payments were included in other current assets (\$24 million) and other assets (\$126 million) at December 31, 2017, and in other assets (\$150 million) at December 31, 2016, in the consolidated balance sheets. The contingent payments will be received over time as Anadarko realizes future cash flows in connection with a third-party production handling agreement for an offshore platform. Anadarko assumed abandonment obligations associated with these properties. A portion of the proceeds from this transaction was used to repay FCX's remaining outstanding borrowings under its unsecured bank term loan.

Under the full cost accounting rules, the sales of the Deepwater GOM and onshore California oil and gas properties required gain (loss) recognition (net loss of \$9 million in 2016, which was net of \$150 million for contingent payments associated with the Deepwater GOM sale and \$33 million for the fair value of contingent consideration from the onshore California sale) because of their significance to the full cost pool.

In connection with the sale of the Deepwater GOM oil and gas properties, FM O&G entered into an agreement to amend the terms of the Plains Offshore Preferred Stock that was reported as redeemable noncontrolling interest on FCX's financial statements. The amendment provided FM O&G the right to call these securities for \$582 million. FM O&G exercised this option in December 2016 and recorded a \$199 million gain on redemption to retained earnings.

On July 25, 2016, FM O&G sold its Haynesville shale assets for cash consideration of \$87 million, before closing adjustments. On June 17, 2016, FM O&G sold certain oil and gas royalty interests to Black Stone Minerals, L.P. for cash consideration of \$102 million, before closing adjustments. Under the full cost accounting rules, the proceeds

from these transactions were recorded as a reduction of capitalized oil and gas properties, with no gain or loss recognition in 2016 because the reserves were not significant to the full cost pool.

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Morenci. On May 31, 2016, FCX sold a 13 percent undivided interest in its Morenci unincorporated joint venture to SMM Morenci, Inc. for \$1.0 billion in cash. FCX recorded a \$576 million gain on the transaction and used losses to offset cash taxes on the transaction. A portion of the proceeds from the transaction was used to repay borrowings under FCX's unsecured bank term loan and revolving credit facility.

The Morenci unincorporated joint venture was owned 85 percent by FCX and 15 percent by Sumitomo. As a result of the transaction, the unincorporated joint venture is owned 72 percent by FCX, 15 percent by Sumitomo and 13 percent by SMM Morenci, Inc.

Timok. On May 2, 2016, FMC sold an interest in the Timok exploration project in Serbia to Global Reservoir Minerals Inc. (now known as Nevsun Resources, Ltd.) for consideration of \$135 million in cash and contingent consideration of up to \$107 million payable to FCX in stages upon achievement of defined development milestones. As a result of this transaction, FCX recorded a gain of \$133 million in 2016, and no amounts were recorded for contingent consideration under the loss recovery approach. A portion of the proceeds from the transaction was used to repay borrowings under FCX's unsecured bank term loan.

Assets Held for Sale. Freeport Cobalt includes the large-scale cobalt refinery in Kokkola, Finland, and the related sales and marketing business, in which FCX owns an effective 56 percent interest. Kisanfu is a copper and cobalt exploration project, located near Tenke, in which FCX owns a 100 percent interest. As a result of the sale of TFHL, FCX expects to sell its interest in Freeport Cobalt and Kisanfu, and the assets and liabilities of Freeport Cobalt and Kisanfu are classified as held for sale in the consolidated balance sheets. A \$110 million estimated loss on disposal was included in net gain on sales of assets in 2016 in the consolidated statements of operations. FCX continues to market the Freeport Cobalt and Kisanfu assets and evaluate the fair value of these assets. During 2017, the fair value evaluations resulted in an increase to the estimated fair value less costs to sell of \$13 million (included in net gain on sales of assets in the consolidated statements of operations).

**NOTE 3. OWNERSHIP IN SUBSIDIARIES AND JOINT VENTURES**

Ownership in Subsidiaries. FMC produces copper and molybdenum, with mines in North America and South America. At December 31, 2017, FMC's operating mines in North America were Morenci, Bagdad, Safford, Sierrita and Miami located in Arizona; Tyrone and Chino located in New Mexico; and Henderson and Climax located in Colorado. FCX has a 72 percent interest (subsequent to the sale of a 13 percent undivided interest on May 31, 2016) in Morenci (refer to "Joint Ventures – Sumitomo and SMM Morenci, Inc.") and owns 100 percent of the other North America mines. At December 31, 2017, operating mines in South America were Cerro Verde (53.56 percent owned) located in Peru and El Abra (51 percent owned) located in Chile. At December 31, 2017, FMC's net assets totaled \$16.0 billion and its accumulated deficit totaled \$14.0 billion. FCX had no loans outstanding to FMC at December 31, 2017.

FCX's direct ownership in PT-FI totals 81.28 percent. PT Indocopper Investama, an Indonesian company, owns 9.36 percent of PT-FI, and FCX owns 100 percent of PT Indocopper Investama. Refer to "Joint Ventures - Rio Tinto" for discussion of the unincorporated joint venture. At December 31, 2017, PT-FI's net assets totaled \$6.3 billion and its retained earnings totaled \$6.0 billion. FCX had no loans outstanding to PT-FI at December 31, 2017.

FCX owns 100 percent of the outstanding Atlantic Copper common stock. At December 31, 2017, Atlantic Copper's net liabilities totaled \$40 million and its accumulated deficit totaled \$452 million. FCX had \$365 million in intercompany loans outstanding to Atlantic Copper at December 31, 2017.

FCX owns 100 percent of FM O&G, which, as of December 31, 2017, has oil and gas assets that primarily includes oil and natural gas production onshore in South Louisiana and on the GOM Shelf and oil production offshore California. At December 31, 2017, FM O&G's net liabilities totaled \$13.7 billion and its accumulated deficit totaled

\$25.3 billion. FCX had \$9.9 billion in intercompany loans outstanding to FM O&G at December 31, 2017.

Joint Ventures. FCX has the following unincorporated joint ventures.

Rio Tinto. PT-FI and Rio Tinto have established an unincorporated joint venture pursuant to which Rio Tinto has a 40 percent interest in PT-FI's Contract of Work (COW) and the option to participate in 40 percent of any other future exploration projects in Papua, Indonesia.

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Pursuant to the joint venture agreement, Rio Tinto has a 40 percent interest in certain assets and future production exceeding specified annual amounts of copper, gold and silver through 2022 in Block A of PT-FI's COW, and, after 2022, a 40 percent interest in all production from Block A. All of PT-FI's proven and probable reserves and all its mining operations are located in the Block A area. PT-FI receives 100 percent of production and related revenues from reserves established as of December 31, 1994 (27.1 billion pounds of copper, 38.4 million ounces of gold and 75.8 million ounces of silver), divided into annual portions subject to reallocation for events causing changes in the anticipated production schedule. Production and related revenues exceeding those annual amounts (referred to as incremental expansion revenues) are shared 60 percent PT-FI and 40 percent Rio Tinto. Operating, nonexpansion capital and administrative costs are shared 60 percent PT-FI and 40 percent Rio Tinto based on the ratio of (i) the incremental expansion revenues to (ii) total revenues from production from Block A, with PT-FI responsible for the rest of such costs. PT-FI will continue to receive 100 percent of the cash flow from specified annual amounts of copper, gold and silver through 2022 calculated by reference to its proven and probable reserves as of December 31, 1994, and 60 percent of all remaining cash flow. Expansion capital costs are shared 60 percent PT-FI and 40 percent Rio Tinto. The payable to Rio Tinto for its share of joint venture cash flows was \$30 million at December 31, 2017, and \$10 million at December 31, 2016.

Sumitomo and SMM Morenci, Inc. FMC owns a 72 percent undivided interest in Morenci via an unincorporated joint venture. The remaining 28 percent is owned by Sumitomo (15 percent) and SMM Morenci, Inc. (13 percent). Each partner takes in kind its share of Morenci's production. FMC purchased 218 million pounds of Morenci's copper cathode from Sumitomo and SMM Morenci, Inc. at market prices for \$610 million during 2017. FMC had receivables from Sumitomo and SMM Morenci, Inc. totaling \$18 million at December 31, 2017, and \$15 million at December 31, 2016.

**NOTE 4. INVENTORIES, INCLUDING LONG-TERM MILL AND LEACH STOCKPILES**

The components of inventories follow:

	December 31,	
	2017	2016
Current inventories:		
Total materials and supplies, net <sup>a</sup>	\$1,305	\$1,306
Mill stockpiles	\$360	\$259
Leach stockpiles	1,062	1,079
Total current mill and leach stockpiles	\$1,422	\$1,338
Raw materials (primarily concentrate)	\$265	\$255
Work-in-process	154	114
Finished goods	747	629
Total product inventories	\$1,166	\$998
Long-term inventories:		
Mill stockpiles	\$300	\$487
Leach stockpiles	1,109	1,146
Total long-term inventories <sup>b</sup>	\$1,409	\$1,633

<sup>a</sup> Materials and supplies inventory was net of obsolescence reserves totaling \$29 million at December 31, 2017 and 2016.

<sup>b</sup> Estimated metals in stockpiles not expected to be recovered within the next 12 months.

FCX recorded charges for adjustments to metals inventory carrying values of \$8 million in 2017 and \$36 million in 2016 (primarily for molybdenum inventories), and \$338 million in 2015 (\$215 million for copper inventories and

\$123 million for molybdenum inventories). Refer to Note 16 for metals inventory adjustments by business segment.

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## NOTE 5. PROPERTY, PLANT, EQUIPMENT AND MINE DEVELOPMENT COSTS, NET

The components of net property, plant, equipment and mine development costs follow:

	December 31,	
	2017	2016
Proven and probable mineral reserves	\$3,974	\$3,863
VBPP	447	559
Mine development and other	6,212	5,755
Buildings and infrastructure	7,520	7,479
Machinery and equipment	12,201	11,744
Mobile equipment	3,764	3,725
Construction in progress	2,964	2,831
Property, plant, equipment and mine development costs	37,082	35,956
Accumulated depreciation, depletion and amortization	(14,246 )	(12,737 )
Property, plant, equipment and mine development costs, net	\$22,836	\$23,219

FCX recorded \$1.6 billion for VBPP in connection with the FMC acquisition in 2007 (excluding \$634 million associated with mining operations that were sold or included in assets held for sale) and transferred \$112 million to proven and probable mineral reserves during 2017 and \$640 million prior to 2017 (none in 2016). Cumulative impairments of VBPP total \$485 million, which were primarily recorded in 2008.

Capitalized interest, which primarily related to FCX's mining operations' capital projects, totaled \$121 million in 2017, \$92 million in 2016 and \$157 million in 2015.

In connection with the decline in copper and molybdenum prices and revised operating plans at FCX's mining operations, FCX evaluated its long-lived assets (other than indefinite-lived intangible assets) for impairment during 2015 and as of December 31, 2015, as described in Note 1. FCX's evaluations of its copper mines at December 31, 2015, were based on near-term price assumptions reflecting prevailing copper future prices, which ranged from \$2.15 per pound to \$2.17 per pound for COMEX and from \$2.13 per pound to \$2.16 per pound for LME, and a long-term average price of \$3.00 per pound. FCX's evaluations of its molybdenum mines at December 31, 2015, were based on near-term price assumptions that were consistent with then-current market prices for molybdenum and a long-term average price of \$10.00 per pound.

FCX's evaluations of long-lived assets (other than indefinite-lived intangible assets) resulted in the recognition of a charge to production costs for the impairment of the Tyrone mine totaling \$37 million in 2015, net of a revision to Tyrone's ARO.

During 2016 and 2017, FCX concluded there were no events or changes in circumstances that would indicate that the carrying amount of its long-lived mining assets might not be recoverable. Additionally, copper and molybdenum prices have improved. The LME copper spot prices were \$3.25 per pound and \$2.50 per pound at December 31, 2017 and 2016, respectively, which were higher than the LME spot price of \$2.13 per pound at December 31, 2015; the weekly average prices for molybdenum were \$10.15 per pound and \$6.74 per pound at December 31, 2017 and 2016, respectively, which were higher than the weekly average price of \$5.23 per pound at December 31, 2015.



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## NOTE 6. OTHER ASSETS

The components of other assets follow:

	December 31,	
	2017	2016
Disputed tax assessments: <sup>a</sup>		
PT-FI	\$417	\$331
Cerro Verde	185	277
Long-term receivable for taxes <sup>b</sup>	445	129
Intangible assets <sup>c</sup>	306	305
Investments:		
Assurance bond <sup>d</sup>	123	120
PT Smelting <sup>e</sup>	61	83
Available-for-sale securities	30	50
Other	48	50
Contingent consideration associated with sales of assets <sup>f</sup>	234	196
Legally restricted funds <sup>g</sup>	189	182
Rio Tinto's share of ARO	68	71
Long-term employee receivables	20	32
Other	144	130
Total other assets	\$2,270	\$1,956

a. Refer to Note 12 for further discussion.

b. Includes tax overpayments and refunds not expected to be realized within the next 12 months (primarily in the U.S. associated with U.S. tax reform, refer to Note 11).

c. Indefinite-lived intangible assets totaled \$215 million at December 31, 2017, and \$217 million at December 31, 2016. Definite-lived intangible assets were net of accumulated amortization totaling \$46 million at December 31, 2017, and \$37 million at December 31, 2016.

d. Relates to PT-FI's commitment for smelter development in Indonesia (refer to Note 13 for further discussion).

e. PT-FI's 25 percent ownership in PT Smelting (smelter and refinery in Gresik, Indonesia) is recorded using the equity method. Amounts were reduced by unrecognized profits on sales from PT-FI to PT Smelting totaling \$68 million at December 31, 2017, and \$39 million at December 31, 2016. Trade accounts receivable from PT Smelting totaled \$308 million at December 31, 2017, and \$283 million at December 31, 2016.

f. Refer to Note 2 for further discussion.

g. Includes \$180 million at December 31, 2017, and \$173 million at December 31, 2016, held in trusts for AROs related to properties in New Mexico (refer to Note 12 for further discussion).

## NOTE 7. ACCOUNTS PAYABLE AND ACCRUED LIABILITIES

The components of accounts payable and accrued liabilities follow:

	December 31,	
	2017	2016
Accounts payable	\$1,380	\$1,540
Salaries, wages and other compensation	235	225
Accrued interest <sup>a</sup>	168	129
Accrued taxes, other than income taxes	129	90
Pension, postretirement, postemployment and other employee benefits <sup>b</sup>	111	76
Deferred revenue	91	82
Accrued mining royalties	68	46
Other	139	205
Total accounts payable and accrued liabilities	\$2,321	\$2,393

a.

Third-party interest paid, net of capitalized interest, was \$565 million in 2017, \$743 million in 2016 and \$570 million in 2015.

b. Refer to Note 9 for long-term portion.

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## NOTE 8. DEBT

FCX's debt at December 31, 2017, included additions of \$97 million (\$179 million at December 31, 2016) for unamortized fair value adjustments (primarily from the 2013 oil and gas acquisitions), and is net of reductions of \$85 million (\$100 million at December 31, 2016) for unamortized net discounts and unamortized debt issuance costs. The components of debt follow:

	December 31,	
	2017	2016
Revolving credit facility	\$—	\$—
Cerro Verde credit facility	1,269	1,390
Cerro Verde shareholder loans	—	261
Senior notes and debentures:		
Issued by FCX:		
2.15% Senior Notes due 2017	—	500
2.30% Senior Notes due 2017	—	728
2.375% Senior Notes due 2018	1,408	1,480
6.125% Senior Notes due 2019	—	186
3.100% Senior Notes due 2020	997	996
6½% Senior Notes due 2020	—	583
6.625% Senior Notes due 2021	—	242
4.00% Senior Notes due 2021	596	595
6.75% Senior Notes due 2022	427	432
3.55% Senior Notes due 2022	1,884	1,882
6 <sup>7</sup> / <sub>8</sub> % Senior Notes due 2023	776	784
3.875% Senior Notes due 2023	1,914	1,912
4.55% Senior Notes due 2024	845	844
5.40% Senior Notes due 2034	740	739
5.450% Senior Notes due 2043	1,842	1,842
Issued by FMC:		
7 <sup>1</sup> / <sub>8</sub> % Debentures due 2027	115	115
9½% Senior Notes due 2031	127	128
6 <sup>1</sup> / <sub>8</sub> % Senior Notes due 2034	116	116
Issued by Freeport-McMoRan Oil & Gas LLC (FM O&G LLC):		
6.125% Senior Notes due 2019	—	60
6½% Senior Notes due 2020	—	69
6.625% Senior Notes due 2021	—	35
6.75% Senior Notes due 2022	—	48
6 <sup>7</sup> / <sub>8</sub> % Senior Notes due 2023	54	55
Other	7	5
Total debt	13,117	16,027
Less current portion of debt	(1,414 )	(1,232 )
Long-term debt	\$11,703	\$14,795

Revolving Credit Facility. FCX, PT-FI and FM O&G LLC have a senior unsecured \$3.5 billion revolving credit facility that matures on May 31, 2019, with \$500 million available to PT-FI. At December 31, 2017, FCX had no borrowings outstanding and \$13 million of letters of credit issued under the revolving credit facility, resulting in availability of approximately \$3.5 billion, of which \$1.5 billion could be used for additional letters of credit.

Interest on the revolving credit facility (London Interbank Offered Rate (LIBOR) plus 2.25 percent or an alternate base rate (ABR) plus 1.25 percent at December 31, 2017) is determined by reference to FCX's credit ratings and

leverage ratio.

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Cerro Verde Credit Facility. In March 2014, Cerro Verde entered into a five-year, \$1.8 billion senior unsecured credit facility that is nonrecourse to FCX and the other shareholders of Cerro Verde. In June 2017, Cerro Verde's credit facility was amended (balance outstanding at the time of amendment was \$1.275 billion) to increase the commitment by \$225 million to \$1.5 billion, to modify the amortization schedule and to extend the maturity date to June 19, 2022. The amended credit facility amortizes in four installments, with \$225 million due on December 31, 2020 (of which \$220 million was prepaid during 2017), \$225 million due on June 30, 2021, \$525 million due on December 31, 2021, and the remaining balance due on the maturity date of June 19, 2022. All other terms, including the interest rates, remain the same. Interest under the term loan is based on LIBOR plus a spread (1.9 percent at December 31, 2017) based on Cerro Verde's total net debt to earnings before interest, taxes, depreciation and amortization (EBITDA) ratio as defined in the agreement. The interest rate on Cerro Verde's credit facility was 3.47 percent at December 31, 2017.

Cerro Verde Shareholder Loans. In December 2014, Cerro Verde entered into loan agreements with three of its shareholders for borrowings up to \$800 million. In June 2017, Cerro Verde used the proceeds from its amended credit facility plus available cash to repay the balance of its outstanding shareholder loans. The remaining availability for borrowing under these agreements totals \$200 million.

Senior Notes issued by FCX. In December 2016, FCX completed an exchange offer and consent solicitation associated with FM O&G LLC senior notes. Holders representing 89 percent of the outstanding FM O&G LLC senior notes tendered their notes and received new FCX senior notes. Each series of newly issued FCX senior notes have an interest rate that is identical to the interest rate of the applicable series of FM O&G LLC senior notes. The newly issued FCX senior notes are senior unsecured obligations of FCX and rank equally in right of payment with all other existing and future senior unsecured indebtedness of FCX. A summary of the tenders follows:

	Principal Amount Outstanding	Principal Amount Tendered	Book Value of New FCX Senior Notes
6.125% Senior Notes due 2019	\$ 237	\$ 179	\$ 186
6½% Senior Notes due 2020	617	552	583
6.625% Senior Notes due 2021	261	228	242
6.75% Senior Notes due 2022	449	404	432
6¾% Senior Notes due 2023	778	728	785
	\$ 2,342	\$ 2,091	\$ 2,228

The principal amounts were increased by \$151 million to reflect the remaining unamortized acquisition-date fair market value adjustments associated with the PXP acquisition. In addition, FCX paid \$14 million in cash consideration for FM O&G LLC's senior notes that were tendered, which reduced the book value of the new FCX senior notes. All of these senior notes, except the 6.75% Senior Notes due 2022 and the 6¾% Senior Notes due 2023, were redeemed during 2017 (refer to Early Extinguishment and Exchanges of Debt in this note). The 6.75% Senior Notes due 2022 are currently redeemable in whole or in part, at the option of FCX, at a specified redemption price. The 6¾% Senior Notes due 2023 are redeemable in whole or in part, at the option of FCX, at a make-whole redemption price prior to February 15, 2020, and at a specified redemption price thereafter. As of December 31, 2017, the book value of these senior notes totaled \$1.2 billion, which reflects the remaining unamortized acquisition-date fair market value adjustments (\$81 million) and the cash consideration (\$9 million) that are being amortized over the term of these senior notes and recorded as a net reduction of interest expense.

In November 2014, FCX sold \$750 million of 2.30% Senior Notes due 2017 (which matured and were repaid in 2017), \$600 million of 4.00% Senior Notes due 2021, \$850 million of 4.55% Senior Notes due 2024 and \$800 million of 5.40% Senior Notes due 2034 for total net proceeds of \$2.97 billion. In March 2013, in connection with the financing of FCX's acquisitions of PXP and MMR, FCX issued \$6.5 billion of unsecured senior notes in four tranches. FCX sold \$1.5 billion of 2.375% Senior Notes due March 2018, \$1.0 billion of 3.100% Senior Notes due March 2020, \$2.0 billion of 3.875% Senior Notes due March 2023 and \$2.0 billion of 5.450% Senior Notes due March 2043 for total net proceeds of \$6.4 billion. In February 2012, FCX sold \$500 million of 2.15% Senior Notes due 2017 (which matured and were repaid in 2017) and \$2.0 billion of 3.55% Senior Notes due 2022 for total net proceeds of \$2.47 billion.

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The 2.375% Senior Notes due 2018, 3.100% Senior Notes due 2020 and 4.00% Senior Notes due 2021 are redeemable in whole or in part, at the option of FCX, at a make-whole redemption price. The senior notes listed below are redeemable in whole or in part, at the option of FCX, at a make-whole redemption price prior to the dates stated below, and beginning on the dates stated below at 100 percent of principal.

Debt Instrument	Date
3.55% Senior Notes due 2022	December 1, 2021
3.875% Senior Notes due 2023	December 15, 2022
4.55% Senior Notes due 2024	August 14, 2024
5.40% Senior Notes due 2034	May 14, 2034
5.450% Senior Notes due 2043	September 15, 2042

These senior notes rank equally with FCX's other existing and future unsecured and unsubordinated indebtedness.

Senior Notes issued by FM O&G LLC. In May 2013, in connection with the acquisition of PXP, FCX assumed unsecured senior notes with a stated value of \$6.4 billion, which was increased by \$716 million to reflect the acquisition-date fair market value of these senior notes. After redemptions discussed below and the 2016 exchange offer and consent solicitation discussed above, as of December 31, 2017, the 6<sup>7/8</sup>% Senior Notes due 2023 are the only remaining FM O&G LLC senior notes, and these senior notes are currently redeemable in whole or in part, at the option of FM O&G LLC, at a specified redemption price.

Early Extinguishment and Exchanges of Debt. During 2017, FCX redeemed in full or purchased in open-market transactions certain senior notes. A summary of these debt extinguishments follows:

	Principal Amount	Net Adjustments	Book Value	Redemption Value	Gain
2.375% Senior Notes due 2018	\$ 74	\$ —	\$ 74	\$ 74	\$ —
FCX 6.125% Senior Notes due 2019	179	5	184	182	2
FM O&G LLC 6.125% Senior Notes due 2019	58	2	60	59	1
FCX 6½% Senior Notes due 2020	552	23	575	562	13
FM O&G LLC 6½% Senior Notes due 2020	65	3	68	66	2
FCX 6.625% Senior Notes due 2021	228	12	240	234	6
FM O&G 6.625% Senior Notes due 2021	33	2	35	34	1
FM O&G 6.750% Senior Notes due 2022	45	2	47	46	1
	\$ 1,234	\$ 49	\$ 1,283	\$ 1,257	\$ 26

Partially offsetting the \$26 million gain was a net loss of \$5 million, primarily associated with the modification of Cerro Verde's credit facility in June 2017 and Cerro Verde's prepayment in December 2017.

During 2016, FCX redeemed certain senior notes in exchange for its common stock (refer to Note 10 for further discussion) and purchased certain senior notes in open-market transactions. A summary of these transactions follows:

	Principal Amount	Net Adjustments	Book Value	Redemption Value	Gain
2.30% Senior Notes due 2017	\$ 20	\$ —	\$ 20	\$ 20	\$ —
2.375% Senior Notes due 2018	18	—	18	18	—
3.55% Senior Notes due 2022	108	(1 )	107	96	11
3.875% Senior Notes due 2023	77	—	77	68	9
5.40% Senior Notes due 2034	50	(1 )	49	41	8
5.450% Senior Notes due 2043	134	(2 )	132	106	26
	\$ 407	\$ (4 )	\$ 403	\$ 349	\$ 54

Partially offsetting the \$54 million gain was \$28 million in losses, primarily related to deferred debt issuance costs for an unsecured bank term loan that was repaid and costs associated with the December 2016 senior note exchange offer and consent solicitation.



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**Guarantees.** In connection with the acquisition of PXP, FCX guaranteed the PXP senior notes, and the guarantees by certain PXP subsidiaries were released. Refer to Note 17 for a discussion of FCX's senior notes guaranteed by FM O&G LLC.

**Restrictive Covenants.** FCX's revolving credit facility contains customary affirmative covenants and representations, and also a number of negative covenants that, among other things, restrict, subject to certain exceptions, the ability of FCX's subsidiaries that are not borrowers or guarantors to incur additional indebtedness (including guarantee obligations) and FCX's ability or the ability of FCX's subsidiaries to: create liens on assets; enter into sale and leaseback transactions; engage in mergers, liquidations and dissolutions; and sell assets. FCX's revolving credit facility also contains financial ratios governing maximum total leverage and minimum interest coverage. FCX's leverage ratio (Net Debt/EBITDA, as defined in the credit agreement) cannot exceed 3.75x, and the minimum interest coverage ratio (ratio of consolidated EBITDA, as defined in the credit agreement, to consolidated cash interest expense) is 2.25x. The pricing under the revolving credit facility is a function of credit ratings and the leverage ratio. FCX's senior notes contain limitations on liens. At December 31, 2017, FCX was in compliance with all of its covenants.

**Maturities.** Maturities of debt instruments based on the principal amounts and terms outstanding at December 31, 2017, total \$1.4 billion in 2018, none in 2019, \$1.0 billion in 2020, \$1.4 billion in 2021, \$2.8 billion in 2022 and \$6.5 billion thereafter.

**NOTE 9. OTHER LIABILITIES, INCLUDING EMPLOYEE BENEFITS**

The components of other liabilities follow:

	December 31,	
	2017	2016
Pension, postretirement, postemployment and other employment benefits <sup>a</sup>	\$1,154	\$1,345
Cerro Verde royalty dispute	368	—
Provision for tax positions	291	167
Legal matters	81	77
Insurance claim reserves	47	51
Accrued oil and gas contract commitments	—	43
Other	71	62
Total other liabilities	\$2,012	\$1,745

a. Refer to Note 7 for current portion.

**Pension Plans.** Following is a discussion of FCX's pension plans.

**FMC Plans.** FMC has U.S. trustee, non-contributory pension plans covering substantially all of its U.S. employees and some employees of its international subsidiaries hired before 2007. The applicable FMC plan design determines the manner in which benefits are calculated for any particular group of employees. Benefits are calculated based on final average monthly compensation and years of service or based on a fixed amount for each year of service. Non-bargained FMC employees hired after December 31, 2006, are not eligible to participate in the FMC U.S. pension plan.

FCX's funding policy for these plans provides that contributions to pension trusts shall be at least equal to the minimum funding requirements of the Employee Retirement Income Security Act of 1974, as amended, for U.S. plans; or, in the case of international plans, the minimum legal requirements that may be applicable in the various countries. Additional contributions also may be made from time to time.

FCX's policy for determining asset-mix targets for the FMC plan assets held in a master trust (Master Trust) includes the periodic development of asset allocation studies and review of the liabilities to determine expected long-term rates of return and expected risk for various investment portfolios. FCX's retirement plan administration and investment

committee considers these studies in the formal establishment of asset-mix targets defined in the investment policy. FCX's investment objective emphasizes diversification through both the allocation of the Master Trust assets among various asset classes and the selection of investment managers whose various styles are fundamentally complementary to one another and serve to achieve satisfactory rates of return. Diversification, by asset class and by investment manager, is FCX's principal means of reducing volatility and exercising prudent investment judgment. FCX's present target asset allocation approximates 50 percent equity investments (primarily global equities), 43 percent fixed income (primarily long-term treasury STRIPS or "separate trading or registered

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interest and principal securities”; long-term U.S. treasury/agency bonds; global fixed income securities; long-term, high-credit quality corporate bonds; high-yield and emerging markets fixed income securities; and fixed income debt securities) and 7 percent alternative investments (private real estate, real estate investment trusts and private equity).

The expected rate of return on plan assets is evaluated at least annually, taking into consideration asset allocation, historical and expected future performance on the types of assets held in the Master Trust, and the current economic environment. Based on these factors, FCX expects the pension assets will earn an average of 6.5 percent per annum beginning January 1, 2018. The 6.5 percent estimation was based on a passive return on a compound basis of 6.0 percent and a premium for active management of 0.5 percent reflecting the target asset allocation and current investment array.

For estimation purposes, FCX assumes the long-term asset mix for these plans generally will be consistent with the current mix. Changes in the asset mix could impact the amount of recorded pension costs, the funded status of the plans and the need for future cash contributions. A lower-than-expected return on assets also would decrease plan assets and increase the amount of recorded pension costs in future years. When calculating the expected return on plan assets, FCX uses the market value of assets.

Among the assumptions used to estimate the pension benefit obligation is a discount rate used to calculate the present value of expected future benefit payments for service to date. The discount rate assumption for FCX’s U.S. plans is designed to reflect yields on high-quality, fixed-income investments for a given duration. The determination of the discount rate for these plans is based on expected future benefit payments for service to date together with the Mercer Pension Discount Curve - Above Mean Yield. The Mercer Pension Discount Curve - Above Mean Yield is constructed from the bonds in the Mercer Pension Discount Curve that have a yield higher than the regression mean yield curve. The Mercer Pension Discount Curve consists of spot (i.e., zero coupon) interest rates at one-half-year increments for each of the next 30 years and is developed based on pricing and yield information for high-quality corporate bonds. Changes in the discount rate are reflected in FCX’s benefit obligation and, therefore, in future pension costs.

