

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, 2015

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

(State or other jurisdiction of incorporation or organization)

74-2480931

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

333 North Central Avenue

Phoenix, Arizona

(Address of principal executive offices)

85004-2189

(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

Common Stock, par value \$0.10 per share

Name of each exchange on which registered

New York Stock Exchange

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

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

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

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

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

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of 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.

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 \$8.6 billion on February 19, 2016, and \$19.1 billion on June 30, 2015.

Common stock issued and outstanding was 1,251,849,800 shares on February 19, 2016, and 1,040,217,108 shares on June 30, 2015.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of our proxy statement for our 2016 annual meeting of stockholders are incorporated by reference into Part III (Items 10, 11, 12, 13 and 14) of this report.

FREEPOR-T-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, 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 premier U.S.-based natural resources company with an industry-leading global portfolio of mineral assets and significant oil and natural gas resources. Our portfolio of assets includes the Grasberg minerals district in Indonesia, one of the world's largest copper and gold deposits; significant mining operations in North and South America; the Tenke Fungurume (Tenke) minerals district in the Democratic Republic of Congo (DRC) in Africa; and significant U.S. oil and natural gas assets. Our principal executive offices are in Phoenix, Arizona, and our company was incorporated under the laws of the state of Delaware on November 10, 1987.

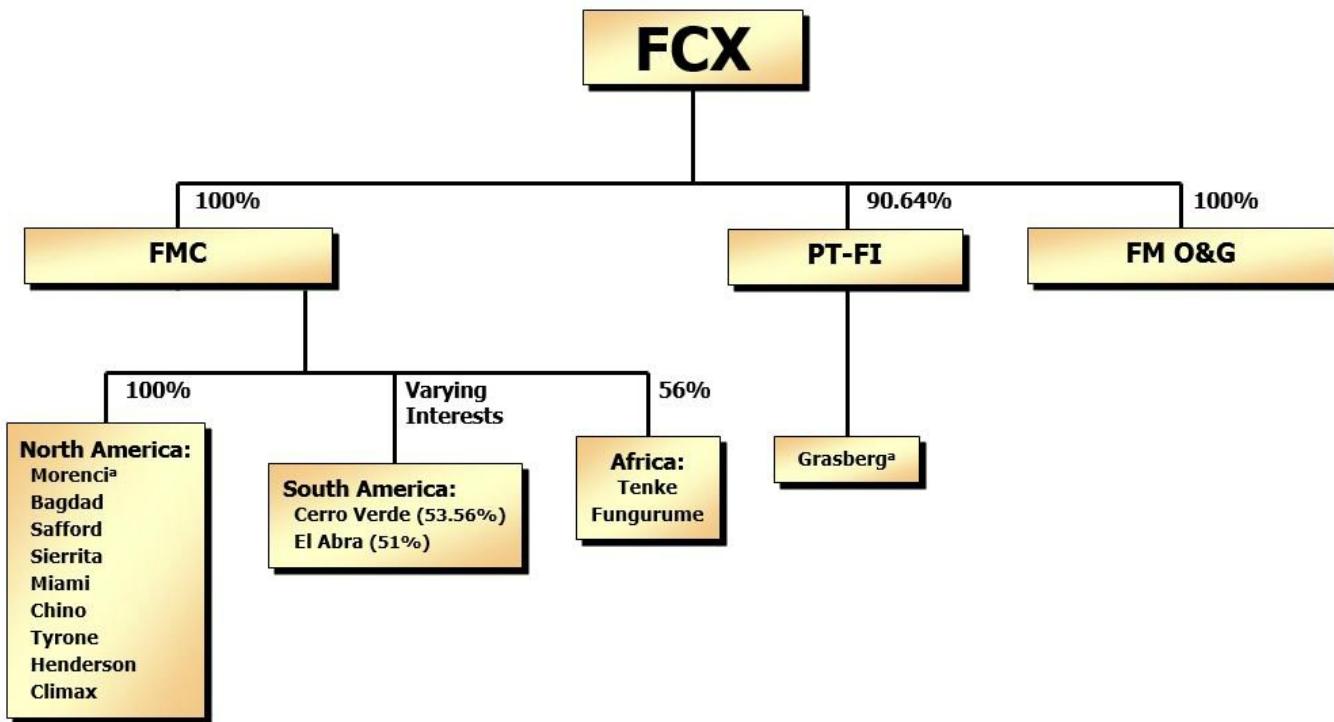
During 2015, in response to weak market conditions, we took actions to enhance our financial position, including significant reductions in capital spending, production curtailments at certain North and South America mines and actions to reduce operating, exploration and administrative costs. We are also taking continuing actions to reduce oil and gas costs and capital expenditures. Our oil and gas business (FCX Oil & Gas Inc., or FM O&G) is undertaking a near-term deferral of exploration and development expenditures by idling the three Deepwater Gulf of Mexico (GOM) drillships it has under contract. Refer to "Mining Operations" and "Oil and Gas Operations" for further discussion of revised operating plans.

Concerns about the global economy, and particularly the weakening of the Chinese economy, have dominated financial market sentiment and negatively impacted commodity prices, including copper. Oil prices have weakened to multi-year lows in response to excess global supplies and relatively weak economic conditions. Current market conditions and uncertainty about the timing of economic and commodity price recovery require us to continue taking actions to strengthen our financial position, reduce debt and re-focus our portfolio of assets. Our business strategy is focused on our position as a leading global copper producer. We will continue to manage our production activities, spending on capital projects and the administration of our business to enhance cash flows, and intend to complete asset sales to reduce debt. Several initiatives are currently being advanced, including an evaluation of alternatives for the oil and gas business as well as several potential transactions involving certain of our mining assets. In February 2016, we announced that we have entered into a definitive agreement to sell a 13 percent undivided interest in the Morenci unincorporated joint venture to Sumitomo Metal Mining Co., Ltd. for \$1.0 billion in cash (refer to Note 18 for further discussion).

We are confident about the longer term outlook for copper prices based on the global demand and supply fundamentals. With our established reserves and large-scale current production base, our significant portfolio of undeveloped resources, and our global organization of highly qualified and dedicated workers and management, we believe we are well positioned to generate significant asset sale proceeds while retaining an attractive portfolio of high-quality assets.

Our Board of Directors is undertaking a strategic review of alternatives for FM O&G. We and our advisors are actively engaged with interested participants in a process to evaluate opportunities that include asset sales and joint venture arrangements to generate cash proceeds for debt repayment. We expect to advance the evaluation of these alternatives during the first half of 2016.

Following are our ownership interests at December 31, 2015, in operating mines through our subsidiaries, Freeport Minerals Corporation (FMC) and PT Freeport Indonesia (PT-FI), and in our oil and gas business through our subsidiary, FM O&G:



- a. FMC has an 85 percent undivided interest in Morenci via an unincorporated joint venture (as further discussed in Note 18, we have entered into a definitive agreement to sell a 13 percent undivided interest in Morenci; the transaction is expected to close in mid-2016). Additionally, PT-FI has established 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 2, in November 2014, we completed the sale of our 80 percent ownership interests in the Candelaria and Ojos del Salado copper mining operations in Chile. During 2014, we also completed the sale of our Eagle Ford shale assets in Texas and acquired additional oil and gas interests in the GOM.

Mining

At December 31, 2015, our estimated consolidated recoverable proven and probable mineral reserves totaled 99.5 billion pounds of copper, 27.1 million ounces of gold, 3.05 billion pounds of molybdenum, 271.2 million ounces of silver and 0.87 billion pounds of cobalt. Following is a summary of our consolidated recoverable proven and probable mineral reserves at December 31, 2015, by geographic location (refer to "Mining Operations" for further discussion):

	Copper	Gold	Molybdenum	Silver	Cobalt
North America	34%	1%	78%	29%	—%
South America	31	—	22	32	—
Indonesia	28	99	—	39	—
Africa	7	—	—	—	100
	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>

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 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 the mines in the Grasberg minerals district. In addition to copper, the Grasberg minerals district also produces significant quantities of gold and silver. In Africa, our subsidiary Tenke Fungurume Mining S.A. (TFM) operates the mines in the Tenke minerals district. In addition to copper, the Tenke minerals district also produces cobalt hydroxide.

Following is a summary of our consolidated copper, gold and molybdenum production for the year 2015 by geographic location (refer to "Mining Operations" for further information):

	Copper	Gold	Molybdenum
North America	48%	2%	92% ^a
South America	22	—	8
Indonesia	19	98	—
Africa	11	—	—
	<u>100%</u>	<u>100%</u>	<u>100%</u>

- a. Our Henderson and Climax molybdenum mines produced 52 percent of consolidated molybdenum production, and our North America copper mines produced 40 percent.

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



Oil and Gas

At December 31, 2015, our estimated proved oil and natural gas reserves (all of which are located in the U.S.) totaled 252 million barrels of oil equivalents (MMBOE), with 82 percent comprised of oil (including natural gas liquids, or NGLs) and 67 percent represented by proved developed reserves. Refer to "Oil and Gas Operations" for further discussion.

Our portfolio of oil and gas assets include significant oil production facilities and growth potential in the Deepwater GOM, established oil production onshore and offshore California, large onshore natural gas resources in the Haynesville shale in Louisiana, natural gas production from the Madden area in central Wyoming, and a position in the Inboard Lower Tertiary/Cretaceous natural gas trend onshore in South Louisiana.

The locations of our U.S. oil and gas operations are shown on the map below:



COPPER, GOLD, MOLYBDENUM AND OIL

Following provides a brief discussion of our primary natural resources – copper, gold, molybdenum and oil. 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 2015, the LME spot copper price averaged \$2.49 per pound, ranging from a low of \$2.05 per pound to a high of \$2.92 per pound, and was \$2.13 per pound at December 31, 2015.

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 (28 percent), electrical applications (19 percent), transportation (12 percent) and industrial machinery (11 percent).

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) PM quotations. During 2015, the London PM gold price averaged \$1,160 per ounce, ranging from a low of \$1,049 per ounce to a high of \$1,296 per ounce, and was \$1,062 per ounce at December 31, 2015.

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*, *Ryan's Notes* and *Metal Bulletin*. During 2015, the weekly average price of molybdenum quoted by *Metals Week* averaged \$6.66 per pound, ranging from a low of \$4.46 per pound to a high of \$9.35 per pound, and was \$5.23 per pound at December 31, 2015.

Oil

Oil products include transportation fuels, fuel oils for heating and electricity generation, asphalt and road oil, and the feedstocks used to make chemicals, plastics and synthetic materials. The price of crude oil is set in the global marketplace, with prices largely determined by regional benchmarks, including Brent, West Texas Intermediate (WTI) and Heavy Louisiana Sweet. Prices generally reflect the worldwide supply and demand balance, and can be volatile. During 2015, the Brent crude oil price averaged \$53.64 per barrel, ranging from a low of \$36.11 per barrel to a high of \$67.77 per barrel, and was \$37.28 per barrel at December 31, 2015.

PRODUCTS AND SALES

FCX's consolidated revenues for 2015 primarily included sales of copper (67 percent), oil (11 percent), gold (10 percent) and molybdenum (5 percent). Oil and gas sales to Phillips 66 Company represented 7 percent of our consolidated revenues in 2015 and 12 percent in 2014; no other customer accounted for more than 10 percent of our consolidated revenues in any of the past three years. 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 2015, 43 percent of our mined copper was sold in concentrate, 33 percent as cathode and 24 percent as rod from North America operations.

Our copper ore 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 each 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 each and has an average copper content of 99.99 percent. For ore subject to the SX/EW process, 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 10 of our mines. SX/EW cathode is produced from the Morenci, Bagdad, Safford, Sierrita, Miami, Chino and Tyrone mines in North America; from the Cerro Verde and El Abra mines in South America; and from the Tenke minerals district in Africa. 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.

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 2015, 15 percent of our North America mines' copper sales volumes were shipped to Atlantic Copper in the form of copper concentrate.

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 2015, our South America mines sold half of their copper production in concentrate and half as cathode.

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 treatment and refining charges (*i.e.*, fees paid to smelters and refiners 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, 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:

	2015	2014	2013
Third parties	61%	36%	50%
PT Smelting	37	58	41
Atlantic Copper	2	6	9
	<u>100%</u>	<u>100%</u>	<u>100%</u>

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.

Africa. TFM sells its production in the form of copper cathode under U.S. dollar-denominated contracts.

Substantially all of TFM's cathode sales provide final copper pricing in the month after the shipment date based on quoted LME monthly average spot copper prices. Revenues from TFM's cathode sales are recorded net of royalties and also include adjustments for point-of-sale transportation costs that are negotiated in customer contracts.

Gold Products and Sales

We produce gold mostly 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. During 2015, our molybdenum sales were generally priced based on the average *Metals Week* price for the month prior to the month of shipment. We have incorporated changes in the commercial pricing structure for our chemicals products to promote continuation of chemical-grade production.

Cobalt and Silver Products and Sales

We produce cobalt hydroxide at the Tenke minerals district. Cobalt hydroxide is priced at a discount to the average monthly low price as published by *Metal Bulletin* or using LME-based pricing for a specified month near the month of shipment. We also produce silver as a component of our copper concentrate or in slimes. Silver generally is priced at the average London price for a specified month near the month of shipment.

Oil and Gas Products and Sales

We produce and sell oil and gas in the U.S. Our oil production is primarily sold under contracts with prices based upon regional benchmarks, and approximately 30 percent of our gas sales is priced monthly using industry-recognized, published index pricing, and the remainder is priced daily on the spot market.

Approximately 70 percent of our California production is attributable to heavy crude oil, which is primarily sold under a long-term contract with prices based upon regional benchmarks. In the GOM, our share of oil and gas production is sold under a series of contracts pursuant to which crude oil is sold directly to refineries in the Gulf Coast regions of Texas and Louisiana at prices based on widely used industry benchmarks.

LABOR MATTERS

At December 31, 2015, we employed approximately 34,500 people (12,400 in the U.S., 12,100 in Indonesia, 5,200 in South America, 3,400 in Africa, and 1,400 in Europe and other locations), and also had contractors with personnel at many of our operations, including approximately 20,600 at the Grasberg minerals district, 6,300 at our South America mining operations, 6,000 at the Tenke minerals district, 4,100 in the U.S., and 500 in Europe and other locations. The number of employees represented by unions at December 31, 2015, and the expiration date of the applicable union agreements are listed below.

Location	Number of Unions	Number of Union-Represented Employees	Expiration Date
PT-FI – Indonesia	2	9,058	September 2017
TFM – DRC	11	3,326	N/A ^a
Cerro Verde – Peru	3	2,735	August 2018
El Abra – Chile	2	612	April 2016 ^b
Atlantic Copper – Spain	2	423	December 2015 ^c
Kokkola - Finland	3	414	November 2016
Rotterdam – The Netherlands	2	60	March 2015 ^c
Stowmarket – United Kingdom	1	40	May 2017
Bayway – New Jersey	1	36	April 2016

- a. The Collective Labor Agreement (CLA) between TFM and its workers' unions has no expiration date, but can be amended at any time in accordance with an established process. In September 2012, TFM negotiated a four-year salary scale with union-represented employees.
- b. In February 2016, El Abra and one of its workers' unions (representing approximately one-third of El Abra's union-represented employees) signed a new four-year CLA agreement, which expires April 2020.
- c. The CLA between Atlantic Copper and its workers' unions expired in December 2015, and the CLA between Rotterdam and its workers' unions expired in March 2015; new agreements are currently being negotiated.

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

ENVIRONMENTAL AND RECLAMATION MATTERS

The cost of complying with environmental laws 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 half of total worldwide mined copper production. We currently rank second among those producers, with approximately eight 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.

Within the oil and gas industry, our competitors include national and international oil companies, major integrated oil and gas companies, numerous independent oil and gas companies and others. There is substantial competition in the oil and gas industry. Our ability to identify and successfully develop additional prospects and to discover oil and

gas reserves in the future will depend on capital availability and our ability to evaluate and select suitable properties, consummate transactions and manage our operations in a cost-efficient and effective manner in a highly competitive environment.

MINING OPERATIONS

Revised Operating Plans

During 2015, in response to weak market conditions, we took actions to enhance our financial position, including significant reductions in capital spending, production curtailments at certain North and South America mines (which resulted in aggregate annual reductions of 350 million pounds of copper and 34 million pounds of molybdenum) and actions to reduce operating, exploration and administrative costs. We continue to evaluate our mining operating plans and additional adjustments may be made as market conditions warrant.

Revised operating plans for the North America copper mines incorporate reductions in mining rates to reduce operating and capital costs, including the suspension of mining operations at the Miami mine, the suspension of production at the Sierrita mine, a 50 percent reduction in mining rates at the Tyrone mine and adjustments to mining rates at other North America mines. The revised plans at each of the operations also incorporated the impacts of lower energy, acid and other consumables, reduced labor costs and a significant reduction in capital spending plans.

The revised operating plan for our Henderson molybdenum mine incorporates lower operating rates, resulting in an approximate 65 percent reduction in annual production volumes. We have also incorporated changes in the commercial pricing structure for our chemical products to promote continuation of chemical-grade production.

Revised operating plans for the South America mines principally reflect adjustments at El Abra to reduce mining and stacking rates by approximately 50 percent to achieve lower operating and labor costs, defer capital expenditures and extend the life of the existing operation.

The revised operating plan for PT-FI incorporates improved operational efficiencies, reductions in input costs, supplies and contractor costs, and a deferral of 15 percent of capital expenditures that had been planned for 2016.

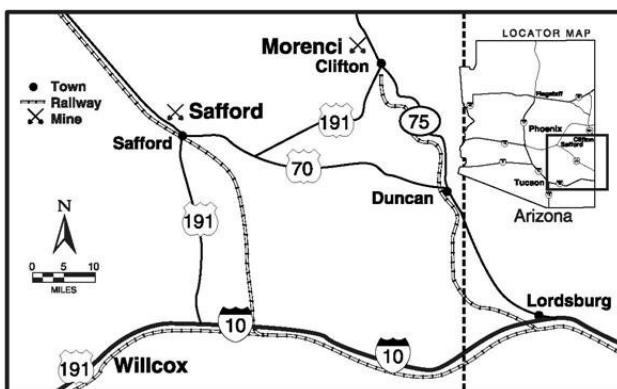
The revised operating plan for the Tenke mine incorporates a 50 percent reduction in capital spending that had been planned for 2016 and various initiatives to reduce operating, administrative and exploration costs.

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

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 an 85 percent undivided interest in Morenci, with the remaining 15 percent owned by Sumitomo Metal Mining Arizona, Inc. Each partner takes in kind its share of Morenci's production.

As further discussed in Note 18, we have entered into a definitive agreement to sell a 13 percent undivided interest in Morenci. Following completion of the transaction, we will own a 72 percent undivided interest in Morenci.

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 12 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 commenced operations in May 2014, successfully achieved full rates in second-quarter 2015. The project expanded mill capacity from 50,000 metric tons of ore per day to approximately 115,000 metric tons of ore per day, which results in incremental annual production of approximately 225 million pounds of copper and an improvement in Morenci's cost structure. Over the next five years, Morenci's copper production, including our joint venture partner share, is expected to average approximately one billion pounds per year.

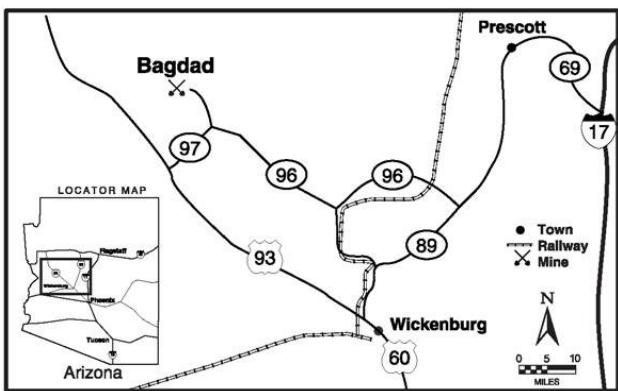
Morenci's production, including our joint venture partner's share, totaled 1.06 billion pounds of copper and 8 million pounds of molybdenum in 2015, 812 million pounds of copper and less than 1 million pounds of molybdenum in 2014, and 664 million pounds of copper and 2 million pounds of molybdenum in 2013.

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 68,250 acres, comprising 51,150 acres of patented mining claims and other fee lands, 14,050 acres of unpatented mining claims and 3,050 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.

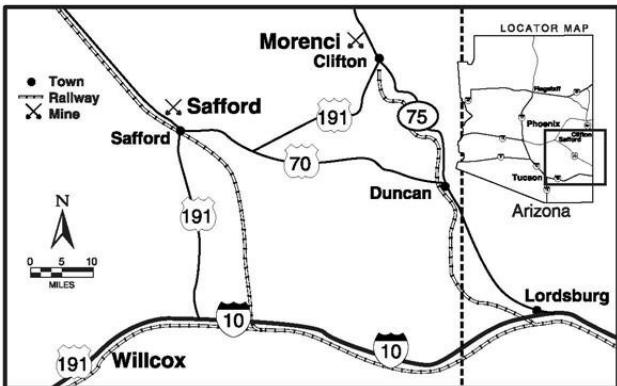
The Bagdad operation consists of a 75,000 metric ton-per-day concentrator that produces copper and molybdenum concentrate, an SX/EW plant that can produce up to 32 million pounds per year of copper cathode from solution generated by low-grade stockpile leaching, and a pressure-leach plant to process molybdenum concentrate. The available mining fleet consists of thirty 235-metric ton haul trucks loaded by six 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 210 million pounds of copper and 9 million pounds of molybdenum in 2015, 237 million pounds of copper and 9 million pounds of molybdenum in 2014, and 216 million pounds of copper and 8 million pounds of molybdenum in 2013.

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.

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.

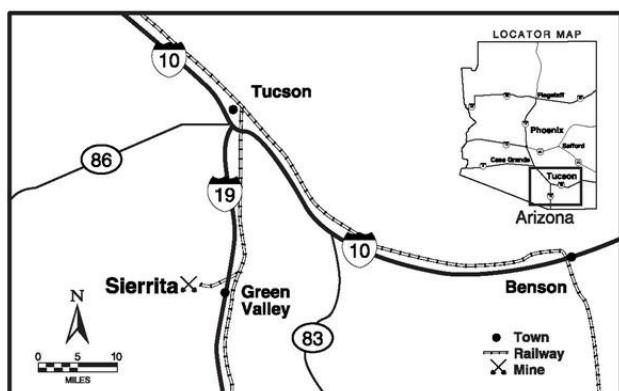
The property is a mine-for-leach project and produces copper cathode. The operation consists of two open pits feeding a crushing facility with a capacity of 103,000 metric tons per day. The crushed ore is delivered to leach pads by a series of overland and portable conveyors. Leach solutions feed a SX/EW 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 202 million pounds in 2015, 139 million pounds in 2014 and 146 million pounds in 2013.

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.

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.

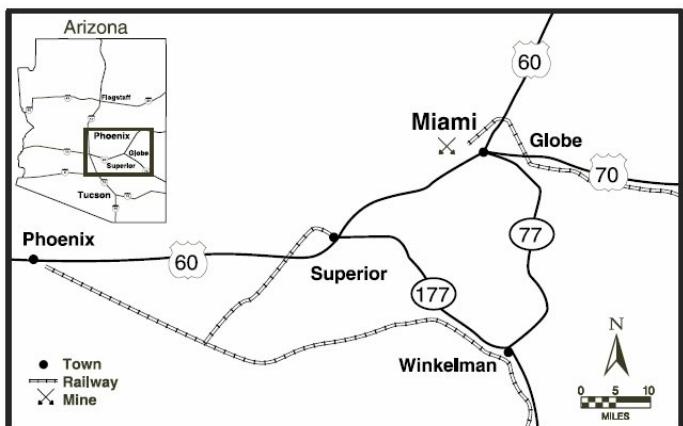
The Sierrita operation includes a 102,000 metric ton-per-day concentrator that produces copper and molybdenum concentrate. Sierrita also produces copper from a ROM oxide-leaching system. Cathode copper is plated at the Twin Buttes EW facility, which has a design capacity of approximately 50 million pounds 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-five 235-metric ton haul trucks loaded by four shovels with bucket sizes ranging from 34 to 56 cubic meters, which are capable of moving an average of 200,000 metric tons of material per day.

In response to low copper and molybdenum prices, during December 2015, we announced plans to suspend production at the Sierrita mine. The plan consists of putting the mine and concentrator operations on care-and-maintenance status and producing copper through the oxide-leaching system. Additionally, Sierrita's molybdenum processing facility will continue to process material from our other mines. Sierrita's production totaled 189 million pounds of copper and 21 million pounds of molybdenum in 2015, 195 million pounds of copper and 24 million pounds of molybdenum in 2014, and 171 million pounds of copper and 20 million pounds of molybdenum in 2013.

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.

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.

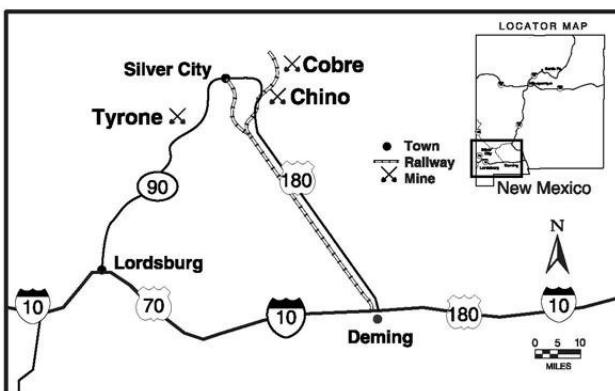
As a result of current economic conditions, we have revised operating plans to suspend mining operations at the Miami mine and produce copper through leaching material already placed on stockpiles. The design capacity of the SX/EW plant is 200 million pounds of copper per year.

Miami's copper production totaled 43 million pounds in 2015, 57 million pounds in 2014 and 61 million pounds in 2013.