**SERP Plan.** FCX has an unfunded Supplemental Executive Retirement Plan (SERP) for its chief executive officer. The SERP provides for retirement benefits payable in the form of a joint and survivor annuity, life annuity or an equivalent lump sum, which is determined on January 1 of the year in which the participant completed 25 years of credited service. The annuity will equal a percentage of the participant’s highest average compensation for any consecutive three-year period during the five years immediately preceding the completion of 25 years of credited service. The SERP benefit will be reduced by the value of all benefits from current and former retirement plans (qualified and nonqualified) sponsored by FCX, by FM Services Company, FCX’s wholly owned subsidiary, or by any predecessor employer (including FCX’s former parent company), except for benefits produced by accounts funded exclusively by deductions from the participant’s pay.

**PT-FI Plan.** PT-FI has a defined benefit pension plan denominated in Indonesian rupiah covering substantially all of its Indonesian national employees. PT-FI funds the plan and invests the assets in accordance with Indonesian pension guidelines. The pension obligation was valued at an exchange rate of 13,480 rupiah to one U.S. dollar on December 31, 2017, and 13,369 rupiah to one U.S. dollar on December 31, 2016. Indonesian labor laws require that companies provide a minimum level of benefits to employees upon employment termination based on the reason for termination and the employee’s years of service. PT-FI’s pension benefit obligation includes benefits related to this law. PT-FI’s expected rate of return on plan assets is evaluated at least annually, taking into consideration its long-range estimated return for the plan based on the asset mix. Based on these factors, PT-FI expects its pension assets will earn an average of 7.75 percent per annum beginning January 1, 2018. The discount rate assumption for PT-FI’s plan is based on the Mercer Indonesian zero coupon bond yield curve derived from the Indonesian Government Security Yield Curve. Changes in the discount rate are reflected in PT-FI’s benefit obligation and, therefore, in future pension

costs.

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Plan Information. FCX uses a measurement date of December 31 for its plans. Information for those plans where the accumulated benefit obligations exceed the fair value of plan assets follows:

	December 31,	
	2017	2016
Projected benefit obligation	\$2,287	\$2,127
Accumulated benefit obligation	2,163	2,014
Fair value of plan assets	1,521	1,312

Information on the FCX (FMC and SERP plans) and PT-FI plans as of December 31 follows:

	FCX		PT-FI	
	2017	2016	2017	2016
Change in benefit obligation:				
Benefit obligation at beginning of year	\$2,135	\$2,104	\$374	\$318
Service cost	44	27	20	27
Interest cost	91	93	23	29
Actuarial losses (gains)	188	92	(61 )	2
Foreign exchange losses (gains)	3	(4 )	(2 )	8
Curtailment <sup>a</sup>	—	—	(62 )	—
Benefits and administrative expenses paid	(118 )	(177 )	(52 )	(10 )
Benefit obligation at end of year	2,343	2,135	240	374

Change in plan assets:

Fair value of plan assets at beginning of year	1,329	1,379	284	204
Actual return on plan assets	230	88	11	47
Employer contributions <sup>b</sup>	145	42	28	38
Foreign exchange gains (losses)	2	(3 )	(2 )	5
Benefits and administrative expenses paid	(118 )	(177 )	(52 )	(10 )
Fair value of plan assets at end of year	1,588	1,329	269	284
Funded status	\$(755 )	\$(806 )	\$29	\$(90 )

Accumulated benefit obligation	\$2,218	\$2,022	\$194	\$225
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Weighted-average assumptions used to determine benefit obligations:

Discount rate	3.70	%	4.40	%	6.75	%	8.25	%
Rate of compensation increase	3.25	%	3.25	%	4.00	%	8.00	%

Balance sheet classification of funded status:

Other assets	\$11	\$9	\$29	\$—
Accounts payable and accrued liabilities	(4 )	(4 )	—	—
Other liabilities	(762 )	(811 )	—	(90 )
Total	\$(755 )	\$(806 )	\$29	\$(90 )

<sup>a.</sup> Resulted from the 2017 PT-FI reductions in workforce (refer to Restructuring Charges in this note for further discussion).

<sup>b.</sup> Employer contributions for 2018 are expected to approximate \$75 million for the FCX plans and \$17 million for the PT-FI plan (based on a December 31, 2017, exchange rate of 13,480 Indonesian rupiah to one U.S. dollar).



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The weighted-average assumptions used to determine net periodic benefit cost and the components of net periodic benefit cost for FCX's pension plans for the years ended December 31 follow:

	2017	2016	2015
Weighted-average assumptions: <sup>a</sup>			
Discount rate	4.40%	4.60%	4.10%
Expected return on plan assets	7.00%	7.25%	7.25%
Rate of compensation increase	3.25%	3.25%	3.25%
Service cost	\$44	\$27	\$36
Interest cost	91	93	87
Expected return on plan assets	(93 )	(96 )	(102)
Amortization of net actuarial losses	49	42	45
Special retirement benefits <sup>b</sup>	—	—	22
Net periodic benefit cost	\$91	\$66	\$88

a. The assumptions shown relate only to the FMC plans.

b. Resulted from FMC's 2015 revised mine operating plans and reductions in the workforce (refer to Note 5 for further discussion).

The weighted-average assumptions used to determine net periodic benefit cost and the components of net periodic benefit cost for PT-FI's pension plan for the years ended December 31 follow:

	2017	2016	2015
Weighted-average assumptions:			
Discount rate	8.25%	9.00%	8.25%
Expected return on plan assets	7.75%	7.75%	7.75%
Rate of compensation increase	8.00%	9.40%	9.00%
Service cost	\$20	\$27	\$26
Interest cost	23	29	23
Expected return on plan assets	(21 )	(17 )	(14 )
Amortization of prior service cost	2	3	3
Amortization of net actuarial loss	—	5	6
Curtailment loss	4	—	—
Net periodic benefit cost	\$28	\$47	\$44

Included in accumulated other comprehensive loss are the following amounts that have not been recognized in net periodic pension cost as of December 31:

	2017		2016	
	Before Taxes	After Taxes and Noncontrolling Interests	Before Taxes	After Taxes and Noncontrolling Interests
Net actuarial loss	\$620	\$ 412	\$722	\$ 466
Prior service costs	10	6	21	11
	\$630	\$ 418	\$743	\$ 477

Actuarial losses in excess of 10 percent of the greater of the projected benefit obligation or market-related value of plan assets are amortized over the expected average remaining future service period of the current active participants. The amount expected to be recognized in 2018 net periodic pension cost for actuarial losses is \$47 million.

FCX does not expect to have any plan assets returned to it in 2018. Plan assets are classified within a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1), then to significant observable inputs (Level 2) and the lowest priority to significant unobservable inputs (Level 3).



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A summary of the fair value for pension plan assets, including those measured at net asset value (NAV) as a practical expedient, associated with the FCX plans follows:

	Fair Value at December 31, 2017				
	Total	NAV	Level	Level	Level
			1	2	3
Commingled/collective funds:					
Global equity	\$404	\$404	\$—	\$—	\$—
Fixed income securities	154	154	—	—	—
Global fixed income securities	115	115	—	—	—
Emerging markets equity	87	87	—	—	—
International small-cap equity	72	72	—	—	—
U.S. small-cap equity	67	67	—	—	—
Real estate property	50	50	—	—	—
U.S. real estate securities	45	45	—	—	—
Short-term investments	12	12	—	—	—
Fixed income:					
Government bonds	208	—	—	208	—
Corporate bonds	168	—	—	168	—
Global large-cap equity securities	119	—	119	—	—
Private equity investments	20	20	—	—	—
Other investments	62	—	19	43	—
Total investments	1,583	\$1,026	\$138	\$419	\$—
Cash and receivables	21				
Payables	(16 )				
Total pension plan net assets	\$1,588				

	Fair Value at December 31, 2016				
	Total	NAV	Level	Level	Level
			1	2	3
Commingled/collective funds:					
Global equity	\$420	\$420	\$—	\$—	\$—
Fixed income securities	129	129	—	—	—
Global fixed income securities	107	107	—	—	—
Real estate property	72	72	—	—	—
Emerging markets equity	66	66	—	—	—
U.S. small-cap equity	60	60	—	—	—
International small-cap equity	51	51	—	—	—
U.S. real estate securities	42	42	—	—	—
Short-term investments	17	17	—	—	—
Fixed income:					
Government bonds	160	—	—	160	—
Corporate bonds	141	—	—	141	—
Private equity investments	25	25	—	—	—
Other investments	36	—	1	35	—
Total investments	1,326	\$989	\$1	\$336	\$—
Cash and receivables	4				
Payables	(1 )				
Total pension plan net assets	\$1,329				

Following is a description of the pension plan asset categories and the valuation techniques used to measure fair value. There have been no changes to the techniques used to measure fair value.

Commingled/collective funds are managed by several fund managers and are valued at the NAV per unit of the fund. For most of these funds, the majority of the underlying assets are actively traded securities. These funds (except the real estate property fund) require up to a 60-day notice for redemptions. The real estate property fund is valued at NAV using information from independent appraisal firms, who have knowledge and expertise about the current market values of real property in the same vicinity as the investments. Redemptions of the real estate property fund are allowed once per quarter, subject to available cash.

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Fixed income investments include government and corporate bonds held directly by the Master Trust. Fixed income securities are valued using a bid-evaluation price or a mid-evaluation price and, as such, are classified within Level 2 of the fair value hierarchy. A bid-evaluation price is an estimated price at which a dealer would pay for a security. A mid-evaluation price is the average of the estimated price at which a dealer would sell a security and the estimated price at which a dealer would pay for a security. These evaluations are based on quoted prices, if available, or models that use observable inputs.

Common stocks included in global large-cap equity securities and preferred stocks included in other investments are valued at the closing price reported on the active market on which the individual securities are traded and, as such, are classified within Level 1 of the fair value hierarchy.

Private equity investments are valued at NAV using information from general partners and have inherent restrictions on redemptions that may affect the ability to sell the investments at their NAV in the near term.

A summary of the fair value hierarchy for pension plan assets associated with the PT-FI plan follows:

	Fair Value at December 31, 2017			
	Total	Level 1	Level 2	Level 3
Government bonds	\$81	\$81	\$	—
Common stocks	78	78	—	—
Mutual funds	16	16	—	—
Total investments	175	\$175	\$	—
Cash and receivables <sup>a</sup>	94			
Total pension plan net assets	\$269			

	Fair Value at December 31, 2016			
	Total	Level 1	Level 2	Level 3
Government bonds	\$78	\$78	\$	—
Common stocks	72	72	—	—
Mutual funds	16	16	—	—
Total investments	166	\$166	\$	—
Cash and receivables <sup>a</sup>	119			
Payables	(1 )			
Total pension plan net assets	\$284			

a. Cash consists primarily of short-term time deposits.

Following is a description of the valuation techniques used for pension plan assets measured at fair value associated with the PT-FI plan. There have been no changes to the techniques used to measure fair value.

Common stocks, government bonds and mutual funds are valued at the closing price reported on the active market on which the individual securities are traded and, as such, are classified within Level 1 of the fair value hierarchy.

The techniques described above may produce a fair value calculation that may not be indicative of NRV or reflective of future fair values. Furthermore, while FCX believes its valuation techniques are appropriate and consistent with

those used by other market participants, the use of different techniques or assumptions to determine the fair value of certain financial instruments could result in a different fair value measurement at the reporting date.

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The expected benefit payments for FCX's and PT-FI's pension plans follow:

	FCX	PT-FI <sup>a</sup>
2018	\$ 111	\$ 48
2019	151	8
2020	116	15
2021	118	20
2022	120	23
2023 through 2027	635	166

a. Based on a December 31, 2017, exchange rate of 13,480 Indonesian rupiah to one U.S. dollar.

Postretirement and Other Benefits. FCX also provides postretirement medical and life insurance benefits for certain U.S. employees and, in some cases, employees of certain international subsidiaries. These postretirement benefits vary among plans, and many plans require contributions from retirees. The expected cost of providing such postretirement benefits is accrued during the years employees render service.

The benefit obligation (funded status) for the postretirement medical and life insurance benefit plans consisted of a current portion of \$14 million (included in accounts payable and accrued liabilities) and a long-term portion of \$129 million (included in other liabilities) at December 31, 2017, and a current portion of \$16 million and a long-term portion of \$138 million at December 31, 2016. The discount rate used to determine the benefit obligation for these plans, which was determined on the same basis as FCX's pension plans, was 3.50 percent at December 31, 2017, and 3.80 percent at December 31, 2016. Expected benefit payments for these plans total \$14 million for 2018, \$14 million for 2019, \$13 million for 2020, \$13 million for 2021, \$12 million for 2022 and \$50 million for 2023 through 2027.

The net periodic benefit cost charged to operations for FCX's postretirement benefits (primarily for interest costs) totaled \$5 million in 2017, \$4 million in 2016 and \$6 million in 2015. The discount rate used to determine net periodic benefit cost and the components of net periodic benefit cost for FCX's postretirement benefits was 3.80 percent in 2017, 4.10 percent in 2016 and 3.60 percent in 2015. The medical-care trend rates assumed the first year trend rate was 8.00 percent at December 31, 2017, which declines over the next 15 years with an ultimate trend rate of 4.25 percent.

FCX has a number of postemployment plans covering severance, long-term disability income, continuation of health and life insurance coverage for disabled employees or other welfare benefits. The accumulated postemployment benefit consisted of a current portion of \$5 million (included in accounts payable and accrued liabilities) and a long-term portion of \$38 million (included in other liabilities) at December 31, 2017, and a current portion of \$5 million and a long-term portion of \$34 million at December 31, 2016. In connection with the retirement of one of its executive officers in December 2015, FCX recorded a charge to selling, general and administrative expenses of \$16 million.

FCX also sponsors savings plans for the majority of its U.S. employees. The plans allow employees to contribute a portion of their pre-tax income in accordance with specified guidelines. These savings plans are principally qualified 401(k) plans for all U.S. salaried and non-bargained hourly employees. In these plans, participants exercise control and direct the investment of their contributions and account balances among various investment options. FCX contributes to these plans at varying rates and matches a percentage of employee pre-tax deferral contributions up to certain limits, which vary by plan. For employees whose eligible compensation exceeds certain levels, FCX provides an unfunded defined contribution plan, which had a liability balance of \$46 million at December 31, 2017, and \$47 million at December 31, 2016, all of which was included in other liabilities.

The costs charged to operations for employee savings plans totaled \$65 million in 2017 (none of which was capitalized), \$78 million in 2016 (of which \$4 million was capitalized to oil and gas properties) and \$98 million in

2015 (of which \$13 million was capitalized to oil and gas properties). FCX has other employee benefit plans, certain of which are related to FCX's financial results, which are recognized in operating costs.

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Restructuring Charges. As a result of the first-quarter 2017 regulatory restrictions and uncertainties regarding long-term investment stability, PT-FI took actions to adjust its cost structure, reduce its workforce and slow investments in its underground development projects and new smelter (refer to Note 13 for further discussion). These actions included workforce reductions through furlough and voluntary retirement programs. Following the furlough and voluntary retirement programs, a significant number of employees and contractors elected to participate in an illegal strike action beginning in May 2017, and were subsequently deemed to have voluntarily resigned under the existing Indonesian laws and regulations. As a result, PT-FI recorded charges in 2017 to production costs of \$120 million, and selling, general and administrative costs of \$5 million for employee severance and related costs, and a pension curtailment loss of \$4 million included in production costs.

In early 2016, FCX restructured its oil and gas business to reduce costs and in late 2016, FCX sold substantially all of its remaining oil and gas properties. As a result, FCX recorded charges of \$85 million to selling, general and administrative expenses and \$6 million to production costs for net restructuring-related costs in 2016.

Because of a decline in commodity prices, FCX made adjustments to its operating plans for its mining operations in 2015 (refer to Note 5 for further discussion). As a result of these revisions to its mining operating plans, FCX recorded restructuring charges to production costs in 2015 of \$45 million primarily for employee severance and benefit costs, and \$22 million for special retirement benefits.

### NOTE 10. STOCKHOLDERS' EQUITY AND STOCK-BASED COMPENSATION

FCX's authorized shares of capital stock total 3.05 billion shares, consisting of 3 billion shares of common stock and 50 million shares of preferred stock.

Common Stock. In November 2016, FCX completed a \$1.5 billion registered at-the-market equity offering of common stock that was announced on July 27, 2016. FCX sold 116.5 million shares of its common stock at an average price of \$12.87 per share, which generated gross proceeds of \$1.5 billion (net proceeds of \$1.48 billion after \$15 million of commissions and expenses).

During 2016, FCX issued 48.1 million shares of its common stock (with a value of \$540 million, excluding \$5 million of commissions paid by FCX) in connection with the settlement of two drilling rig contracts.

Also during 2016, FCX negotiated private exchange transactions exempt from registration under the Securities Act of 1933, as amended, whereby 27.7 million shares of FCX's common stock were issued (with an aggregate value of \$311 million), in exchange for \$369 million principal amount of FCX's senior notes.

In September 2015, FCX completed a \$1.0 billion at-the-market equity program and announced an additional \$1.0 billion at-the-market equity program. Through December 31, 2015, FCX sold 205.7 million shares of its common stock at an average price of \$9.53 per share under these programs, which generated gross proceeds of \$1.96 billion (net proceeds of \$1.94 billion after \$20 million of commissions and expenses). From January 1, 2016, through January 5, 2016, FCX sold 4.3 million shares of its common stock, which generated proceeds of \$29 million (after \$0.3 million of commissions and expenses). FCX used the proceeds to repay indebtedness.

The Board of Directors (the Board) declared a one-time special cash dividend of \$0.1105 per share related to the settlement of the shareholder derivative litigation, which was paid in August 2015. In response to the impact of lower commodity prices, the Board authorized a decrease in the cash dividend on FCX's common stock from an annual rate of \$1.25 per share to an annual rate of \$0.20 per share in March 2015, and then suspended the cash dividend in December 2015. Refer to Note 18 for discussion of the reinstated cash dividend on FCX's common stock. The declaration of dividends is at the discretion of the Board and will depend on FCX's financial results, cash requirements, future prospects and other factors deemed relevant by the Board.





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Accumulated Other Comprehensive Loss. A summary of changes in the balances of each component of accumulated other comprehensive loss, net of tax, follows:

	Defined Benefit Plans	Unrealized Losses on Securities	Translation Adjustment	Total
Balance at January 1, 2015	\$ (548 )	\$ ( 6 )	\$ 10	\$ (544)
Amounts arising during the period <sup>a,b</sup>	3	—	—	3
Amounts reclassified <sup>c</sup>	38	—	—	38
Balance at December 31, 2015	(507 )	( 6 )	10	(503 )
Amounts arising during the period <sup>a,b</sup>	(91 )	2	—	(89 )
Amounts reclassified <sup>c</sup>	44	—	—	44
Balance at December 31, 2016	(554 )	( 4 )	10	(548 )
Amounts arising during the period <sup>a,b</sup>	7	1	—	8
Amounts reclassified <sup>c</sup>	53	—	—	53
Balance at December 31, 2017	\$ (494 )	\$ ( 3 )	\$ 10	\$ (487)

<sup>a</sup> Includes net actuarial (losses) gains, net of noncontrolling interest, totaling \$(7) million for 2015, \$(79) million for 2016 and \$52 million for 2017.

<sup>b</sup> Includes tax benefits (provision) totaling \$2 million for 2015, \$(11) million for 2016 and \$(45) million for 2017.

<sup>c</sup> Includes amortization primarily related to actuarial losses, net of taxes of \$16 million for 2015, \$4 million for 2016 and \$5 million for 2017.

Stock Award Plans. FCX currently has awards outstanding under various stock-based compensation plans. The stockholder-approved 2016 Stock Incentive Plan (the 2016 Plan) provides for the issuance of stock options, SARs, restricted stock, RSUs, PSUs and other stock-based awards for up to 72 million common shares. As of December 31, 2017, 64.7 million shares were available for grant under the 2016 Plan, and no shares were available under other plans.

Stock-Based Compensation Cost. Compensation cost charged against earnings for stock-based awards for the years ended December 31 follows:

	2017	2016	2015
Selling, general and administrative expenses	\$55	\$69	\$67
Production and delivery	16	16	17
Capitalized costs	—	4	11
Total stock-based compensation	71	89	95
Less capitalized costs	—	( 4 )	( 11 )
Tax benefit and noncontrolling interests' share	( 4 ) <sup>a</sup>	( 3 ) <sup>a</sup>	( 31 )
Impact on net income (loss) from continuing operations	\$67	\$82	\$53

<sup>a</sup> Charges in the U.S. are not expected to generate a future tax benefit.

Stock Options and SARs. Stock options granted under the plans generally expire 10 years after the date of grant and vest in 25 percent annual increments beginning one year from the date of grant. The award agreements provide that participants will receive the following year's vesting upon retirement. Therefore, on the date of grant, FCX accelerates one year of amortization for retirement-eligible employees. Stock options provide for accelerated vesting only upon certain qualifying terminations of employment within one year following a change of control. SARs generally expire within five years after the date of grant and vest in one-third annual increments beginning one year from the date of grant. SARs are similar to stock options, but are settled in cash rather than in shares of common stock and are classified as liability awards.



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A summary of options and SARs outstanding as of December 31, 2017, including 716,469 SARs, and activity during the year ended December 31, 2017, follows:

	Number of Options and SARs	Weighted- Average Exercise Price Per Share	Weighted- Average Remaining Contractual Term (years)	Aggregate Intrinsic Value
Balance at January 1	53,794,235	\$ 30.25		
Granted	3,861,000	15.52		
Exercised	(647,941 )	7.64		
Expired/Forfeited	(8,992,606 )	34.24		
Balance at December 31	48,014,688	28.63	4.8	\$ 129
Vested and exercisable at December 31	39,725,053	32.26	4.0	\$ 62

The fair value of each stock option is estimated on the date of grant using the Black-Scholes-Merton option valuation model. The fair value of each SAR is determined using the Black-Scholes-Merton option valuation model and remeasured at each reporting date until the date of settlement. Expected volatility is based on implied volatilities from traded options on FCX's common stock and historical volatility of FCX's common stock. FCX uses historical data to estimate future option and SAR exercises, forfeitures and expected life. When appropriate, separate groups of employees who have similar historical exercise behavior are considered separately for valuation purposes. The expected dividend rate is calculated using the annual dividend (excluding supplemental dividends) at the date of grant. The risk-free interest rate is based on Federal Reserve rates in effect for bonds with maturity dates equal to the expected term of the option or SAR.

Information related to stock options during the years ended December 31 follows:

	2017	2016	2015
Weighted-average assumptions used to value stock option awards:			
Expected volatility	51.4 %	71.6 %	37.9 %
Expected life of options (in years)	5.70	5.34	5.17
Expected dividend rate	—	—	4.5 %
Risk-free interest rate	2.0 %	1.3 %	1.7 %
Weighted-average grant-date fair value (per share)	\$7.61	\$2.64	\$4.30
Intrinsic value of options exercised	\$5	\$—	<sup>a</sup> \$1
Fair value of options vested	\$25	\$43	\$50

a. Rounds to less than \$1 million.

As of December 31, 2017, FCX had \$24 million of total unrecognized compensation cost related to unvested stock options expected to be recognized over a weighted-average period of approximately 2.0 years.

Stock-Settled PSUs and RSUs. Beginning in 2014, FCX's executive officers were granted PSUs that vest after three years. For the PSUs granted to the executive officers in 2015, the final number of shares to be issued to the executive officers is based on FCX's total shareholder return compared to the total shareholder return of a peer group. The total grant date target shares related to the PSU grants were 755 thousand in 2015, and executive officers received no shares at maturity based on FCX's total shareholder return compared to its peers. For the PSUs granted in 2017 and 2016, the final number of shares to be issued to the executive officers will be determined based on (i) FCX's achievement of certain financial and operational performance metrics and (ii) FCX's total shareholder return compared to the shareholder return of a peer group. The total grant date target shares related to the PSU grants were 0.6 million for 2017 and 1.5 million for 2016, of which the executive officers will earn (i) between 0 percent and 175 percent of the

target shares based on achievement of financial and operating metrics and (ii) +/- 25 percent of the target shares based on FCX's total shareholder return compared to the peer group.

All of FCX's executive officers are retirement eligible, and their PSU awards are therefore non-forfeitable. As such, FCX charges the estimated fair value of the PSU awards to expense at the time the financial and operational metrics are established.

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FCX grants RSUs that vest over a period of three years to certain employees. FCX also grants RSUs to its directors. Beginning in December 2015, RSUs granted to directors vest on the first anniversary of the grant. Prior to December 2015, RSUs granted to directors generally vest over a period of four years. The fair value of the RSUs is amortized over the vesting period or the period until the director becomes retirement eligible, whichever is shorter. Upon a director's retirement, all of their unvested RSUs immediately vest. For retirement-eligible directors, the fair value of RSUs is recognized in earnings on the date of grant.

The award agreements provide for accelerated vesting of all RSUs held by directors if there is a change of control (as defined in the award agreements) and for accelerated vesting of all RSUs held by employees if they experience a qualifying termination within one year following a change of control.

Dividends attributable to RSUs and PSUs accrue and are paid if the award vests. A summary of outstanding stock-settled RSUs and PSUs as of December 31, 2017, and activity during the year ended December 31, 2017, follows:

	Number of Awards	Weighted-Average Grant-Date Fair Value Per Award	Aggregate Intrinsic Value
Balance at January 1	7,218,227	\$ 18.08	
Granted	2,062,067 <sup>a</sup>	15.37	
Vested	(3,175,437)	15.45	
Forfeited	(554,233 )	11.23	
Balance at December 31	5,550,624	19.27	\$ 105

a. Excludes 374 thousand PSUs related to 2017 grants and 497 thousand PSUs related to 2016 grants for which the performance metrics have not yet been established.

The total fair value of stock-settled RSUs and PSUs granted was \$32 million during 2017, \$37 million during 2016 and \$46 million during 2015. The total intrinsic value of stock-settled RSUs vested was \$45 million during 2017, and \$22 million during both 2016 and 2015. As of December 31, 2017, FCX had \$6 million of total unrecognized compensation cost related to unvested stock-settled RSUs expected to be recognized over approximately 1.4 years.

**Cash-Settled RSUs and PSUs.** Cash-settled RSUs are similar to stock-settled RSUs, but are settled in cash rather than in shares of common stock. These cash-settled RSUs generally vest over periods ranging from three to five years of service. The award agreements for cash-settled RSUs provide for accelerated vesting upon certain qualifying terminations of employment within one year following a change of control (as defined in the award agreements).

In 2015, certain members of FM O&G's senior management were granted cash-settled PSUs that vest over three years. The total grant date target shares related to the 2015 cash-settled PSU grants were 582 thousand shares, of which FM O&G's senior management earned a total of 487 thousand shares at maturity based on the achievement of applicable performance goals.

The cash-settled PSUs and RSUs are classified as liability awards, and the fair value of these awards is remeasured each reporting period until the vesting dates.

Dividends attributable to cash-settled RSUs and PSUs accrue and are paid if the award vests. A summary of outstanding cash-settled RSUs and PSUs as of December 31, 2017, and activity during the year ended December 31, 2017, follows:

	Number of Awards	Weighted-Average Grant-Date Fair Value Per Award	Aggregate Intrinsic Value
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Balance at January 1	2,531,744	\$ 19.30	
Granted	622,907	15.26	
Vested	(1,796,288)	22.43	
Forfeited	(51,128 )	12.96	
Balance at December 31	1,307,235	13.32	\$ 25

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The total grant-date fair value of cash-settled RSUs was \$10 million during 2017, \$4 million during 2016 and \$44 million during 2015. The intrinsic value of cash-settled RSUs vested was \$27 million during 2017 and \$15 million during 2016. The accrued liability associated with cash-settled RSUs and PSUs consisted of a current portion of \$11 million (included in accounts payable and accrued liabilities) and a long-term portion of \$5 million (included in other liabilities) at December 31, 2017, and a current portion of \$23 million and a long-term portion of \$4 million at December 31, 2016.

Other Information. The following table includes amounts related to exercises of stock options and vesting of RSUs during the years ended December 31:

	2017	2016	2015
FCX shares tendered to pay the exercise price and/or the minimum required taxes <sup>a</sup>	1,041,937	906,120	349,122
Cash received from stock option exercises	\$ 5	\$ — <sup>b</sup>	\$ 3
Actual tax benefit realized for tax deductions	\$ 1	\$ — <sup>b</sup>	\$ 11
Amounts FCX paid for employee taxes	\$ 15	\$ 6	\$ 7

Under terms of the related plans, upon exercise of stock options and vesting of stock-settled RSUs, employees may

<sup>a</sup>. tender FCX shares to pay the exercise price and/or the minimum required taxes.

<sup>b</sup>. Rounds to less than \$1 million.

## NOTE 11. INCOME TAXES

Geographic sources of income (losses) before income taxes and equity in affiliated companies' net earnings (losses) for the years ended December 31 consist of the following:

	2017	2016	2015
U.S.	\$20	\$(5,179)	\$(14,589)
Foreign <sup>2,882</sup>	<sup>a</sup> 1,707	461	
Total	\$2,902	\$(3,472)	\$(14,128)

As a result of the unfavorable Peruvian Supreme Court ruling on the Cerro Verde royalty dispute, FCX incurred a pre-tax charge of \$348 million to income from continuing operations and \$7 million of net tax expense for the year 2017. Refer to Note 12 for further discussion.

Income taxes are provided on the earnings of FCX's material foreign subsidiaries under the assumption that these earnings will be distributed. FCX has not provided deferred income taxes for other differences between the book and tax carrying amounts of its investments in material foreign subsidiaries as FCX considers its ownership positions to be permanent in duration, and quantification of the related deferred tax liability is not practicable.

FCX's (provision for) benefit from income taxes for the years ended December 31 consist of the following:

	2017	2016	2015
Current income taxes:			
Federal	\$(3 )	\$164	\$89
State	(10 )	17	2
Foreign	(1,426)	(352 )	(160 )
Total current	(1,439)	(171 )	(69 )
Deferred income taxes:			
Federal	64	137	3,403
State	10	41	154
Foreign	89	(451 )	(163 )
Total deferred	163	(273 )	3,394

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Adjustments	393	a 13	b (1,374 ) <sup>c</sup>
Operating loss carryforwards	—	60	—
(Provision for) benefit from income taxes	\$(883)	\$(371)	\$1,951

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Reflects provisional tax credits associated with the Tax Cuts and Jobs Act (the Act), including reversal of valuation allowances associated with anticipated refunds of alternative minimum tax (AMT) credits (\$272 million, net of reserves) and a decrease in corporate income tax rates (\$121 million). Refer to “Tax Reform” below for further discussion.

a. Benefit related to changes in Peruvian tax rules.

Adjustments include net provisions of \$1.2 billion associated with an increase in the beginning of the year valuation allowance related to the impairment of U.S. oil and gas properties and \$0.2 billion resulting from the termination of PT-FI’s Delaware domestication.

A reconciliation of the U.S. federal statutory tax rate to FCX’s effective income tax rate for the years ended December 31 follows:

	2017		2016		2015	
	Amount	Percent	Amount	Percent	Amount	Percent
U.S. federal statutory tax rate	\$(1,016)	(35 )%	\$1,215	(35 )%	\$4,945	(35 )%
Valuation allowance, net	28	<sup>a</sup> 1	(1,680 ) <sup>b</sup>	48	(2,955 ) <sup>b</sup>	21
Foreign tax credit limitation	(159 )	(5 )	(598 )	17	(228 )	2
Tax reform	393	14	—	—	—	—
Mining royalty dispute	(129 )	(5 )	—	—	—	—
Impairment of oil and gas properties	—	—	520	<sup>c</sup> (15 )	—	—
Percentage depletion	227	8	211	(6 )	186	(1 )
Withholding and other impacts on foreign earnings	(216 )	(7 )	(93 )	3	(193 )	1
Effect of foreign rates different than the U.S. federal statutory rate	17	1	45	(1 )	12	—
State income taxes	(5 )	(1 )	46	<sup>b</sup> (1 )	105	<sup>b</sup> (1 )
Other items, net	(23 )	(1 )	(37 )	1	79	(1 )
(Provision for) benefit from income taxes	\$(883 ) <sup>d</sup>	(30 )%	\$(371 ) <sup>e</sup>	11 %	\$1,951	(14 )%

a. Refer to “Valuation Allowance” below for further discussion of current year changes.

Includes tax charges totaling \$1.6 billion in 2016 and \$3.3 billion in 2015 as a result of the impairment to U.S. oil and gas properties to establish valuation allowances against U.S. federal and state deferred tax assets that will not generate a future benefit.

b. Reflects a loss under U.S. federal income tax law related to the impairment of investments in oil and gas properties.

Includes net charges of \$7 million associated with the Cerro Verde mining royalties dispute, consisting of tax charges of \$136 million for disputed royalties and other related mining taxes for the period October 2011 through the year 2013 (when royalties were determined based on operating income), mostly offset by a tax benefit of \$129 million associated with disputed royalties and other related mining taxes for the period December 2006 through the year 2013. Refer to Note 12 for further discussion.

c. Includes a net tax benefit related to changes in Peruvian tax rules of \$13 million.

FCX paid federal, state and foreign income taxes totaling \$702 million in 2017, \$203 million in 2016 (including \$27 million for discontinued operations) and \$893 million in 2015 (including \$187 million for discontinued operations). FCX received refunds of federal, state and foreign income taxes of \$329 million in 2017, \$247 million in 2016 and \$334 million in 2015.

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The components of deferred taxes follow:

	December 31,	
	2017	2016
Deferred tax assets:		
Foreign tax credits	\$2,129	\$2,094
Accrued expenses	789	923
Oil and gas properties	236	346
AMT credits	—	444
Net operating losses	2,043	2,898
Employee benefit plans	248	403
Other	259	485
Deferred tax assets	5,704	7,593
Valuation allowances	(4,575 )	(6,058 )
Net deferred tax assets	1,129	1,535
Deferred tax liabilities:		
Property, plant, equipment and mine development costs	(3,710 )	(4,326 )
Undistributed earnings	(811 )	(779 )
Other	(226 )	(195 )
Total deferred tax liabilities	(4,747 )	(5,300 )
Net deferred tax liabilities	\$(3,618)	\$(3,765)

Tax Attributes. At December 31, 2017, FCX had (i) U.S. foreign tax credits of \$2.1 billion that will expire between 2018 and 2027, (ii) U.S. federal net operating losses of \$6.4 billion that expire between 2032 and 2036, (iii) U.S. federal capital losses of \$160 million that expire in 2021 and 2022, (iv) U.S. state net operating losses of \$10.6 billion that expire between 2018 and 2037 and (v) Spanish net operating losses of \$566 million that can be carried forward indefinitely.

Valuation Allowance. On the basis of available information at December 31, 2017, including positive and negative evidence, FCX has provided valuation allowances for certain of its deferred tax assets where it believes it is more likely than not that some portion or all of such assets will not be realized. Valuation allowances totaled \$4.6 billion at December 31, 2017, and \$6.1 billion at December 31, 2016, and covered all of FCX's U.S. foreign tax credits, U.S. federal net operating losses, U.S. federal capital losses, foreign net operating losses, and substantially all of its U.S. state net operating losses. FCX's valuation allowances at December 31, 2016, also covered substantially all of its U.S. AMT credits.

The valuation allowance related to FCX's U.S. foreign tax credits totaled \$2.1 billion at December 31, 2017. FCX has operations in tax jurisdictions where statutory income taxes and withholding taxes are in excess of the U.S. federal income tax rate. Valuation allowances are recorded on foreign tax credits for which no benefit is expected to be realized.

The valuation allowance related to FCX's U.S. federal, state and foreign net operating losses totaled \$2.1 billion at December 31, 2017, including \$280 million related to FCX's U.S. federal and state deferred tax assets. Deferred tax assets represent future deductions for which a benefit will only be realized to the extent these deductions offset future income. FCX develops an estimate of which future tax deductions will be realized and provides a valuation allowance to the extent these deductions are not expected to be realized in future periods.

Valuation allowances will continue to be carried on U.S. foreign tax credits and U.S. federal, state and foreign net operating losses until such time that (i) FCX generates taxable income against which any of the assets, credits or net

operating losses can be used, (ii) forecasts of future income provide sufficient positive evidence to support reversal of the valuation allowances or (iii) FCX identifies a prudent and feasible means of securing the benefit of the assets, credits or net operating losses that can be implemented.

The \$1.5 billion net decrease in the valuation allowances during 2017 primarily related to a \$1.1 billion decrease associated with a reduction in the corporate income tax rate applicable to U.S. federal deferred tax assets (refer to “Tax Reform” below for further discussion) and \$371 million for the reversal of valuation allowances on U.S. federal

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AMT credits. FCX will continue to assess whether its valuation allowances are effected by various aspects of the Act.

**Tax Reform.** The Act, which was enacted on December 22, 2017, includes significant modifications to existing U.S. tax laws and creates many new complex tax provisions. The Act reduces the corporate income tax rate to 21 percent, eliminates the corporate AMT, provides for a refund of AMT credits, maintains hard minerals percentage depletion, allows for immediate expensing of certain qualified property and generally broadens the tax base. The Act also creates a territorial tax system (with a one-time mandatory tax on previously deferred foreign earnings), creates anti-base erosion rules that require companies to pay a minimum tax on foreign earnings and disallows certain payments from U.S. corporations to foreign related parties.

As further described below, FCX has made reasonable estimates of the tax effects related to its existing deferred tax balances, AMT credit refunds and the transition tax. While FCX has not completed its analysis, its 2017 income tax provision includes provisional net tax benefits associated with the Act totaling \$393 million, which includes \$272 million (net of reserves) for the reversal of valuation allowances associated with anticipated refunds of AMT credits and \$121 million for the decrease in corporate income tax rates. For certain provisions of the Act, FCX has not been able to make a reasonable estimate. For these items, FCX's accounting continues to be based on existing income tax accounting guidance and the provisions of the tax laws that were in effect immediately prior to enactment of the Act. FCX will continue to refine its calculations as it gains a more thorough understanding of the Act.

**Elimination of Corporate AMT and Refund of AMT Credits.** For tax years beginning after December 31, 2017, the corporate AMT was repealed. FCX has historically incurred an AMT liability in excess of regular tax liability, resulting in accumulated AMT credits totaling \$490 million as of December 31, 2017. The Act allows the use of existing corporate AMT credits to offset regular tax liability for tax years after December 31, 2017. AMT credits in excess of regular liability are refundable in the years 2018 through 2021.

At December 31, 2016, FCX had estimated a \$72 million benefit for AMT credits, and during 2017 recognized a \$38 million benefit, all of which was expected to be refunded under prior tax law. As a result of the Act, FCX recognized an additional net benefit of \$272 million in 2017, consisting of a \$380 million tax benefit for additional historical AMT credits expected to be refunded, partially offset by a \$108 million tax charge to establish a reserve for uncertain tax positions. FCX will continue to refine these provisional amounts as historical data is gathered and analyzed.

**Reduction in Corporate Income Tax Rate.** The Act reduces the U.S. federal corporate income tax rate from 35 percent to 21 percent. While applicable for years after December 31, 2017, existing income tax accounting guidance requires the effects of changes in tax rates and laws on deferred tax balances to be recognized in the period in which the legislation is enacted. In fourth-quarter 2017, FCX recognized this change in the federal statutory rate and recorded a net benefit of \$121 million, consisting of a \$1.1 billion tax benefit associated with changes in related valuation allowances, partly offset by a \$975 million tax charge related to existing net U.S. federal deferred tax assets and liabilities. FCX will continue to refine these provisional amounts as further analysis of the laws' impacts are completed, including effects on U.S. state income taxes and the realizability of deferred tax assets in future years.

**Transition Tax on Previously Deferred Foreign Earnings.** Under the Act, U.S. shareholders owning at least 10 percent of a foreign subsidiary generally must recognize taxable income equal to the shareholder's pro rata share of accumulated post-1986 historical Earnings and Profits (E&P). The portion of any E&P associated with cash or cash equivalents is taxed at a rate of 15.5 percent, while any remaining E&P is taxed at a reduced rate of 8 percent. The resulting tax liability (Transition Tax) may be reduced by available foreign tax credits. Because FCX operates in foreign jurisdictions with statutory tax rates in excess of the U.S. historical statutory tax rate of 35 percent, the Transition Tax is fully offset by foreign tax credits generated in the current year. Although its 2017 income tax provision was not impacted by this one-time Transition Tax liability, FCX has yet to complete its final calculation of the total accumulated post-1986 E&P. As a result, FCX's estimate of Transition Tax may change when the underlying

calculations are finalized.

Anti-Base Erosion Rules. For tax years that begin after December 31, 2017, applicable taxpayers are required to pay the Base Erosion Anti-Abuse Tax (BEAT). BEAT is an alternative tax calculation that disallows deduction of certain amounts paid or accrued by a U.S. taxpayer to a foreign related party. The new BEAT rules are complex and FCX is evaluating this provision in the context of its global structure and operations and existing tax accounting guidance. Based on FCX's current evaluations, it is unclear if BEAT will impact FCX and no adjustments were made related to BEAT in its 2017 income tax provision.

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The Act also includes provisions to tax a new class of income called Global Intangible Low-Taxed Income (GILTI). Because of the complexity of the new GILTI tax rules, FCX is continuing to evaluate this provision of the Act and the application of existing income tax accounting guidance. Under U.S. generally accepted accounting principles, FCX is allowed to make an accounting policy choice of either (i) treating taxes due on future U.S. inclusions in taxable income related to GILTI as a current period expense when incurred or (ii) factoring such amounts into the measurement of deferred taxes. FCX has not made a policy decision regarding whether to record deferred taxes on GILTI, and the selection of an accounting policy will depend, in part, on analyzing its global income to determine whether FCX expects to have future U.S. inclusions and, if so, what impact is expected. No adjustments were made related to potential GILTI tax in FCX's 2017 income tax provision.

**Executive Compensation Limitation.** For tax years beginning after December 31, 2017, tax deductible compensation of covered employees is limited to \$1 million. In addition, the definition of covered employees is revised to include the principal executive officer, the principal financial officer, and the three other highest paid officers. If an individual is a covered employee for a tax year beginning after December 31, 2016, the individual remains a covered employee for all future years. Under a transition rule, the changes do not apply to any remuneration under specified contracts in effect on November 2, 2017. FCX is continuing to analyze the impacts of this provision. No adjustments were made related to the future disallowance of executive compensation in FCX's 2017 income tax provision.

**Other.** As of December 31, 2017, FCX has offset \$5.3 billion of foreign source income with U.S. source losses. Under existing U.S. tax law, FCX has the ability to re-characterize \$5.3 billion of future U.S. source income into foreign source income. While utilization of U.S. foreign tax credits is dependent upon FCX generating future U.S. tax liabilities within the carryforward period, this re-sourcing may permit FCX to utilize up to \$1.1 billion of the \$2.1 billion foreign tax credits that would otherwise expire unused. FCX continues to evaluate the impact of the Act on these income re-sourcing provisions.

**Other Events.** In October 2017, the Peruvian Supreme Court issued a ruling in favor of SUNAT, Peru's national tax authority, that the assessments of royalties for the year 2008 on ore processed by the Cerro Verde concentrator were proper under Peruvian law. SUNAT has assessed mining royalties on ore processed by the Cerro Verde concentrator for the period December 2006 to December 2011, which Cerro Verde has contested on the basis that its 1998 stability agreement exempts from royalties all minerals extracted from its mining concessions, irrespective of the method used for processing those minerals. As a result of the unfavorable Peruvian Supreme Court decision, FCX incurred pre-tax charges of \$348 million and \$7 million of net income tax expense for the year 2017, consisting of tax charges of \$136 million for disputed royalties and other related mining taxes for the period October 2011 through the year 2013 (when royalties were determined based on operating income), mostly offset by a tax benefit of \$129 million associated with disputed royalties and other related mining taxes for the period December 2006 through the year 2013. Refer to Note 12 for further discussion.

In December 2016, the Peruvian parliament passed tax legislation that, in part, modified the applicable tax rates established in its December 2014 tax legislation, which progressively decreased the corporate income tax rate from 30 percent in 2014 to 26 percent in 2019 and thereafter, and also increased the dividend tax rate on distributions from 4.1 percent in 2014 to 9.3 percent in 2019 and thereafter. Under the tax legislation, which was effective January 1, 2017, the corporate income tax rate was 29.5 percent, and the dividend tax rate on distributions of earnings was 5 percent. Cerro Verde's current mining stability agreement subjects FCX to a stable income tax rate of 32 percent through the expiration of the agreement on December 31, 2028. The tax rate on dividend distributions is not stabilized by the agreement.

During 2015, PT-FI's Delaware domestication was terminated. As a result, PT-FI is no longer a U.S. income tax filer, and tax attributes related to PT-FI, which were fully reserved with a related valuation allowance, are no longer available for use in FCX's U.S. federal consolidated income tax return. There was no resulting net impact to FCX's

consolidated statement of operations. PT-FI remains a limited liability company organized under Indonesian law.

In September 2014, the Chilean legislature approved a tax reform package that implemented a dual tax system, which was amended in January 2016. Under previous rules, FCX's share of income from Chilean operations was subject to an effective 35 percent tax rate allocated between income taxes and dividend withholding taxes. Under the amended tax reform package, FCX's Chilean operation is subject to the "Partially-Integrated System," resulting in FCX's share of income from El Abra being subject to progressively increasing effective tax rates of 35 percent through 2019 and 44.5 percent in 2020 and thereafter. In November 2017, the progression of increasing tax rates was delayed by the Chilean legislature so that the 35 percent rate continues through 2021 increasing to 44.5 percent in 2022 and thereafter.

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In 2010, the Chilean legislature approved an increase in mining royalty taxes to help fund earthquake reconstruction activities, education and health programs. Mining royalty taxes at FCX's El Abra mine were 4 percent for the years 2013 through 2017. Beginning in 2018 and through 2023, rates move to a sliding scale of 5 to 14 percent (depending on a defined operational margin).

**Uncertain Tax Positions.** FCX accounts for uncertain income tax positions using a threshold and measurement criteria for the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. FCX's policy associated with uncertain tax positions is to record accrued interest in interest expense and accrued penalties in other income and expense rather than in the provision for income taxes. A summary of the activities associated with FCX's reserve for unrecognized tax benefits for the years ended December 31 follows:

	2017	2016	2015
Balance at beginning of year	\$101	\$110	\$104
Additions:			
Prior year tax positions	302	5	7
Current year tax positions	6	28	11
Decreases:			
Prior year tax positions	(1 )	(3 )	(6 )
Settlements with taxing authorities	(17 )	—	—
Lapse of statute of limitations	(1 )	(39 )	(6 )
Balance at end of year	\$390	\$101	\$110

The total amount of accrued interest and penalties associated with unrecognized tax benefits included in the consolidated balance sheets was \$22 million at December 31, 2017, \$19 million at December 31, 2016, and \$16 million at December 31, 2015.

The reserve for unrecognized tax benefits of \$390 million at December 31, 2017, included \$344 million (\$272 million net of income tax benefits and valuation allowances) that, if recognized, would reduce FCX's provision for income taxes. Changes to the reserve for unrecognized tax benefits associated with current year tax positions were primarily related to uncertainties associated with FCX's tax treatment of social welfare payments. Changes in the reserve for unrecognized tax benefits associated with prior year tax positions were primarily related to uncertainties associated with royalties and other related mining taxes and AMT credit refunds. Changes to the reserve for unrecognized tax benefits associated with the lapse of statute of limitations were primarily related to social welfare payments. There continues to be uncertainty related to the timing of settlements with taxing authorities, but if additional settlements are agreed upon during 2018, FCX could experience a change in its reserve for unrecognized tax benefits.

FCX or its subsidiaries file income tax returns in the U.S. federal jurisdiction and various state and foreign jurisdictions. The tax years for FCX's major tax jurisdictions that remain subject to examination are as follows:

Jurisdiction	Years Subject to Examination	Additional Open Years
U.S. Federal	N/A	2014-2017
Indonesia	2008, 2011-2016	2017
Peru	2012	2013-2017
Chile	2015-2016	2017



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## NOTE 12. CONTINGENCIES

Environmental. FCX subsidiaries are subject to various national, state and local environmental laws and regulations that govern emissions of air pollutants; discharges of water pollutants; generation, handling, storage and disposal of hazardous substances, hazardous wastes and other toxic materials; and remediation, restoration and reclamation of environmental contamination. FCX subsidiaries that operate in the U.S. also are subject to potential liabilities arising under CERCLA and similar state laws that impose responsibility on current and previous owners and operators of a facility for the remediation of hazardous substances released from the facility into the environment, including damages to natural resources, in some cases irrespective of when the damage to the environment occurred or who caused it. Remediation liability also extends to persons who arranged for the disposal of hazardous substances or transported the hazardous substances to a disposal site selected by the transporter. These liabilities are often shared on a joint and several basis, meaning that each responsible party is fully responsible for the remediation, if some or all of the other historical owners or operators no longer exist, do not have the financial ability to respond or cannot be found. As a result, because of FCX's acquisition of FMC in 2007, many of the subsidiary companies FCX now owns are responsible for a wide variety of environmental remediation projects throughout the U.S., and FCX expects to spend substantial sums annually for many years to address those remediation issues. Certain FCX subsidiaries have been advised by the U.S. Environmental Protection Agency (EPA), the Department of the Interior, the Department of Agriculture and various state agencies that, under CERCLA or similar state laws and regulations, they may be liable for costs of responding to environmental conditions at a number of sites that have been or are being investigated to determine whether releases of hazardous substances have occurred and, if so, to develop and implement remedial actions to address environmental concerns. FCX is also subject to claims where the release of hazardous substances is alleged to have damaged natural resources (NRD) and to litigation by individuals allegedly exposed to hazardous substances. As of December 31, 2017, FCX had more than 100 active remediation projects, including NRD claims, in 26 U.S. states.

A summary of changes in estimated environmental obligations for the years ended December 31 follows:

	2017	2016	2015
Balance at beginning of year	\$1,221	\$1,215	\$1,174
Accretion expense <sup>a</sup>	84	81	78
Additions	241	26	33
Reductions <sup>b</sup>	(43 )	(43 )	(3 )
Spending	(64 )	(58 )	(67 )
Balance at end of year	1,439	1,221	1,215
Less current portion	(134 )	(129 )	(100 )
Long-term portion	\$1,305	\$1,092	\$1,115

<sup>a</sup> Represents accretion of the fair value of environmental obligations assumed in the 2007 acquisition of FMC, which were determined on a discounted cash flow basis.

<sup>b</sup> Reductions primarily reflect revisions for changes in the anticipated scope and timing of projects and other noncash adjustments.

Estimated future environmental cash payments (on an undiscounted and unescalated basis) total \$134 million in 2018, \$132 million in 2019, \$117 million in 2020, \$119 million in 2021, \$88 million in 2022 and \$2.7 billion thereafter. The amount and timing of these estimated payments will change as a result of changes in regulatory requirements, changes in scope and timing of remediation activities, the settlement of environmental matters and as actual spending occurs.

At December 31, 2017, FCX's environmental obligations totaled \$1.4 billion, including \$1.3 billion recorded on a discounted basis for those obligations assumed in the FMC acquisition at fair value. On an undiscounted and unescalated basis, these obligations totaled \$3.3 billion. FCX estimates it is reasonably possible that these obligations could range between \$2.8 billion and \$3.7 billion on an undiscounted and unescalated basis.

At December 31, 2017, the most significant environmental obligations were associated with the Pinal Creek site in Arizona; the Newtown Creek site in New York City; historical smelter sites principally located in Arizona, Indiana, Kansas, Missouri, New Jersey, Oklahoma and Pennsylvania; and uranium mining sites in the western U.S. The recorded environmental obligations for these sites totaled \$1.3 billion at December 31, 2017. FCX may also be subject to litigation brought by private parties, regulators and local governmental authorities related to these historical sites. A discussion of these sites follows.

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Pinal Creek. The Pinal Creek site was listed under the Arizona Department of Environmental Quality's (ADEQ) Water Quality Assurance Revolving Fund program in 1989 for contamination in the shallow alluvial aquifers within the Pinal Creek drainage near Miami, Arizona. Since that time, environmental remediation was performed by members of the Pinal Creek Group, consisting of FM Miami, Inc. (Miami), a wholly owned subsidiary of FCX, and two other companies. Pursuant to a 2010 settlement agreement, Miami agreed to take full responsibility for future groundwater remediation at the Pinal Creek site, with limited exceptions. Remediation work mainly consisting of groundwater extraction and treatment continues and is expected to continue for many years in the future.

Newtown Creek. From the 1930s until 1964, Phelps Dodge Refining Corporation (PDRC), a subsidiary of FCX, operated a copper smelter, and from the 1930s until 1984 operated a copper refinery, on the banks of Newtown Creek (the creek), which is a 3.5-mile-long waterway that forms part of the boundary between Brooklyn and Queens in New York City. Heavy industrialization along the banks of the creek and discharges from the City of New York's sewer system over more than a century resulted in significant environmental contamination of the waterway. In 2010, EPA notified PDRC, four other companies and the City of New York that EPA considers them to be PRPs under CERCLA. The notified parties began working with EPA to identify other PRPs, and EPA proposed that the notified parties perform a remedial investigation/feasibility study (RI/FS) at their expense and reimburse EPA for its oversight costs. EPA is not expected to propose a remedy until after the RI/FS is completed. Additionally, in 2010, EPA designated the creek as a Superfund site, and in 2011, PDRC and five other parties entered an Administrative Order on Consent (AOC) to perform the RI/FS to assess the nature and extent of environmental contamination in the creek and identify potential remedial options. The parties' RI/FS work under the AOC and their efforts to identify other PRPs are ongoing. EPA recently identified eight additional parties as PRPs for the creek. The draft RI was submitted to EPA in November 2016, and the draft FS is expected to be submitted to EPA by the end of 2020. EPA's remedial decision could be made in 2021 and remedial design could begin in 2022, with the actual remediation construction starting several years later. The actual costs of fulfilling this remedial obligation and the allocation of costs among PRPs are uncertain and subject to change based on the results of the RI/FS, the remediation remedy ultimately selected by EPA and related allocation determinations. The overall cost and the portion ultimately allocated to PDRC could be material to FCX. During 2017, FCX recorded charges of \$138 million for revised cost estimates for the Newtown Creek environmental obligation.

Historical Smelter Sites. FCX subsidiaries and their predecessors at various times owned or operated copper, zinc and lead smelters or refineries in states including Arizona, Indiana, Kansas, Missouri, New Jersey, Oklahoma and Pennsylvania. For some of these former processing sites, certain FCX subsidiaries have been advised by EPA or state agencies that they may be liable for costs of investigating and, if appropriate, remediating environmental conditions associated with these former processing facilities. At other sites, certain FCX subsidiaries have entered into state voluntary remediation programs to investigate and, if appropriate, remediate onsite and offsite conditions associated with the facilities. The historical processing sites are in various stages of assessment and remediation. At some of these sites, disputes with local residents and elected officials regarding alleged health effects or the effectiveness of remediation efforts have resulted in litigation of various types, and similar litigation at other sites is possible.

From 1920 until 1986, United States Metal Refining Company (USMR), an indirect wholly owned subsidiary of Cyprus Amax Minerals Company, owned and operated a copper smelter and refinery in the Borough of Carteret, New Jersey. Since the early 1980s, the site has been the subject of environmental investigation and remediation, primarily under the supervision of the New Jersey Department of Environmental Protection. On January 30, 2017, a class action titled Juan Duarte, Betsy Duarte and N.D., Infant, by Parents and Natural Guardians Juan Duarte and Betsy Duarte, Leroy Nobles and Betty Nobles, on behalf of themselves and all others similarly situated v. United States Metals Refining Company, Freeport-McMoRan Copper & Gold Inc. and Amax Realty Development, Inc., Docket No. 734-17, was filed in the Superior Court of New Jersey against USMR, FCX, and Amax Realty Development, Inc. The defendants have removed this litigation to the U.S. District Court for the District of New Jersey, where it remains pending. Pursuant to an amendment of the complaint in December of 2017, FCX is no longer a party to the lawsuit

and FMC has been added to the lawsuit. The suit alleges that USMR generated and disposed of smelter waste at the site and allegedly released contaminants onsite and offsite through discharges to surface water and air emissions over a period of decades and seeks unspecified damages for economic losses, including loss of property value, medical monitoring, punitive damages and other damages. FCX intends to vigorously defend this matter.

As a result of recent off-site soil sampling in public and private areas near the former Carteret smelter, FCX increased its associated environmental obligation for known and potential off-site environmental remediation by

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recording a \$59 million charge to operating income in 2017. Additional sampling is ongoing and could result in additional adjustments to the related environmental remediation obligation.

Uranium Mining Sites. During a period between 1940 and the early 1970s, certain FCX subsidiaries and their predecessors were involved in uranium exploration and mining in the western U.S., primarily on federal and tribal lands in the Four Corners region of the southwest. Similar exploration and mining activities by other companies have also caused environmental impacts warranting remediation. In January 2017, the Department of Justice, EPA, Navajo Nation, and two FCX-related subsidiaries reached an agreement regarding the financial contribution of the U.S. Government and the FCX subsidiaries and the scope of the environmental investigation and remediation work for the cleanup of 94 former uranium mining sites on tribal lands. The settlement terms are outlined in a Consent Decree that was filed on January 17, 2017, in the U.S. District Court for the District of Arizona. Under the Consent Decree, which the government valued at over \$600 million, FCX subsidiaries are in the process of performing the environmental investigation and remediation work at 94 sites, and the United States contributed \$335 million into a trust fund to cover the government's initial share of the costs. The program is expected to take more than 20 years to complete. Based on updated cash flow and timing estimates, FCX reduced its associated obligation for that contingency by recording a \$41 million credit to operating income in second-quarter 2017 after receiving court approval of the Consent Decree. In addition to uranium activities on tribal lands, FCX is conducting site surveys of historical uranium mining claims associated with FCX subsidiaries on non-tribal federal lands in the Four Corners region. Under a memorandum of understanding with the U.S. Bureau of Land Management (BLM), site surveys are being performed on over 5,000 mining claims, ranging from undisturbed claims to claims with mining features. Based on these surveys, BLM may provide no further action determinations for undisturbed claims or requests for additional assessment or closure activities for others.

AROs. FCX's ARO estimates are reflected on a third-party cost basis and are based on FCX's legal obligation to retire tangible, long-lived assets. A summary of changes in FCX's AROs for the years ended December 31 follows:

	2017	2016	2015
Balance at beginning of year	\$2,635	\$2,771	\$2,744
Liabilities incurred	14	12	97
Settlements and revisions to cash flow estimates, net	(112 )	529	<sup>a</sup> (69 )
Accretion expense	124	137	131
Dispositions	(10 )	(626 ) <sup>b</sup>	—
Spending	(71 )	(188 )	(132 )
Balance at end of year	2,580	2,635	2,771
Less current portion	(254 )	(240 )	(172 )
Long-term portion	\$2,326	\$2,395	\$2,599

Revisions to cash flow estimates were primarily related to revised estimates for an overburden stockpile in

a. Indonesia and at certain oil and gas properties.

b. Primarily reflects the sale of certain oil and gas properties.

ARO costs may increase or decrease significantly in the future as a result of changes in regulations, changes in engineering designs and technology, permit modifications or updates, changes in mine plans, settlements, inflation or other factors and as reclamation spending occurs. ARO activities and expenditures for mining operations generally are made over an extended period of time commencing near the end of the mine life; however, certain reclamation activities may be accelerated if legally required or if determined to be economically beneficial. The methods used or required to plug and abandon non-producing oil and gas wellbores; remove platforms, tanks, production equipment and flow lines; and restore wellsites could change over time.

Financial Assurance. New Mexico, Arizona, Colorado and other states, as well as federal regulations governing mine operations on federal land, require financial assurance to be provided for the estimated costs of mine reclamation and

closure, including groundwater quality protection programs. FCX has satisfied financial assurance requirements by using a variety of mechanisms, primarily involving parent company performance guarantees and financial capability demonstrations, but also including trust funds, surety bonds, letters of credit and other collateral. The applicable regulations specify financial strength tests that are designed to confirm a company's or guarantor's financial capability to fund estimated reclamation and closure costs. The amount of financial assurance FCX is required to provide will vary with changes in laws, regulations, reclamation and closure requirements, and cost estimates. At December 31, 2017, FCX's financial assurance obligations associated with these U.S. mine closure and reclamation/restoration costs totaled \$1.2 billion, of which \$703 million was in the form of guarantees issued by FCX and FMC. At December 31, 2017, FCX had trust assets totaling \$180 million (included in other assets), which

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are legally restricted to be used to satisfy its financial assurance obligations for its mining properties in New Mexico. In addition, FCX has financial assurance obligations for its oil and gas properties associated with plugging and abandoning wells and facilities totaling \$614 million. Where oil and gas guarantees associated with the Bureau of Ocean Energy Management do not include a stated cap, the amounts reflect management's estimates of the potential exposure.