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 ultimate pit bottom will have 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. Although we believe the Miami 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 Miami operation. Refer to Item 1A. "Risk Factors" and Item 3. "Legal Proceedings" for further discussion.

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.

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 production totaled 314 million pounds of copper in 2015, 250 million pounds of copper and less than 1 million pounds of molybdenum in 2014, and 171 million pounds of copper and 2 million pounds of molybdenum in 2013.

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.

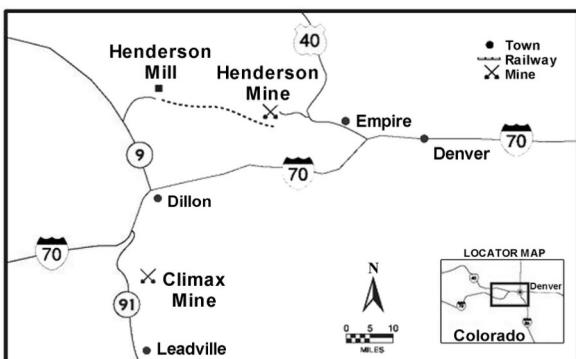
Copper processing facilities consist of a SX/EW operation with a maximum capacity of approximately 100 million pounds of copper cathode per year. The available mining fleet consists of seven 240-metric ton haul trucks loaded by one shovel with a bucket size of 47 cubic meters, which is capable of moving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

The revised operating plans include a 50 percent reduction in mining rates at the Tyrone mine. Tyrone's copper production totaled 84 million pounds in 2015, 94 million pounds in 2014 and 96 million pounds in 2013.

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.

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 40 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 fifteen 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.

The revised operating plans for the Henderson mine incorporate an approximate 65 percent reduction in operating rates. Henderson's molybdenum production totaled 25 million pounds in 2015, and 30 million pounds in both 2014 and 2013.

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.

Molybdenum production from Climax totaled 23 million pounds in 2015, 21 million pounds in 2014 and 19 million pounds in 2013.

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.

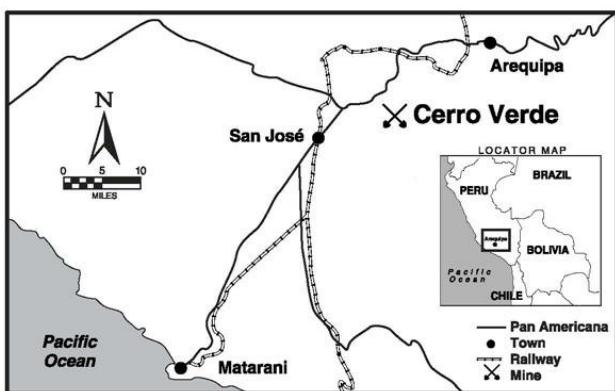
The operations encompass approximately 14,350 acres, consisting primarily of patented mining claims and other fee lands.

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. A majority of Cerro Verde's copper cathode production is sold locally, and the remaining copper cathode and concentrate production are 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 and is currently operating at full rates. Cerro Verde's expanded operations will benefit from its large-scale, long-lived reserves and cost efficiencies. The project expanded the concentrator facilities from 120,000 metric tons of ore per day to 360,000 metric tons of ore per day and is expected to provide incremental annual production of approximately 600 million pounds of copper and 15 million pounds of molybdenum.

The available fleet consists of six 290-metric ton haul trucks and eighty-two 230-metric ton haul trucks loaded by nine 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 725,000 metric tons of material per day.

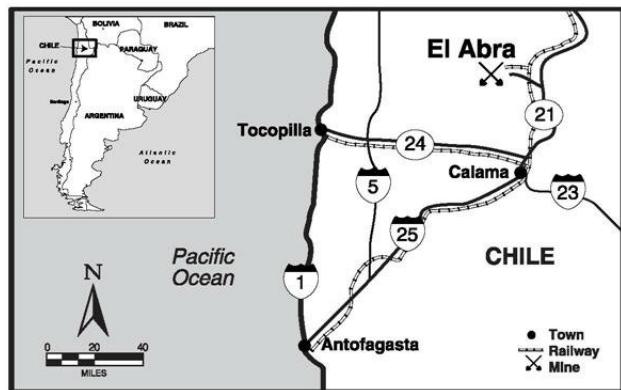
Cerro Verde's production totaled 545 million pounds of copper and 7 million pounds of molybdenum in 2015, 500 million pounds of copper and 11 million pounds of molybdenum in 2014, and 558 million pounds of copper and 13 million pounds of molybdenum in 2013.

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 grants the surface rights of mining concessions located on government land. Additional government land if obtained prior to 1997, must be leased or purchased. Cerro Verde has a mining concession covering approximately 157,000 acres, including 14,500 acres rented from the Regional Government of Arequipa, plus 71 acres of owned property, and 80 acres of rights-of-way outside the mining concession area.

Cerro Verde receives electrical power under long-term contracts with Kallpa Generación SA and ElectroPeru to supply energy to the expanded facilities.

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 Chile and processes it for both use at the Cerro Verde mine and for recharge of treated water into the Rio Chile. Prior to construction of the wastewater treatment plant, Cerro Verde reached agreement with the Regional Government of Arequipa, the National Government, the local water utility company, Servicio de Agua Potable y Alcantarillado de Arequipa S.A. (SEDAPAR), and other local institutions to allow it to reuse an annual average of one cubic meter per second of the treated water to support the recently completed concentrator expansion. 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 forty-one 220-metric ton haul trucks loaded by four shovels with buckets ranging in size from 34 to 63 cubic meters, which are capable of moving an average of 214,000 metric tons of material per day.

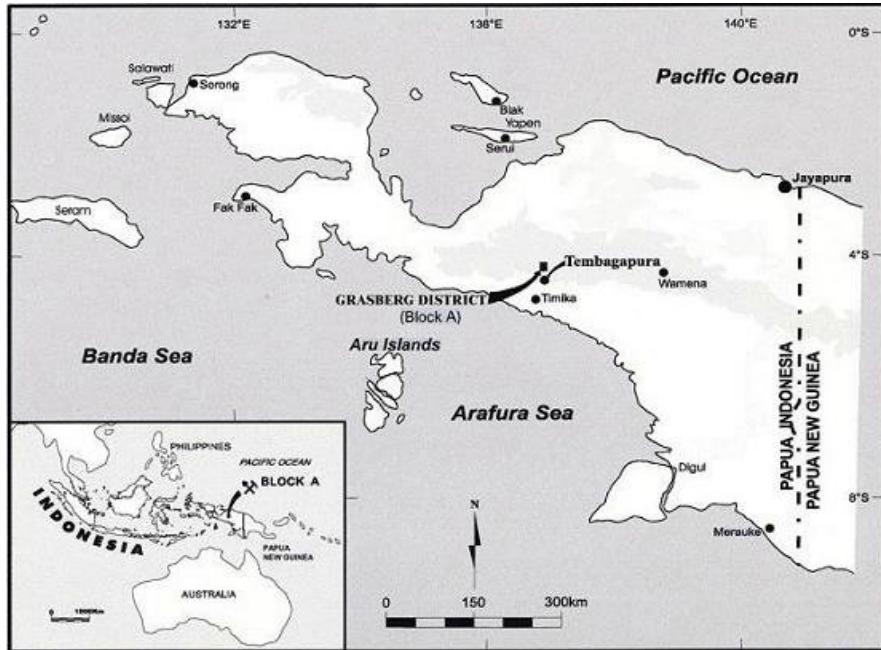
The revised operating plans for El Abra reduce mining and stacking rates by approximately 50 percent to achieve lower operating and labor costs, defer capital expenditures and extend the life of the existing operations. El Abra's copper production totaled 324 million pounds in 2015, 367 million pounds in 2014 and 343 million pounds in 2013.

Exploration results in recent years at El Abra indicate a significant sulfide resource, which could potentially support a major mill project. Future investments will be dependent on technical studies, economic factors and global copper 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 E-Cl. 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. El Abra is conducting studies to assess the feasibility of constructing a desalination plant near the Pacific Ocean to treat seawater for possible increased sulfide ore production through ore mill processing. 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; the Indonesian government owns the remaining 9.36 percent.

PT-FI has established 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 2021 in Block A of PT-FI's Contract of Work (COW), and after 2021, a 40 percent interest in all production from Block A. Refer to Note 3 for further discussion of the joint venture agreement.

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; however, we have not had an arbitration during the more than 40 years we have operated in Indonesia.

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, which is where all of PT-FI's proven and probable mineral reserves and all its current mining operations are located. Under the COW, PT-FI also conducts exploration activities in the Block B area currently covering 502,000 acres. Ongoing negotiations for an amended COW, discussed below and in Note 13, may result in relinquishments of the Block B acreage.

Under the COW, PT-FI pays royalties on copper, gold and silver in the concentrate it sells (refer to Note 13 for further discussion of the royalty rates and the "Regulatory Matters" discussion below regarding the modifications resulting from the July 2014 Memorandum of Understanding (MOU) entered into with Indonesian government). 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. PT-FI's royalties totaled \$114 million in 2015, \$115 million in 2014 and \$109 million in 2013.

Regulatory Matters. In January 2014, the Indonesian government published regulations that among other things imposed a progressive export duty on copper concentrate and restricts concentrate exports 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 MOU with the Indonesian government. Under the MOU, PT-FI provided a \$115 million assurance bond to support its commitment for smelter development, agreed to increase royalty rates and agreed to pay export duties (which were set at 7.5 percent, declining to 5.0 percent when smelter development progress exceeds 7.5 percent and are eliminated when development progress exceeds 30 percent). The MOU also anticipated an amendment of the COW within six months to address other matters; however, no terms of the COW other than those relating to the smelter bond, increased royalties and export duties were changed. In January 2015, the MOU was extended to July 25, 2015, and it expired on that date. The increased royalty rates, export duties and smelter assurance bond remain in effect. PT-FI paid export duties totaling \$109 million in 2015 and \$77 million in 2014.

PT-FI is required to apply for renewal of export permits at six-month intervals. On July 29, 2015, PT-FI's export permit was renewed through January 28, 2016. In connection with the renewal, export duties were reduced to 5.0 percent as a result of smelter development progress. On February 9, 2016, PT-FI's export permit was renewed through August 8, 2016. PT-FI will continue to pay a 5.0 percent export duty on concentrate while it reviews its smelter progress with the Indonesian government.

PT-FI continues to engage in discussions with the Indonesian government regarding its COW and long-term operating rights. In October 2015, the Indonesian government provided a letter of assurance to PT-FI indicating that it will 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 its current COW.

In connection with its COW negotiations and subject to concluding the agreement to extend PT-FI's operations beyond 2021 on acceptable terms, PT-FI has agreed to construct new smelter capacity in Indonesia and to divest an additional 20.64 percent in PT-FI at fair market value. PT-FI continues to advance plans for the smelter in parallel with completing its COW negotiations.

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 agreement with the Indonesian government on its long-term rights, we may be required to reduce or defer investments in underground development projects, which could have a material adverse effect on PT-FI's future production and reserves. In addition, PT-FI would intend to pursue any and all claims against the Indonesian government for breach of contract through international arbitration. Refer to Item 1A. "Risk Factors" for further discussion of 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 Deep Mill Level Zone (DMLZ) underground mine. The Grasberg minerals district also includes the developed Big Gossan underground mine where operations are currently suspended and are expected to restart in the first half of 2017. 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, currently anticipated to occur in late 2017. Refer to MD&A for further discussion of these projects.

PT-FI's production, including our joint venture partner's share, totaled 752 million pounds of copper and 1.23 million ounces of gold in 2015, 651 million pounds of copper and 1.13 million ounces of gold in 2014 and 928 million pounds of copper and 1.14 million ounces of gold in 2013.

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.

Although we typically have sufficient water for our Indonesian operations, lower rainfall resulting from El Niño weather conditions in the second half of 2015 has impacted operations, and may continue to impact operations in 2016. 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. Mining operations are expected to continue through the end of 2017, and production from the ore stockpiles, which are located outside of the pit limits, are expected to continue until early 2019. Production in the open pit is currently at the 3,160- to 3,715-meter elevation level and totaled 42 million metric tons of ore in 2015, which provided 70 percent of PT-FI's 2015 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 141 haul trucks with payloads ranging from 218 to 276 metric tons and 16 shovels with bucket sizes ranging from 17 to 42 cubic meters, which mined an average of 250,400 metric tons of material per day in 2015, 298,400 metric tons per day in 2014 and 381,000 metric tons per day in 2013.

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. For the year 2015, Grasberg's crushing and conveying systems delivered an average of 116,000 metric tons of ore per day to the mill. Grasberg's overburden handling system is capable of delivering 175,000 metric tons per day. For the year 2015, the Grasberg overburden handling system delivered an average of 43,000 metric tons per day of overburden to the overburden stockpiles. The remaining overburden moved by haul trucks averaged 72,000 metric tons per day in 2015. Ore milled from the Grasberg open pit averaged 115,900 metric tons of ore per day in 2015, 69,100 metric tons of ore per day in 2014 and 127,700 metric tons of ore per day in 2013.

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, which range from 35,000 to 65,000 metric tons of ore per day, 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. During 2015, ore milled from the DOZ underground mine averaged 43,700 metric tons of ore per day. Production at the DOZ underground mine is expected to continue through 2021.

The DOZ mine fleet consists of over 250 pieces of mobile equipment. The primary mining equipment directly associated with production and development includes an available fleet of 52 LHD units and 21 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.

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. PT-FI began production from the DMLZ ore body in September 2015 using the block-cave method. Ore milled from the DMLZ underground mine averaged 2,900 metric tons of ore per day for the year 2015 (3,500 metric tons per day in fourth-quarter 2015). 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 2040.

The DMLZ mine fleet consists of over 277 pieces of mobile equipment, which includes 33 LHD units and 19 haul trucks used in production and development activities.

Big Gossan Underground Mine

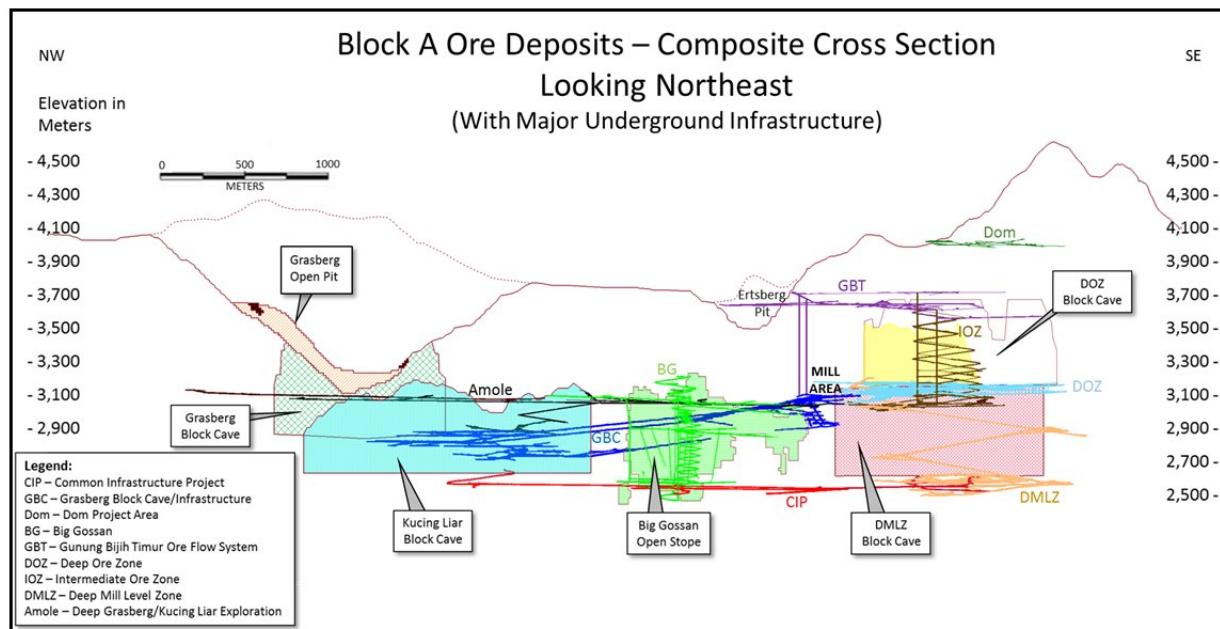
Production from the Big Gossan ore body, which is currently suspended, is expected to restart in the first half of 2017 and ramp up to 7,000 metric tons of ore per day in 2019. The Big Gossan mine lies underground and adjacent to the current mill site. It is a tabular, near vertical ore body with approximate 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 135 pieces of mobile equipment, which includes five LHD units and three haul trucks used in development and production activities.

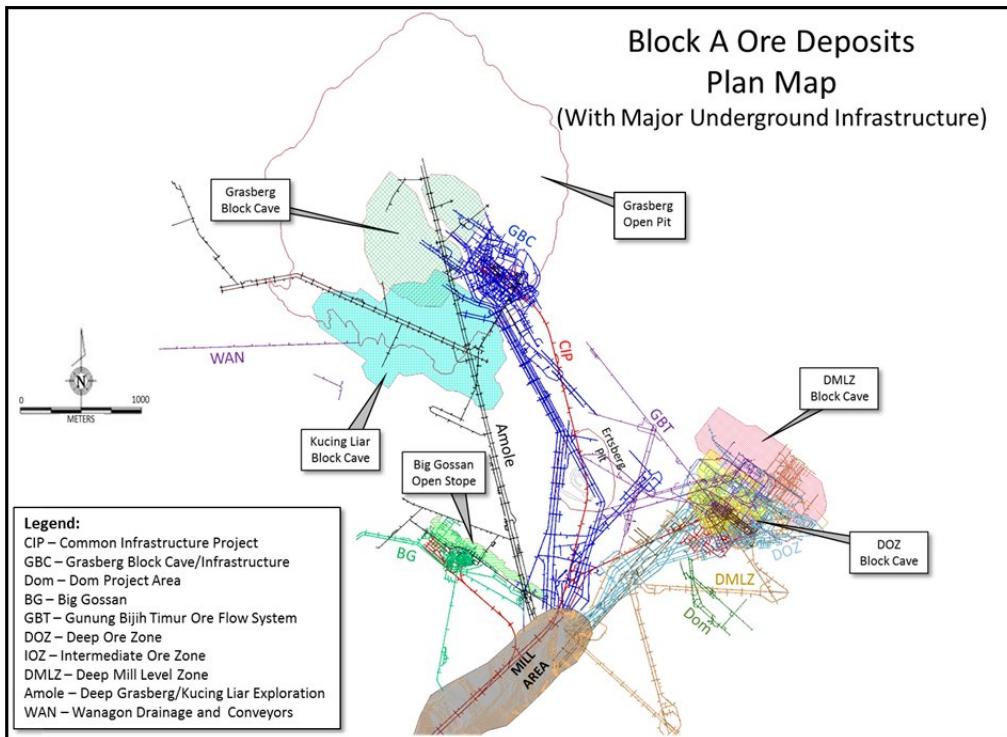
Description of Ore Bodies. Our Indonesia ore bodies are located within and around two main igneous intrusions, the Grasberg monzodiorite and the Ertsberg diorite. The host rocks of these ore bodies include both carbonate and clastic rocks that form the ridge crests and upper flanks of the Sudirman Range, 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.

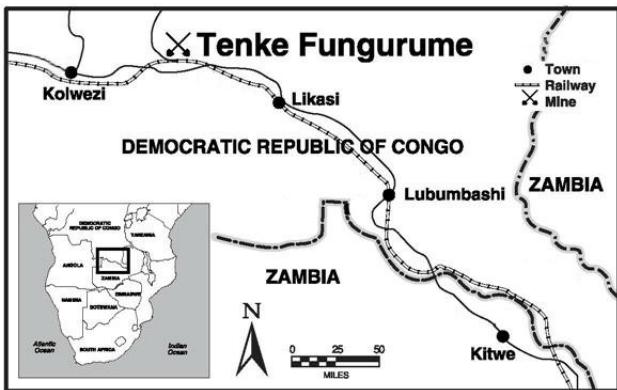
The following diagram indicates the relative elevations (in meters) of our reported Indonesia ore bodies.



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.



Africa



TFM is organized under the laws of the DRC. We own an effective 56 percent interest in TFM, with the remaining ownership interests held by Lundin Mining Corporation (Lundin) (an effective 24 percent interest) and La Générale des Carrières et des Mines (Gécamines), which is wholly owned by the DRC government (a 20 percent non-dilutable interest).

TFM is entitled to mine in the DRC under an Amended and Restated Mining Convention (ARMC) with the DRC government. The original Mining Convention entered into in 1996 was replaced with the ARMC in 2005 and was further amended in 2010 (approved in 2011). The current ARMC will remain in effect for as long as the Tenke concessions are exploitable.

TFM pays a royalty of two percent of net revenues under the ARMC, which totaled \$25 million in 2015 and \$29 million in both 2014 and 2013.

The Tenke minerals district is located in the Southeast region of the DRC approximately 110 miles northwest of Lubumbashi and is accessible by paved roads and by rail. The deposits are sediment-hosted copper and cobalt

deposits with oxide, mixed oxide-sulfide and sulfide mineralization. The dominant oxide minerals are malachite, pseudomalachite and heterogenite. Important sulfide minerals consist of bornite, carrollite, chalcocite and chalcopyrite.

The Tenke minerals district contains an open-pit copper and cobalt mining complex, which commenced initial copper production in March 2009. TFM completed its second phase expansion project in early 2013, which included increasing mine, mill and processing capacity. Construction of a second sulphuric acid plant is under way, with completion expected in the first half of 2016. We continue to engage in exploration activities and metallurgical testing to evaluate the potential of the highly prospective minerals district at Tenke. Future development and expansion opportunities are being deferred pending improved market conditions.

The current equipment fleet includes three 17-cubic meter mass excavators, five 12-cubic meter front-end loaders, thirteen 7-cubic meter front-end loaders, thirty-six 91-metric ton haul trucks and six 80-metric ton haul trucks.

Copper and cobalt are recovered through an agitation-leach plant. Production from the Tenke minerals district totaled 449 million pounds of copper and 35 million pounds of cobalt in 2015, 447 million pounds of copper and 29 million pounds of cobalt in 2014, and 462 million pounds of copper and 28 million pounds of cobalt in 2013.

The Tenke minerals district is located in a tropical region; however, temperatures are moderated by its higher altitudes. Weather in this region is characterized by a dry season and a wet season, each lasting about six months with average rainfall of 47 inches per year. The highest bench elevation is expected to be 1,520 meters above sea level, and the ultimate pit bottom is expected to be 1,110 meters above sea level. The Tenke deposits are covered by six exploitation permits totaling approximately 394,450 acres.

TFM has long-term power supply and infrastructure funding agreements with La Société Nationale d'Electricité, the state-owned electric utility company serving the region. The results of a recent water exploration program, as well as the regional geological and hydro-geological conditions, indicate that adequate water is available during the expected life of the operation.

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 300,000 metric tons of copper per year, and the refinery has a capacity of 285,000 metric tons of copper per year. During 2015, Atlantic Copper treated 1.05 million metric tons of concentrate and scrap, and produced 293,100 metric tons of copper anode from its smelter and 284,800 metric tons of copper cathode from its refinery.

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

	2015	2014	2013
North America copper mines	23%	21%	13%
South America mining	3	21	32
Indonesia mining	3	8	16
Third parties	71	50	39
	<u>100%</u>	<u>100%</u>	<u>100%</u>

a. The decrease in purchases from the South America mines, compared to the years 2014 and 2013, primarily reflects the impact of the November 2014 sale of the Candelaria and Ojos del Salado mines.

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 the next short-term maintenance turnaround is scheduled for 2017.

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 Unimetal 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 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.

During 2015, PT Smelting treated 744,800 metric tons of concentrate and produced 199,700 metric tons of copper anode from its smelter and 198,400 metric tons of copper cathode from its refinery. PT Smelting resumed operations in September 2015, following a temporary suspension in July 2015, and operated at approximately 80 percent capacity until 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 23-day maintenance turnaround during 2014, and the next major maintenance turnaround is scheduled for third-quarter 2016.

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 technologies, to improve production and to comply with air quality requirements. The Miami smelter is installing emission control equipment that will allow it to operate in compliance with recently adopted enhanced air quality standards (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 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 (refer to Item 1A. "Risk Factors" for further discussion).

Major maintenance turnarounds (which take approximately three weeks to complete) typically occur approximately every 14 months for the Miami smelter, with short-term maintenance turnarounds in the interim. The Miami Smelter completed a major maintenance turnaround in third-quarter 2015, and the next major maintenance turnaround is scheduled for fourth-quarter 2016.

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. The acquisition provided direct end-market access for the cobalt hydroxide production at the Tenke minerals district. 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 our partners in TFM, including 24 percent by Lundin and 20 percent by Gécamines. The Kokkola refinery has an annual refining capacity of approximately 15,000 metric tons of cobalt, sufficient to refine the majority of the cobalt we produce in the Tenke minerals district.

Other North America Copper Mines. We also have five non-operating copper mines in North America – Ajo, Bisbee, Twin Buttes and Tohono in Arizona, and Cobre in New Mexico – 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

We have several projects and potential opportunities to expand production volumes, extend mine lives and develop large-scale underground ore bodies. Our near-term major development projects include the underground development activities in Grasberg (refer to MD&A for further discussion). Considering the long-term nature and large size of our development projects, actual costs and timing could vary from estimates. We continue to review our mine development and processing plans to maximize the value of our mineral reserves.

Capital expenditures for mining operations totaled \$3.3 billion (including \$2.4 billion for major projects) in 2015, \$4.0 billion (including \$2.9 billion for major projects) in 2014 and \$3.8 billion (including \$2.3 billion for major projects) in 2013. Capital expenditures for major projects during the three years ended December 31, 2015, were primarily associated with the expansion projects at Morenci and Cerro Verde, and underground development activities at Grasberg. Capital expenditures for major projects at mining operations in the year 2016 are expected to approximate \$1.4 billion and are primarily associated with underground development activities at Grasberg and remaining costs for the Cerro Verde expansion.

PT-FI is advancing plans for the construction of new smelter capacity in Indonesia in parallel with completing negotiations on its COW and long-term operating rights. PT-FI has identified sites, and project definition studies and early engineering are being advanced. We are also engaged in discussions with potential partners for the project. The preliminary scope of the facilities involves smelting and refining capacity of one to two million metric tons per year of copper concentrate from the Grasberg mine.

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 \$2.4 billion (which are expected to be made between 2019 and 2031). Additionally, our current mine development plans include approximately \$5 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 2018 and 2035.

Our mining exploration activities are generally near our existing mines, with a focus on opportunities to expand reserves and resources to support development of additional future production capacity in the large minerals districts where we currently operate. Exploration results continue to indicate opportunities for what we believe could be significant future potential reserve additions in North and South America, and in the Tenke minerals district. The drilling data in North America also indicates the potential for significantly expanded sulfide production. Drilling results and exploration modeling provide a long-term pipeline for future growth in reserves and production capacity in established minerals districts. Exploration spending associated with mining operations totaled \$102 million in 2015, \$96 million in 2014 and \$182 million in 2013. Exploration spending continues to be reduced from historical levels as a result of market conditions and is expected to approximate \$52 million for the year 2016.

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 17 percent of our 2015 consolidated copper production costs and included purchases of approximately 250 million gallons of diesel fuel; 7,600 gigawatt hours of electricity at our North America, South America and Africa copper mining operations (we generate all of our power at our Indonesia mining operation); 800 thousand metric tons of coal for our coal power plant in Indonesia; and 1 million British thermal units (MMBtu) of natural gas at certain of our North America mines. Based on current cost estimates, we estimate energy will approximate 20 percent of our consolidated copper production costs for 2016.

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 and Tenke mines. Sulphuric acid needs in excess of the sulphuric acid produced by our operations are purchased from third parties. As further discussed in Item 1A. "Risk Factors," if production were to be curtailed at the Miami Smelter, we would be required to export concentrate rather than process it ourselves and to purchase sulphuric acid from third parties, thereby increasing our operating costs.

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
- basic education programs
- public health programs, including malaria control and HIV
- agricultural assistance programs
- small and medium enterprise development programs
- cultural promotion and preservation programs
- clean water and sanitation projects
- community infrastructure development
- charitable donations

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.

We completed a corporate level human rights impact assessment in 2014, the results of which were used to evaluate our human rights program, including a review of our human rights policy. In February 2015, we updated our human rights policy to, among other things, reflect our commitment to integrating the United Nations Guiding Principles on Business and Human Rights into our human rights program. We also participate in a multi-industry human rights working group to gain insight from peer companies and are integrating human rights due diligence into our business practices.

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 should help us maintain good relations with the surrounding communities and avoid disruptions of mining operations. As part of our ongoing, annual commitment to sustainable community development, we have made significant investments in social programs, including in-kind support and administration, across our global operations. Over the last five years, these investments have averaged \$180 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 and distribution network, which was financed by the Cerro Verde Civil Association (the Association). The Association manages contributions made by Cerro Verde for projects that focus on education, training, health, cultural preservation and basic infrastructure.

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 is being used to supplement existing water supplies to support Cerro Verde's concentrator expansion. Treating this water will also improve the regional water quality, enhance agriculture products grown in the area and reduce waterborne illnesses. In addition to these projects, Cerro Verde annually makes significant community development investments in the Arequipa region.

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 of the area. PT-FI has

committed through 2016 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 \$27 million in 2015, \$31 million in 2014 and \$41 million in 2013 for this commitment.

The Amungme and Kamoro Community Development Organization (*Lembaga Pengembangan Masyarakat Amungme dan Kamoro* or LPMAK) oversees disbursement of the program funds we contribute to the Partnership Fund. LPMAK 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 \$58 million for 2015, \$57 million for 2014 and \$51 million for 2013.

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 \$21 million in 2015, \$27 million in 2014 and \$25 million in 2013. 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.

Africa. TFM has committed to assist the communities living within its concession area in the Southeast region of the DRC. Initiatives include an integrated malaria control program; construction, renovation and building of local health facilities; construction and renovation of local schools; installation of over 115 clean water wells in rural villages as well as construction of urban water distribution systems; and economic development programs supporting development and training of local entrepreneurs, contractors and farmers. We have also made significant investments in infrastructure in the region that will have lasting benefits to the country, including upgrading a portion of a national road and the regional power generation and transmission systems.

Through the ARMC, TFM also contributes 0.3 percent of its net sales revenue to a community development fund to assist the local communities with development of local infrastructure and related services including health, education and agriculture. The TFM Social Community Fund is managed by a board of directors comprised of two local community representatives, one representative nominated by the provincial governor, four TFM representatives and an observer representative from Gecamines. A stakeholder forum comprised of 40 community leaders provides for increased community participation and input regarding project priorities, community needs, and

transparency of fund management. The TFM Social Community Fund contributions totaled \$4 million in each of the years in 2015, 2014 and 2013.

Security Matters. TFM maintains an unarmed internal security department composed of both employees and contractors. The national government also has assigned Mines Police to the TFM concession areas. The Mines Police are a division of the Congolese National Police and are responsible for maintaining security in mining concessions throughout the DRC. TFM provides food, housing, medical services, supervised transportation, non-lethal equipment and monetary allowances as well as direct payments to the government for the provision of the security assigned to the concession areas. The total cost to TFM for this support, including in-kind support, approximated \$1 million in 2015, \$2 million in 2014 and \$1 million in 2013.

TFM also participates in monthly security coordination meetings with host country security personnel, other mining companies, non-governmental organizations and representatives from the United Nations to discuss security issues and concerns. As an outcome of the coordination meetings, TFM has partnered with MONUSCO (United Nations Stabilization Mission in the DRC) to conduct human rights training in the TFM concessions for host government security personnel, local representatives and TFM security employees.

Mining Production Data

(FCX's net interest in %)	Years Ended December 31,				
	2015	2014	2013	2012	2011
COPPER (millions of recoverable pounds)					
North America					
Morenci (85%) ^a	902	691	564	537	522
Bagdad (100%)	210	237	216	197	194
Safford (100%)	202	139	146	175	151
Sierrita (100%)	189	195	171	157	177
Miami (100%)	43	57	61	66	66
Chino (100%)	314	250	171	144	69
Tyrone (100%)	84	94	96	83	76
Other (100%)	3	7	6	4	3
Total North America	<u>1,947</u>	<u>1,670</u>	<u>1,431</u>	<u>1,363</u>	<u>1,258</u>
South America					
Cerro Verde (53.56%)	545	500	558	595	647
El Abra (51%)	324	367	343	338	274
Candelaria/Ojos del Salado (80%) ^b	—	284	422	324	385
Total South America	<u>869</u>	<u>1,151</u>	<u>1,323</u>	<u>1,257</u>	<u>1,306</u>
Indonesia					
Grasberg (90.64%) ^c	752	636	915	695	846
Africa					
Tenke Fungurume (56%) ^d	449	447	462	348	281
Consolidated	<u>4,017</u>	<u>3,904</u>	<u>4,131</u>	<u>3,663</u>	<u>3,691</u>
Less noncontrolling interests	680	725	801	723	710
Net	<u>3,337</u>	<u>3,179</u>	<u>3,330</u>	<u>2,940</u>	<u>2,981</u>
GOLD (thousands of recoverable ounces)					
North America (100%) ^a	25	12	7	13	10
South America (80%) ^b	—	72	101	83	101
Indonesia (90.64%) ^c	1,232	1,130	1,142	862	1,272
Consolidated	<u>1,257</u>	<u>1,214</u>	<u>1,250</u>	<u>958</u>	<u>1,383</u>
Less noncontrolling interests	115	120	127	98	139
Net	<u>1,142</u>	<u>1,094</u>	<u>1,123</u>	<u>860</u>	<u>1,244</u>
MOLYBDENUM (millions of recoverable pounds)					
Henderson (100%)	25	30	30	34	38
Climax (100%) ^e	23	21	19	7	—
North America copper mines (100%) ^a	37	33	32	36	35
Cerro Verde (53.56%)	7	11	13	8	10
Consolidated	<u>92</u>	<u>95</u>	<u>94</u>	<u>85</u>	<u>83</u>
Less noncontrolling interest	3	5	6	4	5
Net	<u>89</u>	<u>90</u>	<u>88</u>	<u>81</u>	<u>78</u>
COBALT (millions of contained pounds)					
Consolidated - Tenke Fungurume (56%)^d	<u>35</u>	<u>29</u>	<u>28</u>	<u>26</u>	<u>25</u>
Less noncontrolling interests	15	13	12	11	11
Net	<u>20</u>	<u>16</u>	<u>16</u>	<u>15</u>	<u>14</u>

- a. Amounts are net of Morenci's 15 percent joint venture partner interest. As further discussed in Note 18, we have entered into a definitive agreement to sell a 13 percent undivided interest in Morenci; the transaction is expected to close in mid-2016.
- b. On November 3, 2014, we completed the sale of our 80 percent interests in the Candelaria and Ojos del Salado mines.
- c. 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 was 100 percent in 2015, 98 percent in 2014, 99 percent in 2013, 100 percent in 2012 and 95 percent in 2011; PT-FI's share of gold production was 100 percent in 2015, 2014, 2013 and 2012, and 88 percent in 2011.
- d. Effective March 26, 2012, FCX's effective ownership interest in TFM was prospectively reduced from 57.75 percent to 56 percent.
- e. The Climax molybdenum mine began commercial operations in May 2012.

Mining Sales Data

(FCX's net interest in %)	Years Ended December 31,				
	2015	2014	2013	2012	2011
COPPER (millions of recoverable pounds)					
North America					
Morenci (85%) ^a	915	680	561	532	521
Bagdad (100%)	222	240	212	196	201
Safford (100%)	198	142	151	175	147
Sierrita (100%)	196	196	170	162	175
Miami (100%)	46	60	60	68	59
Chino (100%)	319	243	168	132	62
Tyrone (100%)	89	96	94	82	79
Other (100%)	3	7	6	4	3
Total North America	<u>1,988</u>	<u>1,664</u>	<u>1,422</u>	<u>1,351</u>	<u>1,247</u>
South America					
Cerro Verde (53.56%)	544	501	560	589	657
El Abra (51%)	327	366	341	338	276
Candelaria/Ojos del Salado (80%) ^b	—	268	424	318	389
Total South America	<u>871</u>	<u>1,135</u>	<u>1,325</u>	<u>1,245</u>	<u>1,322</u>
Indonesia					
Grasberg (90.64%) ^c	744	664	885	716	846
Africa					
Tenke Fungurume (56%) ^d	467	425	454	336	283
Consolidated sales from mines	<u>4,070</u>	<u>3,888</u>	<u>4,086</u>	<u>3,648</u>	<u>3,698</u>
Less noncontrolling interests	688	715	795	717	717
Net	<u>3,382</u>	<u>3,173</u>	<u>3,291</u>	<u>2,931</u>	<u>2,981</u>
Consolidated sales from mines	4,070	3,888	4,086	3,648	3,698
Purchased copper	121	125	223	125	223
Total copper sales, including purchases	<u>4,191</u>	<u>4,013</u>	<u>4,309</u>	<u>3,773</u>	<u>3,921</u>
Average realized price per pound	\$ 2.42	\$ 3.09	\$ 3.30	\$ 3.60	\$ 3.86
GOLD (thousands of recoverable ounces)					
North America (100%) ^a	23	13	6	13	7
South America (80%) ^b	—	67	102	82	101
Indonesia (90.64%) ^c	1,224	1,168	1,096	915	1,270
Consolidated sales from mines	<u>1,247</u>	<u>1,248</u>	<u>1,204</u>	<u>1,010</u>	<u>1,378</u>
Less noncontrolling interests	115	123	123	102	139
Net	<u>1,132</u>	<u>1,125</u>	<u>1,081</u>	<u>908</u>	<u>1,239</u>
Average realized price per ounce	\$ 1,129	\$ 1,231	\$ 1,315	\$ 1,665	\$ 1,583
MOLYBDENUM (millions of recoverable pounds)					
Consolidated sales from mines	<u>89</u>	<u>95</u>	<u>93</u>	<u>83</u>	<u>79</u>
Less noncontrolling interests	4	5	5	4	4
Net	<u>85</u>	<u>90</u>	<u>88</u>	<u>79</u>	<u>75</u>
Average realized price per pound	\$ 8.70	\$ 12.74	\$ 11.85	\$ 14.26	\$ 16.98
COBALT (millions of contained pounds)					
Consolidated - Tenke Fungurume (56%)^d	<u>35</u>	<u>30</u>	<u>25</u>	<u>25</u>	<u>25</u>
Less noncontrolling interests	15	13	11	11	10
Net	<u>20</u>	<u>17</u>	<u>14</u>	<u>14</u>	<u>15</u>
Average realized price per pound	\$ 8.21	\$ 9.66	\$ 8.02	\$ 7.83	\$ 9.99

- a. Amounts are net of Morenci's 15 percent joint venture partner interest. As further discussed in Note 18, we have entered into a definitive agreement to sell a 13 percent undivided interest in Morenci; the transaction is expected to close in mid-2016.
- b. On November 3, 2014, we completed the sale of our 80 percent interests in the Candelaria and Ojos del Salado mines.
- c. 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 sales was 100 percent in 2015, 98 percent in 2014, 99 percent in 2013, 100 percent in 2012 and 96 percent in 2011; PT-FI's share of gold sales was 100 percent in 2015, 2014, 2013 and 2012, and 88 percent in 2011.
- d. Effective March 26, 2012, FCX's effective ownership interest in TFM was prospectively reduced from 57.75 percent to 56 percent.

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, 2015, were determined using long-term average prices of \$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, 2015, LME spot copper prices averaged \$2.97 per pound, London PM gold prices averaged \$1,276 per ounce and the weekly average price for molybdenum quoted by *Metals Week* averaged \$9.45 per pound.

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, 2015**

	Copper^a (billion pounds)	Gold (million ounces)	Molybdenum (billion pounds)	Silver^b (million ounces)	Cobalt^b (billion pounds)
North America	33.5	0.3	2.38	79.3	—
South America	30.8	—	0.67	85.2	—
Indonesia ^c	28.0	26.8	—	106.7	—
Africa	7.2	—	—	—	0.87
Consolidated basis^d	99.5	27.1	3.05	271.2	0.87
Net equity interest^e	79.3	24.6	2.73	221.6	0.49

- a. Consolidated recoverable copper reserves include 3.8 billion pounds in leach stockpiles and 1.0 billion pounds in mill stockpiles (refer to "Mill and Leach Stockpiles" for further discussion).
- b. Determined using long-term average prices of \$15 per ounce for silver and \$10 per pound for cobalt.
- c. Recoverable proven and probable reserves from Indonesia reflect estimates of minerals that can be recovered through the end of 2041 (refer to Note 13 for discussion of PT-FI's COW).
- d. 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 Notes 3 and 18 for further discussion of our joint ventures.
- e. 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.

<u>Recoverable Proven and Probable Mineral Reserves</u>													
<u>Estimated at December 31, 2015</u>													
	Processing Method	Proven Reserves						Probable Reserves					
		Average Ore Grade						Average Ore Grade					
		Million metric tons	Copper %	Gold g/t	Moly %	Silver g/t	Cobalt %	Million metric tons	Copper %	Gold g/t	Moly %	Silver g/t	Cobalt %
North America													
Morenci	Mill	636	0.43	—	0.02	—	—	116	0.40	—	0.02	—	—
	Crushed leach	313	0.56	—	—	—	—	72	0.46	—	—	—	—
	ROM leach	1,862	0.18	— ^a	—	—	—	575	0.16	— ^a	—	—	—
Bagdad	Mill	997	0.34	— ^a	0.02	1.45	—	152	0.32	— ^a	0.02	1.36	—
	ROM leach	78	0.22	—	—	—	—	26	0.20	—	—	—	—
Safford	Crushed leach	57	0.44	— ^a	—	—	—	27	0.42	—	—	—	—
Sierrita	Mill	2,135	0.24	— ^a	0.03	1.42	—	184	0.19	— ^a	0.02 ^a	1.14	—
Chino	Mill	93	0.56	0.04	0.01	0.51	—	56	0.52	0.04	— ^a	0.47	—
	ROM leach	73	0.30	—	—	—	—	15 ^a	0.26	—	—	—	—
	ROM leach	13	0.42	—	—	—	—	—	0.40	—	—	—	—
Tyrone	ROM leach	65	—	—	0.18	—	—	16	—	—	0.14	—	—
Henderson	Mill	155	—	—	0.16	—	—	23 ^a	—	—	0.08	—	—
Climax	Mill	16	0.53	—	—	—	—	—	0.53	—	—	—	—
Cobre ^b	ROM leach	62	0.31	—	—	—	—	1	0.40	—	—	—	—
		6,555						1,263					
South America													
Cerro Verde	Mill	925	0.39	—	0.02	1.61	—	2,778	0.37	—	0.01	1.53	—
	Crushed leach	34	0.51	—	—	—	—	51	0.41	—	—	—	—
	ROM leach	14	0.23	—	—	—	—	54	0.22	—	—	—	—
El Abra	Crushed leach	268	0.49	—	—	—	—	68	0.44	—	—	—	—
	ROM leach	47	0.19	—	—	—	—	16	0.21	—	—	—	—
		1,288						2,967					
Indonesia													
DMLZ	Mill	68	0.94	0.77	—	4.60	—	392	0.89	0.73	—	4.36	—
	Grasberg open pit	50	1.52	2.02	—	3.93	—	79	0.80	0.82	—	2.20	—
	DOZ	39	0.57	0.68	—	2.42	—	77	0.55	0.70	—	2.30	—
	Big Gossan	17	2.39	1.02	—	15.15	—	37	2.20	0.98	—	13.22	—
	Grasberg Block Cave ^b	444	1.20	0.96	—	3.73	—	518	0.88	0.62	—	3.29	—
	Kucing Liar ^b	144	1.36	1.15	—	7.59	—	251	1.21	1.05	—	6.56	—
		762						1,354					
Africa													
Tenke Fungurume	Agitation leach	57	3.45	—	—	—	0.39	42	2.85	—	—	—	0.35
	Total FCX - 100% Basis	8,662						5,626					

a. Grade not shown because of rounding.

b. Undeveloped reserves that 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
- ROM – Run of Mine

<u>Recoverable Proven and Probable Mineral Reserves</u> <u>Estimated at December 31, 2015</u> (continued)												
	Processing Method	Proven and Probable		Average Ore Grade				Recoveries ^a				
		Million metric tons	Copper %	Gold g/t	Moly %	Silver g/t	Cobalt %	Copper %	Gold %	Moly %	Silver %	Cobalt %
North America												
Morenci	Mill	752	0.42	—	0.02	—	—	81.2	—	50.4	—	—
	Crushed leach	385	0.54	—	—	—	—	78.5	—	—	—	—
	ROM leach	2,437	0.18	— ^b	—	—	—	43.3	—	—	—	—
Bagdad	Mill	1,149	0.34	—	0.02	1.43	—	86.2	59.1	70.8	49.3	—
	ROM leach	104	0.21	—	—	—	—	24.6	—	—	—	—
Safford	Crushed leach	84	0.43	— ^b	—	—	—	63.9	—	—	—	—
Sierrita	Mill	2,319	0.23	— ^b	0.03	1.40	—	83.2	59.9	79.9	49.3	—
Chino	Mill	149	0.55	0.04	0.01	0.50	—	79.4	77.9	33.7	78.5	—
	ROM leach	88	0.29	—	—	—	—	39.4	—	—	—	—
Tyrone	ROM leach	13	0.42	—	—	—	—	68.4	—	—	—	—
Henderson	Mill	81	—	—	0.17	—	—	—	—	84.3	—	—
Climax	Mill	178	—	—	0.15	—	—	—	—	89.7	—	—
Cobre ^c	Mill	16	0.53	—	—	—	—	80.2	—	—	—	—
	ROM leach	63	0.31	—	—	—	—	49.5	—	—	—	—
		7,818										
South America												
Cerro Verde	Mill	3,703	0.37	—	0.01	1.55	—	86.3	—	54.3	44.7	—
	Crushed leach	85	0.45	—	—	—	—	79.9	—	—	—	—
	ROM leach	68	0.22	—	—	—	—	53.5	—	—	—	—
EI Abra	Crushed leach	336	0.48	—	—	—	—	58.2	—	—	—	—
	ROM leach	63	0.20	—	—	—	—	39.6	—	—	—	—
		4,255										
Indonesia												
DMLZ	Mill	460	0.89	0.74	—	4.39	—	87.1	79.4	—	64.9	—
Grasberg open pit	Mill	129	1.08	1.29	—	2.87	—	85.2	82.0	—	44.2	—
DOZ	Mill	116	0.56	0.69	—	2.34	—	86.2	78.0	—	64.9	—
Big Gossan	Mill	54	2.26	0.99	—	13.82	—	91.6	65.8	—	63.8	—
Grasberg Block Cave ^c	Mill	962	1.03	0.78	—	3.50	—	84.4	64.7	—	57.2	—
Kucing Liar ^c	Mill	395	1.27	1.09	—	6.93	—	85.2	46.3	—	39.6	—
		2,116										
Africa												
Tenke Fungurume	Agitation leach	99	3.19	—	—	—	0.37	86.6	—	—	—	75.7
Total FCX - 100% Basis		14,288										

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

b. Grade not shown because of rounding.

c. Undeveloped reserves that would require additional capital investment, which could be significant, to bring into production.

Recoverable Proven and Probable Mineral Reserves**Estimated at December 31, 2015**

(continued)

		<u>Recoverable Reserves</u>					
	<u>FCX's Interest</u>	<u>Processing Method</u>	<u>Copper billion lbs.</u>	<u>Gold million ozs.</u>	<u>Moly billion lbs.</u>	<u>Silver million ozs.</u>	<u>Cobalt billion lbs.</u>
North America							
Morenci	85%	Mill	5.7	—	0.17	—	—
		Crushed leach	3.6	—	—	—	—
		ROM leach	4.1	—	—	—	—
Bagdad	100%	Mill	7.5	0.1	0.38	26.1	—
		ROM leach	0.1	—	—	—	—
Safford	100%	Crushed leach	0.5	—	—	—	—
Sierrita	100%	Mill	9.9	0.1	1.04	51.3	—
Chino	100%	Mill	1.5	0.1	0.01	1.9	—
		ROM leach	0.2	—	—	—	—
Tyrone	100%	ROM leach	0.1	—	—	—	—
Henderson	100%	Mill	—	—	0.25	—	—
Climax	100%	Mill	—	—	0.53	—	—
Cobre	100%	Mill	0.1	—	—	—	—
		ROM leach	0.2	—	—	—	—
			33.5	0.3	2.38	79.3	—
			2.1	—	0.02	—	—
Recoverable metal in stockpiles^a			35.6	0.3	2.40	79.3	—
100% operations			33.5	0.3	2.38	79.3	—
Consolidated^b			33.5	0.3	2.38	79.3	—
Net equity interest^c			33.5	0.3	2.38	79.3	—
South America							
Cerro Verde	53.56%	Mill	26.2	—	0.65	82.3	—
		Crushed leach	0.7	—	—	—	—
		ROM leach	0.2	—	—	—	—
EI Abra	51%	Crushed leach	2.1	—	—	—	—
		ROM leach	0.1	—	—	—	—
			29.3	—	0.65	82.3	—
			1.5	—	0.02	2.9	—
Recoverable metal in stockpiles^a			30.8	—	0.67	85.2	—
100% operations			30.8	—	0.67	85.2	—
Consolidated^b			16.4	—	0.35	45.6	—
Net equity interest^c							
Indonesia							
DMLZ	d	Mill	7.9	8.7	—	42.2	—
Grasberg open pit	d	Mill	2.6	4.4	—	5.3	—
DOZ	d	Mill	1.2	2.0	—	5.6	—
Big Gossan	d	Mill	2.5	1.1	—	15.3	—
Grasberg Block Cave	d	Mill	18.4	15.6	—	61.9	—
Kucing Liar	d	Mill	9.4	6.4	—	34.9	—
			42.0	38.2	—	165.2	—
Recoverable metal in stockpiles^a			0.1	0.1	—	0.2	—
100% operations			42.1	38.3	—	165.4	—
Consolidated^b			28.0	26.8	—	106.7	—
Net equity interest^c			25.3	24.3	—	96.7	—
Africa							
Tenke Fungurume	56%	Agitation leach	6.0	—	—	—	0.61
Recoverable metal in stockpiles^a			1.2	—	—	—	0.26
100% operations			7.2	—	—	—	0.87
Consolidated^b			7.2	—	—	—	0.87
Net equity interest^c			4.1	—	—	—	0.49
Total FCX – 100% basis			115.7	38.6	3.07	329.9	0.87
Total FCX – Consolidated basis^b			99.5	27.1	3.05	271.2	0.87
Total FCX – Net equity interest^c			79.3	24.6	2.73	221.6	0.49

- a. Refer to "Mill and Leach Stockpiles" for additional information.
- b. 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 Notes 3 and 18 for further discussion of our joint ventures.
- c. 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.
- d. 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 2021, calculated by reference to its proven and probable reserves as of December 31, 1994, and 60 percent of all remaining cash flow.