**New Mexico Environmental and Reclamation Programs.** FCX's New Mexico operations are regulated under the New Mexico Water Quality Act and regulations adopted by the Water Quality Control Commission (WQCC). In connection with discharge permits, the New Mexico Environment Department (NMED) has required each of these operations to submit closure plans for NMED's approval. The closure plans must include measures to assure meeting applicable groundwater quality standards following the closure of discharging facilities and to abate groundwater or surface water contamination to meet applicable standards. In 2013, the WQCC adopted Supplemental Permitting Requirements for Copper Mining Facilities, which became effective on December 1, 2013, and specify closure requirements for copper mine facilities. The rules were adopted after an extensive stakeholder process in which FCX participated and were jointly supported by FCX and NMED. The rules are currently being challenged in the New Mexico Supreme Court by certain environmental organizations and the New Mexico Attorney General. Finalized closure plan requirements, including those resulting from application of the 2013 rules or the application of different standards if the rules are invalidated by the New Mexico Supreme Court, could result in material increases in closure costs for FCX's New Mexico operations.

FCX's New Mexico operations also are subject to regulation under the 1993 New Mexico Mining Act (the Mining Act) and the related rules that are administered by the Mining and Minerals Division (MMD) of the New Mexico Energy, Minerals and Natural Resources Department. Under the Mining Act, mines are required to obtain approval of plans describing the reclamation to be performed following cessation of mining operations. At December 31, 2017, FCX had accrued reclamation and closure costs of \$453 million for its New Mexico operations. As stated above, additional accruals may be required based on the state's periodic review of FCX's updated closure plans and any resulting permit conditions, and the amount of those accruals could be material.

**Arizona Environmental and Reclamation Programs.** FCX's Arizona properties are subject to regulatory oversight in several areas. ADEQ has adopted regulations for its aquifer protection permit (APP) program that require permits for, among other things, certain facilities, activities and structures used for mining, leaching, concentrating and smelting, and require compliance with aquifer water quality standards at an applicable point of compliance well or location during both operations and closure. The APP program also may require mitigation and discharge reduction or elimination of some discharges.

An application for an APP requires a proposed closure strategy that will meet applicable groundwater protection requirements following cessation of operations and an estimate of the cost to implement the closure strategy. An APP may specify closure requirements, which may include post-closure monitoring and maintenance. A more detailed closure plan must be submitted within 90 days after a permitted entity notifies ADEQ of its intent to cease operations. A permit applicant must demonstrate its financial ability to meet the closure costs approved by ADEQ. In 2014, the state enacted legislation requiring closure costs for facilities covered by APPs to be updated no more frequently than every five years and financial assurance mechanisms to be updated no more frequently than every two years. While some closure cost updates have occurred in the normal course as modifications to APPs, ADEQ has not yet formally notified FCX regarding the timetable for updating other closure cost estimates and financial assurance mechanisms for FCX's Arizona mine sites. In 2016, ADEQ approved a closure plan update for Sierrita, which resulted in increased closure costs. FCX may be required to begin updating its closure cost estimates at other Arizona sites in 2018.

Portions of Arizona mining facilities that operated after January 1, 1986, also are subject to the Arizona Mined Land Reclamation Act (AMLRA). AMLRA requires reclamation to achieve stability and safety consistent with post-mining

land use objectives specified in a reclamation plan. Reclamation plans must be approved by the State Mine Inspector and must include an estimate of the cost to perform the reclamation measures specified in the plan along with financial assurance. During 2016, Safford submitted an update to its reclamation plan, which increased its reclamation costs. FCX will continue to evaluate options for future reclamation and closure activities at its operating and non-operating sites, which are likely to result in adjustments to FCX's ARO liabilities, and those adjustments could be material. At December 31, 2017, FCX had accrued reclamation and closure costs of \$346 million for its Arizona operations.



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Colorado Reclamation Programs. FCX's Colorado operations are regulated by the Colorado Mined Land Reclamation Act (Reclamation Act) and regulations promulgated thereunder. Under the Reclamation Act, mines are required to obtain approval of plans for reclamation of lands affected by mining operations to be performed during mining or upon cessation of mining operations. During 2016, at the request of the Colorado Division of Reclamation Mining & Safety, the Climax mine submitted a revised cost estimate for its current reclamation plan, which did not materially change the closure plan cost. As of December 31, 2017, FCX had accrued reclamation and closure costs of \$56 million for its Colorado operations.

Chilean Reclamation and Closure Programs. In July 2011, the Chilean senate passed legislation regulating mine closure, which established new requirements for closure plans. FCX's El Abra operation submitted updated closure cost estimates based on the existing approved closure plan in November 2014, which were approved in August 2015. At December 31, 2017, FCX had accrued reclamation and closure costs of \$58 million for its El Abra operation.

Peruvian Reclamation and Closure Programs. Cerro Verde is subject to regulation under the Mine Closure Law administered by the Peruvian Ministry of Energy and Mines. Under the closure regulations, mines must submit a closure plan that includes the reclamation methods, closure cost estimates, methods of control and verification, closure and post-closure plans, and financial assurance. The latest closure plan and cost estimate for the Cerro Verde mine expansion were submitted to the Peruvian regulatory authorities in November 2013 and approved in August 2014. At December 31, 2017, Cerro Verde had accrued reclamation and closure costs of \$108 million.

Indonesian Reclamation and Closure Programs. The ultimate amount of reclamation and closure costs to be incurred at PT-FI's operations will be determined based on applicable laws and regulations and PT-FI's assessment of appropriate remedial activities in the circumstances, after consultation with governmental authorities, affected local residents and other affected parties and cannot currently be projected with precision. Some reclamation costs will be incurred during mining activities, while the remaining reclamation costs will be incurred at the end of mining activities, which are currently estimated to continue for approximately 24 years. At the end of 2016, PT-FI revised its estimates for an overburden stockpile to address ongoing erosion that occurred during 2016, a design change that increased the volume and updated cost estimates reflecting more recent productivity and costs at the overburden stockpile, which resulted in an increase in the ARO of \$372 million. At December 31, 2017, PT-FI had accrued reclamation and closure costs of \$977 million.

In December 2009, PT-FI submitted its revised mine closure plan to the Department of Energy and Mineral Resources for review and addressed comments received during the course of this review process. In December 2010, the Indonesian government issued a regulation regarding mine reclamation and closure, which requires a company to provide a mine closure guarantee in the form of a time deposit placed in a state-owned bank in Indonesia. In accordance with its COW, PT-FI continues to work with the Department of Energy and Mineral Resources to review the application of these requirements, including discussion of other options for satisfaction of the mine closure guarantee. During 2017, PT-FI funded \$22 million into a restricted time deposit account for mine closure guarantees and \$7 million for reclamation guarantees.

In October 2017, Indonesia's Ministry of Environment and Forestry (the Ministry) notified PT-FI of administrative sanctions related to certain activities the Ministry indicated are not reflected in its environmental permit. The Ministry also notified PT-FI that certain operational activities were inconsistent with factors set forth in its environmental permitting studies and that additional monitoring and improvements need to be undertaken related to air quality, water drainage, treatment and handling of certain wastes, and tailings management. PT-FI has been engaged in a process to update its permits through submissions and dialogue with the Ministry, which began in late 2014. PT-FI believes that it has submitted the required documentation to update its permits and is in the process of addressing other points raised by the Ministry.

Oil and Gas Properties. Substantially all of FM O&G's oil and gas leases require that, upon termination of economic production, the working interest owners plug and abandon non-producing wellbores, remove equipment and facilities from leased acreage, and restore land in accordance with applicable local, state and federal laws. Following several sales transactions in 2016 and 2017, FM O&G's remaining operating areas include the GOM shelf, offshore California, the Gulf Coast and the Rocky Mountain area as of December 31, 2017. FM O&G AROs cover approximately 250 wells and 140 platforms and other structures. At December 31, 2017, FM O&G had accrued \$553 million associated with its AROs.

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**Litigation.** FCX is involved in numerous legal proceedings that arise in the ordinary course of business or are associated with environmental issues arising from legacy operations conducted over the years by FMC and its affiliates as discussed in this note under “Environmental.” FCX is also involved periodically in reviews, inquiries, investigations and other proceedings initiated by or involving government agencies, some of which may result in adverse judgments, settlements, fines, penalties, injunctions or other relief. Management does not believe, based on currently available information, that the outcome of any legal proceeding will have a material adverse effect on FCX’s financial condition, although individual outcomes could be material to FCX’s operating results for a particular period, depending on the nature and magnitude of the outcome and the operating results for the period.

**Asbestos Claims.** Since approximately 1990, FMC and various subsidiaries have been named as defendants in a large number of lawsuits that claim personal injury either from exposure to asbestos allegedly contained in electrical wire products produced or marketed many years ago or from asbestos contained in buildings and facilities located at properties owned or operated by FMC affiliates, or from alleged asbestos in talc products. Many of these suits involve a large number of codefendants. Based on litigation results to date and facts currently known, FCX believes there is a reasonable possibility that losses may have been incurred related to these matters; however, FCX also believes that the amounts of any such losses, individually or in the aggregate, are not material to its consolidated financial statements. There can be no assurance, however, that future developments will not alter this conclusion.

**Tax and Other Matters.** FCX’s operations are in multiple jurisdictions where uncertainties arise in the application of complex tax regulations. Some of these tax regimes are defined by contractual agreements with the local government, while others are defined by general tax laws and regulations. FCX and its subsidiaries are subject to reviews of its income tax filings and other tax payments, and disputes can arise with the taxing authorities over the interpretation of its contracts or laws. The final taxes paid may be dependent upon many factors, including negotiations with taxing authorities. In certain jurisdictions, FCX must pay a portion of the disputed amount to the local government in order to formally appeal the assessment. Such payment is recorded as a receivable if FCX believes the amount is collectible.

**Cerro Verde Royalty Dispute.** SUNAT, the Peru national tax authority, has assessed mining royalties on ore processed by the Cerro Verde concentrator, which commenced operations in late 2006, for the period December 2006 to December 2011. Cerro Verde contested these assessments because it believes that its 1998 stability agreement exempts from royalties all minerals extracted from its mining concession, irrespective of the method used for processing those minerals. No assessments have been issued for the period from January 2012 through December 2013, and no assessments can be issued for years after 2013, as Cerro Verde began paying royalties on all of its production in January 2014 under its new 15-year stability agreement. Since 2014, Cerro Verde has been paying the disputed assessments for the period from December 2006 through December 2008 under an installment program (\$142 million paid by Cerro Verde through December 31, 2017).

In October 2017, the Peruvian Supreme Court issued a ruling in favor of SUNAT that the assessments of royalties for the year 2008 on ore processed by the Cerro Verde concentrator were proper under Peruvian law.

As a result of the unfavorable Peruvian Supreme Court ruling on the 2008 royalty dispute, Cerro Verde recorded pre-tax charges totaling \$348 million (\$355 million including net tax charges and \$186 million net of noncontrolling interests) in 2017, consisting of \$244 million in royalty assessments, \$151 million of penalties and interest related to the December 2006 to December 2008 assessments, and \$89 million for related items (primarily associated with the special mining tax and net assets tax) that Cerro Verde would have incurred under the view that its concentrator was not stabilized.

A summary of the charges recorded in 2017 for the Cerro Verde royalty dispute follows (in millions):  
Royalty and related  
assessment charges:

Production and delivery	\$203	<sup>a</sup>
Interest expense, net	145	
Provision for income taxes	7	<sup>b</sup>
Net loss attributable to noncontrolling interests	(169)	
	\$186	

Includes \$175 million related to disputed royalty assessments for the period from December 2006 to September a. 2011 (when royalties were determined based on revenues), \$6 million of penalties related to the December 2006 to December 2008 royalty assessments and \$22 million of related charges primarily associated with the net assets tax.

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Includes tax charges of \$136 million for disputed royalties (\$69 million) and other related mining taxes (\$67 million) for the period October 2011 through the year 2013 when royalties were determined based on operating income, mostly offset by a tax benefit of \$129 million associated with disputed royalties and other related mining taxes for the period December 2006 through December 2013.

Cerro Verde acted in good faith in applying the provisions of its 1998 stability agreement and continues to evaluate alternatives to defend its rights. Cerro Verde intends to seek a waiver available under Peruvian law of penalties and interest associated with this matter and has not recorded charges for potential penalties and interest totaling \$385 million (\$206 million net of noncontrolling interests) at December 31, 2017, as FCX believes that Cerro Verde can obtain a waiver under Peruvian law and a loss is not probable. Cerro Verde also intends to file a reimbursement claim with SUNAT for penalties and interest paid under the installment plan for the December 2006 to December 2008 assessments, and may have claims for reimbursement of payments it would not have made in the absence of the stabilization agreement, such as the overpayments made for a special (voluntary) levy (GEM), import duties and civil association contributions. No amounts have been recorded for these potential gain contingencies at December 31, 2017.

Other Peruvian Tax Matters. Cerro Verde has also received assessments from SUNAT for additional taxes, penalties and interest related to various audit exceptions for income and other taxes. Cerro Verde has filed or will file objections to the assessments because it believes it has properly determined and paid its taxes. A summary of these assessments follows:

Tax Year	Tax Assessment	Penalty and Interest Assessment	Total
2003 to 2005	\$ 16	\$ 54	\$70
2006	7	59	66
2007 to 2008	33	31	64
2009	59	49	108
2010	66	107	173
2011, 2014 to 2017	72	64	136
	\$ 253	\$ 364	\$617

As of December 31, 2017, Cerro Verde had paid \$288 million on these disputed tax assessments. A reserve has been applied against these payments totaling \$103 million, resulting in a net receivable of \$185 million (included in other assets), which Cerro Verde believes is collectible.

Indonesia Tax Matters. PT-FI has received assessments from the Indonesian tax authorities for additional taxes and interest related to various audit exceptions for income and other taxes. PT-FI has filed objections to the assessments because it believes it has properly determined and paid its taxes. Excluding surface water and withholding tax assessments discussed below and the Indonesian government's imposition of a 7.5 percent export duty (refer to Note 13), a summary of these assessments follows:

Tax Year	Tax Assessment	Interest Assessment	Total
2005	\$ 77	\$ 37	\$114
2007	48	24	72
2008, 2010 to 2011	56	37	93
2012	125	1	126
2013	160	80	240
2014	160	7	167
2015	169	—	169

\$ 795      \$ 186      \$981

As of December 31, 2017, PT-FI had paid \$417 million (included in other assets) on disputed tax assessments, which it believes is collectible.

In December 2009, PT-FI was notified by Indonesian tax authorities that it was obligated to pay value-added taxes on certain goods imported after the year 2000. In December 2014, PT-FI paid \$269 million for value-added taxes for the period from November 2005 through the year 2009 and sought a refund. In March 2016, PT-FI collected a cash refund of \$196 million and \$38 million was offset against other tax liabilities. The remaining balance of the amount originally paid was reduced by currency exchange and other losses.

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PT-FI received assessments from the local regional tax authority in Papua, Indonesia, for additional taxes and penalties related to surface water taxes for the period from January 2011 through December 2017. PT-FI has filed or will file appeals with the Indonesia Tax Court. During 2017, the Indonesia Tax Court issued rulings against PT-FI with respect to assessments for additional taxes and penalties for the period from January 2011 through December 2015 in the amount of \$400 million (based on the exchange rate as of December 31, 2017, and including \$239 million in penalties). The aggregate amount of assessments received from January 2016 through December 2017 was an additional \$130 million (based on the exchange rate as of December 31, 2017, and including \$65 million in penalties). No charges have been recorded for these assessments as of December 31, 2017, because PT-FI believes its COW exempts it from these payments and that it has the right to contest these assessments in the Indonesia Tax Court and ultimately the Indonesia Supreme Court. FCX estimates the total exposure based on the exchange rate as of December 31, 2017, totals \$530 million, including penalties. As of February 20, 2018, PT-FI has not paid and does not intend to pay these assessments unless there is a mechanism established to secure a refund for any such payments upon the final court decision. Additionally, PT-FI is seeking to address this matter in connection with the ongoing negotiations with the Indonesian government to resolve PT-FI's long-term mining rights. If the local regional tax authority were to force PT-FI to make these payments through the threat of expropriation of assets or other measures, such amounts may not be recoverable from the local regional tax authority and may result in a charge to operating income. At this time, PT-FI does not believe that the threat of seizure of PT-FI assets is imminent.

In November 2017, PT-FI received an Indonesia Supreme Court decision that overturned a Tax Court case previously decided in favor of PT-FI related to 2005 assessments of less than \$1 million for employee withholding taxes. PT-FI has other pending cases at the Indonesia Supreme Court related to withholding taxes for employees and other service providers for the year 2005 and the year 2007, which total approximately \$66 million (based on the December 31, 2017, exchange rate), including penalties and interest. PT-FI believes the ruling in the case regarding the 2005 assessments is inconsistent with a ruling by the Indonesia Supreme Court in a similar case and is also inconsistent with PT-FI's COW. PT-FI plans to continue to defend the outstanding cases and has not recorded charges for those cases because it does not believe a loss is probable. Because of a 2013 Ministry of Finance ruling that definitively defines withholding tax rates for employees and other service providers, and the statute of limitations, PT-FI does not believe it has exposure in any years after 2007.

Letters of Credit, Bank Guarantees and Surety Bonds. Letters of credit and bank guarantees totaled \$283 million at December 31, 2017, primarily for environmental and asset retirement obligations, the Cerro Verde royalty dispute (refer to discussion above), workers' compensation insurance programs, tax and customs obligations, and other commercial obligations. In addition, FCX had surety bonds totaling \$326 million at December 31, 2017, primarily associated with environmental and asset retirement obligations.

Insurance. FCX purchases a variety of insurance products to mitigate potential losses, which typically have specified deductible amounts or self-insured retentions and policy limits. FCX generally is self-insured for U.S. workers' compensation, but purchases excess insurance up to statutory limits. An actuarial analysis is performed twice a year on the various casualty insurance programs covering FCX's U.S.-based mining operations, including workers' compensation, to estimate expected losses. At December 31, 2017, FCX's liability for expected losses under these insurance programs totaled \$57 million, which consisted of a current portion of \$10 million (included in accounts payable and accrued liabilities) and a long-term portion of \$47 million (included in other liabilities). In addition, FCX has receivables of \$16 million (a current portion of \$2 million included in other accounts receivable and a long-term portion of \$14 million included in other assets) for expected claims associated with these losses to be filed with insurance carriers.

FCX's oil and gas operations are subject to all of the risks normally incident to the production of oil and gas, including well blowouts, cratering, explosions, oil spills, releases of gas or well fluids, fires, pollution and releases of toxic gas, each of which could result in damage to or destruction of oil and gas wells, production facilities or other property, or

injury to persons. While FCX is not fully insured against all risks related to its oil and gas operations, its insurance policies provide limited coverage for losses or liabilities relating to pollution, with broader coverage for sudden and accidental occurrences. FCX is self-insured for named windstorms in the GOM.



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## NOTE 13. COMMITMENTS AND GUARANTEES

**Operating Leases.** FCX leases various types of properties, including offices and equipment. Future minimum rentals under non-cancelable leases at December 31, 2017 (excluding amounts related to assets held for sale), total \$34 million in 2018, \$24 million in 2019, \$20 million in 2020, \$18 million in 2021, \$17 million in 2022 and \$95 million thereafter. Minimum payments under operating leases have not been reduced by aggregate minimum sublease rentals, which are minimal. Total aggregate rental expense under operating leases was \$59 million in 2017 and \$71 million in both 2016 and 2015.

**Contractual Obligations.** Based on applicable prices at December 31, 2017, FCX has unconditional purchase obligations of \$3.4 billion, primarily comprising the procurement of copper concentrate (\$2.4 billion), electricity (\$0.4 billion) and transportation services (\$0.3 billion). Some of FCX's unconditional purchase obligations are settled based on the prevailing market rate for the service or commodity purchased. In some cases, the amount of the actual obligation may change over time because of market conditions. Obligations for copper concentrate provide for deliveries of specified volumes to Atlantic Copper at market-based prices. Electricity obligations are primarily for long-term power purchase agreements in North America and contractual minimum demand at the South America mines. Transportation obligations are primarily for South America contracted ocean freight. Amounts exclude approximately \$0.8 billion in total contractual obligations related to assets held for sale, which is primarily for the procurement of cobalt. Obligations for cobalt provide for deliveries of specified volumes to Freeport Cobalt (an asset held for sale) at market-based prices.

FCX's unconditional purchase obligations by year total \$2.4 billion in 2018, \$537 million in 2019, \$91 million in 2020, \$92 million in 2021, \$35 million in 2022 and \$270 million thereafter. During the three-year period ended December 31, 2017, FCX fulfilled its minimum contractual purchase obligations.

**Mining Contracts — Indonesia.** FCX is entitled to mine in Indonesia under the COW between PT-FI and the Indonesian government. The original COW was entered into in 1967 and was replaced with the current COW in 1991. The initial term of the current COW expires in 2021 but can be extended by PT-FI for two 10-year periods subject to Indonesian government approval, which pursuant to the COW cannot be withheld or delayed unreasonably.

The copper royalty rate payable by PT-FI under its COW, prior to modifications discussed below as a result of the July 2014 Memorandum of Understanding (MOU), varied from 1.5 percent of copper net revenue at a copper price of \$0.90 or less per pound to 3.5 percent at a copper price of \$1.10 or more per pound. The COW royalty rate for gold and silver sales was at a fixed rate of 1.0 percent.

A large part of the mineral royalties under Indonesian government regulations is designated to the provinces from which the minerals are extracted. In connection with its fourth concentrator mill expansion completed in 1998, PT-FI agreed to pay the Indonesian government additional royalties (royalties not required by the COW) to provide further support to the local governments and to the people of the Indonesian province of Papua. The additional royalties were paid on production exceeding specified annual amounts of copper, gold and silver generated when PT-FI's milling facilities operated above 200,000 metric tons of ore per day. The additional royalty for copper equaled the COW royalty rate, and for gold and silver equaled twice the COW royalty rates. Therefore, PT-FI's royalty rate on copper net revenues from production above the agreed levels was double the COW royalty rate, and the royalty rates on gold and silver sales from production above the agreed levels were triple the COW royalty rates.

In January 2014, the Indonesian government published regulations pursuant to the 2009 mining law that, among other things, imposed a progressive export duty on copper concentrate and restricted exports of copper concentrate and anode slimes (a by-product of the refining process containing metals, including gold) after January 12, 2017. PT-FI's COW authorizes it to export concentrate and specifies the taxes and other fiscal terms available to its operations. The COW states that PT-FI shall not be subject to taxes, duties or fees subsequently imposed or approved by the

Indonesian government except as expressly provided in the COW. Additionally, PT-FI complied with the requirements of its COW for local processing by arranging for the construction and commissioning of Indonesia's only copper smelter and refinery, which is owned by PT Smelting (refer to Note 6).

In July 2014, PT-FI entered into a MOU with the Indonesian government, under which PT-FI and the Indonesian government agreed to negotiate an amended COW to extend PT-FI's operations beyond 2021 on acceptable terms. Subject to concluding an agreement to extend PT-FI's operations, PT-FI agreed to: (i) construct new smelter capacity in Indonesia and provide a \$115 million assurance bond to support its commitment; (ii) pay export duties until certain smelter development milestones were met (initially set at 7.5 percent, declining to 5.0 percent when

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smelter development progress exceeds 7.5 percent and eliminated when development progress exceeds 30 percent); (iii) divest an additional 20.64 percent interest in PT-FI at fair market value to Indonesian participants; (iv) increase the royalty paid on copper to 4.0 percent from 3.5 percent under the COW; and (v) increase the royalty paid on gold and silver to 3.75 percent from 1.0 percent under the COW. The MOU also anticipated an amendment of the COW within six months to address other matters. In January 2015, the MOU was extended to July 25, 2015, and ultimately expired on that date. Following the expiration of the MOU, the Indonesian government has continued to require the smelter bond, and to impose the increased royalty rates and export duties. PT-FI's royalties totaled \$173 million in 2017, \$131 million in 2016 and \$114 million in 2015; its export duties totaled \$115 million in 2017, \$95 million in 2016 and \$109 million in 2015.

In October 2015, the Indonesian government provided a letter of assurance to PT-FI indicating that it would revise regulations allowing it to approve the extension of PT-FI's operations beyond 2021, and provide the same rights and the same level of legal and fiscal certainty provided under the current COW.

In January and February 2017, the Indonesian government issued new regulations pursuant to the 2009 mining law to address exports of unrefined metals, including copper concentrate and anode slimes, and other matters related to the mining sector. The new regulations permit the continuation of copper concentrate exports for a five-year period through January 2022, subject to various conditions, including conversion from a contract of work to a special mining license (known as an IUPK, which does not provide the same level of fiscal and legal protections as PT-FI's COW, which remains in effect), a commitment to the completion of smelter construction in five years and payment of export duties to be determined by the Ministry of Finance. In addition, the new regulations enable application for an extension of mining rights five years before expiration of the IUPK and require foreign IUPK holders to divest a 51 percent interest to Indonesian interests no later than the tenth year of production. Export licenses would be valid for one-year periods, subject to review every six months, depending on smelter construction progress.

Following the issuance of the January and February 2017 regulations and discussions with the Indonesian government, PT-FI advised the government that it was prepared to convert its COW to an IUPK, subject to extension of its long-term mining rights to 2041 and obtaining an investment stability agreement providing contractual rights with the same level of legal and fiscal certainty provided under its COW, and provided that the COW would remain in effect until it is replaced by a mutually satisfactory alternative. PT-FI also committed to commence construction of a new smelter during a five-year time frame after approval of the extension of its long-term mining rights.

On January 12, 2017, PT-FI suspended exports in response to Indonesian regulations in effect at the time. In addition, as a result of labor disturbances and a delay in the renewal of its export license for anode slimes, PT Smelting's operations were shut down from mid-January 2017 until early March 2017. On February 10, 2017, PT-FI was forced to suspend production as a result of limited storage capacity at PT-FI and PT Smelting. On April 21, 2017, the Indonesian government issued a permit to PT-FI that allowed exports to resume for a six-month period, and PT-FI commenced export shipments.

In mid-February 2017, pursuant to the COW's dispute resolution provisions, PT-FI provided formal notice to the Indonesian government of an impending dispute listing the government's breaches and violations of the COW, including, but not limited to, the: (i) imposition of restrictions on PT-FI's basic right to export mining products in violation of the COW; (ii) imposition of export duties other than those taxes and other charges expressly provided for in the COW; (iii) imposition of surface water taxes in excess of the restrictions imposed by the COW (refer to Note 12 for further discussion of these assessments); (iv) requirement for PT-FI build a smelter, when no such requirement was in the COW; (v) unreasonably withholding and delaying the approval of the two successive ten-year extensions of the term of the COW; and (vi) imposition of divestment requirements not provided for in the COW. PT-FI continues to reserve its rights under these provisions.

As a result of the 2017 regulatory restrictions and uncertainties regarding long-term investment stability, PT-FI took actions to adjust its cost structure, slow investments in its underground development projects and new smelter, and place certain of its workforce on furlough programs.

In late March 2017, the Indonesian government amended the regulations to enable PT-FI to retain its COW until replaced with an IUPK accompanied by an investment stability agreement, and to grant PT-FI a temporary IUPK. In April 2017, PT-FI entered into a Memorandum of Understanding with the Indonesian government (the 2017 MOU) confirming that the COW would continue to be valid and honored until replaced by a mutually agreed IUPK and

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investment stability agreement. In the 2017 MOU, PT-FI agreed to continue to pay a 5.0 percent export duty during this period. Subsequently, the Customs Office of the Minister of Finance refused to recognize the 5.0 percent export duty under the 2017 MOU and imposed a 7.5 percent export duty under the Ministry of Finance regulations, which PT-FI has paid under protest since resuming exports in April 2017. PT-FI is disputing the incremental 2.5 percent export duty while the matter is pending in Indonesia Tax Court proceedings, and amounts paid are being held in a restricted cash account or in a long-term receivable (\$38 million total balance at December 31, 2017, of which \$22 million was included in other current assets and \$16 million in other assets in the consolidated balance sheets) that PT-FI expects to have released or refunded in full once the matter is resolved.

In August 2017, FCX and the Indonesian government reached an understanding on a framework that would replace the COW while providing PT-FI with long-term mining rights. This framework includes (i) conversion from the COW to an IUPK providing PT-FI with long-term mining rights through 2041; (ii) Indonesian government certainty of fiscal and legal terms during the term of the IUPK; (iii) PT-FI commitment to construct a new smelter in Indonesia within five years of reaching a definitive agreement; and (iv) divestment of 51 percent of the project area interests to Indonesian participants at fair market value, structured so that FCX retains control over operations and governance of PT-FI. Execution of a definitive agreement will require approval by the Board and PT-FI's joint venture partner, Rio Tinto, as well as the modification or revocation of current regulations and the implementation of new regulations by the Indonesian government. FCX cannot currently predict whether there will be any material accounting and tax impacts associated with the divestment.

In late 2017, the Indonesian government (including the regional government of Papua Province and Mimika Regency) and PT Indonesia Asahan Aluminium (Inalum), a state-owned enterprise, which will lead the government's consortium of investors, agreed to form a special purpose company to acquire Grasberg project area interests. Inalum is wholly owned by the Indonesian government and currently holds 9.36 percent of PT-FI's outstanding common stock. FCX is engaged in discussions with Inalum and Rio Tinto regarding potential arrangements that would result in the Inalum consortium acquiring interests that would meet the Indonesian government's 51 percent ownership objective in a manner satisfactory to all parties, and in a structure that would provide for continuity of FCX's management of PT-FI's operations and governance of the business. The parties continue to negotiate documentation on a comprehensive agreement for PT-FI's extended operations and to reach agreement on timing, process and governance matters relating to the divestment. The parties have a mutual objective of completing negotiations and the required documentation during the first half of 2018.

In December 2017, PT-FI was granted an extension of its temporary IUPK through June 30, 2018, to enable exports to continue while negotiations on a definitive agreement proceed. In February 2018, PT-FI received an extension of its export license through February 15, 2019. On February 15, 2018, PT Smelting submitted an application to renew its anode slimes export license, which expires March 1, 2018.