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, silver and cobalt. 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, 2015:

	Copper Equivalent Cutoff Grade (Percent)			Molybdenum Cutoff Grade (Percent)
	Mill	Crushed or Agitation Leach	ROM Leach	Mill
North America				
Morenci	0.26	0.18	0.03	—
Bagdad	0.20	—	0.06	—
Safford	—	0.12	—	—
Sierrita	0.18	—	—	—
Chino	0.24	—	0.08	—
Tyrone	—	—	0.10	—
Henderson	—	—	—	0.12
Climax	—	—	—	0.05
Cobre	0.26	—	0.06	—
South America				
Cerro Verde	0.17	0.19	0.14	—
El Abra	—	0.10	0.06	—
Indonesia				
DMLZ	0.81	—	—	—
Grasberg open pit	0.25	—	—	—
DOZ	0.88	—	—	—
Big Gossan	1.88	—	—	—
Grasberg Block Cave	0.78	—	—	—
Kucing Liar	0.94	—	—	—
Africa				
Tenke Fungurume	—	1.37	—	—

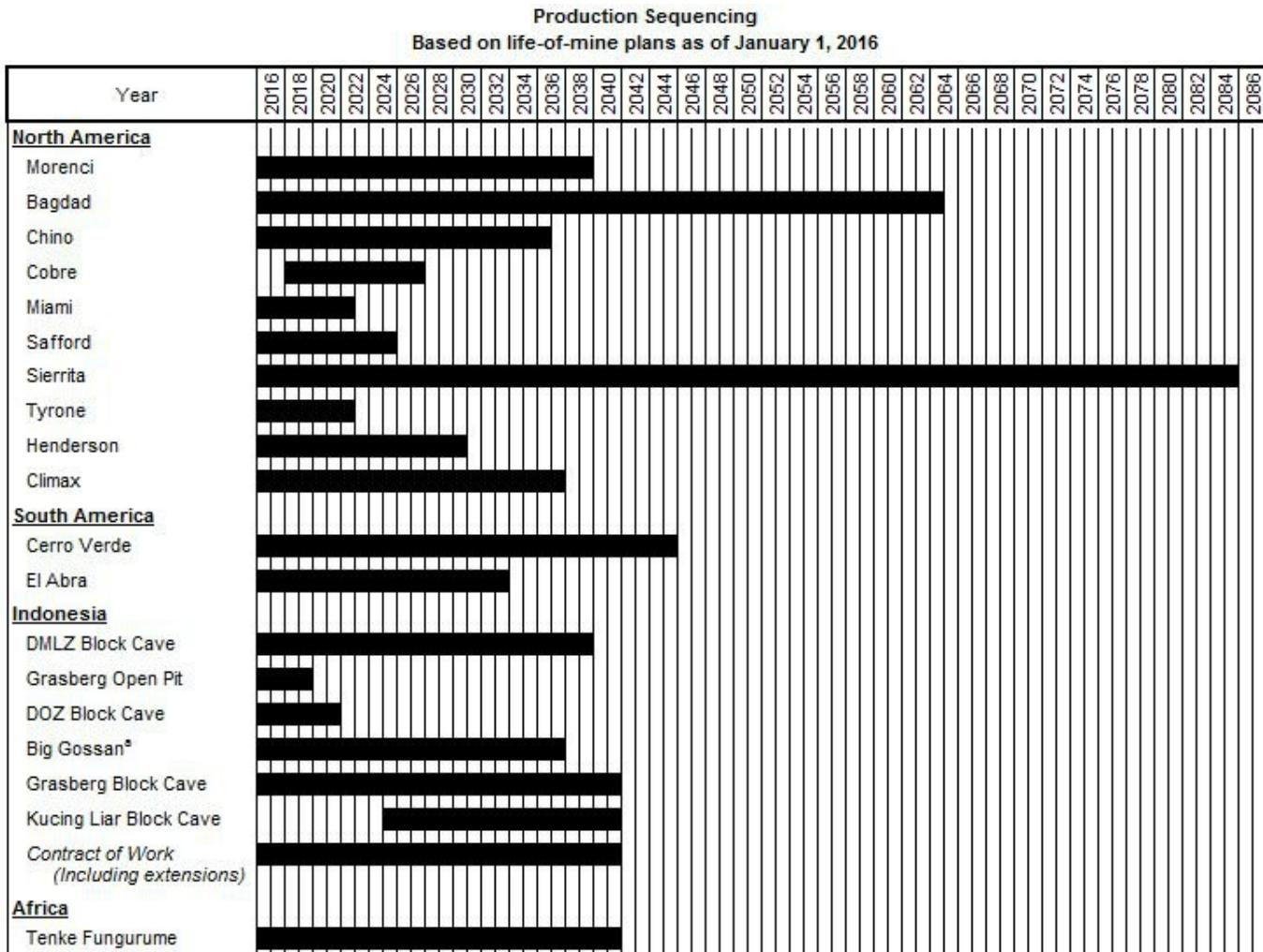
Drill hole spacing data is used by mining professionals, such as geologists and geological engineers, in determining the suitability of data coverage (on a relative basis) in a given deposit type and mining method scenario so as to achieve a given level of confidence in the resource estimate. Drill hole 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
Bagdad	Open Pit	86	86	122
Safford	Open Pit	—	86	—
Sierrita	Open Pit	73	—	104
Miami	Open Pit	—	61	—
Chino	Open Pit	43	86	86
Tyrone	Open Pit	—	86	—
Henderson	Block Cave	47	—	96
Climax	Open Pit	61	—	91
Cobre	Open Pit	61	61	91
South America				
Cerro Verde	Open Pit	50	50	100
El Abra	Open Pit	—	75	—
Indonesia				
DMLZ	Block Cave	16	—	58
Grasberg open pit	Open Pit	35	—	75
DOZ	Block Cave	23	—	57
Big Gossan	Open Stope	12	—	36
Grasberg Block Cave	Block Cave	34	—	81
Kucing Liar	Block Cave	39	—	98
Africa				
Tenke Fungurume	Open Pit	—	50	—
				100

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.



a. Production from the Big Gossan mine, which is currently suspended, is expected to restart in the first half of 2017.

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 generally 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.

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, 2015:

	Million Metric Tons	Average Ore Grade (%)	Recovery Rate (%)	Recoverable Copper (billion pounds)
<u>Mill stockpiles</u>				
Cerro Verde	159	0.32	81.8	0.9
Grasberg minerals district	14	0.44	74.9	0.1
	173			1.0
<u>Leach stockpiles</u>				
Morenci	5,982	0.24	2.2	0.7 ^a
Bagdad	499	0.24	1.5	—
Safford	213	0.44	14.3	0.3
Sierrita	650	0.15	11.0	0.3
Miami	498	0.39	2.9	0.1
Chino	1,695	0.26	5.3	0.5
Tyrone	1,121	0.28	2.3	0.2
Cerro Verde	388	0.52	5.0	0.2
El Abra	644	0.43	5.9	0.4
Tenke Fungurume	45	1.31	90.9	1.2
	11,735			3.9
Total FCX - 100% basis				4.9
Total FCX - Consolidated basis^b				4.8
Total FCX - Net equity interest^c				3.5

- a. Amounts not shown because of rounding.
- b. Consolidated stockpiles 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 Notes 3 and 18 for further discussion of our joint ventures.
- c. 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.

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.

Mineralized Material Estimated at December 31, 2015									
	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	85%	598	0.28	—	0.02	—	921	0.21	1,519
Bagdad	100%	746	0.27	— ^a	0.02	1.2	3	0.22	749
Safford	100%	188	0.65	0.12	—	2.4	60	0.31	248
Sierrita	100%	1,370	0.19	— ^a	0.02	1.1	—	—	1,370
Chino	100%	180	0.47	0.03	0.01	0.4	37	0.26	217
Tyrone	100%	—	—	—	—	—	11	0.43	11
Henderson	100%	78	—	—	0.14	—	—	—	78
Climax	100%	337	—	—	0.13	—	—	—	337
Cobre	100%	34	0.50	0.09	—	1.3	—	—	34
Ajo	100%	437	0.40	0.06	0.01	0.8	—	—	437
Cochise/Bisbee	100%	—	—	—	—	—	250	0.46	250
Lone Star	100%	—	—	—	—	—	679	0.47	679
Sanchez	100%	—	—	—	—	—	148	0.29	148
Tohono	100%	220	0.72	—	—	—	270	0.67	490
Twin Buttes	100%	73	0.62	—	0.04	6.4	44	0.23	117
Christmas	100%	201	0.39	0.05	— ^a	1.0	—	—	201
South America									
Cerro Verde	53.56%	250	0.35	—	0.01	1.4	33	0.48	283
El Abra	51%	2,024	0.45	0.02	0.01	1.4	199	0.30	2,223
Indonesia									
Grasberg minerals district	54.38% ^b	2,207	0.72	0.63	—	3.5	—	—	2,207
Africa									
Tenke Fungurume ^c	56%	52	4.10	—	—	—	31	2.88	83
Kisanfu ^c	95%	49	2.48	—	—	—	47	3.16	96
Total FCX - 100% basis		9,044					2,733		11,777
Total FCX - Consolidated basis^d		8,071					2,595		10,666
Total FCX - Net equity interest^e		6,814					2,466		9,280

- 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. Stated tonnage also includes cobalt at Tenke Fungurume (0.31 percent) and Kisanfu (1.15 percent).
- 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 Notes 3 and 18 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.

OIL AND GAS OPERATIONS

Through our wholly owned oil and gas subsidiary, FM O&G, our portfolio of oil and gas assets includes significant oil production facilities and growth potential in the Deepwater GOM, established oil production onshore and offshore California, large onshore natural gas resources in the Haynesville shale in Louisiana, natural gas production from the Madden area in central Wyoming, and a position in the Inboard Lower Tertiary/Cretaceous natural gas trend onshore in South Louisiana. For the year 2015, 88 percent of our oil and gas revenues, excluding the impact of derivative contracts, were from sales of oil and NGLs.

Revised Operating Plans

We are taking continuing actions to reduce oil and gas costs and capital expenditures. FM O&G is undertaking a near-term deferral of exploration and development expenditures by idling the three Deepwater GOM drillships it has under contract. Refer to MD&A for further discussion.

Acreage

At December 31, 2015, we owned interests in oil and gas leases covering 4.4 million gross acres (2.5 million acres net to our interest). Developed acres are acres spaced or assigned to productive wells and do not include undrilled acreage held by production under the terms of the lease. Undeveloped acres are acres on which wells have not been drilled or completed to a point that would permit the production of commercial quantities of oil or gas, regardless of whether such acreage contains proved reserves. The following table summarizes, by geographic area, the developed and undeveloped oil and gas acreage in which we held interests at December 31, 2015:

	Developed		Undeveloped	
	Gross Acres	Net Acres	Gross Acres	Net Acres
U.S.:				
Louisiana:				
Onshore	388,392	79,141	105,257	80,074
Offshore	328,014	189,197	655,874	491,830
Texas:				
Onshore	16,865	3,621	209	653
Offshore	28,800	15,906	—	—
California:				
Onshore	60,898	60,406	65,259	40,847
Offshore	44,049	39,618	712	712
Wyoming	78,007	11,018	31,968	18,394
Nevada	—	—	246,073	246,073
Other states	1,324	368	181,342	137,293
	<hr/> 946,349	<hr/> 399,275	<hr/> 1,286,694	<hr/> 1,015,876
Morocco	—	—	2,154,014	1,120,087
	<hr/> 946,349	<hr/> 399,275	<hr/> 3,440,708	<hr/> 2,135,963

As of December 31, 2015, 84 percent of our total net leasehold acreage is undeveloped. Many of our oil and gas leases require us to drill wells that are commercially productive, and if we are unsuccessful, we could lose our rights under such leases.

At December 31, 2015, 24 percent of our total U.S. net undeveloped acres was covered by leases that expire from 2016 through 2018. As a result of declining crude oil prices, FM O&G's current plans anticipate that the majority of expiring acreage will not be retained by drilling operations or other means.

Currently, FM O&G has a commitment to drill a second well in Morocco in 2016. However, FM O&G is actively negotiating with its partners to modify the work program, which, if successful, would result in changes in the timing, amount or type of future commitment. The exploration permits covering FM O&G's Morocco acreage expire at the end of 2016; however, FM O&G has the ability, under certain circumstances, to extend the exploration permits through 2019.

Properties

Our oil and gas properties are subject to customary royalty interests, liens incident to operating agreements, liens for current taxes and other burdens, including other mineral encumbrances and restrictions. We do not believe that any of these burdens materially interfere with our use of the properties in the operation of our business.

We believe that we have satisfactory title to or rights in all of our producing properties. As is customary in the oil and gas industry, we conduct minimal investigation of title at the time we acquire undeveloped properties. We conduct title investigations and receive title opinions of local counsel only before we commence drilling operations. We believe that we have satisfactory title to all of our other assets. Although title to our properties is subject to encumbrances in certain cases, we believe that none of these burdens will materially detract from the value of our properties or from our interest therein or will materially interfere with our use in the operation of our business.

Gulf of Mexico.

Deepwater GOM. FM O&G has a large strategic position in the Deepwater GOM with significant current oil production, strong cash margins and existing infrastructure with excess production and handling capacity. FM O&G's Deepwater GOM properties and activities are principally located in four focus areas, which we refer to as Atwater Valley, Green Canyon, Mississippi Canyon and Keathley Canyon.

Following is a summary of FM O&G's Deepwater GOM platforms at December 31, 2015:

Platform	Working Interest	Field Location	Type of Platform	Production Commenced	Capacity per Day		
					Water Depth (feet)	Oil (MBbls)	Gas (MMcf)
Holstein ^a	100%	Green Canyon Blocks 644, 645 and 688	Truss Spar	2004	4,300	113	142
Horn Mountain ^a	100%	Mississippi Canyon Blocks 126 and 127	Truss Spar	2002	5,400	75	72
Marlin Hub ^a	100%	Several ^b	Tension Leg	2000	3,200	60	235
Lucius	25.1% ^c	Keathley Canyon Blocks 874, 875, 918 and 919	Truss Spar	2015	7,200	80	450
Heidelberg	12.5%	Green Canyon Blocks 859, 903, 904 and 948	Truss Spar	2016 ^d	5,300	80	80
Ram Powell	31.0%	Viosca Knoll Blocks 911 to 913 and 955 to 957	Tension Leg	1997	3,200	70	310
Hoover	33.3%	Several ^e	Deep Draft Caisson Vessel	2000	4,800	100	325

- a. We are the operator of the Holstein, Horn Mountain and Marlin Hub platforms.
- b. The Marlin Hub is the production facility for the Marlin field (S/2 Viosca Knoll Block 871 and N/2 Viosca Knoll Block 915), the Dorado field (S/2 Viosca Knoll Block 915) and the King field (Mississippi Canyon Blocks 84, 85, and 129). The Marlin field currently produces via a combination of platform and subsea tie-back wells, while the Dorado and King fields currently produce exclusively via subsea wells and tie-back infrastructure.
- c. FM O&G's consolidated subsidiary Plains Offshore Operations Inc. (Plains Offshore), holds a 20 percent working interest in the Lucius development. FM O&G's combined ownership in the Lucius development, including the 20 percent held by Plains Offshore, is 25.1 percent. Refer to Note 2 for further discussion of Plains Offshore.
- d. In January 2016, first oil production commenced from three wells in the Heidelberg oil field.
- e. The Hoover platform is located in Alaminos Canyon Block 25. The Hoover field is located in Alaminos Canyon Blocks 25 and 26.

FM O&G has a 100-percent interest in the Holstein Deep development, which is located in Green Canyon Block 643, west of the 100-percent owned Holstein platform, in 3,890 feet of water. Completion activities for the initial three-well subsea tieback development program are progressing, with first production expected in mid-2016.

FM O&G also owns working interests in several oil discoveries in the Atwater Valley focus area, including Vito and Power Nap. FM O&G has an 18.67 percent interest in Vito, which is a deep subsalt Miocene oil discovery made in

2009, located in 4,000 feet of water in the Mississippi Canyon area (Blocks 940, 941, 984 and 985) and a 50 percent interest in Power Nap, which is located in close proximity to Vito.

FM O&G's Deepwater GOM exploration portfolio consists of interests in 136 blocks containing 55 prospects in the Pliocene, Miocene and Lower Tertiary reservoirs.

GOM Shelf. The GOM Shelf properties are primarily located on the outer continental shelf in the shallow waters (less than 500 feet of water) of the GOM and onshore in the Gulf Coast area of Louisiana, with drilling depths not exceeding 15,000 feet considered to be traditional shelf prospects.

Inboard Lower Tertiary/Cretaceous. Prospects with drilling depths below the salt weld (generally at depths exceeding 25,000 feet) are considered Inboard Lower Tertiary/Cretaceous prospects. FM O&G is the operator and has a 72 percent working interest (an approximate 49 percent net revenue interest) in Highlander, located onshore in South Louisiana. In December 2015, gross rates from the Highlander well averaged 44 MMcf per day (21 MMcf per day net to FM O&G).

California. FM O&G's California assets provide an established oil production base with low-decline production profiles and long-lived reserves.

Onshore California. FM O&G's onshore properties are located in the Los Angeles Basin and San Joaquin Basin. FM O&G holds a 100 percent working interest in the majority of its onshore positions including the Inglewood, Las Cienegas, Montebello, Packard and San Vicente fields in the Los Angeles Basin, and the Cymric, Midway Sunset, South Belridge, and North Belridge fields in the San Joaquin Basin. The Los Angeles Basin properties are characterized by light crude oil (21 to 32 degree American Petroleum Institute (API) gravity), have well depths ranging from 2,000 feet to over 10,000 feet and include both primary production and secondary recovery using waterflood methods (whereby water is injected into the reservoir formation to displace residual oil), where producing wells have a high ratio of water produced compared to total liquids produced (high water cuts). The San Joaquin Basin properties are characterized by heavier oil (12 to 16 degree API gravity) and shallow wells (generally less than 2,000 feet) that require enhanced oil recovery techniques, including steam injection.

FM O&G also holds a 100 percent working interest in the Arroyo Grande Field located in San Luis Obispo County, which is characterized by heavier oil (12 to 16 degree API gravity) and well depths averaging 1,700 feet requiring continuous steam injection.

Offshore California. All of the offshore California properties are located in federal waters approximately three to seven miles offshore in the Santa Maria Basin. FM O&G holds a 69.3 percent working interest in the Point Arguello Unit, composed of the Hidalgo, Hermosa and Harvest platforms, and the various partnerships owning the related transportation, processing and marketing infrastructure. Since second-quarter 2015, production from Point Arguello platforms has been shut in following the shutdowns of a third-party operated pipeline system that transports oil to various California refineries. FM O&G also holds a 100 percent working interest in the Point Pedernales field, which includes the Irene platform, that is utilized to access the Federal Outer Continental Shelf Monterey Reservoir by extended reach directional wells and support facilities which lie within the onshore Lompoc field.

Haynesville. As of December 31, 2015, in the Haynesville shale, FM O&G has a non-operated interest in over 1,450 producing wells with an average working interest of 8.6 percent and leases covering 72,000 net acres. The Haynesville shale is characterized by dry gas production from the Jurassic-aged Haynesville shale formation in Louisiana and eastern Texas, and typical well depth is 10,500 feet. The area has historically been developed with horizontal wells more than 4,000 feet at a measured total depth of 16,000 feet.

Madden. FM O&G owns a non-operated 14 percent working interest in the Madden Deep Unit and Lost Cabin Gas Plant located in central Wyoming. The Madden Deep Unit is a federal unit operated by a third party and consists of acreage in the Wind River Basin. The Madden area is characterized by gas production from multiple stratigraphic horizons of the Lower Fort Union, Lance, Mesaverde and Cody sands and the Madison Dolomite. Production from the Madden Deep Unit is typically found at depths ranging from 5,500 to 25,000 feet.

Exploration and Development Activities

FM O&G has significant proved, probable and possible reserves, with valuable infrastructure and associated resources with attractive long-term production and development potential.

Since commencing development activities in 2014 at its three 100-percent-owned production platforms in the Deepwater GOM, FM O&G has drilled 14 wells in producing fields with positive results, including the King D-10 well in fourth-quarter 2015. Four of these wells have been brought on production, including the King D-12 well in November 2015. FM O&G plans to complete and place six additional wells on production in 2016.

Capital expenditures for our oil and gas operations totaled \$3.0 billion in 2015 (including \$2.5 billion incurred for Deepwater GOM and \$0.2 billion for the Inboard Lower Tertiary/Cretaceous natural gas trend), \$3.2 billion for the year 2014 (including \$2.1 billion incurred for the Deepwater GOM and \$0.7 billion for the Inboard Lower Tertiary/Cretaceous natural gas trend) and \$1.45 billion for the seven-month period ending December 31, 2013 (including \$0.4 billion incurred for Deepwater GOM and \$0.2 billion for the Inboard Lower Tertiary/Cretaceous natural gas trend).

In response to market conditions, FM O&G is undertaking a near-term deferral of exploration and development expenditures by idling the three Deepwater GOM drillships it has under contract. FM O&G expects to incur idle rig costs associated with its drillship contracts totaling \$0.6 billion in 2016 and \$0.4 billion in 2017. Excluding amounts for idle rig costs, capital expenditures for oil and gas operations for the year 2016 are estimated to total \$1.5 billion, with approximately 85 percent of the capital budget expected to be directed to the GOM. Refer to MD&A for further discussion of FM O&G's current exploration and development activities.

Production and Sales Data

Following presents summary oil and gas production and sales data for the years ended December 31, 2015 and 2014, and the seven-month period ending December 31, 2013:

	Years Ended December 31,		Seven Months Ended
	2015	2014	December 31, 2013
GOM^{a,b}			
Oil (MBbls)	22,161	19,681	11,364
Natural gas (MMcf)	35,878	28,700	17,231
NGLs (MBbls)	2,209	2,027	1,049
MBOE	30,350	26,491	15,286
California			
Oil (MBbls)	12,935	13,732	7,977
Natural gas (MMcf)	2,154	2,368	1,318
NGLs (MBbls)	166	171	97
MBOE	13,460	14,298	8,293
Haynesville/Madden/Other			
Oil (MBbls)	158	222	83
Natural gas (MMcf)	51,626	42,364	26,782
NGLs (MBbls)	50	35	27
MBOE	8,812	7,318	4,574
Eagle Ford^d			
Oil (MBbls)	—	6,481	7,206
Natural gas (MMcf)	—	7,410	8,844
NGLs (MBbls)	—	978	1,244
MBOE	—	8,694	9,924
Total U.S. oil and gas operations			
Oil (MBbls)	35,254	40,116	26,630
Natural gas (MMcf)	89,658	80,842	54,175
NGLs (MBbls)	2,425	3,211	2,417
MBOE	52,622	56,801	38,077
Average cost per BOE:			
Production costs ^e	\$ 17.14	\$ 18.00	\$ 15.18
Production and ad valorem taxes	1.45	2.08	1.96
Cash production costs ^f	\$ 18.59	\$ 20.08	\$ 17.14

- a. Includes properties in the Deepwater GOM and on the Shelf, including the Inboard Lower Tertiary /Cretaceous natural gas trend.
- b. Horn Mountain represented 17 percent of our proved oil and gas reserves at December 31, 2015. During 2015, production and sales from Horn Mountain totaled 3.2 MMBOE (consisting of 2.9 MMBbls of oil, 1.1 Bcf of natural gas and 0.1 MMBbls

- of NGLs). No individual fields represented 15 percent or more of our proved oil and gas reserves at December 31, 2014 and 2013.
- c. Natural gas sales from GOM are net of fuel used in operations totaling 1,125 MMcf in 2015. Natural gas sales from California are net of fuel used in operations totaling 588 MMcf in 2015, 1,190 MMcf in 2014 and 780 MMcf for the seven-month period ending December 31, 2013.
 - d. In June 2014, we completed the sale of Eagle Ford.
 - e. Reflects costs incurred to operate and maintain wells and related equipment and facilities.
 - f. Refer to MD&A for further discussion of cash production costs per BOE and for a reconciliation to production costs reported in our consolidated financial statements.

Oil and Gas Reserves

All of our estimated proved and probable reserves are based upon reserve reports prepared by Netherland, Sewell, & Associates, Inc. (NSAI) and Ryder Scott Company, L.P. (Ryder Scott), independent petroleum engineering firms. A copy of the independent petroleum engineering firms' reserve reports are filed as exhibits to this annual report on Form 10-K. Our reserve estimates are prepared in accordance with guidelines established by the SEC as prescribed by Regulation S-X, Rule 4-10. FM O&G's technical staff estimates, with reasonable certainty, the economically producible oil and gas. The practices for estimating hydrocarbons in place include, but are not limited to, mapping, seismic interpretation of two-dimensional and/or three-dimensional data, core analysis, mechanical properties of formations, thermal maturity, well logs of existing penetrations, correlation of known penetrations, decline curve analysis of producing locations with significant production history, well testing, static bottom hole testing, flowing bottom hole pressure analysis and pressure and rate transient analysis.

Internal Control and Qualifications of Third Party Engineers and Internal Staff. The technical personnel responsible for preparing the reserve estimates at NSAI and Ryder Scott meet the requirements regarding qualifications, independence, objectivity, and confidentiality set forth in the Standards Pertaining to the Estimating and Auditing of Oil and Gas Reserves Information promulgated by the Society of Petroleum Engineers. Both NSAI and Ryder Scott are independent firms of petroleum engineers, geologists, geophysicists and petrophysicists; neither firm owns an interest in our properties nor are employed on a contingent fee basis. FM O&G's internal staff of petroleum engineers and geoscience professionals work closely with our independent reserve engineers to ensure the integrity, accuracy and timeliness of data furnished to NSAI and Ryder Scott in their reserves estimation process. Throughout each fiscal year, FM O&G internal technical staff meets with representatives of the independent reserve engineers to review properties and discuss methods and assumptions used in preparation of the proved reserves estimates. FM O&G provides historical information to the independent reserve engineers, including ownership interest, oil and gas production, well test data, commodity prices and operating and development costs. The NSAI and Ryder Scott reserve reports are reviewed with representatives of NSAI and Ryder Scott and FM O&G's internal technical staff before dissemination of the information. Additionally, FM O&G's senior management reviews the NSAI and Ryder Scott reserve reports.

The internal reservoir engineering staff are supervised by FM O&G's Vice President of Engineering, who has 39 years of technical experience in petroleum engineering and reservoir evaluation and analysis. This individual directs the activities of our internal reservoir engineering staff for the internal reserve estimation process and also to provide the appropriate data to NSAI and Ryder Scott for the year-end oil and gas reserves estimation process. The preparation of proved oil and gas reserve estimates are completed in accordance with our internal control procedures. These procedures, which are intended to ensure reliability of reserve estimations, include (i) the review and verification of historical production data; (ii) the review by FMO&G's Vice President of Engineering of annually reported proved reserves, including the review of significant reserve changes and new proved undeveloped (PUD) reserves additions; (iii) the direct reporting responsibilities by FM O&G's Vice President of Engineering to FM O&G's President and Chief Operating Officer; (iv) the verification of property ownership by FM O&G's land department; and (v) no employee's compensation is tied to the amount of reserves reported.

Proved Reserves. Our proved reserve volumes have been determined in accordance with SEC guidelines, which require the use of an average price, calculated as the twelve-month historical average of the first-day-of-the-month historical reference price as adjusted for location and quality differentials, unless prices are defined by contractual arrangements, excluding escalations based upon future conditions and the impact of derivatives. Our reference prices for reserve determination are the WTI spot price for crude oil and the Henry Hub price for natural gas, which were \$50.28 per barrel of oil and \$2.59 per MMBtu of natural gas at December 31, 2015. These prices are 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 escalations. In accordance with the guidelines and

excluding the impact of derivative instruments, the average realized prices used in our reserve reports as of December 31, 2015, were \$47.80 per barrel of oil and \$2.55 per Mcf of natural gas.

The scope and results of procedures employed by NSAI and Ryder Scott are summarized in their reserve reports. For purposes of reserve estimation, we and the independent petroleum engineers use technical and economic data including well logs, geologic maps, seismic data, well test data, production data, historical price and cost information, and property ownership interests. Our reserves have been estimated using deterministic methods. Standard engineering and geoscience methods were used, or a combination of methods, including performance analysis, volumetric analysis and analogy, which we and the independent petroleum engineers considered to be appropriate and necessary to categorize and estimate reserves in accordance with SEC definitions and regulations. A significant portion of these reserves are for undeveloped locations and are based on estimates of reserve volumes and recovery efficiencies along with analogy to properties with similar geologic and reservoir characteristics. Because these estimates depend on many assumptions, any or all of which may differ substantially from actual results, reserve estimates may differ from the quantities of oil and gas that FM O&G ultimately recovers.

Proved reserves represent quantities of oil and gas, which, by analysis of geoscience and engineering data, can be estimated with reasonable certainty to be economically producible from a given date forward, from known reservoirs, and under existing economic conditions, operating methods and government regulations. The term "reasonable certainty" implies a high degree of confidence that the quantities of oil and gas actually recovered will equal or exceed the estimate.

The following table presents our estimated proved oil and gas reserves as of December 31, 2015, all of which are located in the U.S.:

	Proved Oil and Gas Reserves Estimated at December 31, 2015		
	Oil^a (MMBbls)	Gas (Bcf)	Total (MMBOE)
Proved Developed:			
GOM	59	116	78
California	69	12	71
Haynesville/Madden/Other	1	117	20
	<u>129</u>	<u>245</u>	<u>169</u>
Proved Undeveloped:			
GOM	65	29	70
California	13	—	13
	<u>78</u>	<u>29</u>	<u>83</u>
Total Proved Reserves	<u>207</u>	<u>274</u>	<u>252</u>

a. Includes 9 MMBbls of NGL proved reserves, consisting of 6 MMBbls of proved developed and 3 MMBbls of proved undeveloped.

At December 31, 2015, we have an estimated total proved reserve life of 4.7 years and a proved developed reserve life of 3.2 years.

At December 31, 2015, total proved oil and gas reserves were 252 MMBOE, including 83 MMBOE of PUD reserves. With the exception of one planned sidetrack development well in one of our Deepwater GOM properties that cannot be executed until the current producing well depletes, 98 percent of our PUD reserves are scheduled for development within five years, and \$1.6 billion (or 97 percent) of our estimated future PUD capital is associated with the development of those reserves.

Total estimated PUD reserves of 83 MMBOE at December 31, 2015, decreased from estimated PUD reserves of 144 MMBOE at December 31, 2014, reflecting downward revisions of 72 MMBOE primarily related to lower oil and gas price realizations. These revisions were partly offset by increases of 11 MMBOE primarily associated with the continued development of our Deepwater GOM properties.

At December 31, 2014, FM O&G had 1,176 PUD locations, including 132 injector wells, of which 122 PUD locations (with associated proved reserves of 28 MMBOE) were scheduled to be drilled during 2015. During 2015, FM O&G invested \$0.6 billion to drill and complete 35 PUD locations, which resulted in converting 1 MMBOE from PUD reserves to proved developed reserves. Of the remaining 87 PUD locations scheduled to be drilled in 2015, 81 locations (with associated proved reserves of 3 MMBOE) were eliminated based on the current price environment,

4 locations (with associated proved reserves of 17 MMBOE) were drilled and are expected to be completed in 2016 and 2017, and 2 locations (with associated proved reserves of 7 MMBOE) were delayed to future periods.

At December 31, 2015, FM O&G had 186 PUD locations, including 4 injector wells. During 2016, 33 of these PUD locations (including 2 injector wells) with associated proved reserves of 35 MMBOE are scheduled to be developed.

During 2015, FM O&G participated in 37 gross exploratory wells, of which 33 were successful, and 26 gross development wells, of which 24 were successful (refer to "Drilling Activities").

The following table reflects the present value of estimated future net cash flows before income taxes from the production and sale of our estimated proved reserves reconciled to the standardized measure of discounted net cash flows (standardized measure) at December 31, 2015 (in millions):

Estimated undiscounted future net cash flows before income taxes	\$ 1,638
Present value of estimated future net cash flows before income taxes (PV-10) ^{a,b}	\$ 1,392
Discounted future income taxes ^c	—
Standardized measure (refer to Note 21)	<u>\$ 1,392</u>

- a. In accordance with SEC guidelines, estimates of future net cash flows from our proved reserves and the present value thereof are made using the twelve-month average of the first-day-of-the-month historical reference prices as adjusted for location and quality differentials. Refer to discussion above for pricing used in our reserve reports at December 31, 2015.
- b. The present value of estimated future net cash flows before income taxes (PV-10) is not considered a U.S. generally accepted accounting principle (GAAP) financial measure. We believe that our PV-10 presentation is an important measure and useful to our investors because it presents the discounted future net cash flows attributable to our proved reserves before taking into account the related future income taxes, as such taxes may differ among companies because of differences in the amounts and timing of deductible basis, net operating loss carryforwards and other factors. We believe investors use our PV-10 as a basis for comparison of the relative size and value of our proved reserves to the reserve estimates of other companies. PV-10 is not a measure of financial or operating performance under U.S. GAAP and is not intended to represent the current market value of our estimated oil and gas reserves. PV-10 should not be considered in isolation or as a substitute for the standardized measure of discounted future net cash flows as defined under U.S. GAAP.
- c. Future tax deductions are expected to be sufficient to fully offset future taxable income, resulting in no future income tax obligation at December 31, 2015.

Refer to Note 21 for further discussion of our proved reserves.

Probable Reserves. All of our probable oil and gas reserves at December 31, 2015, are based upon reserve reports prepared by the independent petroleum engineering firm of NSAI. Probable reserves are those additional reserves that are less certain to be recovered than proved reserves, but which, together with proved reserves, are as likely as not to be recovered. In addition to the uncertainties inherent in estimating quantities and values of proved reserves, probable reserves may be assigned to areas where data control or interpretations of available data are less certain even if the interpreted reservoir continuity of structure or productivity does not meet the reasonably certain criterion. Probable reserves may be assigned to areas that are structurally higher than the proved area if these areas are in communication with the proved reservoir. Probable reserve estimates also include potential incremental quantities associated with a greater percentage recovery of the hydrocarbons in place than assumed for proved reserves. Undeveloped reserves that meet the reasonably certain, economic and other requirements to be classified as proved undeveloped, except that they are not expected to be developed within five years, are classified as probable reserves.

The following table presents our estimated probable oil and gas reserves at December 31, 2015:

	Probable Oil and Gas Reserves Estimated at December 31, 2015		
	Oil ^a (MMBbls)	Gas (Bcf)	Total (MMBOE)
Probable Developed^b:			
GOM	20	45	27
California	5	—	5
	<u>25</u>	<u>45</u>	<u>32</u>
Probable Undeveloped:			
GOM	65	29	70
California	27	2	27
	<u>92</u>	<u>31</u>	<u>97</u>
Total Probable Reserves	<u>117</u>	<u>76</u>	<u>129</u>

- a. Includes 5 MMBbls of NGL probable reserves, consisting of 2 MMBbls of probable developed and 3 MMBbls of probable undeveloped.
- b. Reflects reserves associated with incremental recovery from existing production/injection wells that require minimal to no future development costs and reserves associated with work performed on existing producers/injectors that do not meet the reasonable certainty requirements to be classified as proved reserves.

Drilling Activities

The following table provides the total number of wells that we drilled during the years ended December 31, 2015 and 2014, and the seven-month period ending December 31, 2013:

	Years Ended December 31,				Seven Months Ended	
	2015		2014		December 31, 2013	
	Gross	Net	Gross	Net	Gross	Net
Exploratory Productive:						
Oil	2	1	25	21	40	35
Gas	31	5	21	2	25	2
Dry	4	3	10	7	1	1
	<u>37</u>	<u>9</u>	<u>56</u>	<u>30</u>	<u>66</u>	<u>38</u>
Development Productive:						
Oil	7	3	184	174	71	66
Gas	17	2	75	10	23	8
Dry	2	2	2	—	1	1
	<u>26</u>	<u>7</u>	<u>261</u>	<u>184</u>	<u>95</u>	<u>75</u>
	<u><u>63</u></u>	<u><u>16</u></u>	<u><u>317</u></u>	<u><u>214</u></u>	<u><u>161</u></u>	<u><u>113</u></u>

In addition to the wells drilled, there were 9 gross exploratory and 19 gross development wells (5 net exploratory and 7 net development wells) in progress at December 31, 2015.

Productive Wells

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 at December 31, 2015; 3,069 gross (2,991 net) active producing oil wells and 1,710 gross (211 net) active producing natural gas wells at December 31, 2014; and 3,310 gross (3,153 net) active producing oil wells and 1,651 gross (238 net) active producing natural gas wells at December 31, 2013. One or more completions in the same well bore are considered one well. If any well in which one of the multiple completions is an oil completion, such well is classified as an oil well. At December 31, 2015, we owned interests in five gross wells containing multiple completions.

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; cash production costs per barrel of oil equivalent (BOE); operating cash flows; capital expenditures; debt reduction initiatives; exploration efforts and results; development and production activities and costs; liquidity; tax rates; the impact of copper, gold, molybdenum, cobalt, crude oil and natural gas 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

Declines in the market prices of copper, gold and oil have adversely affected our earnings, cash flows and asset values and, if sustained or intensified, may adversely affect our ability to repay debt. Fluctuations in the market prices of copper, gold and oil have caused and may continue to cause significant volatility in our financial performance and in the trading prices of our debt and common stock.

Our financial results vary with fluctuations in the market prices of the commodities we produce, primarily copper, gold and oil, and to a lesser extent molybdenum, silver, cobalt and natural gas. As described below, during 2015 and in early 2016, copper and oil prices declined significantly. If low prices persist or decline further, they may continue to 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 continue to depress the trading prices of our common stock and of our publicly traded debt securities.

In response to lower commodities prices, we have announced revised operating plans that incorporate significant reductions in capital spending, production curtailments at certain North and South America mines and actions to reduce operating, exploration and administrative costs, which may not achieve all the results we anticipate. If market prices for our primary commodities continue to decline or persist at low levels, we may have to further revise our operating plans, including curtailing production further, 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 additional losses, and those losses may be material. We are also pursuing asset sales and joint venture arrangements to raise proceeds for debt reduction. We may be unable to receive favorable terms for asset sales or joint venture arrangements in the current market environment, which may prevent us from achieving our desired debt reduction levels.

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

In particular, 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 declined significantly during 2015, with London Metal Exchange (LME) spot copper prices averaging \$3.11 per pound in 2014 and \$2.49 per pound in 2015. On December 31, 2015, the LME spot copper price was \$2.13 per pound. Copper prices weakened further in early 2016 with the LME spot copper price ranging from \$1.96 per pound to \$2.13 per pound from January 1, 2016, to February 19, 2016. The decline in prices during 2015 resulted in non-cash charges for copper and molybdenum inventory adjustments (\$338 million) and long-lived mining asset impairments (\$37 million), as more fully discussed in Notes 4 and 5. Copper prices at or below the December 31, 2015, level could result in additional inventory adjustments and impairment charges for our long-lived mining assets. Other events that could result in impairment of our long-lived mining assets include, but are not limited to, decreases in estimated proven and probable mineral reserves and any event that might otherwise have a material adverse effect on mine production costs.

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 \$1,160 per ounce in 2015 and \$1,266 per ounce in 2014, and was \$1,062 per ounce on December 31, 2015.

Crude oil prices have been and could be affected in the future by continued development of shale reserves through hydraulic fracturing, actions of the Organization of the Petroleum Exporting Countries and other major oil producing nations, political and weather conditions in oil producing regions, transportation and refinery capacity, the amount of foreign imports of oil into the U.S., and the impact of legislation adopted in December 2015 lifting 40-year old restrictions on exporting U.S. oil. Oil prices have declined significantly since mid-2014, with Brent crude oil prices averaging \$99.45 per barrel in 2014 and \$53.64 per barrel in 2015. On December 31, 2015, the Brent crude oil price was \$37.28. In early 2016, oil prices weakened further to multi-year lows in response to excess global supplies and relatively weak economic conditions with Brent crude oil prices ranging from \$27.88 per barrel to \$37.22 per barrel from January 1, 2016, to February 19, 2016. As further discussed in Note 1 and in Management's Discussion and Analysis of Financial Condition and Results of Operations (MD&A), lower oil prices, and to a lesser extent natural gas prices, were a significant contributing factor to the non-cash impairment charges totaling \$13.1 billion for the year 2015 and \$3.7 billion for the year 2014 to write-down the carrying value of our proved oil and gas properties.

As further described in Note 1, under full cost accounting rules, a "ceiling test" is conducted each quarter to review the carrying value of proved oil and gas properties for impairment. The U.S. Securities and Exchange Commission (SEC) requires that the twelve-month average of the first-day-of-the-month historical reference prices be used to determine the ceiling test limitation. Using West Texas Intermediate (WTI) as the reference oil price, the average price was \$50.28 per barrel at December 31, 2015, compared with \$94.99 per barrel at December 31, 2014. If the twelve-month historical average price remains below the December 31, 2015, twelve-month average of \$50.28 per barrel, the ceiling test limitation will decrease potentially resulting in additional ceiling test impairments of our oil and gas properties. The WTI spot oil price was \$29.64 per barrel at February 19, 2016.

In addition to declines in the trailing twelve-month average oil and natural gas prices, other factors that could result in future impairment of our oil and gas properties, include costs transferred from unevaluated properties to the full cost pool without corresponding proved oil and natural gas reserve additions, negative reserve revisions and the future incurrence of exploration, development and production costs. At December 31, 2015, carrying costs for unevaluated properties were \$4.8 billion. These costs will be transferred into the full cost pool as the properties are evaluated and proved reserves are established or if impairment is determined. If these activities do not result in additions to discounted future net cash flows from proved oil and natural gas reserves at least equal to the related costs transferred (net of related tax effects), ceiling test impairments may occur. During 2015, we transferred \$6.4 billion of costs associated with unevaluated properties to the full cost pool mostly reflecting impairment of the carrying values of unevaluated properties.

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

At December 31, 2015, our total consolidated debt was \$20.4 billion (see Note 8) and our total consolidated cash was \$224 million. We also have various other financial commitments, including for reclamation and environmental obligations, take-or-pay contracts and leases. 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 industries in which we operate;
- Increasing our vulnerability to general adverse economic and industry conditions;
- Limiting our ability to fund future working capital and capital expenditures, 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.

On February 26, 2016, we reached agreement with our bank group to amend our revolving credit facility and term loan. The changes pursuant to the revolving credit facility and the term loan included modifications of the maximum leverage ratio and minimum interest expense coverage ratio to provide us with additional flexibility, and the commitment under our revolving credit facility has been reduced by \$500 million from \$4.0 billion to \$3.5 billion. A springing collateral and guarantee trigger was added to the revolving credit facility and term loan. Under this provision, if we have not entered into definitive agreements for asset sales totaling \$3.0 billion in aggregate by June 30, 2016, that are reasonably expected to close by December 31, 2016, we will be required to secure the revolving credit facility and term loan with a mutually acceptable collateral and guarantee package. If such asset sales totaling \$3.0 billion in aggregate have not occurred by December 31, 2016, then the springing collateral and guarantee trigger will go into effect. Refer to Notes 8 and 18 for further information about the revolving credit facility and term loan.

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 the related debt, which in turn may trigger cross-acceleration or cross-default provisions in other debt agreements. Our cash flow would not be sufficient to fully repay borrowings under our debt instruments that are accelerated upon an event of default.

Since August 2015 and through January 5, 2016, we sold 210 million shares of our common stock at an average price of \$9.47 per share under at-the-market equity programs that generated approximately \$2 billion in gross proceeds. We may seek to raise additional equity capital to fund operations, reduce debt or improve our financial position, which may have a negative impact to our stock price. For additional information, see Note 10.

As of February 24, 2016, our senior unsecured debt was rated "BB" with a negative outlook by Standard & Poor's (S&P), "BBB-" with a negative outlook by Fitch Ratings (Fitch), and "B1" with a negative outlook by Moody's Investors Service (Moody's). There is no assurance that our credit ratings will not be downgraded in the future. For more information, refer to the risk factor below relating to mine closure and reclamation regulations and plugging and abandonment obligations related to our oil and gas operations.

Our strategic review of the oil and gas business and evaluation of other transactions may not result in increased stockholder value.

Our Board of Directors (the Board) is undertaking a strategic review of alternatives for our oil and gas business. We and our advisors are actively engaged with interested parties in a process to evaluate opportunities that include asset sales and joint venture arrangements that would generate cash proceeds for debt repayment. We are also evaluating transactions involving certain of our mining assets. These initiatives may not result in transactions or other events that will lead to debt reduction or an increase in stockholder value.

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 oil and gas properties, and are required to provide bonds or other forms of financial assurance in connection with those operations. 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 equivalent state regulations. 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. Currently there are no financial assurance requirements for active mining operations under CERCLA, but in August 2014, several environmental organizations initiated litigation against the EPA to require it to set a schedule for adopting financial assurance regulations under CERCLA governing the hard rock mining industry. The 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 the 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 Court also ruled that the EPA has no obligation to promulgate rules at all and has until the end of 2016 to decide whether or not to proceed. It is uncertain how the new requirements, if promulgated, will affect the amount and form of our existing and future financial assurance obligations or the extent to which they will supplement or replace state requirements. Any new regulations may, however, be financially material and adverse.

We are also subject to financial assurance requirements in connection with our oil and gas operations under both state and federal laws. For example, permits, bonding and insurance are required to drill, operate, and plug and abandon wells. Financial responsibility requirements are also required under the Oil Pollution Act of 1990 to cover containment and cleanup costs resulting from an oil spill.

In order to cover the various obligations of lessees operating in federal waters, such as the cost to plug and abandon wells and decommission and remove platforms and pipelines at the end of production, the BOEM generally requires that lessees demonstrate financial strength and reliability according to regulatory standards sufficient to obtain a waiver from the requirement to post supplemental bonds, or post such bonds or other acceptable assurances that those obligations will be satisfied. Although we are currently exempt from the requirement to post security under the current rules, we may be required to post security under these rules if the BOEM determines we are no longer eligible for the exemption, which could have a material adverse effect on our financial condition and liquidity. In August 2014, the BOEM issued an Advanced Notice of Proposed Rulemaking in which the agency indicated that it was considering changing the financial assurance requirements, and it currently plans to publish a revised notice in 2016. Among other things, the Notice states that the BOEM intends to revise its supplemental bonding procedures to eliminate waivers from the requirement to post security. Substantial changes to BOEM's financial assurance requirements, including a requirement to post significant amounts of security in the form of bonds or similar assurance, could have a material adverse effect on our financial condition and liquidity. The cost for bonds or assurances can be substantial, and there is no assurance that they can be obtained in all cases. Our failure to provide financial assurance, or failure to do the same by our co-lessees, could result in BOEM or the Bureau of Safety and Environmental Enforcement (BSEE) suspending or terminating operations on affected leases, which could materially and adversely affect our financial condition and results of operations.

As of December 31, 2015, our financial assurance obligations associated with closure, reclamation and remediation of mining sites, and plugging and abandonment obligations in our oil and gas operations totaled approximately \$2.6 billion, and a substantial portion of these obligations were satisfied by FCX and FM O&G guarantees and financial capability demonstrations. As a result of the downgrade of the credit ratings of our debt below investment grade by S&P's and Moody's, we may be required to provide additional or alternative forms of financial assurance, such as letters of credit, surety bonds or collateral. These other forms of assurance would be 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 mines or suspension of the affected oil and gas operations.

Refer to Notes 1 and 12, for further discussion of our environmental and asset retirement 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 natural resources company with substantial mining assets located outside of the U.S. We conduct international mining operations in Indonesia, Peru, Chile and the Democratic Republic of Congo (DRC). 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. 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 another 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;
 - 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 materially and adversely affect our 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, and a steadily increasing focus on enforcement of those laws continues. 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 business, 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 operations in Indonesia is a significant operating asset, our business may continue to be adversely affected by political, economic and social uncertainties and security risks 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 the term of the COW. 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 provisions contained in the mining law enacted in 2009, and mining regulations adopted thereunder, including matters with respect to 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 in January 2014 imposed, among other things, a progressive export duty on copper concentrate and restricts concentrate exports 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. Under the MOU, PT-FI provided a \$115 million assurance bond to support its commitment for smelter development, agreed to increase royalty rates and agreed to pay export duties (which were set at 7.5 percent, declining to 5.0 percent when smelter development progress exceeds 7.5 percent and are eliminated when development progress exceeds 30 percent). The MOU also anticipated an amendment of the COW within six months to address other matters; however, no terms of the COW other than those relating to the smelter bond, increased royalties and export duties were changed. In January 2015, the MOU was extended to July 25, 2015, and it expired on that date. The increased royalty rates, export duties and smelter assurance bond remain in effect.

PT-FI is required to apply for renewal of export permits at six-month intervals. On July 29, 2015, PT-FI's export permit was renewed through January 28, 2016. In connection with the renewal, export duties were reduced to 5.0 percent, as a result of smelter development progress. On February 9, 2016, PT-FI's export permit was renewed through August 8, 2016. PT-FI will continue to pay a 5.0 percent export duty on concentrate while it reviews its smelter progress with the Indonesian government.

As of December 31, 2015, we owned 90.64 percent of PT-FI, and the remaining 9.36 percent was owned by the Indonesian government. Upon completion of an amended COW, which has not yet occurred, we and PT-FI have agreed to divest to the Indonesian national or local governments and/or Indonesian nationals up to a 30 percent interest (an additional 20.64 percent) in PT-FI at fair market value.

PT-FI is engaged in active discussions with the Indonesian government regarding an amended COW. The revisions to the COW are expected to result in additional costs for our Indonesian operations. We cannot predict whether we will be successful in reaching a satisfactory agreement on the terms of our long-term mining rights. It has been difficult to get firm or final commitments from the Indonesian government. As a result, the outcome of these discussions remains uncertain. If we are unable to reach agreement with the government on our long-term rights, we may be required to reduce or defer investments in our underground development projects, which would materially and adversely affect future production and reserves. In addition, we cannot predict whether our applications for renewal of export permits, which are required at six-month intervals, will be granted on a timely basis or whether we will be permitted to export concentrate after August 8, 2016. Recent media reports have indicated that the Indonesia government is considering revisions to the 2009 Mining Law. It is unclear how any such changes would impact our current negotiations with the Indonesian government related to the extension and amendment of the COW, smelter development, export permits and other significant issues.

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 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. 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 have continued on a sporadic basis with the last incident occurring on January 1, 2015. During this time, there were 20 fatalities and 59 injuries to our employees, contractor employees, government security personnel and civilians. To date, no one person or group has claimed responsibility for the shootings. 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.

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. For further discussion of labor disruptions at PT-FI, refer to the operational risk factor "Labor unrest and activism could disrupt our operations and may adversely affect our business, financial condition, results of operations and prospects."

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

The initial term of PT-FI's COW expires in 2021, but can be extended for two 10-year periods subject to Indonesian government approval, which pursuant to the COW cannot be withheld or delayed unreasonably. 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 21 percent of aggregate proven and probable recoverable ore at December 31, 2015, representing 27 percent of PT-FI's share of recoverable copper reserves and 38 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 factor "Because our Grasberg minerals district is a significant operating asset, our business may continue to be adversely affected by political, economic and social uncertainties and security risks in Indonesia."

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 may 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 minerals district is a significant operating asset, our business may continue to be adversely affected by political, economic and social uncertainties and security risks in Indonesia."

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.

PT-FI's COW requires that disputes with the Indonesian government be submitted to international arbitration. Accordingly, if a dispute arises under the COW, we face the risk of having to submit to the jurisdiction of an international arbitration panel, and if we prevail in such a dispute, 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, and such a dispute could be pending for years.

The Tenke Fungurume (Tenke) minerals district is located in the Southeast region of the DRC, and may be adversely affected by security risks and political, economic and social instability in the DRC.