Until a definitive agreement is reached, PT-FI has reserved all rights under its COW, including dispute resolution procedures. FCX cannot predict whether PT-FI will be successful in reaching a satisfactory agreement on the terms of its long-term mining rights. If PT-FI is unable to reach a definitive agreement with the Indonesian government on its long-term rights, FCX intends to reduce or defer investments significantly in underground development projects and will pursue dispute resolution procedures under the COW.

Other. In 2016, FCX negotiated the termination and settlement of FM O&G's drilling rig contracts with Noble Drilling (U.S.) LLC (Noble) and Rowan Companies plc (Rowan). Under the settlement with Noble, FCX issued 48.1 million shares of its common stock (representing a value of \$540 million) during second-quarter 2016, and Noble immediately sold these shares. Under the settlement with Rowan, FCX paid \$215 million in cash during 2016. FCX also agreed to provide contingent payments of up to \$75 million to Noble and up to \$30 million to Rowan, depending on the average price of crude oil over the 12-month period ending June 30, 2017. In January 2017, FCX paid \$6 million to early settle

a portion of the Rowan contingent payments and no additional payments were due when the contingency period ended on June 30, 2017. As a result of the settlements, FM O&G was released from a total of \$1.1 billion in payment obligations under its three drilling rig contracts.

Community Development Programs. FCX has adopted policies that govern its working relationships with the communities where it operates. These policies are designed to guide its practices and programs in a manner that respects basic human rights and the culture of the local people impacted by FCX's operations. FCX continues to make significant expenditures on community development, education, training and cultural programs.

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In 1996, PT-FI established the Freeport Partnership Fund for Community Development (Partnership Fund) through which PT-FI has made available funding and technical assistance to support community development initiatives in the areas of health, education and economic development of the area. PT-FI has committed through 2018 to provide one percent of its annual revenue for the development of the local people in its area of operations through the Partnership Fund. PT-FI charged \$44 million in 2017, \$33 million in 2016 and \$27 million in 2015 to cost of sales for this commitment.

Guarantees. FCX provides certain financial guarantees (including indirect guarantees of the indebtedness of others) and indemnities.

Prior to its acquisition by FCX, FMC and its subsidiaries have, as part of merger, acquisition, divestiture and other transactions, from time to time, indemnified certain sellers, buyers or other parties related to the transaction from and against certain liabilities associated with conditions in existence (or claims associated with actions taken) prior to the closing date of the transaction. As part of these transactions, FMC indemnified the counterparty from and against certain excluded or retained liabilities existing at the time of sale that would otherwise have been transferred to the party at closing. These indemnity provisions generally now require FCX to indemnify the party against certain liabilities that may arise in the future from the pre-closing activities of FMC for assets sold or purchased. The indemnity classifications include environmental, tax and certain operating liabilities, claims or litigation existing at closing and various excluded liabilities or obligations. Most of these indemnity obligations arise from transactions that closed many years ago, and given the nature of these indemnity obligations, it is not possible to estimate the maximum potential exposure. Except as described in the following sentence, FCX does not consider any of such obligations as having a probable likelihood of payment that is reasonably estimable, and accordingly, has not recorded any obligations associated with these indemnities. With respect to FCX's environmental indemnity obligations, any expected costs from these guarantees are accrued when potential environmental obligations are considered by management to be probable and the costs can be reasonably estimated.

**NOTE 14. FINANCIAL INSTRUMENTS**

FCX does not purchase, hold or sell derivative financial instruments unless there is an existing asset or obligation, or it anticipates a future activity that is likely to occur and will result in exposure to market risks, which FCX intends to offset or mitigate. FCX does not enter into any derivative financial instruments for speculative purposes, but has entered into derivative financial instruments in limited instances to achieve specific objectives. These objectives principally relate to managing risks associated with commodity price changes, foreign currency exchange rates and interest rates.

Commodity Contracts. From time to time, FCX has entered into derivative contracts to hedge the market risk associated with fluctuations in the prices of commodities it purchases and sells. Derivative financial instruments used by FCX to manage its risks do not contain credit risk-related contingent provisions. As a result of the acquisition of the oil and gas business in 2013, FCX assumed a variety of crude oil and natural gas commodity derivatives to hedge the exposure to the volatility of crude oil and natural gas commodity prices, all of which had matured by December 31, 2015. As of December 31, 2017 and 2016, FCX had no price protection contracts relating to its mine production. A discussion of FCX's derivative contracts and programs follows.

**Derivatives Designated as Hedging Instruments – Fair Value Hedges**

Copper Futures and Swap Contracts. Some of FCX's U.S. copper rod customers request a fixed market price instead of the COMEX average copper price in the month of shipment. FCX hedges this price exposure in a manner that allows it to receive the COMEX average price in the month of shipment while the customers pay the fixed price they requested. FCX accomplishes this by entering into copper futures or swap contracts. Hedging gains or losses from these copper futures and swap contracts are recorded in revenues. FCX did not have any significant gains or losses during the three years ended December 31, 2017, resulting from hedge ineffectiveness. At December 31, 2017, FCX

held copper futures and swap contracts that qualified for hedge accounting for 41 million pounds at an average contract price of \$3.02 per pound, with maturities through June 2019.

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A summary of gains (losses) recognized in revenues for derivative financial instruments related to commodity contracts that are designated and qualify as fair value hedge transactions, along with the unrealized gains (losses) on the related hedged item for the years ended December 31 follows:

	2017	2016	2015
Copper futures and swap contracts:			
Unrealized gains (losses):			
Derivative financial instruments	\$ 4	\$ 16	\$(3)
Hedged item – firm sales commitments	(4 )	(16 )	3
Realized gains (losses):			
Matured derivative financial instruments	30	1	(34 )

## Derivatives Not Designated as Hedging Instruments

Embedded Derivatives. As described in Note 1 under “Revenue Recognition,” certain FCX copper concentrate, copper cathode and gold sales contracts provide for provisional pricing primarily based on the LME copper price or the COMEX copper price and the London gold price at the time of shipment as specified in the contract. Similarly, FCX purchases copper and cobalt under contracts that provide for provisional pricing. Mark-to-market price fluctuations from these embedded derivatives are recorded through the settlement date and are reflected in revenues for sales contracts and in cost of sales as production and delivery costs for purchase contracts. A summary of FCX’s embedded derivatives at December 31, 2017, follows:

	Open Positions	Average Price Per Unit Contract	Market	Maturities Through
Embedded derivatives in provisional sales contracts:				
Copper (millions of pounds)	642	\$3.06	\$ 3.28	May 2018
Gold (thousands of ounces)	318	1,269	1,300	March 2018
Embedded derivatives in provisional purchase contracts:				
Copper (millions of pounds)	120	3.02	3.28	April 2018
Cobalt (millions of pounds) <sup>a</sup>	6	22.97	26.81	March 2018

a. Relates to assets held for sale.

Crude Oil and Natural Gas Contracts. As a result of the acquisition of the oil and gas business, FCX had derivative contracts that consisted of crude oil options, and crude oil and natural gas swaps. These derivatives were not designated as hedging instruments and were recorded at fair value with the mark-to-market gains and losses recorded in revenues. The crude oil options were entered into by PXP to protect the realized price of a portion of expected future sales in order to limit the effects of crude oil price decreases. The remaining contracts matured in 2015, and FCX had no outstanding crude oil or natural gas derivative contracts as of December 31, 2017 or 2016.

As part of the terms of the agreement to sell the onshore California oil and gas properties, FM O&G entered into derivative contracts during October 2016 to hedge (i) approximately 72 percent of its forecasted crude oil sales through 2020 with fixed-rate swaps for 19.4 million barrels from November 2016 through December 2020 at a price of \$56.04 per barrel and costless collars for 5.2 million barrels from January 2018 through December 2020 at a put price of \$50.00 per barrel and a call price of \$63.69 per barrel, and (ii) approximately 48 percent of its forecasted natural gas purchases through 2020 with fixed-rate swaps for 28.9 million British thermal units (MMBtu) from November 2016 through December 2020 at a price of \$3.1445 per MMBtu related to these onshore California properties. Sentinel assumed these contracts at the time of the sale in December 2016. These derivative contracts were not designated as hedges for accounting purposes, and were recorded at fair value with the mark-to-market gains and losses recorded in revenues (oil contracts) and production costs (natural gas contracts).

Copper Forward Contracts. Atlantic Copper, FCX's wholly owned smelting and refining unit in Spain, enters into copper forward contracts designed to hedge its copper price risk whenever its physical purchases and sales pricing periods do not match. These economic hedge transactions are intended to hedge against changes in copper prices, with the mark-to-market hedging gains or losses recorded in cost of sales. At December 31, 2017, Atlantic Copper held net copper forward sales contracts for 4 million pounds at an average contract price of \$3.11 per pound, with maturities through February 2018.

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Summary of Gains (Losses). A summary of the realized and unrealized gains (losses) recognized in operating income (loss) for commodity contracts that do not qualify as hedge transactions, including embedded derivatives, for the years ended December 31 follows:

	2017	2016	2015
Embedded derivatives in provisional copper and gold sales contracts <sup>a</sup>	\$515	\$266	\$(406)
Crude oil options and swaps <sup>a</sup>	—	(35)	87
Copper forward contracts <sup>b</sup>	(15)	5	(15)

a. Amounts recorded in revenues.

b. Amounts recorded in cost of sales as production and delivery costs.

## Unsettled Derivative Financial Instruments

A summary of the fair values of unsettled commodity derivative financial instruments follows:

	December 31,	
	2017	2016
Commodity Derivative Assets:		
Derivatives designated as hedging instruments:		
Copper futures and swap contracts	\$ 11	\$ 9
Derivatives not designated as hedging instruments:		
Embedded derivatives in provisional copper and gold sales/purchase contracts	155	137
Copper forward contracts	1	—
Total derivative assets	\$ 167	\$ 146
Commodity Derivative Liabilities:		
Derivatives designated as hedging instruments:		
Copper futures and swap contracts	\$—	\$2
Derivatives not designated as hedging instruments:		
Embedded derivatives in provisional copper and gold sales/purchase contracts	31	56
Copper forward contracts	2	—
Total derivative liabilities	\$33	\$58

The table above excludes \$24 million of embedded derivatives in provisional cobalt purchase contracts at December 31, 2017, which are reflected in liabilities held for sale.

FCX's commodity contracts have netting arrangements with counterparties with which the right of offset exists, and it is FCX's policy to generally offset balances by counterparty on the balance sheet. FCX's embedded derivatives on provisional sales/purchases contracts are netted with the corresponding outstanding receivable/payable balances.

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A summary of these unsettled commodity contracts that are offset in the balance sheet follows:

	Assets at		Liabilities	
	December		at	
	31,		December	
	2017	2016	2017	2016
Gross amounts recognized:				
Commodity contracts:				
Embedded derivatives in provisional sales/purchase contracts	\$155	\$137	\$31	\$56
Copper derivatives	12	9	2	2
	167	146	33	58
Less gross amounts of offset:				
Commodity contracts:				
Embedded derivatives in provisional sales/purchase contracts	—	12	—	12
Copper derivatives	1	2	1	2
	1	14	1	14
Net amounts presented in balance sheet:				
Commodity contracts:				
Embedded derivatives in provisional sales/purchase contracts	155	125	31	44
Copper derivatives	11	7	1	—
	\$166	\$132	\$32	\$44
Balance sheet classification:				
Trade accounts receivable	\$151	\$119	\$—	\$13
Other current assets	11	7	—	—
Accounts payable and accrued liabilities	4	6	32	31
	\$166	\$132	\$32	\$44

The table above excludes \$24 million of embedded derivatives in provisional cobalt purchase contracts at December 31, 2017, which are reflected in liabilities held for sale.

**Credit Risk.** FCX is exposed to credit loss when financial institutions with which it has entered into derivative transactions (commodity, foreign exchange and interest rate swaps) are unable to pay. To minimize the risk of such losses, FCX uses counterparties that meet certain credit requirements and periodically reviews the creditworthiness of these counterparties. FCX does not anticipate that any of the counterparties it deals with will default on their obligations. As of December 31, 2017, the maximum amount of credit exposure associated with derivative transactions was \$166 million.

**Other Financial Instruments.** Other financial instruments include cash and cash equivalents, accounts receivable, restricted cash, investment securities, legally restricted funds, accounts payable and accrued liabilities, and long-term debt. The carrying value for cash and cash equivalents (which included time deposits of \$2.9 billion at December 31, 2017, and \$64 million at December 31, 2016), accounts receivable, restricted cash, and accounts payable and accrued liabilities approximates fair value because of their short-term nature and generally negligible credit losses (refer to Note 15 for the fair values of investment securities, legally restricted funds and long-term debt).

In addition, as of December 31, 2017, FCX has contingent consideration assets related to certain 2016 asset sales (refer to Note 15 for the related fair value and to Note 2 for further discussion of these instruments).

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## NOTE 15. FAIR VALUE MEASUREMENT

Fair value accounting guidance includes a hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1) and the lowest priority to unobservable inputs (Level 3). FCX recognizes transfers between levels at the end of the reporting period. FCX did not have any significant transfers in or out of Level 1, 2 or 3 for 2017.

FCX's financial instruments are recorded on the consolidated balance sheets at fair value except for contingent consideration associated with the sale of the Deepwater GOM oil and gas properties (which was recorded under the loss recovery approach) and debt. A summary of the carrying amount and fair value of FCX's financial instruments (including those measured at NAV as a practical expedient), other than cash and cash equivalents, accounts receivable, restricted cash, and accounts payable and accrued liabilities (refer to Note 14) follows:

	At December 31, 2017					
	Carrying Amount	Fair Value	NAV	Level 1	Level 2	Level 3
<b>Assets</b>						
Investment securities: <sup>a,b</sup>						
U.S. core fixed income fund	\$25	\$25	\$25	\$	—\$	—\$
Equity securities	5	5	—	5	—	—
Total	30	30	25	5	—	—
Legally restricted funds: <sup>a</sup>						
U.S. core fixed income fund	55	55	55	—	—	—
Government bonds and notes	40	40	—	—	40	—
Corporate bonds	32	32	—	—	32	—
Government mortgage-backed securities	27	27	—	—	27	—
Asset-backed securities	15	15	—	—	15	—
Money market funds	11	11	—	11	—	—
Collateralized mortgage-backed securities	8	8	—	—	8	—
Municipal bonds	1	1	—	—	1	—
Total	189	189	55	11	123	—
Derivatives:						
Embedded derivatives in provisional sales/purchase contracts in a gross asset position <sup>c</sup>	155	155	—	—	155	—
Copper futures and swap contracts <sup>c</sup>	11	11	—	9	2	—
Copper forward contracts <sup>c</sup>	1	1	—	—	1	—
Contingent consideration for the sales of TFHL and onshore California oil and gas properties <sup>a</sup>	108	108	—	—	108	—
Total	275	275	—	9	266	—
Contingent consideration for the sale of the Deepwater GOM oil and gas properties <sup>a</sup>	150	134	—	—	—	134
<b>Liabilities</b>						
Derivatives: <sup>c</sup>						
Embedded derivatives in provisional sales/purchase contracts in a gross liability position <sup>d</sup>	\$ 31	\$ 31	\$—	\$ 31	\$—	\$—
Copper forward contracts	2	2	—	1	1	—
Total	33	33	—	1	32	—

Long-term debt, including current portion<sup>e</sup>                      13,117   13,269   —13,269 —

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	At December 31, 2016					
	Carrying Value					
	Amount	Total	NAV	Level 1	Level 2	Level 3
<b>Assets</b>						
Investment securities: <sup>a,b</sup>						
U.S. core fixed income fund	\$23	\$23	\$ 23	\$ —	\$ —	\$ —
Money market funds	22	22	—	22	—	—
Equity securities	5	5	—	5	—	—
Total	50	50	23	27	—	—
Legally restricted funds: <sup>a</sup>						
U.S. core fixed income fund	53	53	53	—	—	—
Government bonds and notes	36	36	—	—	36	—
Corporate bonds	32	32	—	—	32	—
Government mortgage-backed securities	25	25	—	—	25	—
Asset-backed securities	16	16	—	—	16	—
Money market funds	12	12	—	12	—	—
Collateralized mortgage-backed securities	8	8	—	—	8	—
Municipal bonds	1	1	—	—	1	—
Total	183	183	53	12	118	—
Derivatives:						
Embedded derivatives in provisional sales/purchase contracts in a gross asset position <sup>c</sup>	137	137	—	—	137	—
Copper futures and swap contracts <sup>c</sup>	9	9	—	8	1	—
Contingent consideration for the sales of TFHL and onshore California oil and gas properties <sup>a</sup>	46	46	—	—	46	—
Total	192	192	—	8	184	—
Contingent consideration for the sale of the Deepwater GOM oil and gas properties <sup>a</sup>	150	135	—	—	—	135
<b>Liabilities</b>						
Derivatives: <sup>c</sup>						
Embedded derivatives in provisional sales/purchase contracts in a gross liability position	\$56	\$56	\$ —	\$ —	\$ 56	\$ —
Copper futures and swap contracts	2	2	—	2	—	—
Total	58	58	—	2	56	—
Contingent payments for the settlements of drilling rig contracts <sup>f</sup>	23	23	—	—	23	—
Long-term debt, including current portion <sup>e</sup>	16,025	15,196	—	—	15,196	—

a. Current portion included in other current assets and long-term portion included in other assets.

Excludes time deposits (which approximated fair value) included in (i) other current assets of \$52 million at December 31, 2017, and \$28 million at December 31, 2016, and (ii) other assets of \$123 million at December 31,

b. 2017, and \$122 million at December 31, 2016, primarily associated with an assurance bond to support PT-FI's commitment for smelter development in Indonesia (refer to Note 13 for further discussion).

c.



Refer to Note 14 for further discussion and balance sheet classifications.

d. Excludes \$24 million of embedded derivatives in provisional cobalt purchase contracts (refer to Note 14 for further discussion).

e. Recorded at cost except for debt assumed in acquisitions, which are recorded at fair value at the respective acquisition dates. In addition, debt excludes \$112 million at December 31, 2017, and \$98 million at December 31, 2016, related to assets held for sale (which approximated fair value).

f. Included in accounts payable and accrued liabilities.

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Valuation Techniques. The U.S. core fixed income fund is valued at NAV. The fund strategy seeks total return consisting of income and capital appreciation primarily by investing in a broad range of investment-grade debt securities, including U.S. government obligations, corporate bonds, mortgage-backed securities, asset-backed securities and money market instruments. There are no restrictions on redemptions (which are usually within one business day of notice).

Money market funds are classified within Level 1 of the fair value hierarchy because they are valued using quoted market prices in active markets.

Equity securities are valued at the closing price reported on the active market on which the individual securities are traded and, as such, are classified within Level 1 of the fair value hierarchy.

Fixed income securities (government securities, corporate bonds, asset-backed securities, collateralized mortgage-backed securities and municipal bonds) are valued using a bid-evaluation price or a mid-evaluation price. A bid-evaluation price is an estimated price at which a dealer would pay for a security. A mid-evaluation price is the average of the estimated price at which a dealer would sell a security and the estimated price at which a dealer would pay for a security. These evaluations are based on quoted prices, if available, or models that use observable inputs and, as such, are classified within Level 2 of the fair value hierarchy.

FCX's embedded derivatives on provisional copper concentrate, copper cathode and gold purchases and sales are valued using only quoted monthly LME or COMEX copper forward prices and the London gold forward price at each reporting date based on the month of maturity (refer to Note 14 for further discussion); however, FCX's contracts themselves are not traded on an exchange. As a result, these derivatives are classified within Level 2 of the fair value hierarchy.

FCX's embedded derivatives on provisional cobalt purchases are valued using quoted monthly LME cobalt forward prices or average published Metals Bulletin cobalt prices, subject to certain adjustments as specified by the terms of the contracts, at each reporting date based on the month of maturity (Level 2).

FCX's derivative financial instruments for copper futures and swap contracts and copper forward contracts that are traded on the respective exchanges are classified within Level 1 of the fair value hierarchy because they are valued using quoted monthly COMEX or LME prices at each reporting date based on the month of maturity (refer to Note 14 for further discussion). Certain of these contracts are traded on the over-the-counter market and are classified within Level 2 of the fair value hierarchy based on COMEX and LME forward prices.

The fair value of contingent consideration for the sales of TFHL and onshore California oil and gas properties (refer to Note 2 for further discussion) is calculated based on average commodity price forecasts through applicable maturity dates using a Monte Carlo simulation model. The models use various observable inputs, including Brent crude oil forward prices, historical copper and cobalt prices, volatilities, discount rates and settlement terms. As a result, these contingent consideration assets are classified within Level 2 of the fair value hierarchy.

The fair value of contingent consideration for the sale of Deepwater GOM oil and gas properties (refer to Note 2 for further discussion) is calculated based on a discounted cash flow model using inputs that include third-party reserve estimates, production rates, production timing and discount rates. Because significant inputs are not observable in the market, the contingent consideration is classified within Level 3 of the fair value hierarchy.

The December 31, 2016, fair value of contingent payments for the settlements of drilling rig contracts (refer to Note 13 for further discussion) was calculated based on the average price forecasts of WTI crude oil over the 12-month period ending June 30, 2017, using a mean-reverting model. The model used various observable inputs, including

WTI crude oil forward prices, volatilities, discount rate and settlement terms. As a result, these contingent payments were classified within Level 2 of the fair value hierarchy.

Long-term debt, including current portion, is valued using available market quotes and, as such, is classified within Level 2 of the fair value hierarchy.

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The techniques described above may produce a fair value calculation that may not be indicative of NRV or reflective of future fair values. Furthermore, while FCX believes its valuation techniques are appropriate and consistent with those used by other market participants, the use of different techniques or assumptions to determine fair value of certain financial instruments could result in a different fair value measurement at the reporting date. There have been no changes in the techniques used at December 31, 2017.

A summary of the changes in the fair value of FCX's Level 3 instruments for the years ended December 31 follows:

	Contingent Consideration <sup>a</sup>		Crude Oil Options
	2017	2016	2015
Balance at beginning of year	\$ 135	\$ —	\$ 316
Net realized gains	—	—	86 <sup>b</sup>
Net unrealized (losses) gains related to assets still held at the end of the year	(1 )	135	—
Net settlements	—	—	(402 ) <sup>c</sup>
Balance at the end of the year	\$ 134	\$ 135	\$ —

<sup>a</sup> Reflects contingent consideration associated with the sale of the Deepwater GOM oil and gas properties in December 2016 (refer to Note 2 for further discussion).

<sup>b</sup> Includes net realized gains of \$87 million recorded in revenues and interest expense associated with deferred premiums of \$1 million.

<sup>c</sup> Includes interest payments of \$4 million.

Refer to Notes 1 and 5 for a discussion of the fair value estimates utilized in the impairment assessments for mining operations, which were determined using inputs not observable in the market and thus represent Level 3 measurements.

**NOTE 16. BUSINESS SEGMENT INFORMATION**

Product Revenues. FCX revenues attributable to the products it produced for the years ended December 31 follow:

	2017	2016	2015
Copper in concentrate <sup>a</sup>	\$5,373	\$4,502	\$2,927
Copper cathode	4,557	3,925	4,159
Rod, and other refined copper products	2,272	1,963	2,481
Gold	2,032	1,512	1,540
Molybdenum	889	651	783
Oil	73	1,304	1,694
Other	1,207	973	1,023
Total	\$16,403	\$14,830	\$14,607

<sup>a</sup> Amounts are net of treatment and refining charges totaling \$536 million in 2017, \$652 million in 2016 and \$485 million in 2015.

Geographic Area. Information concerning financial data by geographic area follows:

	December 31,		
	2017	2016	2015
Long-lived assets: <sup>a</sup>			
Indonesia	\$8,938	\$8,794	\$7,701
U.S.	8,312	8,282	<sup>b</sup> 16,569
Peru	7,485	7,981	8,432
Chile	1,221	1,269	1,387
Other	257	248	4,706 <sup>c</sup>

Total \$26,213 \$26,574 \$38,795

a. Long-lived assets exclude deferred tax assets and intangible assets.

b. Decrease in 2016 is primarily because of impairment charges related to oil and gas properties and asset dispositions (refer to Notes 1 and 2 for further discussion).

c. Includes long-lived assets held for sale totaling \$4.4 billion at December 31, 2015, primarily associated with TFHL discontinued operations. Refer to Note 2 for further discussion.

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	Years Ended December		
	31,		
	2017	2016	2015
Revenues: <sup>a</sup>			
U.S.	\$5,344	\$5,896	\$6,842
Indonesia	2,023	1,402	1,054
Japan	1,882	1,350	1,246
Switzerland	1,200	1,147	618
China	1,136	1,125	688
Spain	1,086	878	960
India	782	553	532
Philippines	378	261	169
Korea	364	219	177
Chile	248	250	397
Bermuda	226	273	159
United Kingdom	226	204	83
Other	1,508	1,272	1,682
Total	\$16,403	\$14,830	\$14,607

a. Revenues are attributed to countries based on the location of the customer.

Major Customers and Affiliated Companies. Copper concentrate sales to PT Smelting totaled 12 percent of FCX's consolidated revenues for the year ended December 31, 2017, which is the only customer that accounted for 10 percent or more of FCX's consolidated revenues during the three years ended December 31, 2017.

Consolidated revenues include sales to the noncontrolling interest owners of FCX's South America mining operations totaling \$1.1 billion in 2017 and \$1.0 billion in both 2016 and 2015, and PT-FI's sales to PT Smelting totaling \$2.0 billion in 2017, \$1.4 billion in 2016 and \$1.1 billion in 2015.

Labor Matters. As of December 31, 2017, approximately 40 percent of FCX's global labor force was covered by collective bargaining agreements, and approximately 15 percent was covered by agreements that expired and are currently being negotiated or will expire within one year.

Business Segments. FCX has organized its mining operations into four primary divisions – North America copper mines, South America mining, Indonesia mining and Molybdenum mines, and operating segments that meet certain thresholds are reportable segments. Separately disclosed in the following tables are FCX's reportable segments, which include the Morenci, Cerro Verde and Grasberg (Indonesia Mining) copper mines, the Rod & Refining operations and Atlantic Copper Smelting & Refining.

FCX's reportable segments previously included U.S. Oil & Gas operations. During 2016, FCX completed the sales of its Deepwater GOM, onshore California and Haynesville oil and gas properties. As a result, beginning in 2017, the U.S. Oil & Gas operations no longer qualify as a reportable segment, and oil and gas results for all periods presented have been included in Corporate, Other & Eliminations in the following tables. Refer to Note 2 for further discussion of these sales.

Intersegment sales between FCX's business segments are based on terms similar to arms-length transactions with third parties at the time of the sale. Intersegment sales may not be reflective of the actual prices ultimately realized because of a variety of factors, including additional processing, timing of sales to unaffiliated customers and transportation premiums. In addition, intersegment sales from Tenke to FCX's other consolidated subsidiaries have been eliminated in discontinued operations (refer to Note 2).

FCX defers recognizing profits on sales from its mines to other divisions, including Atlantic Copper (FCX's wholly owned smelter and refinery in Spain) and on 25 percent of PT-FI's sales to PT Smelting (PT-FI's 25-percent-owned smelter and refinery in Indonesia), until final sales to third parties occur. Quarterly variations in ore grades, the timing of intercompany shipments and changes in product prices result in variability in FCX's net deferred profits and quarterly earnings.

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FCX allocates certain operating costs, expenses and capital expenditures to its operating divisions and individual segments. However, not all costs and expenses applicable to an operation are allocated. U.S. federal and state income taxes are recorded and managed at the corporate level (included in Corporate, Other & Eliminations), whereas foreign income taxes are recorded and managed at the applicable country level. In addition, most mining exploration and research activities are managed on a consolidated basis, and those costs along with some selling, general and administrative costs, are not allocated to the operating divisions or individual segments. Accordingly, the following segment information reflects management determinations that may not be indicative of what the actual financial performance of each operating division or segment would be if it was an independent entity.

**North America Copper Mines.** FCX operates seven open-pit copper mines in North America – Morenci, Bagdad, Safford, Sierrita and Miami in Arizona, and Chino and Tyrone in New Mexico. The North America copper mines include open-pit mining, sulfide ore concentrating, leaching and SX/EW operations. A majority of the copper produced at the North America copper mines is cast into copper rod by FCX’s Rod & Refining segment. In addition to copper, certain of FCX’s North America copper mines also produce molybdenum concentrate, gold and silver.

The Morenci open-pit mine, located in southeastern Arizona, produces copper cathode and copper concentrate. In addition to copper, the Morenci mine also produces molybdenum concentrate. The Morenci mine produced 49 percent of FCX’s North America copper during 2017.

**South America Mining.** South America mining includes two operating copper mines – Cerro Verde in Peru and El Abra in Chile. These operations include open-pit mining, sulfide ore concentrating, leaching and SX/EW operations.

The Cerro Verde open-pit copper mine, located near Arequipa, Peru, produces copper cathode and copper concentrate. In addition to copper, the Cerro Verde mine also produces molybdenum concentrate and silver. The Cerro Verde mine produced 86 percent of FCX’s South America copper during 2017.

**Indonesia Mining.** Indonesia mining includes PT-FI’s Grasberg minerals district that produces copper concentrate that contains significant quantities of gold and silver.

**Molybdenum Mines.** Molybdenum mines include the wholly owned Henderson underground mine and Climax open-pit mine, both in Colorado. The Henderson and Climax mines produce high-purity, chemical-grade molybdenum concentrate, which is typically further processed into value-added molybdenum chemical products.

**Rod & Refining.** The Rod & Refining segment consists of copper conversion facilities located in North America, and includes a refinery, three rod mills and a specialty copper products facility, which are combined in accordance with segment reporting aggregation guidance. These operations process copper produced at FCX’s North America copper mines and purchased copper into copper cathode, rod and custom copper shapes. At times these operations refine copper and produce copper rod and shapes for customers on a toll basis. Toll arrangements require the tolling customer to deliver appropriate copper-bearing material to FCX’s facilities for processing into a product that is returned to the customer, who pays FCX for processing its material into the specified products.

**Atlantic Copper Smelting & Refining.** Atlantic Copper smelts and refines copper concentrate and markets refined copper and precious metals in slimes. During 2017, Atlantic Copper purchased 18 percent of its concentrate requirements from the North America copper mines and 15 percent from the South America mining operations, with the remainder purchased from third parties.

**Corporate, Other & Eliminations.** Corporate, Other & Eliminations consists of FCX’s other mining and eliminations, oil and gas operations and other corporate and elimination items. Other mining and eliminations include the Miami smelter (a smelter at FCX’s Miami, Arizona, mining operation), Freeport Cobalt (a cobalt chemical refinery in



Kokkola, Finland), molybdenum conversion facilities in the U.S. and Europe, five non-operating copper mines in North America (Ajo, Bisbee, Tohono, Twin Buttes and Christmas in Arizona) and other mining support entities.

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## Financial Information by Business Segment

	North America Copper Mines			South America			Indonesia Mining	Molybdenum Mines	Cerro Verde	Cerro Other	Total	Atlantic Copper Smelting & Refining	Corporate, Other & Elimina- tions <sup>a</sup>	FCX Total
	Morenci	Other	Total	Verde	Other	Total								
Year Ended December 31, 2017														
Revenues:														
Unaffiliated customers	\$228	\$180	\$408	\$2,811	\$498	\$3,309	\$4,445	\$ —	\$4,456	\$2,031	\$1,754	<sup>b</sup>	\$16,403	
Intersegment Production and delivery	1,865	2,292	4,157	385	—	385	—	268	26	1	(4,837)	)	—	
Depreciation, depletion and amortization	1,052	1,715	2,767	1,878	<sup>c</sup> 366	2,244	1,743	<sup>d</sup> 229	4,470	1,966	(3,119)	)	10,300	
Metals inventory adjustments	178	247	425	441	84	525	556	76	10	28	94		1,714	
Selling, general and administrative expenses	—	2	2	—	—	—	—	1	—	—	5		8	
Mining exploration and research expenses	2	2	4	9	—	9	126	<sup>d</sup> —	—	18	327		484	
Environmental obligations and shutdown costs	—	2	2	—	—	—	—	—	—	—	92		94	
Net gain on sales of assets	—	—	—	—	—	—	—	—	—	—	251		251	
Operating income (loss)	—	—	—	—	—	—	—	—	—	—	(81)	)	(81)	
Interest expense, net	861	504	1,365	868	48	916	2,020	(38)	2	20	(652)	)	3,633	
Provision for income taxes	3	1	4	212	<sup>c</sup> —	212	4	—	—	18	563		801	
Total assets at December 31, 2017	—	—	—	436	<sup>c</sup> 10	446	869	—	—	5	(437)	) <sup>e</sup>	883	
	2,861	4,241	7,102	8,878	1,702	10,580	10,911	1,858	277	822	5,752	<sup>f</sup>	37,302	
	114	53	167	103	12	115	875	5	4	41	203		1,410	

Capital  
expendituresYear Ended  
December 31,  
2016

## Revenues:

Unaffiliated customers	\$444	\$240	\$684	\$2,241	\$510	\$2,751	\$3,233	\$ —	\$3,833	\$1,825	\$2,504	<sup>b,g</sup> \$14,830
Intersegment	1,511	2,179	3,690	187	—	187	62	186	29	5	(4,159 )	—
Production and delivery	1,169	1,763	2,932	1,351	407	1,758	1,794	199	3,836	1,712	(1,534 ) <sup>h</sup>	10,697
Depreciation, depletion and amortization	217	313	530	443	110	553	384	68	10	29	956	2,530
Impairment of oil and gas properties	—	—	—	—	—	—	—	—	—	—	4,317	4,317
Metals inventory adjustments	—	1	1	—	—	—	—	15	—	—	20	36
Selling, general and administrative expenses	2	3	5	8	1	9	90	—	—	17	486	<sup>h</sup> 607
Mining exploration and research expenses	—	3	3	—	—	—	—	—	—	—	61	64
Environmental obligations and shutdown costs	—	—	—	—	—	—	—	—	—	—	20	20
Net gain on sales of assets	(576 )	—	(576 )	—	—	—	—	—	—	—	(73 )	(649 )
Operating income (loss)	1,143	336	1,479	626	(8 )	618	1,027	(96)	16	72	(5,908 )	(2,792 )
Interest expense, net	3	1	4	82	—	82	—	—	—	15	654	755
Provision for (benefit from) income taxes	—	—	—	222	(6 )	216	442	—	—	9	(296 )	371
Total assets at December 31, 2016	2,863	4,448	7,311	9,076	1,533	10,609	10,493	1,934	220	658	6,092	<sup>f</sup> 37,317
Capital expenditures	77	25	102	380	2	382	1,025	2	1	17	1,284	<sup>i</sup> 2,813

a. Includes U.S. oil and gas operations, which were previously a reportable segment.

b. Includes revenues from FCX's molybdenum sales company, which includes sales of molybdenum produced by the Molybdenum mines and by certain of the North America and South America copper mines.

- c. Includes net charges of \$203 million in production and delivery costs, \$145 million in interest expense and \$7 million in provision for income taxes associated with disputed royalties for prior years.
- d. Includes net charges of \$120 million in production and delivery costs and \$5 million in selling, general and administrative expenses for PT-FI workforce reductions.
  - e. Includes provisional tax credits totaling \$393 million related to U.S. tax reform, primarily for the reversal of valuation allowances associated with the anticipated refund of AMT credits and a decrease in corporate income tax rates.
  - f. Includes (i) assets held for sale totaling \$598 million at December 31, 2017, and \$344 million at December 31, 2016, primarily associated with Freeport Cobalt and the Kisanfu exploration project and (ii) includes assets associated with oil and gas operations totaling \$271 million at December 31, 2017, and \$467 million at December 31, 2016.
  - g. Includes net mark-to-market losses of \$35 million associated with oil derivative contracts, which were entered into as part of the terms to sell the onshore California oil and gas properties in 2016.
  - h. Includes net charges for oil and gas operations totaling \$1.0 billion in production and delivery costs, primarily for drillship settlements/idle rig and contract termination costs, inventory adjustments, asset impairments and other net charges, and \$85 million in selling, general and administrative expenses for net restructuring charges.
  - i. Includes \$1.2 billion associated with oil and gas operations and \$73 million associated with discontinued operations.
  - 1. Refer to Note 2 for a summary of the results of discontinued operations.

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	North America Copper Mines			South America			Indonesia Mining	Molybdenum Mines	Rhenium Refining	Atlantic Corporate, Copper Other Smelting & Refining		FCX Total
	Morenci	Other	Total	Verde	Other	Total				& Eliminations <sup>a</sup>	Total	
Year Ended December 31, 2015												
Revenues:												
Unaffiliated customers	\$558	\$351	\$909	\$1,065	\$808	\$1,873	\$2,617	\$ —	\$4,125	\$1,955	\$3,128 <sup>b,c</sup>	\$14,607
Intersegment Production and delivery <sup>e</sup>	1,646	2,571	4,217	68	(7 ) <sup>d</sup>	61	36	348	29	15	(4,706 )	—
Depreciation, depletion and amortization	217	343	560	219	133	352	293	97	9	39	1,890	3,240
Impairment of oil and gas properties	—	—	—	—	—	—	—	—	—	—	13,144	13,144
Metals inventory adjustments	—	142	142	—	73	73	—	11	—	—	112	338
Selling, general and administrative expenses	3	3	6	3	1	4	103	—	—	16	429	558
Mining exploration and research expenses	—	7	7	—	—	—	—	—	—	—	100	107
Environmental obligations and shutdown costs	—	3	3	—	—	—	—	—	—	—	75	78
Net gain on sales of assets	—	(39 )	(39 )	—	—	—	—	—	—	—	—	(39 )
Operating income (loss)	461	187	648	96	(29 )	67	449	(72)	16	67	(14,687)	(13,512 )
Interest expense, net	2	2	4	16	—	16	—	—	—	10	587	617
Provision for (benefit from) income taxes	—	—	—	13	(9 )	4	195	—	—	4	(2,154 )	(1,951 )
Total assets at December 31, 2015	3,567	4,878	8,445	9,445	1,661	11,106	9,306	1,999	219	612	14,890 <sup>g</sup>	46,577

Capital expenditures	253	102	355	1,674	48	1,722	901	13	4	23	3,335	g	6,353
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- a. Includes U.S. oil and gas operations, which were previously a reportable segment.
- b. Includes revenues from FCX's molybdenum sales company, which included sales of molybdenum produced by the Molybdenum mines and by certain of the North America and South America copper mines.
- c. Includes net mark-to-market gains associated with crude oil and natural gas derivative contracts totaling \$87 million.
- d. Reflects net reductions for provisional pricing adjustments to prior open sales.  
Includes asset impairment and restructuring charges totaling \$145 million, including \$99 million at other North America copper mines, and restructuring charges totaling \$13 million at South America mines, \$7 million at Molybdenum mines, \$3 million at Rod & Refining and \$23 million at Corporate, Other & Eliminations.
- f. Includes charges for oil and gas operations totaling \$188 million primarily for idle/terminated rig costs, inventory adjustments, asset impairments and other charges.
- g. Includes (i) assets held for sale totaling \$4.9 billion and (ii) capital expenditures totaling \$229 million associated with discontinued operations. Refer to Note 2 for a summary of the results of discontinued operations.

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## NOTE 17. GUARANTOR FINANCIAL STATEMENTS

All of the senior notes issued by FCX and discussed in Note 8 are fully and unconditionally guaranteed on a senior basis jointly and severally by FM O&G LLC, as guarantor, which is a 100-percent-owned subsidiary of FM O&G and FCX. The guarantee is an unsecured obligation of the guarantor and ranks equal in right of payment with all existing and future indebtedness of FM O&G LLC, including indebtedness under FCX's revolving credit facility. The guarantee ranks senior in right of payment with all of FM O&G LLC's future subordinated obligations and is effectively subordinated in right of payment to any debt of FM O&G LLC's subsidiaries. The indentures provide that FM O&G LLC's guarantee may be released or terminated for certain obligations under the following circumstances: (i) all or substantially all of the equity interests or assets of FM O&G LLC are sold to a third party; or (ii) FM O&G LLC no longer has any obligations under any FM O&G senior notes or any refinancing thereof and no longer guarantees any obligations of FCX under the revolving credit facility or any other senior debt or, in each case, any refinancing thereof.

The following condensed consolidating financial information includes information regarding FCX, as issuer, FM O&G LLC, as guarantor, and all other non-guarantor subsidiaries of FCX. Included are the condensed consolidating balance sheets at December 31, 2017 and 2016, and the related condensed consolidating statements of comprehensive income (loss) and the condensed consolidating statements of cash flows for the three years ended December 31, 2017, which should be read in conjunction with FCX's notes to the consolidated financial statements.

## CONDENSED CONSOLIDATING BALANCE SHEET

December 31, 2017

	FCX	FM O&G LLC	Non-guarantor Subsidiaries	Eliminations	Consolidated FCX
	Issuer	Guarantor			
<b>ASSETS</b>					
Current assets	\$75	\$ 671	\$ 10,823	\$ (790 )	\$ 10,779
Property, plant, equipment and mine development costs, net	14	11	22,821	(10 )	22,836
Oil and gas properties subject to amortization, less accumulated amortization and impairments	—	—	8	—	8
Investments in consolidated subsidiaries	19,570	—	—	(19,570 )	—
Other assets	943	48	3,179	(491 )	3,679
Total assets	\$20,602	\$ 730	\$ 36,831	\$ (20,861 )	\$ 37,302
<b>LIABILITIES AND EQUITY</b>					
Current liabilities	\$1,683	\$ 220	\$ 4,073	\$ (938 )	\$ 5,038
Long-term debt, less current portion	10,021	6,512	5,440	(10,270 )	11,703
Deferred income taxes	748	<sup>a</sup> —	2,874	—	3,622
Environmental and asset retirement obligations, less current portion	—	201	3,430	—	3,631
Investments in consolidated subsidiary	—	853	10,397	(11,250 )	—
Other liabilities	173	3,340	1,987	(3,488 )	2,012
Total liabilities	12,625	11,126	28,201	(25,946 )	26,006
<b>Equity:</b>					
Stockholders' equity	7,977	(10,396)	5,916	4,480	7,977
Noncontrolling interests	—	—	2,714	605	3,319

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Total equity	7,977	(10,396)	8,630	5,085	11,296
Total liabilities and equity	\$20,602	\$ 730	\$ 36,831	\$(20,861)	) \$ 37,302

a. All U.S.-related deferred income taxes are recorded at the parent company.

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## CONDENSED CONSOLIDATING BALANCE SHEET

December 31, 2016

	FCX Issuer	FM O&G LLC Guarantor	Non-guarantor Subsidiaries	Eliminations	Consolidated FCX
<b>ASSETS</b>					
Current assets	\$230	\$ 1,790	\$ 11,675	\$ (3,260 )	\$ 10,435
Property, plant, equipment and mine development costs, net	19	24	23,176	—	23,219
Oil and gas properties subject to amortization, less accumulated amortization and impairments	—	—	74	—	74
Investments in consolidated subsidiaries	21,110	—	—	(21,110 )	—
Other assets	1,985	47	3,522	(1,965 )	3,589
Total assets	\$23,344	\$ 1,861	\$ 38,447	\$ (26,335 )	\$ 37,317
<b>LIABILITIES AND EQUITY</b>					
Current liabilities	\$3,895	\$ 308	\$ 3,306	\$ (3,244 )	\$ 4,265
Long-term debt, less current portion	12,517	6,062	11,297	(15,081 )	14,795
Deferred income taxes	826	<sup>a</sup> —	2,942	—	3,768
Environmental and asset retirement obligations, less current portion	—	200	3,287	—	3,487
Investments in consolidated subsidiary	—	893	8,995	(9,888 )	—
Other liabilities	55	3,393	1,784	(3,487 )	1,745
Total liabilities	17,293	10,856	31,611	(31,700 )	28,060
Equity:					
Stockholders' equity	6,051	(8,995 )	4,237	4,758	6,051
Noncontrolling interests	—	—	2,599	607	3,206
Total equity	6,051	(8,995 )	6,836	5,365	9,257
Total liabilities and equity	\$23,344	\$ 1,861	\$ 38,447	\$ (26,335 )	\$ 37,317

a. All U.S.-related deferred income taxes are recorded at the parent company.

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## CONDENSED CONSOLIDATING STATEMENTS OF COMPREHENSIVE INCOME (LOSS)

Year Ended December 31, 2017

	FCX	FM O&G LLC	Non-guarantor Subsidiaries	Eliminations	Consolidated FCX
Revenues	\$—	\$ 52	\$ 16,351	\$ —	\$ 16,403
Total costs and expenses	42	78	12,640	10	12,770
Operating (loss) income	(42 )	(26 )	3,711	(10 )	3,633
Interest expense, net	(467 )	(227 )	(455 )	348	(801 )
Net gain (loss) on early extinguishment of debt	22	5	(6 )	—	21
Other income (expense), net	339	—	58	(348 )	49
(Loss) income before income taxes and equity in affiliated companies' net earnings (losses)	(148 )	(248 )	3,308	(10 )	2,902
Benefit from (provision for) income taxes	220	(108 )	(998 )	3	(883 )
Equity in affiliated companies' net earnings (losses)	1,745	10	(337 )	(1,408 )	10
Net income (loss) from continuing operations	1,817	(346 )	1,973	(1,415 )	2,029
Net income from discontinued operations	—	—	66	—	66
Net income (loss)	1,817	(346 )	2,039	(1,415 )	2,095
Net income attributable to noncontrolling interests:					
Continuing operations	—	—	(150 )	(124 )	(274 )
Discontinued operations	—	—	(4 )	—	(4 )
Net income (loss) attributable to common stockholders	\$ 1,817	\$ (346 )	\$ 1,885	\$ (1,539 )	\$ 1,817
Other comprehensive income (loss)	61	—	61	(61 )	61
Total comprehensive income (loss)	\$ 1,878	\$ (346 )	\$ 1,946	\$ (1,600 )	\$ 1,878

Year Ended December 31, 2016

	FCX	FM O&G LLC	Non-guarantor Subsidiaries	Eliminations	Consolidated FCX
Revenues	\$—	\$ 379	\$ 14,451	\$ —	\$ 14,830
Total costs and expenses	75	3,074	<sup>a</sup> 14,463	<sup>a</sup> 10	17,622
Operating loss	(75 )	(2,695 )	(12 )	(10 )	(2,792 )
Interest expense, net	(534 )	(56 )	(498 )	333	(755 )
Net gain on early extinguishment and exchanges of debt	26	—	—	—	26
Other income (expense), net	271	—	70	(292 )	49
(Loss) income before income taxes and equity in affiliated companies' net (losses) earnings	(312 )	(2,751 )	(440 )	31	(3,472 )
(Provision for) benefit from income taxes	(2,233 )	1,053	821	(12 )	(371 )
Equity in affiliated companies' net (losses) earnings	(1,609 )	(3,101 )	(4,790 )	9,511	11
Net (loss) income from continuing operations	(4,154 )	(4,799 )	(4,409 )	9,530	(3,832 )
Net loss from discontinued operations	—	—	(154 )	(39 )	(193 )
Net (loss) income	(4,154 )	(4,799 )	(4,563 )	9,491	(4,025 )
Net income, and gain on redemption and preferred dividends attributable to noncontrolling interests:					
Continuing operations	—	—	—	(66 )	(66 )

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Discontinued operations	—	—	(63	)	—	(63	)	
Net (loss) income attributable to common stockholders	\$(4,154)	\$(4,799)	\$ (4,626	)	\$ 9,425	\$ (4,154)	)	
Other comprehensive (loss) income	(45	)	—	(45	)	45	(45	)
Total comprehensive (loss) income	\$(4,199)	\$(4,799)	\$ (4,671	)	\$ 9,470	\$ (4,199)	)	

<sup>a</sup> Includes impairment charges totaling \$1.5 billion at the FM O&G LLC Guarantor and \$2.8 billion at the non-guarantor subsidiaries related to FCX's oil and gas properties pursuant to full cost accounting rules.

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## CONDENSED CONSOLIDATING STATEMENT OF COMPREHENSIVE INCOME (LOSS)

Year Ended December 31, 2015

	FCX	FM O&G LLC	Non-guarantor		Consolidated	
	Issuer	Guarantor	Subsidiaries	Eliminations	FCX	
Revenues	\$—	\$613	\$ 13,994	\$ —	\$ 14,607	
Total costs and expenses	60	5,150	<sup>a</sup> 22,920	<sup>a</sup> (11	) 28,119	
Operating (loss) income	(60	) (4,537	) (8,926	) 11	(13,512	)
Interest expense, net	(489	) (8	) (272	) 152	(617	)
Other income (expense), net	225	1	(86	) (139	) 1	
(Loss) income before income taxes and equity in affiliated companies' net (losses) earnings	(324	) (4,544	) (9,284	) 24	(14,128	)
(Provision for) benefit from income taxes	(3,227	) 1,718	3,469	(9	) 1,951	
Equity in affiliated companies' net (losses) earnings	(8,685	) (9,976	) (12,838	) 31,496	(3	)
Net (loss) income from continuing operations	(12,236	) (12,802	) (18,653	) 31,511	(12,180	)
Net income from discontinued operations	—	—	91	—	91	
Net (loss) income	(12,236	) (12,802	) (18,562	) 31,511	(12,089	)
Net income and preferred dividends attributable to noncontrolling interests:						
Continuing operations	—	—	(35	) (33	) (68	)
Discontinued operations	—	—	(79	) —	(79	)
Net (loss) income attributable to common stockholders	\$(12,236)	\$(12,802)	\$ (18,676	) \$ 31,478	\$ (12,236	)
Other comprehensive income (loss)	41	—	41	(41	) 41	
Total comprehensive (loss) income	\$(12,195)	\$(12,802)	\$ (18,635	) \$ 31,437	\$ (12,195	)

Includes impairment charges totaling \$4.2 billion at the FM O&G LLC Guarantor and \$8.9 billion at the a. non-guarantor subsidiaries related to ceiling test impairment charges for FCX's oil and gas properties pursuant to full cost accounting rules and a goodwill impairment charge.

## CONDENSED CONSOLIDATING STATEMENT OF CASH FLOWS

Year Ended December 31, 2017

	FCX	FM O&G LLC	Non-guarantor		Consolidated	
	Issuer	Guarantor	Subsidiaries	Eliminations	FCX	
Net cash (used in) provided by operating activities	\$(156)	\$ (467	) \$ 5,305	\$ —	\$ 4,682	
Cash flow from investing activities:						
Capital expenditures	—	(25	) (1,385	) —	(1,410	)
Intercompany loans	(777	) —	—	777	—	
Dividends from (investments in) consolidated subsidiaries	3,226	(15	) 120	(3,331	) —	
Asset sales and other, net	—	57	(10	) —	47	
Net cash provided by (used in) investing activities	2,449	17	(1,275	) (2,554	) (1,363	)
Cash flow from financing activities:						
Proceeds from debt	—	—	955	—	955	

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Repayments of debt	(2,281)	(205 )	(1,326 )	—	(3,812 )
Intercompany loans	—	663	114	(777 )	—
Cash dividends paid and distributions received, net	(2 )	—	(3,440 )	3,266	(176 )
Other, net	(10 )	(10 )	(67 )	65	(22 )
Net cash (used in) provided by financing activities	(2,293)	448	(3,764 )	2,554	(3,055 )
Net (decrease) increase in cash and cash equivalents	—	(2 )	266	—	264
Increase in cash and cash equivalents in assets held for sale	—	—	(62 )	—	(62 )
Cash and cash equivalents at beginning of year	—	2	4,243	—	4,245
Cash and cash equivalents at end of year	\$—	\$ —	\$ 4,447	\$ —	\$ 4,447

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## CONDENSED CONSOLIDATING STATEMENTS OF CASH FLOWS

Year Ended December 31, 2016

	FCX Issuer	FM O&G LLC Guarantor	Non-guarantor Subsidiaries	Eliminations	Consolidated FCX
Net cash (used in) provided by operating activities	\$(137)	\$ (271 )	\$ 4,135	\$ 2	\$ 3,729
Cash flow from investing activities:					
Capital expenditures	—	(567 )	(2,248 )	2	(2,813 )
Intercompany loans	481	(346 )	—	(135 )	—
Dividends from (investments in) consolidated subsidiaries	1,469	(45 )	176	(1,600 )	—
Asset sales and other, net	2	1,673	4,692	(4 )	6,363
Net cash provided by (used in) investing activities	1,952	715	2,620	(1,737 )	3,550
Cash flow from financing activities:					
Proceeds from debt	1,721	—	1,960	—	3,681
Repayments of debt	(5,011)	—	(2,614 )	—	(7,625 )
Intercompany loans	—	(332 )	197	135	—
Net proceeds from sale of common stock	1,515	—	3,388	(3,388 )	1,515
Cash dividends and distributions paid, including redemption	(6 )	(107 )	(5,555 )	4,969	(699 )
Other, net	(34 )	(3 )	(20 )	19	(38 )
Net cash (used in) provided by financing activities	(1,815)	(442 )	(2,644 )	1,735	(3,166 )
Net increase in cash and cash equivalents	—	2	4,111	—	4,113
Increase in cash and cash equivalents in assets held for sale	—	—	(45 )	—	(45 )
Cash and cash equivalents at beginning of year	—	—	177	—	177
Cash and cash equivalents at end of year	\$—	\$ 2	\$ 4,243	\$ —	\$ 4,245

Year Ended December 31, 2015

	FCX Issuer	FM O&G LLC Guarantor	Non-guarantor Subsidiaries	Eliminations	Consolidated FCX
Net cash (used in) provided by operating activities	\$(167)	\$ 262	\$ 3,112	\$ 13	\$ 3,220
Cash flow from investing activities:					
Capital expenditures	(7 )	(847 )	(5,486 )	(13 )	(6,353 )
Intercompany loans	(1,812)	(1,310 )	—	3,122	—
Dividends from (investments in) consolidated subsidiaries	852	(71 )	130	(913 )	(2 )
Asset sales and other, net	(21 )	(2 )	111	21	109
Net cash (used in) provided by investing activities	(988 )	(2,230 )	(5,245 )	2,217	(6,246 )
Cash flow from financing activities:					
Proceeds from debt	4,503	—	3,769	—	8,272

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Repayments of debt	(4,660)	—	(2,017)	)	—	(6,677)	)
Intercompany loans	—	2,038	1,084		(3,122)	)	—
Net proceeds from sale of common stock	1,936	—	—		—		1,936
Cash dividends and distributions paid	(605)	)	—	(924)	)	804	(725)
Other, net	(19)	)	(71)	)	(18)	)	88
Net cash provided by (used in) financing activities	1,155	1,967	1,894		(2,230)	)	2,786
Net decrease in cash and cash equivalents	—	(1)	)	(239)	)	—	(240)
Decrease in cash and cash equivalents in assets held for sale	—	—		119		—	119
Cash and cash equivalents at beginning of year	—	1		297		—	298
Cash and cash equivalents at end of year	\$—	\$ —		\$ 177		\$ —	\$ 177

## NOTE 18. SUBSEQUENT EVENTS

In February 2018, the Board reinstated a cash dividend on FCX's common stock. The Board intends to declare a quarterly dividend of \$0.05 per share, with the initial dividend expected to be paid May 1, 2018.

FCX evaluated events after December 31, 2017, and through the date the financial statements were issued, and determined any events or transactions occurring during this period that would require recognition or disclosure are appropriately addressed in these financial statements.

## NOTE 19. QUARTERLY FINANCIAL INFORMATION (UNAUDITED)

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Year
2017					
Revenues	\$3,341	\$3,711	\$4,310	\$5,041	\$16,403
Operating income	580	669	917	1,467	3,633
Net income from continuing operations	268	326	242	1,193	2,029
Net income from discontinued operations	38	9	3	16	66
Net income	306	335	245	1,209	2,095
Net (income) loss attributable to noncontrolling interests:					
Continuing operations	(75 )	(66 )	35	(168 )	(274 )
Discontinued operations	(3 )	(1 )	—	—	(4 )
Net income attributable to common stockholders	228	268	280	1,041	1,817
Basic net income per share attributable to common stockholders:					
Continuing operations	\$0.13	\$0.18	\$0.19	\$0.71	\$1.21
Discontinued operations	0.03	—	—	0.01	0.04
	\$0.16	\$0.18	\$0.19	\$0.72	\$1.25
Basic weighted-average shares outstanding	1,446	1,447	1,448	1,448	1,447
Diluted net income per share attributable to common stockholders:					
Continuing operations	\$0.13	\$0.18	\$0.19	\$0.70	\$1.21
Discontinued operations	0.03	—	—	0.01	0.04
	\$0.16	\$0.18	\$0.19	\$0.71	\$1.25
Diluted weighted-average shares outstanding	1,454	1,453	1,454	1,455	1,454

Following summarizes significant charges (credits) included in FCX's net income attributable to common stockholders for the 2017 quarters:

Net charges at Cerro Verde related to Peruvian government claims for disputed royalties (refer to Note 12 for further discussion) totaled \$186 million to net income attributable to common stock or \$0.13 per share for the year (consisting of \$203 million to operating income, \$145 million to interest expense and \$7 million to provision for income taxes, net of \$169 million to noncontrolling interests), most of which was recorded in the third quarter.

Net charges associated with PT-FI workforce reductions for the year totaled \$125 million to operating income (\$66 million to net income attributable to common stockholders or \$0.04 per share) and included \$21 million in the first quarter, \$87 million in the second quarter, \$9 million in the third quarter and \$8 million in the fourth quarter.

Net adjustments to environmental obligations and related litigation reserves totaled \$210 million to operating income and net income attributable to common stockholders (\$0.14 per share) for the year, and included net charges (credits) totaling \$19 million in the first quarter, \$(30) million in the second quarter, \$64 million in the third quarter and \$157 million in the fourth quarter.



Net gains on sales of assets totaling \$81 million to operating income and net income attributable to common stockholders (\$0.06 per share) for the year were mostly associated with sales of oil and gas properties, and included \$23 million in the first quarter, \$10 million in the second quarter, \$33 million in the third quarter and \$15 million in the fourth quarter. Refer to Note 2 for further discussion of asset dispositions.

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Net tax credits totaling \$438 million to net income attributable to common stockholders (\$0.30 per share) for the year were mostly associated with provisional tax credits associated with U.S. tax reform (\$393 million), which were recorded in the fourth quarter. Refer to Note 11 for further discussion.

In November 2016, FCX completed the sale of its interest in TFHL (refer to Note 2 for further discussion), and the results of TFHL are reported as discontinued operations for all periods presented. Net income from discontinued operations for the 2017 periods primarily reflects adjustments to the fair value of the potential contingent consideration related to the sale, which will continue to be adjusted through December 31, 2019.

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Year
2016					
Revenues	\$3,242	\$3,334	\$3,877	\$4,377	\$14,830
Operating (loss) income	(3,872 )	18	359	703	(2,792 )
Net (loss) income from continuing operations	(4,097 )	(229 )	292	202	(3,832 )
Net loss from discontinued operations	(4 )	(181 )	(6 )	(2 )	(193 )
Net (loss) income	(4,101 )	(410 )	286	200	(4,025 )
Net income, and gain on redemption and preferred dividends attributable to noncontrolling interests:					
Continuing operations	(73 )	(57 )	(47 )	111	(66 )
Discontinued operations	(10 )	(12 )	(22 )	(19 )	(63 )
Net (loss) income attributable to common stockholders	(4,184 )	(479 )	217	292	(4,154 )
Basic and diluted net (loss) income per share attributable to common stockholders:					
Continuing operations	\$(3.34 )	\$(0.23 )	\$0.18	\$0.22	\$(2.96 )
Discontinued operations	(0.01 )	(0.15 )	(0.02 )	(0.01 )	(0.20 )
	\$(3.35 )	\$(0.38 )	\$0.16	\$0.21	\$(3.16 )
Basic weighted-average shares outstanding	1,251	1,269	1,346	1,403	1,318
Diluted weighted-average shares outstanding	1,251	1,269	1,351	1,410	1,318

Following summarizes significant charges (credits) included in FCX's net (loss) income attributable to common stockholders for the 2016 quarters:

Impairment of oil and oil and gas properties pursuant to full cost accounting rules (refer to Note 1 for further discussion) totaled \$4.3 billion to operating (loss) income and net (loss) income attributable to common stockholders (\$3.28 per share) for the year, and included \$3.8 billion in the first quarter, \$291 million in the second quarter and \$239 million in the third quarter.

Other oil and gas charges for the year totaled \$1.1 billion to operating (loss) income and net (loss) income attributable to common stockholders (\$0.84 per share) mostly associated with drillship settlements/idle rig costs (refer to Note 13 for further discussion of drillship settlements), inventory adjustments, other asset impairment and restructuring charges, and included \$201 million in the first quarter, \$729 million in the second quarter, \$50 million in the third quarter and \$142 million in the fourth quarter.