Since gaining independence in 1960, the DRC has undergone outbreaks of violence, changes in national leadership and financial crises. The DRC held its first democratic elections in 2006. President Joseph Kabilé, elected in 2006 and currently serving his second five-year term, is not eligible under the DRC constitution for reelection. The next presidential election is scheduled to be held in November 2016 but recent reports indicate that the government may delay the elections, which could lead to additional unrest. These factors heighten the risk of abrupt changes in the national policy toward foreign investors, which in turn could result in unilateral modification of concessions or contracts, increased taxation, denial of permits or permit renewals or expropriation of assets. As part of a review of all mining contracts by the Ministry of Mines (the Ministry) in the DRC, in February 2008, we received notification that the Ministry wished to renegotiate several material provisions of Tenke Fungurume Mining S.A.'s (TFM) mining contracts. In October 2010, the DRC government concluded its review of TFM's existing mining contracts and confirmed that they were in good standing. In connection with the review, several amendments were made to TFM's mining contracts and governing documents, and in March 2012, FCX's effective ownership in TFM was reduced from 57.75 percent to 56 percent.

Political, economic, social and security risks in the DRC are generally outside of our control and could adversely affect our business. These risks include legal and regulatory uncertainties with limited effective recourse through the courts; exposure to an environment of governmental corruption and bribery; unwarranted attempts to increase taxes or make claims for fees and penalties by governmental officials, including retroactive claims; administrative disputes; security risks resulting from political instability; risks associated with illegal mining activity on Tenke's concession; and risk of loss because of civil strife, acts of war, guerrilla activities, insurrection and terrorism.

In addition to ongoing conflict in the eastern region of the DRC, there have been acts of violence in the Southeast region of the DRC where the Tenke minerals district is located. The safety of our workforce at all of our operations is our highest priority, and TFM works cooperatively with government officials to address security issues; however, no assurance can be given that conflict or random acts of violence will not occur near or impact Tenke's operations.

Accordingly, our Tenke operations and future development activities at the Tenke minerals district may be substantially affected by factors beyond our control, any of which could interrupt TFM's operations or future development activities and have a material adverse effect on our results of operations and financial condition.

Operational risks

Our mining and oil and gas 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. 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 elsewhere in these risk factors.

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 recently by large scale tailings dam failures at unaffiliated mines, which caused extensive property and environmental damage and resulted in the loss of life.

Our oil and gas operations are also subject to operating hazards, including well blowouts, cratering, explosions, fires, uncontrollable flows of oil, gas or well fluids and pipeline ruptures, as well as natural disasters such as earthquakes, mudslides and hurricanes. Our operations in California, including transportation of oil by pipelines within the city and county of Los Angeles, are especially susceptible to damage from earthquakes and involve increased risks of personal injury, property damage and marketing interruptions because of the population density of southern California. Our operations in the Gulf of Mexico (GOM) and Gulf Coast region are particularly susceptible to interruption and damage from hurricanes. Any of these operating hazards could cause personal injuries, fatalities, oil spills, discharge of hazardous substances into the air, soil, water and groundwater and other property or environmental damage, lost production and revenue, remediation and clean-up costs and liability for damages, all of which could adversely affect our financial condition and results of operations and may not be fully covered by our insurance.

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

As of December 31, 2015, 48 percent of our global labor force was covered by collective bargaining agreements and 4 percent of our global labor force was covered by agreements that expired in 2015 and are currently being negotiated or will expire during 2016, including the agreement covering employees at our El Abra mine in Chile. None of the employees of our oil and gas operations are represented by a union or covered by a collective labor agreement. 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 which could adversely affect our operations. For example, our PT-FI operations were affected by work stoppages in 2011 and during first-quarter 2012. In October 2014, a large percentage of Grasberg open-pit operators did not report to their scheduled shifts, notwithstanding approval of resumption of operations by Indonesian authorities upon completion of their investigation of a fatal haul truck accident that occurred near the Grasberg open pit. 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 business, financial condition and results of operations.

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 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 two active general stream adjudications in which the Arizona courts have been attempting, for over 40 years, to quantify and prioritize surface water claims for two of the state's largest river systems, which primarily affect our Morenci, Safford, Sierrita and Miami mines. The adjudications are 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 one of the adjudications 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 proceedings.

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 by 18 percent beginning in February 2016. The Peruvian government will continue to evaluate supply availability in the subsequent months dependent on monthly precipitation.

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 affect production from El Abra.

Although we typically have sufficient water for our Indonesian operations, lower rainfall resulting from El Niño weather conditions in the second half of 2015 has impacted operations and may continue to impact operations in 2016.

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. 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 and Africa mining operations involve additional risks because they are located in very remote areas and, in Indonesia, 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.

The Tenke minerals district is located in a remote area of the DRC and is subject to challenges, such as severely limited infrastructure, including road, bridge and rail access that is in disrepair and receives minimal maintenance; limited and unreliable energy supply from antiquated equipment and from power distribution corridors that are not maintained; difficulties in attracting and retaining experienced personnel; security risks; and limited health care in an area plagued by disease and other potential endemic health issues, including malaria, cholera and HIV.

Additionally, because of limited rail access, we currently truck a significant portion of the production from the Tenke minerals district approximately 1,900 miles to ports in South Africa. The Tenke minerals district and its future development may be substantially affected by factors beyond our control, which could adversely affect its contribution to our operating results and increase the cost of future development.

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

Our existing mineral and oil and natural gas reserves will be depleted over time by production from our operations. Because our profits are derived from our mining and oil and gas operations, our ability to replenish our 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 or reservoirs 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 business and prospects.

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 \$3.4 billion for 2016, including \$1.9 billion from the mining business (reflecting \$1.4 billion for major projects primarily for underground development activities at Grasberg and remaining costs for the Cerro Verde expansion and \$0.5 billion for sustaining capital) and \$1.5 billion for oil and gas operations.

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, wells, or other projects are considerable, and changes in costs or construction or drilling schedules 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 business and results of operations.

Operations in the Deepwater GOM present greater operating risks than operations in the shallower waters or onshore. In addition, our shallow water and onshore operations that target ultra-deep prospects involve greater risks and costs than conventional GOM Shelf and onshore Gulf Coast prospects.

The Deepwater GOM presents significant challenges because of risks associated with geological complexity, water depth and higher drilling and development costs. For example, in April 2010, the Deepwater Horizon, an unaffiliated offshore drilling rig located in the Deepwater GOM, sank following an explosion and fire, resulting in fatalities and the discharge of substantial amounts of oil into the GOM until mid-July 2010 when the flow of oil was finally stopped. The U.S. Department of Interior imposed a moratorium on deepwater drilling from May through October 2010 and also issued a series of rules and notices to lessees and operators imposing new and more stringent regulatory safety and performance requirements and permitting procedures for new wells to be drilled in the Deepwater GOM, all of which significantly and adversely disrupted oil and gas exploration activities in the GOM and resulted in increased costs.

The Deepwater GOM also lacks the infrastructure present in shallower waters, which can result in significant delays in obtaining or maintaining production. As a result, deepwater operations may require significant time between a discovery and marketability, thereby increasing the financial risk of these operations.

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." 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.

Our oil and gas operations are subject to extensive laws and regulations that require, among other things, permits for the drilling and operation of wells and bonding and insurance to drill, operate and plug and abandon wells, and that regulate the safety of our pipelines. Our U.S. offshore operations in federal waters are subject to broad regulation by the BOEM/BSEE, which among other things must issue permits in connection with our exploration, drilling, development and production plans. Under certain circumstances BOEM/BSEE may impose penalties and may suspend or terminate any of our operations on federal leases. Many other governmental bodies regulate 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 business and prospects.

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 financial condition and results of operations.

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 oil spill cleanup; 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 44 percent of the aggregate copper concentrate produced by our North America copper mines. EPA regulations require us to invest in new pollution control equipment to reduce sulfur dioxide (SO₂) to meet both regional haze requirements and to allow the state of Arizona to demonstrate compliance with EPA's SO₂ ambient air quality standards. The deadline for the smelter to install the SO₂ pollution control equipment to comply with the regional haze rules is January 1, 2018. The Arizona rules for complying with the national ambient air quality standards are still being developed by state regulators and are subject to EPA approval, and it is not clear when they will become effective, but it is possible that they will be effective prior to January 1, 2018. We expect capital expenditures for this project (to meet both regulatory requirements) to total approximately \$250 million, and we expect those expenditures to be made through 2018. If these expenditures are delayed or deferred for technical, financial or any other reasons, we may be forced to curtail production at the Miami smelter, which would require us to export concentrate rather than process it ourselves and to purchase sulphuric acid that would otherwise be generated during the smelting process, which would result in increased production costs.

Laws such as CERCLA and similar state laws may expose us to joint and several liability for environmental damages caused 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 Freeport Minerals Corporation (FMC) and certain of its affiliates. Some of our onshore California oil and gas fields have been in operation for more than 100 years, and legal requirements may require substantial expenditures to remediate the properties or to otherwise comply with these requirements. 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 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, the EPA promulgated rules that could reclassify certain mineral processing materials as "hazardous waste" under the Federal Resource Conservation and Recovery Act and subject the industry to significant new and costly waste management requirements. These rules are currently being challenged by multiple parties in court; however, if the legal challenges are unsuccessful, the reclassification of certain mineral processing materials as "hazardous waste" could materially increase costs at our U.S. copper and molybdenum processing facilities.

The EPA also recently 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 waterway discharges and land uses, and is in many ways aggressively attempting to expand its regulatory authority over air quality, water quality and solid wastes, among other things. Regulations are also being considered at various governmental levels to increase federal financial responsibility requirements both for mine closure and reclamation and for oil and gas decommissioning, and to increase regulation of or prohibit hydraulic fracturing.

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.

During 2015, 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 of \$421 million, compared with \$405 million in 2014 and \$595 million in 2013. For 2016, we expect to incur approximately \$495 million 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 mining 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 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, 2015, we had more than 100 active remediation projects (including damaged natural resource claims) 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, which contained indemnification provisions relating to environmental matters, and which from time to time become the source of claims against us.

At December 31, 2015, we had \$1.2 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 certain 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 the 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 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, could influence the deposition of finer tailings material in the estuary.

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.

Many scientists believe that emissions from the combustion of carbon-based fuels contribute to greenhouse effects and, therefore, contribute to climate change. Carbon-based energy is a significant input in our operations, and our revenues include sales of oil, natural gas liquids and natural gas, and other carbon-based energy products. 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 21st 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. In the U.S., the EPA has finalized regulations governing greenhouse gas emissions from new, modified, and existing power plants. While these rules are being challenged in court, increased regulation of greenhouse gas emissions may increase our costs and may also affect the demand for the oil and gas we produce.

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 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, to repay any subordinated loan we may make to such subsidiary unless specified conditions are met, 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.

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 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 operations use both surface and groundwater, we are a participant in two active general stream adjudications in which the Arizona courts have been attempting, for over 40 years, to quantify and prioritize surface water claims for two of the state's largest river systems, which primarily affect our Morenci, Safford, Sierrita and Miami mines. The adjudications are 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 one of the adjudications 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 proceedings.

In Re the General Adjudication of All Rights to Use Water in the Little Colorado Water System and Sources, Apache County, Superior Court, No. 6417, filed on or about February 17, 1978. The principal parties, in addition to us, include: the state of Arizona; the Salt River Project; the Arizona Public Service Company; the Navajo Nation, the Hopi Indian Tribe; the San Juan Southern Paiute Tribe; and the U.S. on behalf of those tribes, on its own behalf, and on behalf of the White Mountain Apache Tribe. This case involves adjudication of water rights claims, including federal claims, in the Little Colorado River watershed.

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 "sub-flow" zone of the San Pedro River Basin, a tributary of the Gila River. According to the court, the sub-flow zone is the subsurface area adjacent to the river where the court may find that groundwater is connected to the surface water such that groundwater pumping may reduce surface flows in violation of rights of holders of surface water rights. Although we have minimal interests in the San Pedro River Basin, a decision that re-characterizes groundwater in that basin as 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.

ADWR produced its recommendations in June 2009 which were objected to by numerous parties. Following this and other court rulings in 2012 and 2013, ADWR submitted a revised report in 2014. The court held hearings in 2015 to address the parties' comments and objections, and the issue is currently under advisement with the court. 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 drawdown in the subflow of the river. Based on the cone of depression analyses, wells outside of the subflow zone could be subject to the jurisdiction of the adjudication court, which might then require the owners of those wells to either demonstrate a valid surface water claim to support the pumping, refrain from pumping or pay damages. On November 6, 2014, the court held a hearing to address the parties' comments to ADWR's revised report. In May 2015, ADWR submitted a report concerning cone of depression testing, and in November 2015, several parties, including us, submitted comments to that report.

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 non-Indian federal lands throughout Arizona. These claims are related to reservations of federal land for specific purposes (e.g., 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 and is scheduled for trial in 2016. In Re Redfield Canyon Wilderness Area and In Re San Pedro Riparian National Conservation Area concern the U.S.'s claims to two other federal reservations, and these cases are expected to go to trial in 2017.

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, Sierrita and Miami could be adversely affected unless we are able to acquire alternative resources.

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 0.56 per 200,000 man-hours worked in 2015 and 2014, and 0.74 per 200,000 man-hours worked in 2013. The metal mining sector industry average reported by the U.S. Mine Safety and Health Administration (MSHA) was 2.23 per 200,000 man-hours worked in 2014 and 2.39 per 200,000 man-hours worked in 2013. The metal mining sector industry average for 2015 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 February 19, 2016, about our executive officers is set forth in the following table and accompanying text:

Name	Age	Position or Office
Richard C. Adkerson	69	Vice Chairman of the Board, President and Chief Executive Officer
Kathleen L. Quirk	52	Executive Vice President, Chief Financial Officer and Treasurer
Harry M. "Red" Conger, IV	60	President and Chief Operating Officer - Americas and Africa Mining
Michael J. Arnold	63	Executive Vice President and Chief Administrative Officer
James C. Flores	56	FCX Oil & Gas Inc. Chairman of the Board and Chief Executive 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. Mr. Adkerson served as Co-Chairman of the Board of McMoRan Exploration Co. (MMR) from September 1998 until FCX's acquisition of MMR in 2013.

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 served as the Senior Vice President of MMR from April 2002 and as Treasurer from January 2000 until FCX's acquisition of MMR in 2013.

Harry M. "Red" Conger, IV has served as Chief Operating Officer - Americas and Africa Mining since July 2015, and as President - Americas since 2007. He has also served as President and Chief Operating Officer - Rod and Refining since 2014. 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.

James C. Flores has served as FCX Oil & Gas Inc. (FM O&G) Chief Executive Officer since June 2013 and as FM O&G Chairman of the Board since October 2015. He served as Vice Chairman of the Board of FCX from June 2013 to October 2015, and as President of FM O&G from June 2013 to July 2015. Mr. Flores previously served as

Chairman of the Board, President and Chief Executive Officer of Plains Exploration & Production Company (PXP) from September 2002 until FCX's acquisition of PXP in 2013.

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 2015 and 2014:

	2015		2014	
	High	Low	High	Low
First Quarter	\$23.72	\$16.43	\$38.09	\$30.38
Second Quarter	\$23.97	\$18.11	\$36.51	\$32.35
Third Quarter	\$18.84	\$7.76	\$39.32	\$32.29
Fourth Quarter	\$14.20	\$6.08	\$32.91	\$20.94

At February 19, 2016, there were 14,544 holders of record of our common stock.

Common Stock Dividends

The declaration of dividends is at the discretion of the FCX Board of Directors (the Board) and will depend on our financial results, cash requirements, future prospects and other factors deemed relevant by the Board. In February 2012, the Board authorized an increase in the cash dividend on our common stock to an annual rate of \$1.25 per share (\$0.3125 per share quarterly). 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 March 2015, the Board reduced the annual common stock dividend to \$0.20 per share (\$0.05 per share quarterly), and in December 2015, the Board suspended the annual common stock dividend. The Board will review its financial policy on an ongoing basis.

Below is a summary of dividends on FCX common stock for 2015 and 2014:

	2015		
	Per Share Amount	Record Date	Payment Date
First Quarter	\$0.3125	01/15/2015	02/02/2015
Second Quarter	\$0.0500	04/15/2015	05/01/2015
Special Dividend	\$0.1105	07/15/2015	08/03/2015
Third Quarter	\$0.0500	07/15/2015	08/03/2015
Fourth Quarter	\$0.0500	10/15/2015	11/02/2015

	2014		
	Per Share Amount	Record Date	Payment Date
First Quarter	\$0.3125	01/15/2014	02/03/2014
Second Quarter	\$0.3125	04/15/2014	05/01/2014
Third Quarter	\$0.3125	07/15/2014	08/01/2014
Fourth Quarter	\$0.3125	10/15/2014	11/03/2014

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, 2015:

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 ^a	(d) Maximum Number of Shares That May Yet Be Purchased Under the Plans or Programs ^a
October 1-31, 2015	—	\$ —	—	23,685,500
November 1-30, 2015	—	\$ —	—	23,685,500
December 1-31, 2015	—	\$ —	—	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.

Item 6. Selected Financial Data.

FREEPORT-McMORAN INC. SELECTED FINANCIAL AND OPERATING DATA

	Years Ended December 31,				
	2015	2014	2013 ^a	2012	2011
CONSOLIDATED FINANCIAL DATA					
Revenues	\$ 15,877 ^b	\$ 21,438 ^b	\$ 20,921 ^b	\$ 18,010	\$ 20,880
Operating (loss) income	^{b,c,d} \$(13,382)	^{b,c,e} \$ 97	^{b,c,f} \$ 5,351	^{c,g} \$ 5,814	^{c,h} \$ 9,140
Net (loss) income	^b \$(12,089)	^b \$(745)	^b 3,441	^b 3,980	^b 5,747
Net (loss) income attributable to common stockholders	^{b,c,d,i} \$(12,236)	^{b,c,e,j,k} \$(1,308)	^{b,c,f,j,k,l} \$ 2,658	^{c,g,j,k} \$ 3,041	^{c,h,j,k} \$ 4,560
Basic net (loss) income per share attributable to common stockholders	^b \$(11.31)	^b \$(1.26)	^b 2.65	^b 3.20	^b 4.81
Basic weighted-average common shares outstanding	1,082	1,039	1,002	949	947
Diluted net (loss) income per share attributable to common stockholders	^{b,c,d,i} \$(11.31)	^{b,c,e,j,k} \$(1.26)	^{b,c,f,j,k,l} \$ 2.64	^{c,g,j,k} \$ 3.19	^{c,h,j,k} \$ 4.78
Diluted weighted-average common shares outstanding	1,082	1,039	1,006	954	955
Dividends declared per share of common stock	\$ 0.2605	\$ 1.25	\$ 2.25	\$ 1.25	\$ 1.50
Operating cash flows	\$ 3,220	\$ 5,631	\$ 6,139	\$ 3,774	\$ 6,620
Capital expenditures	\$ 6,353	\$ 7,215	\$ 5,286	\$ 3,494	\$ 2,534
At December 31:					
Cash and cash equivalents	\$ 224	\$ 464	\$ 1,985	\$ 3,705	\$ 4,822
Property, plant, equipment and mining development costs, net	\$ 27,509	\$ 26,220	\$ 24,042	\$ 20,999	\$ 18,449
Oil and gas properties, net	\$ 7,093	\$ 19,274	\$ 23,359	\$ —	\$ —
Goodwill	\$ —	\$ —	\$ 1,916	\$ —	\$ —
Total assets	\$ 46,577	\$ 58,674 ^m	\$ 63,385 ^m	\$ 35,421 ^m	\$ 32,038 ^m
Total debt, including current portion	\$ 20,428	\$ 18,849 ^m	\$ 20,618 ^m	\$ 3,508 ^m	\$ 3,505 ^m
Redeemable noncontrolling interest	\$ 764	\$ 751	\$ 716	\$ —	\$ —
Total stockholders' equity	\$ 7,828	\$ 18,287	\$ 20,934	\$ 17,543	\$ 15,642

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, 2015. All references to income or losses per share are on a diluted basis, unless otherwise noted.

a. Includes the results of FCX Oil & Gas Inc. (FM O&G) beginning June 1, 2013.

- b. Includes net noncash mark-to-market (losses) gains associated with crude oil and natural gas derivative contracts totaling \$(319) million (\$(198) million to net loss attributable to common stockholders or \$(0.18) per share) for 2015, \$627 million (\$389 million to net loss attributable to common stockholders or \$0.37 per share) for 2014 and \$(312) million (\$(194) million to net income attributable to common stockholders 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 \$43 million (\$28 million to net loss attributable to common stockholders or \$0.03 per share) in 2015, \$76 million (\$50 million to net loss attributable to common stockholders or \$0.05 per share) in 2014, \$19 million (\$17 million to net income attributable to common stockholders or \$0.02 per share) in 2013, \$(62) million (\$(40) million to net income attributable to common stockholders or \$(0.04) per share) in 2012 and \$107 million (\$86 million to net income attributable to common stockholders or \$0.09 per share) in 2011.
- d. The year 2015 includes net charges totaling \$13.8 billion to operating loss (\$12.0 billion to net loss attributable to common stockholders or \$11.11 per share) consisting of (i) \$13.1 billion (\$11.6 billion to net loss attributable to common stockholders) for impairment of oil and gas properties, (ii) \$338 million (\$217 million to net loss attributable to common stockholders) for adjustments to copper and molybdenum inventories, (iii) \$188 million (\$117 million to net loss attributable to common stockholders) for charges at oil and gas operations primarily associated with other asset impairments and inventory write-downs, idle/terminated rig costs and prior year non-income tax assessments related to the California properties, (iv) \$156 million (\$94 million to net loss attributable to common stockholders) for charges at mining operations primarily associated with asset impairment, restructuring and other net charges and (v) \$18 million (\$12 million to net loss attributable to common stockholders) for executive retirement benefits, partly offset by (vi) a net gain of \$39 million (\$25 million to net loss attributable to common stockholders) for the sale of the Luna Energy power facility.
- e. The year 2014 includes net charges totaling \$4.8 billion to operating income (\$3.6 billion to net loss attributable to common stockholders or \$3.46 per share) consisting of (i) \$3.7 billion (\$2.3 billion to net loss attributable to common stockholders) for impairment of oil and gas properties, (ii) \$1.7 billion (\$1.7 billion to net loss attributable to common stockholders) to impair the full carrying value of goodwill, (ii) \$46 million (\$29 million to net loss attributable to common stockholders) for charges at oil and gas operations primarily associated with idle/terminated rig costs and inventory write-downs and (iv) \$6 million (\$4 million to net loss attributable to common stockholders) for adjustments to molybdenum inventories, partly offset by (v) net gains on sales of assets of \$717 million (\$481 million to net loss attributable to common stockholders) primarily from the sale of our 80 percent interests in the Candelaria and Ojos del Salado mining operations.
- f. The year 2013 includes net charges totaling \$232 million to operating income (\$137 million to net income attributable to common stockholders or \$0.14 per share) consisting of (i) \$80 million (\$50 million to net income attributable to common stockholders) for transaction and related costs principally associated with our oil and gas acquisitions, (ii) \$76 million (\$49 million to net income attributable to common stockholders) associated with updated mine plans at Morenci that resulted in a loss in recoverable leach stockpiles, (iii) \$37 million (\$23 million to net income attributable to common stockholders) for restructuring an executive employment arrangement, (iv) \$36 million (\$13 million to net income attributable to common stockholders) associated with a labor agreement at Cerro Verde and (v) \$3 million (\$2 million to net income attributable to common stockholders) for adjustments to molybdenum inventories.
- g. The year 2012 includes net charges totaling \$16 million to operating income (\$8 million to net income attributable to common stockholders or \$0.01 per share) associated with a labor agreement at Candelaria.
- h. The year 2011 includes net charges totaling \$57 million to operating income (\$19 million to net income attributable to common stockholders or \$0.02 per share) consisting of (i) \$116 million (\$50 million to net income attributable to common stockholders) associated with labor agreements at PT Freeport Indonesia (PT-FI), Cerro Verde and El Abra, partly offset by (ii) a gain of \$59 million (\$31 million to net income attributable to common stockholders) for the settlement of an insurance claim for business interruption and property damage related to PT-FI's concentrate pipelines.
- i. The year 2015 includes a gain of \$92 million (\$92 million to net loss attributable to common stockholders or \$0.09 per share) related to net proceeds received from insurance carriers and other third parties related to the shareholder derivative litigation settlement.
- j. Includes after-tax net gains (losses) on early extinguishment of debt totaling \$3 million (less than \$0.01 per share) in 2014, \$(28) million (\$(0.03) per share) in 2013, \$(149) million (\$(0.16) per share) in 2012 and \$(60) million (\$(0.06) per share) in 2011.
- k. As further discussed in "Consolidated Results - Provision for Income Taxes" contained in MD&A , amounts include net tax charges of \$121 million (\$103 million net of noncontrolling interests or \$0.10 per share) in 2014 and a net tax benefit of \$199 million (\$0.20 per share) in 2013. In addition, the year 2012 includes a net tax benefit of \$205 million (\$98 million net of noncontrolling interests or \$0.11 per share) primarily for adjustments to Cerro Verde's deferred income taxes, and the year 2011 includes a tax charge of \$53 million (\$49 million net of noncontrolling interests or \$0.05 per share) for additional taxes associated with Cerro Verde's election to pay a special mining burden.
- l. The year 2013 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.
- m. Amounts restated to reflect adoption of new accounting guidance for debt issuance costs, which reduced total debt and total assets by \$121 million at December 31, 2014, \$88 million at December 31, 2013, \$19 million at December 31, 2012, and \$32 million at December 31, 2011.