During 2016, FCX completed several asset sale transactions, including the sale of substantially all of its oil and gas properties and the sale of an additional undivided interest in the Morenci minerals district (refer to Note 2 for further discussion of these and other 2016 asset dispositions). Net gains (losses) on the sales of assets totaled \$649 million to operating (loss) income and net (loss) income attributable to common stockholders (\$0.49 per share) for the year, and included \$749 million in the second quarter, \$13 million in the third quarter and \$(113) million in the fourth quarter. Net tax credits of \$374 million to net (loss) income attributable to common stockholders (\$0.28 per share) for the year were primarily associated with AMT credits, changes to valuation allowances and net operating loss claims, and included net tax (charges) credits totaling \$(42) million in the second quarter, \$332 million in the third quarter and \$84 million in the fourth quarter.

Net loss from discontinued operations for the 2016 periods reflects the results of TFHL and includes charges for allocated interest expense associated with the portion of a bank term loan that was required to be repaid as a result of the sale of FCX's interest in TFHL. The 2016 periods also include charges for the loss on disposal totaling \$198 million (\$0.15 per share) for the year, consisting of \$177 million in the second quarter, \$5 million in the third quarter and \$16 million in the fourth quarter. Refer to Note 2 for further discussion of the sale of FCX's interest in TFHL.

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- Net (loss) income attributable to common stockholders in the fourth quarter and for the year included a gain on redemption of noncontrolling interest for the settlement of FCX's preferred stock obligation at its Plains Offshore subsidiary totaling \$199 million (\$0.15 per share for the year). Refer to Note 2 for further discussion.

## NOTE 20. SUPPLEMENTARY MINERAL RESERVE INFORMATION (UNAUDITED)

Recoverable proven and probable reserves have been calculated as of December 31, 2017, in accordance with Industry Guide 7 as required by the Securities Exchange Act of 1934. FCX's proven and probable reserves may not be comparable to similar information regarding mineral reserves disclosed in accordance with the guidance in other countries. Proven and probable reserves were determined by the use of mapping, drilling, sampling, assaying and evaluation methods generally applied in the mining industry, as more fully discussed below. The term "reserve," as used in the reserve data presented here, means that part of a mineral deposit that can be economically and legally extracted or produced at the time of the reserve determination. The term "proven reserves" means reserves for which (i) quantity is computed from dimensions revealed in outcrops, trenches, workings or drill holes; (ii) grade and/or quality are computed from the results of detailed sampling; and (iii) the sites for inspection, sampling and measurements are spaced so closely and the geologic character is sufficiently defined that size, shape, depth and mineral content of reserves are well established. The term "probable reserves" means reserves for which quantity and grade are computed from information similar to that used for proven reserves but the sites for sampling are farther apart or are otherwise less adequately spaced. The degree of assurance, although lower than that for proven reserves, is high enough to assume continuity between points of observation.

FCX's reserve estimates are based on the latest available geological and geotechnical studies. FCX conducts ongoing studies of its ore bodies to optimize economic values and to manage risk. FCX revises its mine plans and estimates of proven and probable mineral reserves as required in accordance with the latest available studies.

Estimated recoverable proven and probable reserves at December 31, 2017, were determined using \$2.00 per pound for copper, \$1,000 per ounce for gold and \$10 per pound for molybdenum. For the three-year period ended December 31, 2017, LME spot copper prices averaged \$2.50 per pound, London PM gold prices averaged \$1,223 per ounce and the weekly average price for molybdenum quoted by Metals Week averaged \$7.12 per pound.

The recoverable proven and probable reserves presented in the table below represent the estimated metal quantities from which FCX expects to be paid after application of estimated metallurgical recovery rates and smelter recovery rates, where applicable. Recoverable reserves are that part of a mineral deposit that FCX estimates can be economically and legally extracted or produced at the time of the reserve determination.

	Recoverable Proven and Probable Mineral Reserves		
	Estimated at December 31, 2017		
	Copper (billion pounds)	Gold (million ounces)	Molybdenum (billion pounds)
North America	33.5	0.3	2.22
South America	28.1	—	0.62
Indonesia <sup>b</sup>	25.1	23.2	—
Consolidated <sup>c</sup>	86.7	23.5	2.84
Net equity interest <sup>d</sup>	71.3	21.3	2.56

a. Consolidated recoverable copper reserves included 2.1 billion pounds in leach stockpiles and 0.7 billion pounds in mill stockpiles.

b. Recoverable proven and probable reserves reflect estimates of minerals that can be recovered through the end of 2041 (refer to Note 13 for discussion of PT-FI's COW).

c. Consolidated reserves represent estimated metal quantities after reduction for joint venture partner interests at the Morenci mine in North America and the Grasberg minerals district in Indonesia (refer to Note 3 for further discussion of FCX's joint ventures). Excluded from the table above were FCX's estimated recoverable proven and probable reserves of 273.4 million ounces of silver, which were determined using \$15 per ounce.

d. Net equity interest reserves represent estimated consolidated metal quantities further reduced for noncontrolling interest ownership (refer to Note 3 for further discussion of FCX's ownership in subsidiaries). Excluded from the table above were FCX's estimated recoverable proven and probable reserves of 218.2 million ounces of silver.

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## Recoverable Proven and Probable Mineral Reserves

Estimated at December 31, 2017

	Average Ore Grade Per Metric Ton <sup>a</sup>			Recoverable Proven and Probable Reserves <sup>b</sup>			
	Ore <sup>a</sup> (million metric tons)	Copper (%)	Gold (grams)	Molybdenum (%)	Copper (billion pounds)	Gold (million ounces)	Molybdenum (billion pounds)
North America							
Developed and producing:							
Morenci	3,134	0.26	—	—	<sup>c</sup> 11.8	—	0.14
Sierrita	2,245	0.23	—	<sup>c</sup> 0.03	9.9	0.1	1.01
Bagdad	1,405	0.31	—	<sup>c</sup> 0.02	7.5	0.1	0.36
Safford, including Lone Star <sup>d</sup>	662	0.45	—	—	5.0	—	—
Chino, including Cobre <sup>d</sup>	276	0.46	0.02	—	<sup>c</sup> 2.4	0.1	0.01
Climax	160	—	—	0.15	—	—	0.50
Henderson	74	—	—	0.17	—	—	0.24
Tyrone	9	0.42	—	—	0.1	—	—
Miami	—	—	—	—	0.1	—	—
South America							
Developed and producing:							
Cerro Verde	3,577	0.37	—	0.01	25.6	—	0.62
El Abra	394	0.44	—	—	2.5	—	—
Indonesia <sup>e</sup>							
Developed and producing:							
Deep Mill Level Zone	437	0.91	0.76	—	7.7	8.5	—
Deep Ore Zone	79	0.54	0.76	—	0.9	1.6	—
Big Gossan	58	2.22	0.93	—	2.6	1.2	—
Grasberg open pit	34	1.29	2.64	—	1.1	2.7	—
Under development:							
Grasberg Block Cave	963	1.01	0.72	—	18.1	14.5	—
Undeveloped:							
Kucing Liar	360	1.25	1.07	—	8.4	5.4	—
Total 100% basis	13,867				103.7	34.2	2.88
Consolidated <sup>f</sup>					86.7	23.5	2.84
FCX's equity share <sup>g</sup>					71.3	21.3	2.56

a. Excludes material contained in stockpiles.

b. Includes estimated recoverable metals contained in stockpiles.

c. Amounts not shown because of rounding.

d. The Lone Star oxide project is under development, and the Cobre ore body is undeveloped.

e. Recoverable proven and probable reserves reflect estimates of minerals that can be recovered through the end of 2041 (refer to Note 13 for discussion of PT-FI's COW).

f.

Consolidated reserves represent estimated metal quantities after reduction for joint venture partner interests at the Morenci mine in North America and the Grasberg minerals district in Indonesia. Refer to Note 3 for further discussion of FCX's joint ventures.

Net equity interest reserves represent estimated consolidated metal quantities further reduced for noncontrolling<sup>g</sup> interest ownership. Refer to Note 3 for further discussion of FCX's ownership in subsidiaries.

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## NOTE 21. SUPPLEMENTARY OIL AND GAS INFORMATION (UNAUDITED)

Following the sales of substantially all of FCX's oil and gas properties, including the sale of its Deepwater GOM, onshore California and Haynesville oil and gas properties in 2016, along with the sales of its property interests in the Madden area in central Wyoming and certain property interests in the GOM Shelf in 2017, FCX's oil and gas producing activities are not considered significant beginning in 2017. Refer to Note 2 for further discussion.

Costs Incurred. A summary of the costs incurred for FCX's oil and gas acquisition, exploration and development activities for the years ended December 31, 2016 and 2015, follows:

	2016	2015
Property acquisition costs for unproved properties	\$7	\$61
Exploration costs	22	1,250
Development costs	749	1,442
	\$778	\$2,753

These amounts included increases (decreases) in AROs of \$37 million in 2016 and \$(80) million in 2015; capitalized general and administrative expenses of \$78 million in 2016 and \$124 million in 2015; and capitalized interest of \$7 million in 2016 and \$58 million in 2015.

Capitalized Costs. The aggregate capitalized costs subject to amortization for oil and gas properties and the aggregate related accumulated amortization as of December 31 follow:

	2016	2015
Properties subject to amortization	\$27,507	\$24,538
Accumulated amortization <sup>a</sup>	(27,433 )	(22,276 )
	\$74	\$2,262

<sup>a</sup> Includes charges of \$4.3 billion in 2016 and \$13.1 billion in 2015 to reduce the carrying value of oil and gas properties pursuant to full cost accounting rules.

The average amortization rate per barrel of oil equivalents (BOE) was \$17.58 in 2016 and \$33.46 in 2015.

Costs Not Subject to Amortization. Including amounts determined to be impaired, FCX transferred \$4.9 billion of costs associated with unevaluated properties to the full cost pool in 2016. Sales of unevaluated properties totaled \$1.6 billion in 2016. Following FCX's disposition of its Deepwater GOM and onshore California oil and gas properties in fourth-quarter 2016, the carrying value of all of FCX's remaining oil and gas properties was included in the amortization base at December 31, 2017 and 2016.

Results of Operations for Oil and Gas Producing Activities. The results of operations from oil and gas producing activities for the years ended December 31, 2016 and 2015, presented below, exclude non-oil and gas revenues, general and administrative expenses, interest expense and interest income. Income tax benefit was determined by applying the statutory rates to pre-tax operating results:

	2016	2015
Revenues from oil and gas producing activities	\$1,513	\$1,994
Production and delivery costs	(1,829 ) <sup>a</sup>	(1,215 )
Depreciation, depletion and amortization	(839 )	(1,772 )
Impairment of oil and gas properties	(4,317 )	(13,144)
Income tax benefit (based on FCX's U.S. federal statutory tax rate)	—	<sup>b</sup> 5,368
Results of operations from oil and gas producing activities	\$(5,472)	\$(8,769)

a. Includes \$926 million in charges related to drillship settlements/idle rig and contract termination costs.

b. FCX has provided a full valuation allowance on losses associated with oil and gas activities in 2016.





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Proved Oil and Natural Gas Reserve Information. The following information summarizes the net proved reserves of oil (including condensate and natural gas liquids (NGLs)), and natural gas and the standardized measure as described below for the years ended December 31, 2016 and 2015. All of FCX's oil and natural gas reserves are located in the U.S.

Management believes the reserve estimates presented herein are reasonable and prepared in accordance with guidelines established by the SEC as prescribed in Regulation S-X, Rule 4-10. However, there are numerous uncertainties inherent in estimating quantities and values of proved reserves and in projecting future rates of production and the amount and timing of development expenditures, including many factors beyond FCX's control. Reserve engineering is a subjective process of estimating the recovery from underground accumulations of oil and natural gas that cannot be measured in an exact manner, and the accuracy of any reserve estimate is a function of the quality of available data and of engineering and geological interpretation and judgment. Because all oil and natural gas reserve estimates are to some degree subjective, the quantities of oil and natural gas that are ultimately recovered, production and operating costs, the amount and timing of future development expenditures, and future crude oil and natural gas sales prices may all differ from those assumed in these estimates. In addition, different reserve engineers may make different estimates of reserve quantities and cash flows based upon the same available data. Therefore, the standardized measure of discounted future net cash flows (Standardized Measure) shown below represents estimates only and should not be construed as the current market value of the estimated reserves attributable to FCX's oil and gas properties. In this regard, the information set forth in the following tables includes revisions of reserve estimates attributable to proved properties acquired from PXP and MMR, and reflects additional information from subsequent development activities, production history of the properties involved and any adjustments in the projected economic life of such properties resulting from changes in product prices.

Estimated Quantities of Oil and Natural Gas Reserves. The following table sets forth certain data pertaining to proved, proved developed and proved undeveloped reserves, all of which are in the U.S., for the years ended December 31, 2016 and 2015.

	Oil (MMBbls) <sup>a,b</sup>	Gas (Bcf) <sup>a</sup>	Total (MMBOE) <sup>a</sup>
2016			
Proved reserves:			
Balance at beginning of year	207	274	252
Extensions and discoveries	—	—	—
Acquisitions of reserves in-place	—	—	—
Revisions of previous estimates	1	—	1
Sale of reserves in-place	(168)	(118)	(187)
Production	(36)	(69)	(48)
Balance at end of year	4	87	18
Proved developed reserves at December 31, 2016	4	87	18
Proved undeveloped reserves at December 31, 2016	—	—	—
2015			
Proved reserves:			
Balance at beginning of year	288	610	390
Extensions and discoveries	11	43	17
Acquisitions of reserves in-place	—	—	—
Revisions of previous estimates	(54)	(287)	(102)

Sale of reserves in-place	—	(2 )	—
Production	(38 )	(90 )	(53 )
Balance at end of year	207	274	252

Proved developed reserves at December 31, 2015 129 245 169

Proved undeveloped reserves at December 31, 2015 78 29 83

a. MMBbbls = million barrels; Bcf = billion cubic feet; MMBOE = million BOE

b. Includes NGL proved reserves of 1 MMBbbls (all developed) at December 31, 2016, and 9 MMBbbls (6 MMBbbls of developed and 3 MMBbbls of undeveloped) at December 31, 2015.

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For the year ended December 31, 2015, FCX had a total of 17 MMBOE of extensions and discoveries, including 14 MMBOE in the Deepwater GOM, primarily associated with the development at Horn Mountain, and 3 MMBOE in the Haynesville shale assets resulting from drilling that extended and developed FCX's proved acreage.

For the year ended December 31, 2015, FCX had net negative revisions of 102 MMBOE primarily related to lower oil and gas price realizations.

The average realized sales prices used in FCX's reserve reports as of December 31, 2016, were \$34.26 per barrel of crude oil and \$2.40 per one thousand cubic feet (Mcf) of natural gas. Excluding the impact of crude oil derivative contracts, as of December 31, 2015, the average realized sales prices used in FCX's reserve report were \$47.80 per barrel of crude oil and \$2.55 per Mcf.

For the year ended December 31, 2016, FCX sold reserves in-place totaling 187 MMBOE, primarily representing all of its Deepwater GOM, onshore California and Haynesville properties.

Standardized Measure. The Standardized Measure (discounted at 10 percent) from production of proved oil and natural gas reserves has been developed in accordance with SEC guidelines. FCX estimated the quantity of proved oil and natural gas reserves and the future periods in which they were expected to be produced based on year-end economic conditions. Estimates of future net revenues from FCX's proved oil and gas properties and the present value thereof were made using the twelve-month average of the first-day-of-the-month historical reference prices as adjusted for location and quality differentials, which were held constant throughout the life of the oil and gas properties, except where such guidelines permit alternate treatment, including the use of fixed and determinable contractual price escalations (excluding the impact of crude oil derivative contracts). Future gross revenues were reduced by estimated future operating costs (including production and ad valorem taxes) and future development and abandonment costs, all of which were based on current costs in effect at December 31, 2016 and 2015, and held constant throughout the life of the oil and gas properties. Future income taxes were calculated by applying the statutory federal and state income tax rate to pre-tax future net cash flows, net of the tax basis of the respective oil and gas properties and utilization of FCX's available tax carryforwards related to its oil and gas operations.

The Standardized Measure related to proved oil and natural gas reserves as of December 31, 2016 and 2015, follows:

	2016	2015
Future cash inflows	\$345	\$10,536
Future production expense	(175 )	(4,768 )
Future development costs <sup>a</sup>	(439 )	(4,130 )
Future income tax expense	—	—
Future net cash flows	(269 )	1,638
Discounted at 10% per year	32	(246 )
Standardized Measure	\$(237)	\$1,392

<sup>a</sup> Includes estimated asset retirement costs of \$0.4 billion at December 31, 2016, and \$1.9 billion at December 31, 2015.

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A summary of the principal sources of changes in the Standardized Measure for the years ended December 31, 2016 and 2015, follows:

	2016	2015
Balance at beginning of year	\$1,392	\$6,421
Changes during the year:		
Sales, net of production expenses	(831 )	(928 )
Net changes in sales and transfer prices, net of production expenses	(341 )	(7,766 )
Extensions, discoveries and improved recoveries	—	45
Changes in estimated future development costs, including timing and other	146	1,287
Previously estimated development costs incurred during the year	295	985
Sales of reserves in-place	(1,049 )	—
Revisions of quantity estimates	12	(1,170 )
Accretion of discount	139	797
Net change in income taxes	—	1,721
Total changes	(1,629 )	(5,029 )
Balance at end of year	\$(237 )	\$1,392

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure.

Not applicable.

Item 9A. Controls and Procedures.

(a) Evaluation of disclosure controls and procedures. Our chief executive officer and chief financial officer, with the participation of management, have evaluated the effectiveness of our “disclosure controls and procedures” (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934) as of the end of the period covered by this annual report on Form 10-K. Based on their evaluation, they have concluded that our disclosure controls and procedures are effective as of the end of the period covered by this report.

(b) Changes in internal controls over financial reporting. There has been no change in our internal control over financial reporting that occurred during the quarter ended December 31, 2017, that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

(c) Management’s annual report on internal control over financial reporting and the report thereon of Ernst & Young LLP are included herein under Item 8. “Financial Statements and Supplemental Data.”

Item 9B. Other Information.

Not applicable.

### PART III

Item 10. Directors, Executive Officers and Corporate Governance.

The information set forth under the captions “Information About Director Nominees” and “Section 16(a) Beneficial Ownership Reporting Compliance” of our definitive proxy statement to be filed with the United States Securities and Exchange Commission (SEC), relating to our 2018 annual meeting of stockholders, is incorporated herein by reference. The information required by Item 10 regarding our executive officers appears in a separately captioned heading after Item 4. “Executive Officers of the Registrant” in Part I of this report.

Item 11. Executive Compensation.

The information set forth under the captions “Director Compensation” and “Executive Officer Compensation” of our definitive proxy statement to be filed with the SEC, relating to our 2018 annual meeting of stockholders, is incorporated herein by reference.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.

The information set forth under the captions “Stock Ownership of Directors and Executive Officers” and “Stock Ownership of Certain Beneficial Owners” of our definitive proxy statement to be filed with the SEC, relating to our 2018 annual meeting of stockholders, is incorporated herein by reference.

Equity Compensation Plan Information

Only our 2016 Stock Incentive Plan (2016 plan), which was previously approved by our stockholders, has shares of our common stock available for future grant. However, we have equity compensation plans pursuant to which awards have previously been made that could result in issuance of our common stock to employees and non-employees as compensation, including two plans that were assumed in connection with the acquisition of Plains Exploration & Production Company (Plains Exploration) under which stock-settled restricted stock units (RSUs) were previously issued and seven plans that were assumed in connection with the acquisition of McMoRan Exploration Co. under which stock-settled RSUs and nonqualified stock options were previously issued.

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The following table presents information regarding our equity compensation plans as of December 31, 2017.

	Number of Securities To be Issued Upon Exercise of Outstanding Options, Warrants and Rights	Weighted-Average Exercise Price of Outstanding Options, Warrants and Rights	Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in Column (a))
	(a)	(b)	(c)
Equity compensation plans approved by security holders	51,897,625	<sup>a</sup> \$ 28.73	64,748,353
Equity compensation plans not approved by security holders	3,977,985	<sup>b</sup> \$ 26.98	—
Total	55,875,610	\$ 28.59	64,748,353

Includes shares of our common stock issuable upon the vesting of 1,785,259 RSUs and 5,612,000 performance share units (PSUs) at maximum performance levels, and the termination of deferrals with respect to 1,160,450 RSUs that were vested as of December 31, 2017. These awards are not reflected in column (b) because they do not have an exercise price. The number of securities to be issued in column (a) does not include 1,430 outstanding stock appreciation rights (SARs), which were granted under the plan but are payable solely in cash. The number of securities to be issued in column (a) also does not include RSUs granted under our phantom stock plan, which are payable solely in cash.

Represents securities to be issued under awards assumed in our acquisitions of Plains Exploration and McMoRan Exploration Co. Includes shares issuable upon the vesting of 22,382 RSUs that were assumed in prior acquisitions. b. These awards are not reflected in column (b) because they do not have an exercise price. The number of securities to be issued in column (a) does not include 715,039 outstanding SARs and 21,981 RSUs, which were assumed in prior acquisitions and are payable solely in cash.

#### Item 13. Certain Relationships and Related Transactions, and Director Independence.

The information set forth under the captions “Certain Transactions” and “Board and Committee Independence” of our definitive proxy statement to be filed with the SEC, relating to our 2018 annual meeting of stockholders, is incorporated herein by reference.

#### Item 14. Principal Accounting Fees and Services.

The information set forth under the caption “Independent Registered Public Accounting Firm” of our definitive proxy statement to be filed with the SEC, relating to our 2018 annual meeting of stockholders, is incorporated herein by reference.

## PART IV

#### Item 15. Exhibits, Financial Statement Schedules.

(a)(1). Financial Statements.

The consolidated statements of operations, comprehensive income (loss), cash flows and equity, and the consolidated balance sheets are included as part of Item 8. "Financial Statements and Supplementary Data."

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(a)(2). Financial Statement Schedules.

The following financial statement schedule is presented below.

## Schedule II – Valuation and Qualifying Accounts

Schedules other than the one listed below have been omitted since they are either not required, not applicable or the required information is included in the financial statements or notes thereto.

## REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

TO THE BOARD OF DIRECTORS AND STOCKHOLDERS OF  
FREEPORT-McMoRan INC.

## Opinion on the Financial Statement Schedule

We have audited the consolidated financial statements of Freeport-McMoRan Inc. (the Company) as of December 31, 2017 and 2016, and for each of the three years in the period ended December 31, 2017, and have issued our report thereon dated February 20, 2018 (included elsewhere in this Form 10-K). Our audits also included the financial statement schedule listed in Item 15 (a)(2) as of December 31, 2017, 2016 and 2015, and for each of the three years in the period ended December 31, 2017, of this Form 10-K. In our opinion, the financial statement schedule, when considered in relation to the basic financial statements taken as a whole, presents fairly, in all material respects the information set forth therein.

## Basis for Opinion

This schedule is the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's schedule based on our audits. We believe that our audits provide a reasonable basis for our opinion.

/s/ Ernst &amp; Young LLP

Phoenix, Arizona  
February 20, 2018

## SCHEDULE II - VALUATION AND QUALIFYING ACCOUNTS (In millions)

	Balance at Beginning of Year	Additions (Deductions)			Balance at End of Year
		Charged to Costs and Expense	Charged to Other Accounts	Other Additions (Deductions)	
Reserves and allowances deducted from asset accounts:					
Valuation allowance for deferred tax assets					
Year Ended December 31, 2017	\$ 6,058	\$(1,484) <sup>a</sup>	\$ 1	<sup>b</sup> \$ —	\$ 4,575
Year Ended December 31, 2016	4,183	1,852	23	<sup>b</sup> —	6,058
Year Ended December 31, 2015	2,434	1,749	—	—	4,183

Reserves for non-income taxes:

Year Ended December 31, 2017	\$ 64	\$(2 )	\$ —	\$ (4 )	<sup>c</sup> \$58
Year Ended December 31, 2016	83	13	(3 )	(29 )	<sup>c</sup> 64
Year Ended December 31, 2015	93	9	—	(19 )	<sup>c</sup> 83

Relates to a \$1.1 billion decrease associated with a reduction in the corporate income tax rate applicable to U.S. federal deferred tax assets and \$371 million for the reversal of valuation allowances on U.S. federal alternative minimum tax credits.

- b. Relates to a valuation allowance for tax benefits primarily associated with actuarial losses for U.S. defined benefit plans included in other comprehensive loss.
- c. Represents amounts paid or adjustments to reserves based on revised estimates.

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(a)(3). Exhibits.

Exhibit		Filed with this Form 10-K	Incorporated by Reference FormFile No.	Date Filed
Number	Exhibit Title			
<u>2.1</u>	Agreement and Plan of Merger dated as of November 18, 2006, by and among FCX, Phelps Dodge Corporation and Panther Acquisition Corporation.		8-K 333-139252	11/20/2006
<u>2.2</u>	Agreement and Plan of Merger by and among Plains Exploration & Production Company, FCX and IMONC LLC, dated as of December 5, 2012.		8-K 001-11307-01	12/6/2012
<u>2.3</u>	Agreement and Plan of Merger by and among McMoRan Exploration Co., FCX and INAVN Corp., dated as of December 5, 2012.		8-K 001-11307-01	12/6/2012
<u>2.4</u>	Stock Purchase Agreement, dated as of October 6, 2014, among LMC Candelaria SpA, LMC Ojos del Salado SpA and Freeport Minerals Corporation.		10-Q 001-11307-01	11/7/2014
<u>2.5</u>	Purchase Agreement dated February 15, 2016, between Sumitomo Metal Mining America Inc., Sumitomo Metal Mining Co., Ltd., Freeport-McMoRan Morenci Inc., Freeport Minerals Corporation, and FCX.		8-K 001-11307-01	2/16/2016
<u>2.6</u>	Stock Purchase Agreement dated May 9, 2016, among CMOC Limited, China Molybdenum Co., Ltd., Phelps Dodge Katanga Corporation and FCX.		8-K 001-11307-01	2/9/2016
<u>2.7</u>	Purchase and Sale Agreement dated September 12, 2016, between Freeport-McMoRan Oil & Gas LLC, Freeport-McMoRan Exploration & Production LLC, Plains Offshore Operations Inc. and Anadarko US Offshore LLC.		10-Q 001-11307-01	11/9/2016
<u>3.1</u>	Amended and Restated Certificate of Incorporation of FCX, effective as of June 8, 2016.		8-K 001-11307-01	6/9/2016
<u>3.2</u>	Amended and Restated By-Laws of FCX, effective as of June 8, 2016.		8-K 001-11307-01	6/9/2016
<u>4.1</u>	Indenture dated as of February 13, 2012, between FCX and U.S. Bank National Association, as Trustee (relating to the 3.55% Senior Notes due 2022, the 4.00% Senior Notes due 2021, the 4.55% Senior Notes due 2024, and the 5.40% Senior Notes due 2034).		8-K 001-11307-01	2/13/2012
<u>4.2</u>	Third Supplemental Indenture dated as of February 13, 2012, between FCX and U.S. Bank National Association, as Trustee (relating to the 3.55% Senior Notes due 2022).		8-K 001-11307-01	2/13/2012
<u>4.3</u>	Fourth Supplemental Indenture dated as of May 31, 2013, among FCX, Freeport-McMoRan Oil & Gas LLC and U.S. Bank National Association, as Trustee (relating to the 3.55% Senior Notes due 2022, the 4.00% Senior Notes due 2021, the 4.55% Senior Notes due 2024, and the 5.40% Senior Notes due 2034).		8-K 001-11307-01	6/3/2013
<u>4.5</u>	Sixth Supplemental Indenture dated as of November 14, 2014 among FCX, Freeport-McMoRan Oil & Gas LLC and U.S. Bank National Association, as Trustee (relating to the 4.00% Senior Notes due 2021).		8-K 001-11307-01	11/14/2014

<u>4.6</u>	Seventh Supplemental Indenture dated as of November 14, 2014 among FCX, Freeport-McMoRan Oil & Gas LLC and U.S. Bank National Association, as Trustee (relating to the 4.55% Senior Notes due 2024).	8-K 001-11307-01 11/14/2014
<u>4.7</u>	Eighth Supplemental Indenture dated as of November 14, 2014 among FCX, Freeport-McMoRan Oil & Gas LLC and U.S. Bank National Association, as Trustee (relating to the 5.40% Senior Notes due 2034).	8-K 001-11307-01 11/14/2014
<u>4.8</u>	Indenture dated as of March 7, 2013, between FCX and U.S. Bank National Association, as Trustee (relating to the 2.375% Senior Notes due 2018, the 3.100% Senior Notes due 2020, the 3.875% Senior Notes due 2023, and the 5.450% Senior Notes due 2043).	8-K 001-11307-01 3/7/2013

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Exhibit		Filed with this Form 10-K	Incorporated by Reference	
Number	Exhibit Title	Form	File No.	Date Filed
<u>4.9</u>	Supplemental Indenture dated as of May 31, 2013, among FCX, Freeport-McMoRan Oil & Gas LLC and U.S. Bank National Association, as Trustee (relating to the 2.375% Senior Notes due 2018, the 3.100% Senior Notes due 2020, the 3.875% Senior Notes due 2023, and the 5.450% Senior Notes due 2043).	8-K	001-11307-01	6/3/2013
<u>4.10</u>	Indenture dated as of March 13, 2007, among Plains Exploration & Production Company, the Subsidiary Guarantors parties thereto, and Wells Fargo Bank, N.A., as Trustee (relating to the 6.875% Senior Notes due 2023).	8-K	001-31470	3/13/2007
<u>4.11</u>	Seventeenth Supplemental Indenture dated as of October 26, 2012 to the Indenture dated as of March 13, 2007, among Plains Exploration & Production Company, the Subsidiary Guarantors parties thereto and Wells Fargo Bank, N.A., as Trustee (relating to the 6.875% Senior Notes due 2023).	8-K	001-31470	10/26/2012
<u>4.12</u>	Eighteenth Supplemental Indenture dated as of May 31, 2013 to the Indenture dated as of March 13, 2007, among Freeport-McMoRan Oil & Gas LLC, as Successor Issuer, FCX Oil & Gas Inc., as Co-Issuer, FCX, as Parent Guarantor, Plains Exploration & Production Company, as Original Issuer, and Wells Fargo Bank, N.A., as Trustee (relating to the 6.875% Senior Notes due 2023).	8-K	001-11307-01	6/3/2013
<u>4.13</u>	Nineteenth Supplemental Indenture dated as of September 30, 2016 to the Indenture dated as of March 13, 2007, among Freeport-McMoRan Oil & Gas LLC, as Successor Issuer, FCX Oil & Gas Inc., as Co-Issuer, FMSTP Inc., as Additional Co-Issuer, FCX, as Parent Guarantor, and Wells Fargo Bank, N.A., as Trustee (relating to the 6.875% Senior Notes due 2023).	10-Q	001-11307-01	11/9/2016
<u>4.14</u>	Twentieth Supplemental Indenture dated as of December 13, 2016 to the Indenture dated as of March 13, 2007, among Freeport-McMoRan Oil & Gas LLC, as Successor Issuer, FCX Oil & Gas LLC, as Co-Issuer, FMSTP Inc., as Additional Co-Issuer, FCX, as Parent Guarantor, and Wells Fargo Bank, N.A., as Trustee (relating to the 6.875% Senior Notes due 2023).	8-K	001-11307-01	12/13/2016
<u>4.15</u>	Form of Indenture dated as of September 22, 1997, between Phelps Dodge Corporation and The Chase Manhattan Bank, as Trustee (relating to the 7.125% Senior Notes due 2027, the 9.50% Senior Notes due 2031, and the 6.125% Senior Notes due 2034).	S-3	333-36415	9/25/1997
<u>4.16</u>	Form of 7.125% Debenture due November 1, 2027 of Phelps Dodge Corporation issued on November 5, 1997, pursuant to the Indenture dated as of September 22, 1997, between Phelps Dodge Corporation	8-K	001-00082	11/3/1997

and The Chase Manhattan Bank, as Trustee (relating to the 7.125% Senior Notes due 2027).