FREEPORt-McMoRan INC.
SELECTED FINANCIAL AND OPERATING DATA (Continued)

	Years Ended December 31,				
	2015	2014	2013	2012	2011
CONSOLIDATED MINING OPERATING DATA					
Copper					
Production (millions of recoverable pounds)	4,017	3,904	4,131	3,663	3,691
Production (thousands of recoverable metric tons)	1,822	1,771	1,874	1,662	1,674
Sales, excluding purchases (millions of recoverable pounds)	4,070	3,888	4,086	3,648	3,698
Sales, excluding purchases (thousands of recoverable metric tons)	1,846	1,764	1,853	1,655	1,678
Average realized price per pound	\$ 2.42	\$ 3.09	\$ 3.30	\$ 3.60	\$ 3.86
Gold					
Production (thousands of recoverable ounces)	1,257	1,214	1,250	958	1,383
Sales, excluding purchases (thousands of recoverable ounces)	1,247	1,248	1,204	1,010	1,378
Average realized price per ounce	\$ 1,129	\$ 1,231	\$ 1,315	\$ 1,665	\$ 1,583
Molybdenum					
Production (millions of recoverable pounds)	92	95	94	85	83
Sales, excluding purchases (millions of recoverable pounds)	89	95	93	83	79
Average realized price per pound	\$ 8.70	\$ 12.74	\$ 11.85	\$ 14.26	\$ 16.98
NORTH AMERICA COPPER MINES					
Operating Data, Net of Joint Venture Interest					
Copper					
Production (millions of recoverable pounds)	1,947	1,670	1,431	1,363	1,258
Production (thousands of recoverable metric tons)	883	757	649	618	571
Sales, excluding purchases (millions of recoverable pounds)	1,988	1,664	1,422	1,351	1,247
Sales, excluding purchases (thousands of recoverable metric tons)	902	755	645	613	566
Average realized price per pound	\$ 2.47	\$ 3.13	\$ 3.36	\$ 3.64	\$ 3.99
Molybdenum					
Production (millions of recoverable pounds)	37	33	32	36	35
100% Operating Data					
<u>Solution extraction/electrowinning (SX/EW) operations</u>					
Leach ore placed in stockpiles (metric tons per day)	909,900	1,005,300	1,003,500	998,600	888,300
Average copper ore grade (percent)	0.26	0.25	0.22	0.22	0.24
Copper production (millions of recoverable pounds)	1,134	963	889	866	801
<u>Mill operations</u>					
Ore milled (metric tons per day)	312,100	273,800	246,500	239,600	222,800
Average ore grade (percent):					
Copper	0.49	0.45	0.39	0.37	0.38
Molybdenum	0.03	0.03	0.03	0.03	0.03
Copper recovery rate (percent)	85.4	85.8	85.3	83.9	83.1
Copper production (millions of recoverable pounds)	972	828	642	592	549
SOUTH AMERICA MINING^a					
Copper					
Production (millions of recoverable pounds)	869	1,151	1,323	1,257	1,306
Production (thousands of recoverable metric tons)	394	522	600	570	592
Sales (millions of recoverable pounds)	871	1,135	1,325	1,245	1,322
Sales (thousands of recoverable metric tons)	395	515	601	565	600
Average realized price per pound	\$ 2.38	\$ 3.08	\$ 3.30	\$ 3.58	\$ 3.77
Gold					
Production (thousands of recoverable ounces)	—	72	101	83	101
Sales (thousands of recoverable ounces)	—	67	102	82	101
Average realized price per ounce	—	\$ 1,271	\$ 1,350	\$ 1,673	\$ 1,580
Molybdenum					
Production (millions of recoverable pounds)	7	11	13	8	10
<u>SX/EW operations</u>					
Leach ore placed in stockpiles (metric tons per day)	193,900	275,200	274,600	229,300	245,200
Average copper ore grade (percent)	0.44	0.48	0.50	0.55	0.50
Copper production (millions of recoverable pounds)	430	491	448	457	439
<u>Mill operations</u>					
Ore milled (metric tons per day)	152,100	180,500	192,600	191,400	189,200
Average ore grade:					
Copper (percent)	0.46	0.54	0.65	0.60	0.66
Gold (grams per metric ton)	—	0.10	0.12	0.10	0.12
Molybdenum (percent)	0.02	0.02	0.02	0.02	0.02
Copper recovery rate (percent)	81.5	88.1	90.9	90.1	89.6
Copper production (millions of recoverable pounds)	439	660	875	800	867

FREEPORT-McMoRAN INC.
SELECTED FINANCIAL AND OPERATING DATA (Continued)

	Years Ended December 31,				
	2015	2014	2013	2012	2011
INDONESIA MINING					
Operating Data, Net of Joint Venture Interest					
Copper					
Production (millions of recoverable pounds)	752	636	915	695	846
Production (thousands of recoverable metric tons)	341	288	415	315	384
Sales (millions of recoverable pounds)	744	664	885	716	846
Sales (thousands of recoverable metric tons)	337	301	401	325	384
Average realized price per pound	\$ 2.33	\$ 3.01	\$ 3.28	\$ 3.58	\$ 3.85
Gold					
Production (thousands of recoverable ounces)	1,232	1,130	1,142	862	1,272
Sales (thousands of recoverable ounces)	1,224	1,168	1,096	915	1,270
Average realized price per ounce	\$ 1,129	\$ 1,229	\$ 1,312	\$ 1,664	\$ 1,583
100% Operating Data					
Ore milled (metric tons per day): ^b					
Grasberg open pit	115,900	69,100	127,700	118,800	112,900
Deep Ore Zone underground mine	43,700	50,500	49,400	44,600	51,700
Deep Mill Level Zone underground mine	2,900	—	—	—	—
Big Gossan underground mine	—	900	2,100	1,600	1,500
Total	162,500	120,500	179,200	165,000	166,100
Average ore grade:					
Copper (percent)	0.67	0.79	0.76	0.62	0.79
Gold (grams per metric ton)	0.79	0.99	0.69	0.59	0.93
Recovery rates (percent):					
Copper	90.4	90.3	90.0	88.7	88.3
Gold	83.4	83.2	80.0	75.7	81.2
Production:					
Copper (millions of recoverable pounds)	752	651	928	695	882
Gold (thousands of recoverable ounces)	1,232	1,132	1,142	862	1,444
AFRICA MINING					
Copper					
Production (millions of recoverable pounds)	449	447	462	348	281
Production (thousands of recoverable metric tons)	204	203	210	158	127
Sales (millions of recoverable pounds)	467	425	454	336	283
Sales (thousands of recoverable metric tons)	212	193	206	152	128
Average realized price per pound	\$ 2.42	\$ 3.06	\$ 3.21	\$ 3.51	\$ 3.74
Cobalt					
Production (millions of contained pounds)	35	29	28	26	25
Sales (millions of contained pounds)	35	30	25	25	25
Average realized price per pound	\$ 8.21	\$ 9.66	\$ 8.02	\$ 7.83	\$ 9.99
Ore milled (metric tons per day)	14,900	14,700	14,900	13,000	11,100
Average ore grade (percent):					
Copper	4.00	4.06	4.22	3.62	3.41
Cobalt	0.43	0.34	0.37	0.37	0.40
Copper recovery rate (percent)	94.0	92.6	91.4	92.4	92.5
MOLYBDENUM MINES					
Molybdenum production (millions of recoverable pounds)					
48	51	49	41 ^c	38 ^d	38 ^d
Ore milled (metric tons per day)	34,800	39,400	35,700	20,800 ^d	22,300 ^d
Average molybdenum ore grade (percent)	0.20	0.19	0.19	0.23	0.24
OIL AND GAS OPERATIONS^e					
Sales Volumes:					
Oil (million barrels)	35.3	40.1	26.6	—	—
Natural gas (billion cubic feet)	89.7	80.8	54.2	—	—
Natural gas liquids (NGLs) (million barrels)	2.4	3.2	2.4	—	—
Million barrels of oil equivalents	52.6	56.8	38.1	—	—
Average Realizations:					
Oil (per barrel)	\$ 57.11	\$ 90.00	\$ 98.32	—	—
Natural gas (per million British thermal units)	\$ 2.59	\$ 4.23	\$ 3.99	—	—
NGLs (per barrel)	\$ 18.90	\$ 39.73	\$ 38.20	—	—

- a. Includes the results of the Candelaria and Ojos del Salado mines prior to their sale in November 2014.
- b. Represents the approximate average daily throughput processed at PT-FI's mill facilities from each producing mine.
- c. Includes production from the Climax molybdenum mine, which began commercial operations in May 2012.
- d. The years 2012 and 2011 reflect operating data of only the Henderson mine.
- e. Represents the results of FM O&G beginning June 1, 2013.

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 (losses) earnings, 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 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,				
	2015	2014 ^a	2013 ^b	2012	2011
Ratio of earnings to fixed charges	—	—	7.4x	19.8x	20.7x

- a. As a result of the loss recorded in 2015, the ratio coverage was less than 1:1. FCX would have needed to generate additional earnings of \$14.2 billion to achieve coverage of 1:1 in 2015.
- b. As a result of the loss recorded in 2014, the ratio coverage was less than 1:1. FCX would have needed to generate additional earnings of \$657 million to achieve coverage of 1:1 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, "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 Management's Discussion and Analysis of Financial Condition and Results of Operations and Quantitative and Qualitative Disclosures About Market Risk, all references to income or losses per share are on a diluted basis, unless otherwise noted.

OVERVIEW

We are a premier United States (U.S.)-based natural resources company with an industry-leading global portfolio of mineral assets and significant oil and natural gas resources. 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; significant mining operations in North and South America; the Tenke Fungurume (Tenke) minerals district in the Democratic Republic of Congo (DRC) in Africa; and significant U.S. oil and natural gas assets, including reserves in the Deepwater Gulf of Mexico (GOM), onshore and offshore California and in the Haynesville shale in Louisiana, and a position in the Inboard Lower Tertiary/Cretaceous natural gas trend onshore in South Louisiana.

Our results for 2015, compared with 2014, were significantly affected by lower price realizations from copper and oil. Results for both years were also impacted by impairment charges associated with oil and gas properties totaling \$13.1 billion (\$11.6 billion to net loss attributable to common stockholders) in 2015 and \$5.5 billion (\$4.0 billion to net loss attributable to common stockholders) in 2014 (refer to "Critical Accounting Estimates" and Note 2 for further discussion of these impairment charges). Refer to "Consolidated Results" for discussion of items impacting our consolidated results for the three years ended December 31, 2015.

We have significant mineral reserves, resources and future development opportunities within our portfolio of mining assets. At December 31, 2015, our estimated consolidated recoverable proven and probable mineral reserves totaled 99.5 billion pounds of copper, 27.1 million ounces of gold and 3.05 billion pounds of molybdenum, which were determined using long-term average prices of \$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.

A summary of the sources of our consolidated copper, gold and molybdenum production for the year 2015 by geographic location follows:

	Copper	Gold	Molybdenum
North America	48%	2%	92% ^a
South America	22	—	8
Indonesia	19	98	—
Africa	11	—	—
	<u>100%</u>	<u>100%</u>	<u>100%</u>

- a. Our Henderson and Climax molybdenum mines produced 52 percent of consolidated molybdenum production, and our North America copper mines produced 40 percent.

Copper production from the Grasberg mine in Indonesia, Morenci mine in North America and Cerro Verde mine in South America together totaled 55 percent of our consolidated copper production in 2015.

Our oil and gas business has significant proved, probable and possible reserves with organic growth opportunities. Our estimated proved oil and natural gas reserves at December 31, 2015, totaled 252 million barrels of oil equivalents (MMBOE), with 82 percent comprised of oil and natural gas liquids (NGLs). For 2015, our oil and gas sales volumes totaled 52.6 MMBOE, including 35.3 million barrels (MMBbls) of crude oil, 89.7 billion cubic feet (Bcf) of natural gas and 2.4 MMBbls of NGLs. Refer to "Operations" for further discussion of our oil and gas operations and to "Critical Accounting Estimates – Oil and Natural Gas Reserves" for further discussion of our reserves.

Our Board of Directors (the Board) is undertaking a strategic review of alternatives for our oil and gas business (FCX Oil & Gas Inc., or FM O&G). We and our advisors are actively engaged with interested participants in a process to evaluate opportunities that include asset sales and joint venture arrangements that would generate cash proceeds for debt repayment. We expect to advance the evaluation of these alternatives during the first half of 2016.

At December 31, 2015, we had \$20.4 billion in total debt. We have announced initiatives to accelerate our debt reduction plans. Several initiatives are currently being advanced, including an evaluation of alternatives for the oil and gas business as well as several potential transactions involving certain of our mining assets.

In February 2016, we entered into a definitive agreement to sell a 13 percent undivided interest in the Morenci unincorporated joint venture to Sumitomo Metal Mining Co., Ltd. for \$1.0 billion in cash and also reached agreement with our bank group to amend our revolving credit facility and term loan. Refer to Note 18 for further discussion.

REVISED OPERATING PLANS

During 2015, in response to weak market conditions, we took actions to enhance our financial position, including significant reductions in capital spending, production curtailments at certain North and South America mines (which resulted in aggregate annual reductions of 350 million pounds of copper and 34 million pounds of molybdenum) and actions to reduce operating, exploration and administrative costs (refer to "Operations" for further discussion). In addition, we generated approximately \$2 billion in gross proceeds from at-the-market equity programs, and our 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 (refer to Note 10 and "Capital Resources and Liquidity" for further discussion).

Concerns about the global economy, and particularly the weakening of the Chinese economy, have dominated financial market sentiment and negatively impacted commodity prices, including copper. Oil prices have weakened to multi-year lows in response to excess global supplies and relatively weak economic conditions. Current market conditions and uncertainty about the timing of economic and commodity price recovery require us to continue taking actions to strengthen our financial position, reduce debt and re-focus our portfolio of assets. Our business strategy is focused on our position as a leading global copper producer. We will continue to manage our production activities, spending on capital projects and operations, and the administration of our business to enhance cash flows, and intend to complete significant asset sale transactions to reduce debt. We are confident about the longer term outlook for copper prices based on the global demand and supply fundamentals. With our established reserves and large-scale current production base, our significant portfolio of undeveloped resources, and our global

organization of highly qualified and dedicated workers and management, we believe we are well positioned to generate significant asset sale proceeds while retaining an attractive portfolio of high-quality assets.

OUTLOOK

We view the long-term outlook for our business positively, supported by limitations on supplies of copper and by the requirements for copper and oil in the world's economy. Our financial results vary as a result of fluctuations in market prices primarily for copper, gold, molybdenum and oil, 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 for our mining operations, cash production costs per barrel of oil equivalents (BOE) for our oil and gas operations, operating cash flow and capital expenditures.

Projections included in this annual report on Form 10-K for the year ended December 31, 2015, do not reflect PT-FI continuing to pay a 5.0 percent export duty on concentrate or the results of any potential transactions with third parties to raise cash for debt reduction, including the recently announced transaction to sell a 13 percent undivided interest in Morenci (refer to Note 18). Additionally, projections for the year 2016 assume renewal of PT-FI's export permit after August 8, 2016,

Sales Volumes. Following are our projected consolidated sales volumes for 2016 and actual consolidated sales volumes for 2015:

	2016 (Projected)	2015 (Actual)
Copper (millions of recoverable pounds):		
North America copper mines	1,820	1,988
South America mining	1,340	871
Indonesia mining	1,475	744
Africa mining	495	467
	<u>5,130</u>	<u>4,070</u>
Gold (thousands of recoverable ounces)	1,835	1,247
Molybdenum (millions of recoverable pounds)	<u>73</u> ^a	<u>89</u>
Oil Equivalents (MMBOE)	<u>57.6</u>	<u>52.6</u>

- a. Projected molybdenum sales include 30 million pounds produced by our Molybdenum mines and 43 million pounds produced by our North and South America copper mines.

Consolidated sales for first-quarter 2016 are expected to approximate 1.1 billion pounds of copper, 200 thousand ounces of gold, 19 million pounds of molybdenum and 12.4 MMBOE. Anticipated higher grades from Grasberg in the second half of 2016 are expected to result in approximately 55 percent of consolidated copper sales and 75 percent of consolidated gold sales occurring in the second half of the year. 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."

Mining Unit Net Cash Costs. Unit net cash costs for 2016 are expected to decline significantly from 2015, principally reflecting higher anticipated copper and gold volumes, the impact of lower energy and other input costs and cost reduction initiatives. Assuming average prices of \$1,100 per ounce of gold and \$4.50 per pound of molybdenum, and achievement of current volume and cost estimates, consolidated unit net cash costs (net of by-product credits) for our copper mines are expected to average \$1.10 per pound in 2016, compared with \$1.53 per pound in 2015. The impact of price changes in 2016 on consolidated unit net cash costs would approximate \$0.015 per pound for each \$50 per ounce change in the average price of gold and \$0.015 per pound for each \$2 per pound change in the average price of molybdenum. Quarterly unit net cash costs vary with fluctuations in volumes and average realized prices (primarily gold and molybdenum prices). Higher anticipated grades from Grasberg in the second half of 2016 are expected to result in lower unit net cash costs in the second half of 2016, compared to the first half of the year. Refer to "Consolidated Results – Production and Delivery Costs" for further discussion of consolidated production costs for our mining operations.

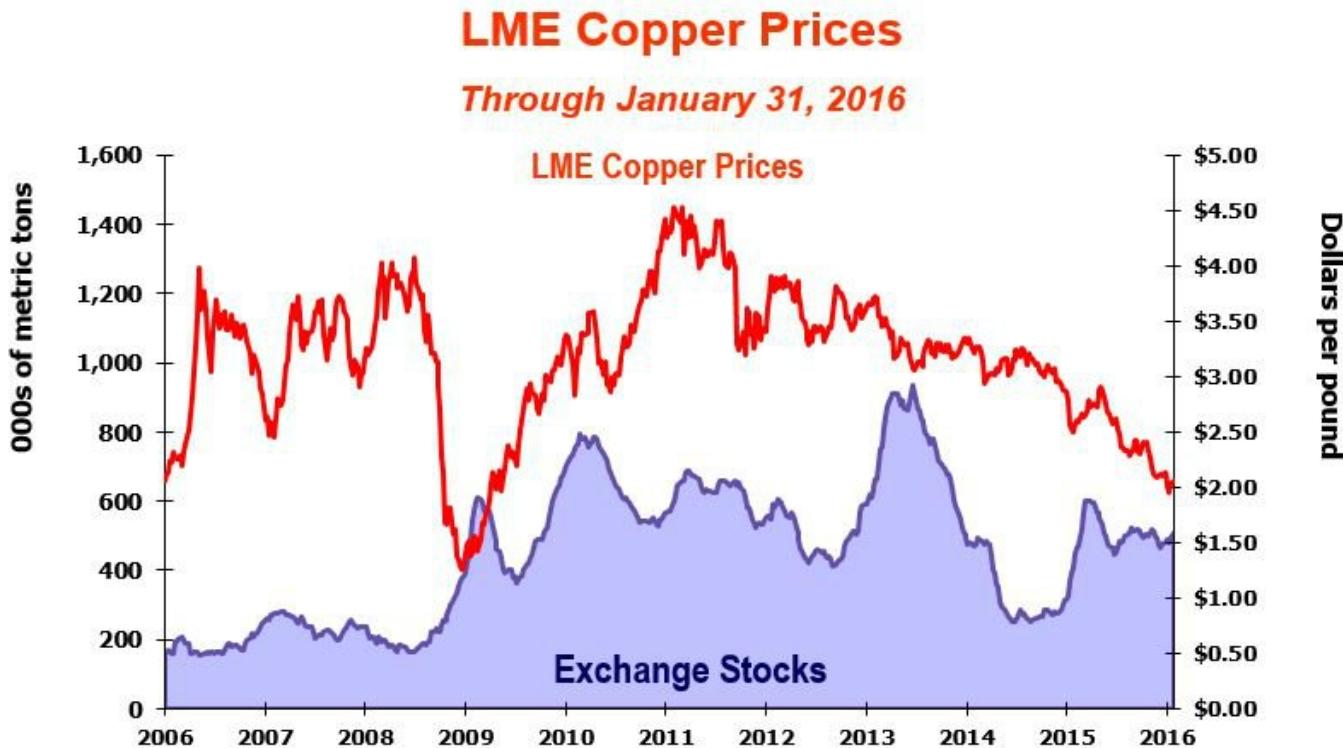
Oil and Gas Cash Production Costs per BOE. Cash production costs per BOE for 2016 are expected to decline from 2015 per BOE costs, principally reflecting increased production from the Deepwater GOM and cost reduction efforts. Based on current sales volume and cost estimates, oil and gas cash production costs are expected to approximate \$15 per BOE in 2016, compared with \$18.59 per BOE in 2015. Refer to "Operations – Oil and Gas Operations" for further discussion of oil and gas production costs.

Consolidated Operating Cash Flow. Our consolidated operating cash flows vary with volumes, prices realized from copper, gold, molybdenum and oil 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 \$2.00 per pound of copper, \$1,100 per ounce of gold, \$4.50 per pound of molybdenum and \$34 per barrel of Brent crude oil, we estimate consolidated operating cash flows for 2016 of \$3.4 billion (net of \$0.6 billion in idle rig costs). Projected consolidated operating cash flows for 2016 also reflect an estimated income tax provision of \$0.8 billion primarily associated with income from our international mining operations (refer to "Consolidated Results - Income Taxes" for further discussion of projected income taxes). The impact of price changes in 2016 on consolidated operating cash flows would approximate \$440 million for each \$0.10 per pound change in the average price of copper, \$55 million for each \$50 per ounce change in the average price of gold, \$60 million for each \$2 per pound change in the average price of molybdenum and \$135 million for each \$5 per barrel change in the average Brent crude oil price.

Consolidated Capital Expenditures. Consolidated capital expenditures are expected to approximate \$3.4 billion for 2016, including \$1.9 billion from the mining business (reflecting \$1.4 billion for major projects primarily for underground development activities at Grasberg and remaining costs for the Cerro Verde expansion and \$0.5 billion for sustaining capital) and \$1.5 billion for oil and gas operations. Consolidated capital expenditures exclude \$0.6 billion for idle rig costs associated with drillship contracts, which are included in projected operating cash flows above.

MARKETS

Metals. World prices for copper, gold and molybdenum can fluctuate significantly. During the period from January 2006 through January 2016, 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 \$525 per ounce in 2006 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, 2015.

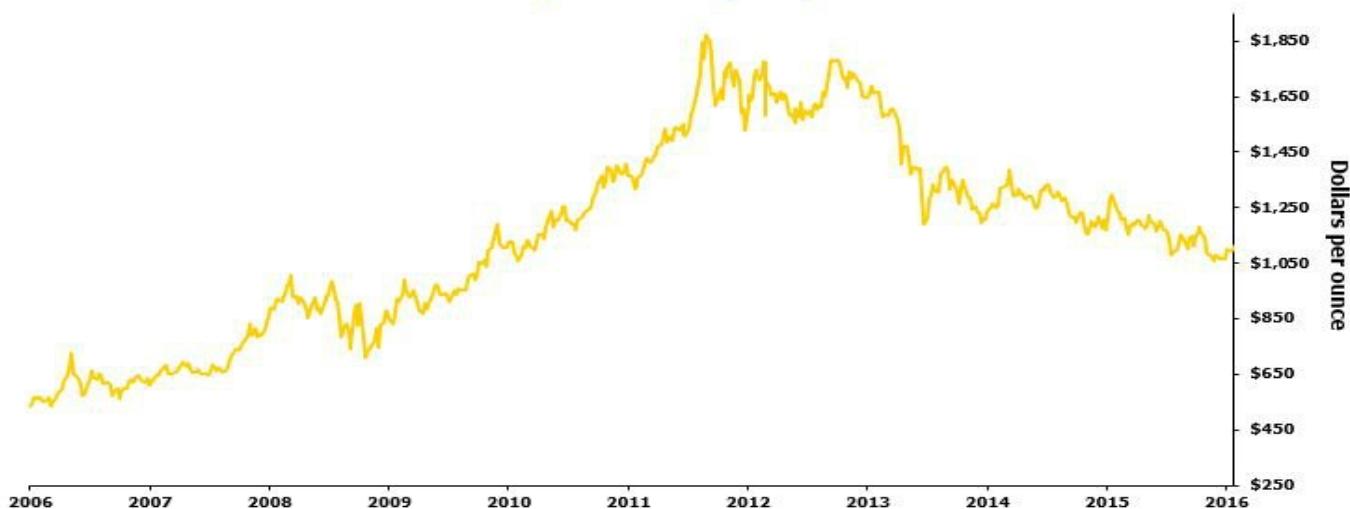


This graph presents LME spot copper prices and combined reported stocks of copper at the LME, Commodity Exchange Inc. (COMEX), a division of the New York Mercantile Exchange (NYMEX), and the Shanghai Futures Exchange from January 2006 through January 2016. Since mid-2014, copper prices have declined because of concerns about slowing growth rates in China, a stronger U.S. dollar and a broad-based decline in commodity prices. During 2015, LME spot copper prices ranged from a low of \$2.05 per pound to a high of \$2.92 per pound, averaged \$2.49 per pound and closed at \$2.13 per pound on December 31, 2015. The LME spot copper price closed at \$2.08 per pound on February 19, 2016.

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.