4.17 Form of 9.5% Note due June 1, 2031 of Phelps Dodge Corporation issued on May 30, 2001, pursuant to the Indenture dated as of September 22, 1997, between Phelps Dodge Corporation and First Union National Bank, as successor Trustee (relating to the 9.50% Senior Notes due 2031). 8-K 001-00082 5/30/2001

4.18 Form of 6.125% Note due March 15, 2034 of Phelps Dodge Corporation issued on March 4, 2004, pursuant to the Indenture dated as of September 22, 1997, between Phelps Dodge Corporation and First Union National Bank, as successor Trustee (relating to the 6.125% Senior Notes due 2034). 10-K 001-00082 3/7/2005

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Exhibit		Filed with this Form 10-K	Incorporated by Reference	
Number	Exhibit Title	Form	File No.	Date Filed
<u>4.19</u>	Supplemental Indenture dated as of April 4, 2007 to the Indenture dated as of September 22, 1997, among Phelps Dodge Corporation, as Issuer, Freeport-McMoRan Copper & Gold Inc., as Parent Guarantor, and U.S. Bank National Association, as Trustee (relating to the 7.125% Senior Notes due 2027, the 9.50% Senior Notes due 2031, and the 6.125% Senior Notes due 2034).		10-K 001-00082	2/26/2016
<u>4.20</u>	Indenture dated as of December 31, 2016 among FCX, Freeport McMoRan Oil & Gas LLC, as guarantor, and U.S. Bank National Association, as Trustee (relating to the 6.75% Senior Notes due 2022 and the 6.875% Senior Notes due 2023).		8-K 001-11307-01	12/13/2016
<u>4.21</u>	Registration Rights Agreement dated as of December 13, 2016 among FCX, Freeport-McMoRan Oil & Gas LLC, as Guarantor, and J.P. Morgan Securities LLC and Merrill Lynch, Pierce, Fenner & Smith Incorporated, as Dealer Managers, relating to the 6.75% Senior Notes due 2022.		8-K 001-11307-01	12/13/2016
<u>4.22</u>	Registration Rights Agreement dated as of December 13, 2016 among FCX, Freeport-McMoRan Oil & Gas LLC, as Guarantor, and J.P. Morgan Securities LLC and Merrill Lynch, Pierce, Fenner & Smith Incorporated, as Dealer Managers, relating to the 6.875% Senior Notes due 2023.		8-K 001-11307-01	12/13/2016
<u>10.1</u>	Contract of Work dated December 30, 1991, between the Government of the Republic of Indonesia and PT Freeport Indonesia.		S-3 333-72760	11/5/2001
<u>10.2</u>	Memorandum of Understanding dated as of July 25, 2014, between the Directorate General of Mineral and Coal, the Ministry of Energy and Mineral Resources and PT Freeport Indonesia on Adjustment of the Contract of Work.		8-K 001-11307-01	7/8/2014
<u>10.3</u>	Extension dated as of January 23, 2015, to Memorandum of Understanding Between the Government of the Republic of Indonesia and PT Freeport Indonesia dated as of July 25, 2014.		10-K 001-11307-01	2/27/2015
<u>10.4</u>	Participation Agreement dated as of October 11, 1996, between PT Freeport Indonesia and P.T. RTZ-CRA Indonesia (a subsidiary of Rio Tinto PLC) with respect to a certain contract of work.		S-3 333-72760	11/5/2001
<u>10.5</u>	First Amendment dated April 30, 1999, Second Amendment dated February 22, 2006, Third Amendment dated October 7, 2009, Fourth Amendment dated November 14, 2013, and Fifth Amendment dated August 4, 2014, to the Participation Agreement dated as of October 11, 1996, between PT Freeport Indonesia and P.T. Rio Tinto Indonesia (formerly P.T. RTZ-CRA Indonesia).		10-K 001-11307-01	2/27/2015
<u>10.6</u>	Sixth Amendment dated September 17, 2015, to the Participation Agreement dated as of October 11, 1996, between PT Freeport Indonesia and P.T. Rio Tinto Indonesia.		10-Q 001-11307-01	11/6/2015
<u>10.7</u>	Seventh Amendment dated October 21, 2016, to the Participation Agreement dated as of October 11, 1996, between PT Freeport		10-Q 001-11307-01	11/9/2016

Indonesia and P.T. Rio Tinto Indonesia.

10.8 Agreement dated as of October 11, 1996, to Amend and Restate Trust Agreement among PT Freeport Indonesia, FCX, the RTZ Corporation PLC (now Rio Tinto PLC), P.T. RTZ-CRA Indonesia, RTZ Indonesian Finance Limited and First Trust of New York, National Association, and The Chase Manhattan Bank, as Administrative Agent, JAA Security Agent and Security Agent.

8-K 001-09916 11/13/1996



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Exhibit		Filed with this Form 10-K	Incorporated by Reference Form File No.	Date Filed
Number	Exhibit Title			
<u>10.9</u>	Amendment dated July 21, 2015, to the Restated Trust Agreement dated as of October 11, 1996, among PT Freeport Indonesia, PT Rio Tinto Indonesia (formerly P.T. RTZ-CRA Indonesia), U.S. Bank National Association, as trustee, JP Morgan Chase Bank, N.A., as depository, and the Secured Creditors.		10-Q 001-11307-01	8/10/2015
<u>10.10</u>	Concentrate Purchase and Sales Agreement dated effective December 11, 1996, between PT Freeport Indonesia and PT Smelting.		S-3 333-72760	11/5/2001
<u>10.11</u>	Amendment No. 1, dated as of March 19, 1998, Amendment No. 2 dated as of December 1, 2000, Amendment No. 3 dated as of January 1, 2003, Amendment No. 4 dated as of May 10, 2004, Amendment No. 5 dated as of March 19, 2009, Amendment No. 6 dated as of January 1, 2011, and Amendment No. 7 dated as of October 29, 2012, to the Concentrate Purchase and Sales Agreement dated effective December 11, 1996, between PT Freeport Indonesia and PT Smelting.		10-K 001-00082	2/27/2015
<u>10.12</u>	Amendment No. 8 dated as of April 16, 2014 to the Concentrate Purchase and Sales Agreement dated December 11, 1996 between PT Freeport Indonesia and PT Smelting.	X		
<u>10.13</u>	Amendment No. 9 dated as of April 10, 2017 to the Concentrate Purchase and Sales Agreement dated December 11, 1996 between PT Freeport Indonesia and PT Smelting.	X		
<u>10.14</u>	Nomination and Standstill Agreement dated October 7, 2015, by and between FCX, Carl C. Icahn, High River Limited Partnership, Hopper Investments LLC, Barberry Corp., Icahn Partners Master Fund LP, Icahn Offshore LP, Icahn Partners LP, Icahn Onshore LP, Icahn Capital LP, IPH GP LLC, Icahn Enterprises Holdings L.P., Icahn Enterprises G.P. Inc., Beckton Corp., Andrew Langham and Courtney Mather.		8-K 001-11307-01	10/7/2015
<u>10.15</u>	Confidentiality Agreement dated October 7, 2015, by and between FCX, Carl C. Icahn, High River Limited Partnership, Hopper Investments LLC, Barberry Corp., Icahn Partners Master Fund LP, Icahn Offshore LP, Icahn Partners LP, Icahn Onshore LP, Icahn Capital LP, IPH GP LLC, Icahn Enterprises Holdings L.P., Icahn Enterprises G.P. Inc., Beckton Corp., Andrew Langham and Courtney Mather.		8-K 001-11307-01	10/7/2015
<u>10.16</u>	Third Amended and Restated Joint Venture and Shareholders Agreement dated as of December 11, 2003 among PT Freeport Indonesia, Mitsubishi Corporation, Nippon Mining & Metals Company, Limited and PT Smelting, as amended by the First Amendment dated as of September 30, 2005, and the Second Amendment dated as of April 30, 2008.		10-K 001-00082	2/27/2015
<u>10.17</u>	Participation Agreement, dated as of March 16, 2005, among Phelps Dodge Corporation, Cyprus Amax Minerals Company, a Delaware corporation, Cyprus Metals Company, a Delaware corporation, Cyprus Climax Metals Company, a Delaware corporation, Sumitomo Corporation, a Japanese corporation, Summit Global Management, B.V., a Dutch corporation, Sumitomo Metal Mining Co., Ltd., a Japanese		8-K 001-00082	3/22/2005

corporation, Compañía de Minas Buenaventura S.A.A., a Peruvian sociedad anonima abierta, and Sociedad Minera Cerro Verde S.A.A., a Peruvian sociedad anonima abierta.

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Exhibit		Filed with this Form 10-K	Incorporated by Reference Form File No.	Date Filed
Number	Exhibit Title			
<u>10.18</u>	Shareholders Agreement, dated as of June 1, 2005, among Phelps Dodge Corporation, Cyprus Climax Metals Company, a Delaware corporation, Sumitomo Corporation, a Japanese corporation, Sumitomo Metal Mining Co., Ltd., a Japanese corporation, Summit Global Management B.V., a Dutch corporation, SMM Cerro Verde Netherlands, B.V., a Dutch corporation, Compañía de Minas Buenaventura S.A.A., a Peruvian sociedad anonima abierta, and Sociedad Minera Cerro Verde S.A.A., a Peruvian sociedad anonima abierta.		8-K 001-00082	6/7/2005
<u>10.19</u>	Amendment and Restatement Agreement dated as of February 26, 2016, relating to the Revolving Credit Agreement dated as of February 14, 2013, as amended, among FCX, PT Freeport Indonesia and Freeport-McMoRan Oil & Gas LLC, as borrowers, JPMorgan Chase Bank, N.A., as administrative agent and each of the lenders and issuing banks from time to time party thereto.		10-K 001-00082	2/26/2016
<u>10.20*</u>	Letter Agreement dated as of December 19, 2013, by and between FCX and Richard C. Adkerson.		8-K 001-11307-01	12/23/2013
<u>10.21*</u>	FCX Director Compensation.		10-K 001-00082	2/26/2016
<u>10.22*</u>	Amended and Restated Executive Employment Agreement dated effective as of December 2, 2008, between FCX and Kathleen L. Quirk.		10-K 001-11307-01	2/26/2009
<u>10.23*</u>	Amendment to Amended and Restated Executive Employment Agreement dated December 2, 2008, by and between FCX and Kathleen L. Quirk, dated April 27, 2011.		8-K 001-11307-01	4/29/2011
<u>10.24*</u>	FCX Executive Services Program		10-K 001-11307-01	2/24/2017
<u>10.25*</u>	FCX Supplemental Executive Retirement Plan, as amended and restated.		8-K 001-11307-01	2/5/2007
<u>10.26*</u>	FCX Supplemental Executive Capital Accumulation Plan.		10-Q 001-11307-01	5/12/2008
<u>10.27*</u>	FCX Supplemental Executive Capital Accumulation Plan Amendment One.		10-Q 001-11307-01	5/12/2008
<u>10.28*</u>	FCX Supplemental Executive Capital Accumulation Plan Amendment Two.		10-K 001-11307-01	2/26/2009
<u>10.29*</u>	FCX Supplemental Executive Capital Accumulation Plan Amendment Three.		10-K 001-00082	2/27/2015
<u>10.30*</u>	FCX Supplemental Executive Capital Accumulation Plan Amendment Four.		10-K 001-00082	2/27/2015
<u>10.31*</u>	FCX 2005 Supplemental Executive Capital Accumulation Plan, as amended and restated effective January 1, 2015.		10-K 001-00082	2/27/2015
<u>10.32*</u>	FCX Amended and Restated 1999 Stock Incentive Plan, as amended and restated.		10-Q 001-11307-01	5/10/2007
<u>10.33*</u>	FCX 2003 Stock Incentive Plan, as amended and restated.		10-Q 001-11307-01	5/10/2007
<u>10.34*</u>	FCX 2004 Director Compensation Plan, as amended and restated.		10-Q 001-11307-01	8/6/2010
<u>10.35*</u>	FCX Amended and Restated 2006 Stock Incentive Plan.		10-K 001-11307-01	2/27/2014

<u>10.36</u> *	Form of Notice of Grant of Nonqualified Stock Options for grants under the FCX 1999 Stock Incentive Plan, the 2003 Stock Incentive Plan and the 2006 Stock Incentive Plan.	10-K 001-11307-01 2/29/2008
<u>10.37</u> *	FCX 2004 Director Compensation Plan, as amended and restated.	10-Q 001-11307-01 8/6/2010
<u>10.38</u> *	FCX Amended and Restated 2006 Stock Incentive Plan.	10-K 001-11307-01 2/27/2014
<u>10.39</u> *	Form of Notice of Grant of Nonqualified Stock Options for grants under the FCX 1999 Stock Incentive Plan, the 2003 Stock Incentive Plan and the 2006 Stock Incentive Plan.	10-K 001-11307-01 2/29/2008

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Exhibit Number	Exhibit Title	Filed with this Form 10-K	Incorporated by Reference	
			Form File No.	Date Filed
<u>10.40</u> *	Form of Notice of Grant of Nonqualified Stock Options and Restricted Stock Units under the 2006 Stock Incentive Plan (for grants made to non-management directors and advisory directors).		8-K 001-11307-01	6/14/2010
<u>10.41</u> *	Form of Nonqualified Stock Options Grant Agreement (effective February 2012).		10-K 001-11307-01	2/27/2012
<u>10.42</u> *	Form of Nonqualified Stock Options Grant Agreement under the FCX stock incentive plans (effective February 2014).		10-K 001-11307-01	2/27/2014
<u>10.43</u> *	Form of Restricted Stock Unit Agreement under the FCX stock incentive plans (effective February 2014).		10-K 001-11307-01	2/27/2014
<u>10.44</u> *	Form of Performance Share Unit Agreement (effective February 2014).		8-K 001-11307-01	3/3/2014
<u>10.45</u> *	FCX Annual Incentive Plan (For Fiscal Years Ending 2014 - 2018).		8-K 001-11307-01	6/18/2014
<u>10.46</u> *	Form of Notice of Grant of Restricted Stock Units (for grants made to non-management directors).		10-K 001-11307-01	2/24/2017
<u>10.47</u> *	Form of Restricted Stock Unit Agreement under the FCX stock incentive plans (effective February 2015).		10-K 001-00082	2/27/2015
<u>10.48</u> *	FCX 2016 Stock Incentive Plan		8-K 001-11307-01	6/9/2016
<u>10.49</u> *	Form of Performance Share Unit Agreement (effective March 2016)	X		
<u>10.50</u> *	Form of Performance Share Unit Agreement (effective February 2018)	X		
<u>10.51</u> *	Form of Nonqualified Stock Options Grant Agreement (effective February 2018)	X		
<u>10.52</u> *	Form of Restricted Stock Unit Agreement (effective February 2018)	X		
<u>12.1</u>	FCX Computation of Ratio of Earnings to Fixed Charges.	X		
<u>14.1</u>	FCX Principles of Business Conduct.		10-K 001-11307-01	2/24/2017
<u>21.1</u>	Subsidiaries of FCX.	X		
<u>23.1</u>	Consent of Ernst & Young LLP.	X		
<u>24.1</u>	Certified resolution of the Board of Directors of FCX authorizing this report to be signed on behalf of any officer or director pursuant to a Power of Attorney.	X		
<u>24.2</u>	Powers of Attorney pursuant to which this report has been signed on behalf of certain officers and directors of FCX.	X		
<u>31.1</u>	Certification of Principal Executive Officer pursuant to Rule 13a-14(a)/15d – 14(a).	X		
<u>31.2</u>	Certification of Principal Financial Officer pursuant to Rule 13a-14(a)/15d – 14(a).	X		
<u>32.1</u>	Certification of Principal Executive Officer pursuant to 18 U.S.C. Section 1350.	X		
<u>32.2</u>	Certification of Principal Financial Officer pursuant to 18 U.S.C. Section 1350.	X		
<u>95.1</u>	Mine Safety Disclosure.	X		
<u>99.1</u>	Memorandum of Understanding between the Minister of Energy and Mineral Resources on behalf of the Government of the Republic of Indonesia with PT Freeport Indonesia dated March 31, 2017.		10-Q 001-11307-01	5/5/2017

101.INS XBRL Instance Document.	X
101.SCHXBRL Taxonomy Extension Schema.	X
101.CALXBRL Taxonomy Extension Calculation Linkbase.	X
101.DEF XBRL Taxonomy Extension Definition Linkbase.	X

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Exhibit	Number	Exhibit Title	Filed	Incorporated by
			with this	Reference
			Form 10-K	File No.
				Date Filed
	101.LAB	XBRL Taxonomy Extension Label Linkbase.	X	
	101.PRE	XBRL Taxonomy Extension Presentation Linkbase.	X	

Note: Certain instruments with respect to long-term debt of FCX have not been filed as exhibits to this Annual Report on Form 10-K since the total amount of securities authorized under any such instrument does not exceed 10 percent of the total assets of FCX and its subsidiaries on a consolidated basis. FCX agrees to furnish a copy of each such instrument upon request of the Securities and Exchange Commission.

\* Indicates management contract or compensatory plan or arrangement.

# Pursuant to a request for confidential treatment, portions of this exhibit have been redacted from the publicly filed document and have been furnished separately to the Securities and Exchange Commission.

Item 16. Form 10-K Summary.

Not applicable.

#### GLOSSARY OF TERMS

Following is a glossary of selected terms used throughout the FCX Form 10-K that are technical in nature:

#### Mining

**Adits.** A horizontal passage leading into a mine for the purposes of access or drainage.

**Alluvial aquifers.** A water-bearing deposit of loosely arranged gravel, sand or silt left behind by a river or other flowing water.

**Anode.** A positively charged metal sheet, usually lead, on which oxidation occurs. During the electro-refining process, anodes are impure copper sheets from the smelting process that require further processing to produce refined copper cathode.

**Azurite.** A bluish supergene copper mineral and ore found in the oxidized portions of copper deposits often associated with malachite.

**Bench.** The horizontal floor cuttings along which mining progresses in an open-pit mine. As the pit progresses to lower levels, safety benches are left in the walls to catch any falling rock.

**Blasthole stoping.** An underground mining method that extracts the ore zone in large vertical rooms. The ore is broken by blasting using large-diameter vertical drill holes.

**Block cave.** A general term used to describe an underground mining method where the extraction of ore depends largely on the action of gravity. By continuously removing a thin horizontal layer at the bottom mining level of the ore column, the vertical support of the ore column is removed and the ore then caves by gravity.

**Bornite.** A red-brown isometric mineral comprising copper, iron and sulfur.

**Brochantite.** A greenish-black copper mineral occurring in the oxidation zone of copper sulfide deposits.

**Cathode.** Refined copper produced by electro-refining of impure copper or by electrowinning.

**Chalcocite.** A grayish copper sulfide mineral, usually found as a supergene in copper deposits formed from the re-deposition of copper minerals that were solubilized from the oxide portion of the deposit.

**Chalcopyrite.** A brass-yellow sulfide of mineral copper and iron.

**Chrysocolla.** A bluish-green to emerald-green oxide copper mineral that forms incrustations and thin seams in oxidized parts of copper-mineral veins; a source of copper and an ornamental stone.

**Cobalt.** A tough, lustrous, nickel-white or silvery-gray metallic element often associated with nickel and copper ores from which it is obtained as a by-product.

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Concentrate. The resulting product from the concentrating process that is composed predominantly of copper sulfide or molybdenum sulfide minerals. Further processing might include smelting and electro-refining, or roasting.

Concentrating. The process by which ore is separated into metal concentrate through crushing, milling and flotation.

Concentrator. A process plant used to separate targeted minerals from gangue and produce a mineral concentrate that can be marketed or processed by additional downstream processes to produce salable metals or mineral products.

Term is used interchangeably with Mill.

Contained copper. The percentage of copper in a mineral sample before the reduction of amounts unable to be recovered during the metallurgical process.

Covellite. A metallic, indigo-blue supergene mineral found in copper deposits.

Crushed-ore leach pad. A slightly sloping pad upon which leach ores are placed in lifts for processing.

Cutoff grade. The minimum percentage of copper contained in the ore for processing. When percentages are below this grade, the material would be routed to a high-lift or waste stockpile. When percentages are above grade, the material would be processed using concentrating or leaching methods for higher recovery.

Disseminations. A mineral deposit in which the desired minerals occur as scattered particles in the rock that has sufficient quantity to be considered an ore deposit.

Electrolytic refining. The purification of metals by electrolysis. A large piece of impure copper is used as the anode with a thin strip of pure copper as the cathode.

Electrowinning. A process that uses electricity to plate copper contained in an electrolyte solution into copper cathode.

Flotation. A concentrating process in which valuable minerals attach themselves to bubbles of an oily froth for separation as concentrate. The gangue material from the flotation process reports as a tailing product.

Grade. The relative quality or percentage of metal content.

Leach stockpiles. A quantity of leachable ore placed on a leach pad or in another suitable location that permits leaching and collection of solutions that contain solubilized metal.

Leaching. The process of extracting copper using a chemical solution to dissolve copper contained in ore.

Malachite. A bright-green copper mineral (ore) that often occurs with azurite in oxidized zones of copper deposits.

Metric ton. The equivalent of 2,204.62 pounds.

Mill stockpile. Millable ore that has been mined, and is available for future processing.

Mine-for-leach. A mining operation focused on mining only leachable ores.

Mineralization. The process by which a mineral is introduced into a rock, resulting in concentration of minerals that may form a valuable or potentially valuable deposit.

Molybdenite. A black, platy, disulfide of molybdenum. It is the most common ore of molybdenum.

Ore body. A continuous, well-defined mass of mineralized material of sufficient ore content to make extraction economically feasible.

Oxide. In mining, oxide is used as an ore classification relating to material that usually leaches well but does not perform well in a concentrator. Oxide minerals in mining refer to an oxidized form.

Paste backfill. A slurry of paste material produced from railings with engineered cement and water content that is used to fill underground mined out stopes.



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Porphyry. A deposit in which minerals of copper, molybdenum, gold or, less commonly, tungsten and tin are disseminated or occur in stock-work of small veinlets within a large mass of hydro-thermally altered igneous rock. The host rock is commonly an intrusive porphyry, but other rocks intruded by a porphyry can also be hosts for ore minerals.

Production level. With respect to underground mining, the elevation of the underground works that permit extraction/transport of the ore to a common point, shaft or plant.

Pseudomalachite. A dark-green monoclinic copper mineral.

Roasting. The heating of sulfide ores to oxidize sulfides to facilitate further processing.

Run-of-Mine (ROM). Leachable ore that is mined and directly placed on a leach pad without utilizing any further processes to reduce particle size prior to leaching.

Skarn. A Swedish mining term for silicate gangue of certain iron ore and sulfide deposits of Archaean age, particularly those that have replaced limestone and dolomite. Its meaning has been generally expanded to include lime-bearing silicates, of any geologic age, derived from nearly pure limestone and dolomite with the introduction of large amounts of silicon, aluminum, iron and magnesium.

Smelting. The process of melting and oxidizing concentrate to separate copper and precious metals from metallic and non-metallic impurities, including iron, silica, alumina and sulfur.

Solution extraction. A process that transfers copper from a copper-bearing ore to an organic solution, then to an electrolyte. The electrolyte is then pumped to a tankhouse where the copper is extracted, using electricity, into a copper cathode (refer to the term Electrowinning), together referred to as solution extraction/electrowinning (SX/EW).

Spot price. The current price at which a commodity can be bought or sold at a specified time and place.

Stope. An underground mining method that is usually applied to highly inclined or vertical veins. Ore is extracted by driving horizontally upon it in a series of workings, one immediately over the other. Each horizontal working is called a stope because when a number of them are in progress, each working face under attack assumes the shape of a flight of stairs.

Sulfide. A mineral compound containing sulfur and a metal. Copper sulfides can be concentrated or leached, depending on the mineral type.

Tailing. The material remaining after economically recoverable metals and minerals have been extracted.

Tolling. The process of converting customer-owned material into specified products, which is then returned to the customer.

Oil and Gas

Barrel or Bbl. One stock tank barrel, or 42 U.S. gallons liquid volume (used in reference to crude oil or other liquid hydrocarbons).

Blowouts. Accidents resulting from loss of hydraulic well control while conducting drilling operations.

Barrel of Oil Equivalent or BOE. One stock tank barrel equivalent of oil, calculated by converting gas volumes to equivalent oil barrels at a ratio of 6 thousand cubic feet to 1 barrel of oil.

British thermal unit or Btu. One British thermal unit is the amount of heat required to raise the temperature of one pound of water by one degree Fahrenheit.

Completion. The installation of permanent equipment for production of oil or gas, or, in the case of a dry well, the reporting to the appropriate authority that the well has been abandoned.

Condensate. A mixture of hydrocarbons that exists in the gaseous phase at original reservoir temperature and pressure, but that, when produced, is in the liquid phase at surface pressure and temperature.

Cratering. The collapse of the circulation system dug around the drilling rig for the prevention of blowouts.

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Developed oil and gas reserves. Developed oil and gas reserves are reserves of any category that can be expected to be recovered: (i) through existing wells with existing equipment and operating methods or in which the cost of the required equipment is relatively minor compared to the cost of a new well; and (ii) through installed extraction equipment and infrastructure operational at the time of the reserves estimate if the extraction is by means not involving a well.

Development well. A well drilled within the proved area of an oil or gas reservoir to the depth of a stratigraphic horizon known to be productive.

Differential. An adjustment to the price of oil or natural gas from an established spot market price to reflect differences in the quality and/or location of oil or gas.

Natural gas liquids or NGLs. Hydrocarbons (primarily ethane, propane, butane and natural gasolines) which have been extracted from wet natural gas and become liquid under various combinations of increasing pressure and lower temperature.

Shale. A fine-grained, clastic sedimentary rock composed of mud that is a mix of flakes of clay minerals and tiny fragments of other minerals.

Standardized measure. The present value, discounted at 10 percent per year, of estimated future net revenues from the production of proved reserves, computed by applying sales prices used in estimating proved oil and natural gas reserves to the year-end quantities of those reserves in effect as of the dates of such estimates and held constant throughout the productive life of the reserves (except for consideration of future price changes to the extent provided by contractual arrangements in existence at year-end), and deducting the estimated future costs to be incurred in developing, producing and abandoning the proved reserves (computed based on year-end costs and assuming continuation of existing economic conditions). Future income taxes are calculated by applying the appropriate year-end statutory federal and state income tax rates, with consideration of future tax rates already legislated, to pre-tax future net cash flows, net of the tax basis of the properties involved and utilization of available tax carryforwards related to proved oil and natural gas reserves.

Undeveloped acreage. Lease acreage on which wells have not been drilled or completed to a point that would permit the production of economic quantities of oil or gas regardless of whether the acreage contains proved reserves.

Undeveloped oil and gas reserves. Undeveloped oil and natural gas reserves are reserves of any category that are expected to be recovered from new wells on undrilled acreage, or from existing wells where a relatively major expenditure is required for recompletion. Reserves on undrilled acreage shall be limited to those directly offsetting development spacing areas that are reasonably certain of production when drilled, unless evidence using reliable technology exists that establishes reasonable certainty of economic producibility at greater distances. Undrilled locations can be classified as having undeveloped reserves only if a development plan has been adopted indicating that they are scheduled to be drilled within five years, unless the specific circumstances justify a longer time. Under no circumstances shall estimates for undeveloped reserves be attributable to any acreage for which an application of fluid injection or other improved recovery technique is contemplated, unless such techniques have been proved effective by actual projects in the same reservoir or an analogous reservoir, or by other evidence using reliable technology establishing reasonable certainty.

Working interest. An interest in an oil and gas lease that gives the owner of the interest the right to drill for and produce oil and gas on the leased acreage and requires the owner to pay a share of the costs of drilling and production operations.

For additional information regarding the definitions contained in this Glossary, or for other oil and gas definitions, refer to Rule 4-10 of Regulation S-X.

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SIGNATURES

Pursuant to the requirements of Section 13 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, on February 20, 2018.

Freeport-McMoRan Inc.

By: /s/ Richard C. Adkerson  
Richard C. Adkerson  
Vice Chairman of the Board, President and Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed by the following persons on behalf of the registrant in the capacities indicated on February 20, 2018.

/s/ Richard C. Adkerson Vice Chairman of the Board, President and Chief Executive Officer  
Richard C. Adkerson (Principal Executive Officer)

/s/ Kathleen L. Quirk Executive Vice President, Chief Financial Officer and Treasurer  
Kathleen L. Quirk (Principal Financial Officer)

\* Vice President and Controller - Financial Reporting  
C. Donald Whitmire, Jr. (Principal Accounting Officer)

\* Chairman of the Board  
Gerald J. Ford

\* Director  
Lydia H. Kennard

\* Director  
Andrew Langham

\* Director  
Jon C. Madonna

\* Director  
Courtney Mather

\* Director  
Dustan E. McCoy

\* Director  
Frances Fragos Townsend

\* By: /s/ Richard C. Adkerson  
Richard C. Adkerson  
Attorney-in-Fact