London Gold Prices

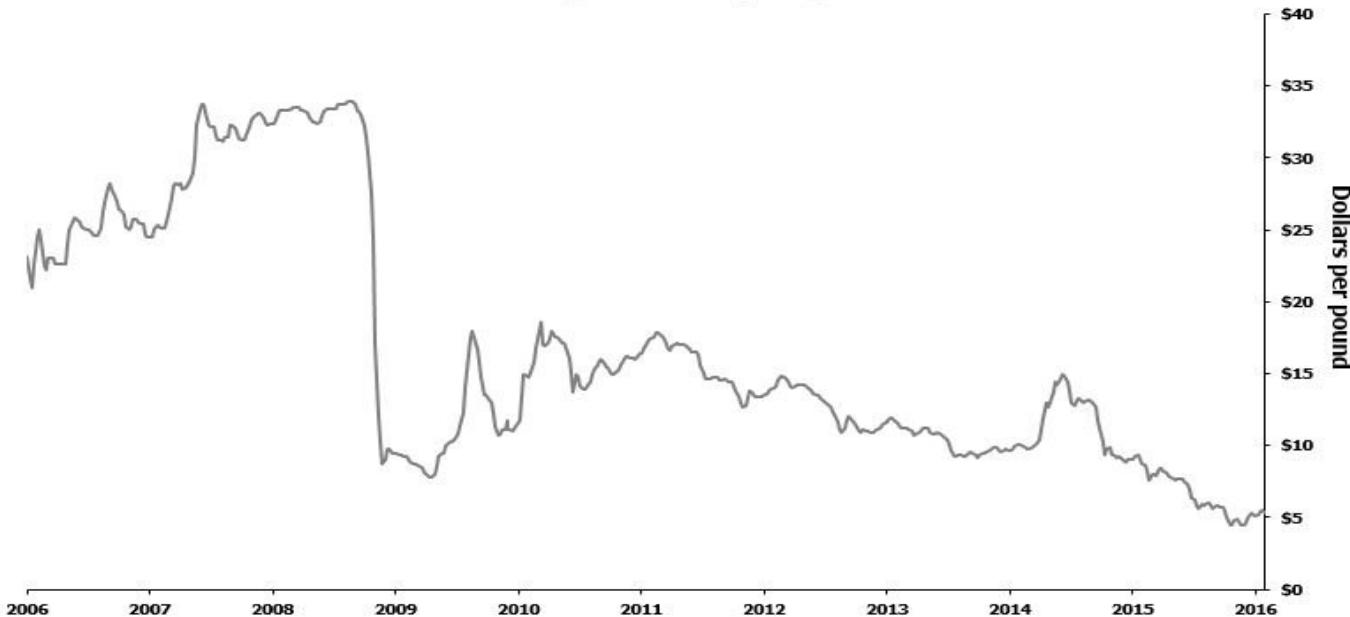
Through January 31, 2016



This graph presents London PM gold prices from January 2006 through January 2016. An improving economic outlook, stronger U.S. dollar and positive equity performance contributed to lower demand for gold in 2014 and 2015, resulting in lower prices. During 2015, London PM gold prices ranged from a low of \$1,049 per ounce to a high of \$1,296 per ounce, averaged \$1,160 per ounce and closed at \$1,062 per ounce on December 31, 2015. Gold prices closed at \$1,231 per ounce on February 19, 2016.

Metals Week Molybdenum Dealer Oxide Prices

Through January 31, 2016



This graph presents the *Metals Week* Molybdenum Dealer Oxide weekly average price from January 2006 through January 2016. Molybdenum prices have declined since mid-2014 because of weaker demand from global steel and stainless steel producers. During 2015, the weekly average price for molybdenum ranged from a low of \$4.46 per pound to a high of \$9.35 per pound, averaged \$6.66 per pound and was \$5.23 per pound on December 31, 2015. The *Metals Week* Molybdenum Dealer Oxide weekly average price was \$5.26 per pound on February 19, 2016.

Oil and Gas. Market prices for crude oil and natural gas can fluctuate significantly. During the period from January 2006 through January 2016, the Brent crude oil price ranged from a low of \$27.88 per barrel in 2016 to a high of \$146.08 per barrel in 2008 and the NYMEX natural gas contract price fluctuated from a low of \$2.03 per million British thermal units (MMBtu) in 2015 to a high of \$13.11 per MMBtu in 2008. Crude oil and natural gas 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, 2015.

Crude Oil and Natural Gas Prices

Through January 31, 2016



This graph presents Brent crude oil prices and NYMEX natural gas contract prices from January 2006 through January 2016. Crude oil prices reached a record high in July 2008 as economic growth in emerging economies and the U.S. created high global demand for oil and lower inventories. Since mid-2014, oil prices have significantly declined associated with concerns of global oversupply. During 2015, the Brent crude oil price ranged from a low of \$36.11 per barrel to a high of \$67.77 per barrel, averaged \$53.64 per barrel and was \$37.28 per barrel on December 31, 2015. The Brent crude oil price was \$33.01 per barrel on February 19, 2016.

CRITICAL ACCOUNTING ESTIMATES

Management's Discussion and Analysis of Financial Condition and Results of Operations 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.

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, 2015, our consolidated estimated recoverable proven and probable reserves were determined using long-term average prices of \$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 2015 and 2014:

	Copper ^a (billion pounds)	Gold (million ounces)	Molybdenum (billion pounds)
Consolidated reserves at December 31, 2013	111.2	31.3	3.26
Net additions/revisions	(0.1)	(0.6)	(0.05)
Production	(3.9)	(1.2)	(0.10)
Sale of Candelaria and Ojos del Salado mines	(3.7)	(1.0)	—
Consolidated reserves at December 31, 2014	103.5	28.5	3.11
Net additions/revisions	—	(0.1)	0.03
Production	(4.0)	(1.3)	(0.09)
Consolidated reserves at December 31, 2015	99.5	27.1	3.05

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

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, 2015, we estimate that our annual depreciation, depletion and amortization (DD&A) expense for 2016 would decrease by \$76 million (\$35 million to net income attributable to common stockholders), and a 10 percent decrease in copper reserves would increase DD&A expense by \$93 million (\$43 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 determined that assigned asset lives do not reflect the expected remaining period of benefit, any change could affect prospective depreciation 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.

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, 2015). Accounting for recoverable copper from mill and leach stockpiles represents a critical accounting estimate because (i) it is generally 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, 2015, estimated consolidated recoverable copper was 3.8 billion pounds in leach stockpiles (with a carrying value of \$3.4 billion) and 1.0 billion pounds in mill stockpiles (with a carrying value of \$617 million),

compared with 3.6 billion pounds in leach stockpiles (with a carrying value of \$3.6 billion) and 0.9 billion pounds in mill stockpiles (with a carrying value of \$446 million) at December 31, 2014.

Impairment of Long-Lived Mining 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 are used. 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 estimated discounted after-tax future cash flows.

As a result of declining copper and molybdenum prices, during 2015 we evaluated our long-lived mining assets for impairment, which resulted in net charges of \$37 million at our Tyrone mine. The December 31, 2015, evaluations of the recoverability of our copper mines were based on near-term price assumptions reflecting prevailing copper futures prices, ranging 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. If low copper prices persist or decline further, we could incur potentially significant additional impairments of our long-lived mining assets. The December 31, 2015, evaluations of the recoverability of our molybdenum mines used near-term price assumptions that are consistent with current market prices for molybdenum and a long-term average of \$10 per pound. While continued low molybdenum prices could result in impairments of our molybdenum mines, we have incorporated changes in the commercial pricing structure for our chemicals products to promote continuation of chemical-grade production.

In addition to decreases in future metal price assumptions, other events that could result in 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.

Oil and Natural Gas Reserves

Proved reserves represent quantities of oil and gas, which, by analysis of geoscience and engineering data, can be estimated with reasonable certainty to be economically producible from a given date forward, from known reservoirs, and under existing economic conditions, operating methods and government regulations. The term "reasonable certainty" implies a high degree of confidence that the quantities of oil and gas actually recovered will equal or exceed the estimate. Engineering estimates of proved oil and natural gas reserves directly impact financial accounting estimates, including DD&A and the ceiling limitation under the full cost method. Our proved reserve volumes have been determined in accordance with the U.S. Securities and Exchange Commission (SEC) guidelines, which require the use of an average price, calculated as the twelve-month historical average of the first-day-of-the-month historical reference price as adjusted for location and quality differentials, unless prices are defined by contractual arrangements, excluding escalations based upon future conditions and the impact of derivative contracts. Our reference prices for reserve determination are the West Texas Intermediate (WTI) spot price for crude oil and the Henry Hub price for gas, which were \$50.28 per barrel of oil and \$2.59 per MMBtu of natural gas at December 31, 2015. These prices are 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 escalations. In accordance with the guidelines and excluding the impact of derivative instruments, the average realized prices used in our reserve reports as of December 31, 2015, were \$47.80 per barrel of oil and \$2.55 per thousand cubic feet (Mcf) of natural gas. Actual future prices and costs may be materially higher or lower than the average prices and costs as of the date of the reserves estimate.

There are numerous uncertainties inherent in estimating quantities and values of proved oil and natural gas reserves and in projecting future rates of production and the amount and timing of development expenditures, including many factors beyond our control. Future development and abandonment costs are determined at least annually for each of our properties based upon its geographic location, type of production structure, water depth, reservoir depth and characteristics, currently available procedures and consultations with engineering consultants. Because these costs typically extend many years into the future, estimating these future costs is difficult and requires management to make judgments that are subject to future revisions based upon numerous factors,

including changing technology and the political and regulatory environment. 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 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 oil and natural gas sales prices may all differ from those assumed in our estimates. Refer to Note 21 for further information regarding estimated proved oil and natural gas reserves.

Our average amortization rate per BOE was \$33.46 in 2015, \$39.74 for 2014 and \$35.54 for 2013. Our oil and gas DD&A rate, after the effect of the ceiling test impairments through December 31, 2015, is expected to approximate \$20 per BOE. Changes to estimates of proved reserves and other factors could result in changes to the prospective UOP amortization rate for our oil and gas properties, which could have a significant impact on our results of operations. Based on our estimated proved reserves and our net oil and gas properties subject to amortization at December 31, 2015, a 10 percent increase in our costs subject to amortization would increase our amortization rate by approximately \$2 per BOE and a 10 percent reduction to proved reserves would increase our amortization rate by approximately \$2 per BOE. Changes in estimates of proved oil and natural gas reserves may also affect our ceiling test calculation. Refer to Note 1 and "Impairment of Oil and Gas Properties" below for further discussion.

Impairment of Oil and Gas Properties

As discussed in Note 1, we follow the full cost method of accounting for our oil and gas operations, whereby all costs associated with oil and gas property acquisition, exploration and development activities are capitalized and amortized to expense under the UOP method on a country-by-country basis using estimates of proved oil and natural gas reserves relating to each country where such activities are conducted. The costs of unproved oil and gas properties are excluded from amortization until the properties are evaluated.

Under full cost accounting rules, a "ceiling test" is conducted each quarter to review the carrying value of our oil and gas properties for impairment (refer to Note 1 for further discussion of the ceiling test calculation). The SEC requires that the twelve-month average of the first-day-of-the-month historical reference prices be used to determine the ceiling test limitation. Such prices are utilized except where different prices are fixed and determinable from applicable contracts for the remaining term of those contracts. The reference pricing in ceiling test impairment calculations may cause results that do not reflect current market conditions that exist at the end of an accounting period. For example, in periods of increasing oil and gas prices, the use of a twelve-month historical average price in the ceiling test calculation may result in an impairment. Conversely, in times of declining prices, ceiling test calculations may not result in an impairment.

Using WTI as the reference oil price, the average price was \$50.28 per barrel at December 31, 2015, compared with \$94.99 per barrel at December 31, 2014. Each quarter end since September 30, 2014, net capitalized costs with respect to FM O&G's proved U.S. oil and gas properties have exceeded the ceiling test limitation specified by the SEC's full cost accounting rules, which resulted in the recognition of impairment charges totaling \$13.0 billion in 2015 and \$3.7 billion in 2014. In addition, during 2015 impairment charges of \$164 million were recorded for international oil and gas properties, primarily related to Morocco (refer to "Operations - Oil and Gas" for further discussion).

If the twelve-month historical average price in 2016 remains below the December 31, 2015, twelve-month average of \$50.28 per barrel, the ceiling test limitation will decrease potentially resulting in additional ceiling test impairments of our oil and gas properties. The WTI spot oil price was \$29.64 per barrel at February 19, 2016.

If the trailing twelve-month average prices for the period ended December 31, 2015, had been \$46.03 per barrel of oil and \$2.45 per MMBtu for natural gas, while all other inputs and assumptions remained constant, an additional pre-tax impairment charge of \$0.6 billion would have been recorded to our oil and gas properties in 2015. These oil and natural gas prices were determined using a twelve-month simple average of the first-day-of-the-month for the eleven months ended February 2016, and the February 2016 prices were held constant for the remaining one month. This calculation solely reflects the impact of hypothetical lower oil and natural gas prices on our ceiling test limitation and proved reserves as of December 31, 2015. The oil and natural gas price is a single variable in the estimation of our proved reserves, and other factors, as described below, could have a significant impact on future reserves and the present value of future cash flows.

In addition to declines in the trailing twelve-month average oil and natural gas prices, other factors that could result in future impairment of our oil and gas properties include costs transferred from unevaluated properties to the full cost pool without corresponding proved oil and natural gas reserve additions, negative reserve revisions and the future incurrence of exploration, development and production costs. During 2015, we transferred \$6.4 billion of costs associated with unevaluated properties to the full cost pool, mostly reflecting impairment of the carrying values of unevaluated properties. As FM O&G completes activities to assess its unevaluated properties, related costs currently recorded as unevaluated properties not subject to amortization will be transferred to the full cost pool. If these activities do not result in additions to discounted future net cash flows from proved oil and natural gas reserves at least equal to the related costs transferred (net of related tax effects), additional ceiling test impairments are expected to result at current price levels.

At December 31, 2015, we had \$4.8 billion of costs for unproved oil and gas properties, which are excluded from amortization. These costs will be transferred into the amortization base (i.e., full cost pool) as the properties are evaluated and proved reserves are established or if impairment is determined. We assess our unproved properties periodically (at least annually), and if impairment is indicated, the cumulative drilling costs incurred to date for such property and all or a portion of the associated leasehold costs are transferred to the full cost pool and subject to amortization. Accordingly, an impairment of unproved properties does not immediately result in the recognition of a charge to the consolidated statements of income, but rather increases the costs subject to amortization and the costs subject to the ceiling limitation under the full cost accounting method. Following a review of the carrying values of unevaluated properties during 2015, FM O&G determined that the carrying values of certain of its unevaluated properties were impaired primarily resulting from declines in oil prices and changes in operating plans. The transfer of costs into the amortization base involves a significant amount of judgment and may be subject to changes over time based on our drilling plans and results, geological and geophysical evaluations, the assignment of proved reserves, availability of capital and other factors.

Because the transfer of unevaluated property to the full cost pool requires significant judgment and the ceiling test used to evaluate impairment of our proved oil and gas properties requires us to make several estimates and assumptions that are subject to risk and uncertainty, changes in these estimates and assumptions could result in the impairment of our oil and gas properties. Events that could result in impairment of our oil and gas properties include, but are not limited to, decreases in future crude oil and natural gas prices, decreases in estimated proved oil and natural gas reserves, increases in production, development or abandonment costs and any event that might otherwise have a material adverse effect on our oil and gas production levels or costs.

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 expensed 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, 2015, environmental obligations recorded in our consolidated balance sheet totaled \$1.2 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, 2015.

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 asset retirement obligations (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, 2015, AROs recorded in our consolidated balance sheet totaled \$2.8 billion, including \$1.1 billion associated with our 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, 2015.

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.

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. The 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 the 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.

At December 31, 2015, our valuation allowances totaled \$4.2 billion, covering U.S. federal and state deferred tax assets, including all of our U.S. foreign tax credit carryforwards, U.S. minimum tax credit carryforwards, foreign net operating loss carryforwards, and a portion of our U.S. federal and state net operating loss carryforwards. Refer to "Consolidated Results - Income Taxes" for discussion of tax charges recording in 2015 associated with the impairment of U.S. oil and gas properties. At December 31, 2014, valuation allowances totaled \$2.4 billion, and covered a portion of our U.S. foreign tax credit carryforwards, foreign net operating loss carryforwards, U.S. state net operating loss carryforwards and U.S. state deferred tax assets. Refer to Note 11 for further discussion.

CONSOLIDATED RESULTS

	Years Ended December 31,		
	2015	2014 ^a	2013 ^{a,b}
SUMMARY FINANCIAL DATA			
Revenues ^{c,d,e}	\$ 15,877	\$ 21,438	\$ 20,921
Operating (loss) income ^{c,d,e,f,g}	\$ (13,382)	\$ 97	\$ 5,351
Net (loss) income attributable to common stockholders ^{d,e,f,g,m}	\$ (12,236)	\$ (1,308)	\$ 2,658
Diluted net (loss) income per share attributable to common stockholders ^{d,e,f,g,m}	\$ (11.31)	\$ (1.26)	\$ 2.64
Diluted weighted-average common shares outstanding	1,082	1,039	1,006
Operating cash flows ^r	\$ 3,220	\$ 5,631	\$ 6,139
Capital expenditures	\$ 6,353	\$ 7,215	\$ 5,286
At December 31:			
Cash and cash equivalents	\$ 224	\$ 464	\$ 1,985
Total debt, including current portion	\$ 20,428	\$ 18,849	\$ 20,618

- a. Includes the results of the Candelaria and Ojos del Salado mines prior to their sale in November 2014, and the results of Eagle Ford prior to its sale in June 2014.
- b. Includes the results of FM O&G beginning June 1, 2013.
- c. 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,		
	2015	2014	2013
Revenues			
North America copper mines	\$ 5,126	\$ 5,616	\$ 5,183
South America mining	1,934	3,532	4,485
Indonesia mining	2,653	3,071	4,087
Africa mining	1,384	1,558	1,637
Molybdenum mines	348	587	522
Rod & Refining	4,154	4,655	5,022
Atlantic Copper Smelting & Refining	1,970	2,412	2,041
U.S. Oil & Gas operations	1,994	4,710	2,616
Other mining, corporate, other & eliminations	(3,686)	(4,703)	(4,672)
Total revenues	<u>\$ 15,877</u>	<u>\$ 21,438</u>	<u>\$ 20,921</u>
Operating income (loss)			
North America copper mines	\$ 648	\$ 1,698	\$ 1,506
South America mining	67	1,220	2,063
Indonesia mining	449	719	1,420
Africa mining	256	548	625
Molybdenum mines	(72)	167	123
Rod & Refining	16	12	23
Atlantic Copper Smelting & Refining	67	(2)	(75)
U.S. Oil & Gas operations	(14,189)	(4,479)	450
Other mining, corporate, other & eliminations	(624)	214	(784)
Total operating (loss) income	<u>\$ (13,382)</u>	<u>\$ 97</u>	<u>\$ 5,351</u>

- d. Includes unfavorable adjustments to provisionally priced concentrate and cathode copper sales recognized in prior periods totaling \$107 million (\$53 million to net loss attributable to common stockholders or \$0.05 per share) in 2015, \$118 million (\$65 million to net loss attributable to common stockholders or \$0.06 per share) in 2014 and \$26 million (\$12 million to net income attributable to common stockholders or \$0.01 per share) in 2013. Refer to "Revenues" for further discussion.
- e. Includes net noncash mark-to-market (losses) gains associated with crude oil and natural gas derivative contracts totaling \$(319) million (\$(198) million to net loss attributable to common stockholders or \$(0.18) per share) in 2015, \$627 million (\$389 million to net loss attributable to common stockholders or \$0.37 per share) in 2014 and \$(312) million (\$(194) million to net income attributable to common stockholders or \$(0.19) per share) for the seven-month period from June 1, 2013, to December 31, 2013. Refer to "Revenues" for further discussion.
- f. Includes net charges for adjustments to environmental obligations and related litigation reserves of \$43 million (\$28 million to net loss attributable to common stockholders or \$0.03 per share) in 2015, \$76 million (\$50 million to net loss attributable to common stockholders or \$0.05 per share) in 2014 and \$19 million (\$17 million to net income attributable to common stockholders or \$0.02 per share) in 2013.

- g. Includes charges at mining operations for adjustments to copper and molybdenum inventories totaling \$338 million (\$217 million to net loss attributable to common stockholders or \$0.20 per share) in 2015, and for adjustments to molybdenum inventories totaling \$6 million (\$4 million to net loss attributable to common stockholders or less than \$0.01 per share) in 2014 and \$3 million (\$2 million to net income attributable to common stockholders or less than \$0.01 per share) in 2013.
- h. Includes charges to reduce the carrying value of oil and gas properties pursuant to full cost accounting rules of \$13.1 billion (\$11.6 billion to net loss attributable to common stockholders or \$10.72 per share) in 2015 and \$3.7 billion (\$2.3 billion to net loss attributable to common stockholders or \$2.24 per share) in 2014. The year 2014 also includes an impairment charge of \$1.7 billion (\$1.7 billion to net loss attributable to common stockholders or \$1.65 per share) for the full carrying value of goodwill. As a result of the impairment to U.S. oil and gas properties, we recorded tax charges of \$3.3 billion in 2015 to establish valuation allowances against U.S. federal and state deferred tax assets that will not generate a future benefit. These tax charges have been reflected in the after tax impacts for the impairment of oil and gas properties in 2015.
- i. Includes charges at oil and gas operations totaling \$188 million (\$117 million to net loss attributable to common stockholders or \$0.11 per share) in 2015, primarily for other asset impairments and inventory write-downs, idle/terminated rig costs and prior year non-income tax assessments related to the California properties, and \$46 million (\$29 million to net loss attributable to common stockholders or \$0.03 per share) in 2014, primarily for idle/terminated rig costs and inventory write-downs.
- j. The year 2015 includes charges at mining operations for impairment, restructuring and other net charges totaling \$156 million (\$94 million to net loss attributable to common stockholders or \$0.09 per share) and charges for executive retirement benefits totaling \$18 million (\$12 million to net loss attributable to common stockholders or \$0.01 per share).
- k. Includes net gains on sales of assets of \$39 million (\$25 million to net loss attributable to common stockholders or \$0.02 per share) in 2015 associated with the sale of our one-third interest in the Luna Energy power facility and \$717 million (\$481 million to net loss attributable to common stockholders or \$0.46 per share) in 2014 primarily from the sale of our 80 percent interests in the Candelaria and Ojos del Salado mines.
- l. The year 2013 includes charges of (i) \$80 million (\$50 million to net income attributable to common stockholders or \$0.05 per share) for transaction and related costs associated with the oil and gas acquisitions, (ii) \$76 million (\$49 million to net income attributable to common stockholders or \$0.05 per share) associated with updated mine plans at Morenci that resulted in a loss in recoverable leach stockpiles, (iii) \$37 million (\$23 million to net income attributable to common stockholders or \$0.02 per share) for restructuring an executive employment arrangement and (iv) \$36 million (\$13 million to net income attributable to common stockholders or \$0.01 per share) associated with Cerro Verde's new labor agreements.
- m. 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.
- n. The year 2015 includes a gain of \$92 million (\$92 million to net loss attributable to common stockholders or \$0.09 per share) related to net proceeds received from insurance carriers and other third parties related to the shareholder derivative litigation settlement.
- o. Includes net gains (losses) on early extinguishment of debt totaling \$73 million (\$3 million to net loss attributable to common stockholders or less than \$0.01 per share) in 2014 and \$(35) million (\$(28) million to net income attributable to common stockholders or \$(0.03) per share) in 2013. Refer to Note 8 for further discussion.
- p. Includes net tax charges of \$103 million (\$0.10 per share) in 2014 and net tax benefits of \$199 million (\$0.20 per share) in 2013. Refer to Note 11 and "Provision for Income Taxes" below for further discussion.
- q. The year 2013 includes a gain of \$128 million (\$128 million to net income attributable to common stockholders or \$0.13 per share) related to our preferred stock investment in and the subsequent acquisition of McMoRan Exploration Co. (MMR).
- r. Includes net working capital sources (uses) and changes in other tax payments of \$373 million in 2015, \$(632) million in 2014 and \$(377) million in 2013.
- s. Amounts restated to reflect adoption of new accounting guidance for debt issuance costs, which reduced total debt and assets by \$121 million in 2014 and \$88 million in 2013.

	Years Ended December 31,		
	2015	2014 ^{a,b}	2013 ^{a,b,c}
SUMMARY OPERATING DATA			
Copper			
Production (millions of recoverable pounds)	4,017	3,904	4,131
Sales, excluding purchases (millions of recoverable pounds)	4,070	3,888	4,086
Average realized price per pound	\$ 2.42	\$ 3.09	\$ 3.30
Site production and delivery costs per pound ^d	\$ 1.78	\$ 1.90	\$ 1.88
Unit net cash costs per pound ^d	\$ 1.53	\$ 1.51	\$ 1.49
Gold			
Production (thousands of recoverable ounces)	1,257	1,214	1,250
Sales, excluding purchases (thousands of recoverable ounces)	1,247	1,248	1,204
Average realized price per ounce	\$ 1,129	\$ 1,231	\$ 1,315
Molybdenum			
Production (millions of recoverable pounds)	92	95	94
Sales, excluding purchases (millions of recoverable pounds)	89	95	93
Average realized price per pound	\$ 8.70	\$ 12.74	\$ 11.85
Oil Equivalents			
Sales volumes:			
MMBOE	52.6	56.8	38.1
Thousand BOE (MBOE) per day	144	156	178
Cash operating margin per BOE: ^e			
Realized revenues	\$ 43.54	\$ 71.83	\$ 76.87
Cash production costs	18.59	20.08	17.14
Cash operating margin	<u>\$ 24.95</u>	<u>\$ 51.75</u>	<u>\$ 59.73</u>

- a. Includes the results of the Candelaria and Ojos del Salado mines prior to their sale in November 2014. Sales volumes from the Candelaria and Ojos del Salado mines totaled 268 million pounds of copper and 67 thousand ounces of gold in 2014 and 424 million pounds of copper and 102 thousand ounces of gold in 2013.
- b. Includes the results of Eagle Ford prior to its sale in June 2014. Sales volumes from Eagle Ford totaled 8.7 MMBOE (24 MBOE per day) in 2014; excluding Eagle Ford, oil and gas cash production costs were \$21.36 per BOE for the year 2014. Sales volumes from Eagle Ford totaled 9.9 MMBOE (46 MBOE per day) in 2013; excluding Eagle Ford, oil and gas cash production costs were \$18.95 per BOE for the year 2013.
- c. Includes the results of FM O&G beginning June 1, 2013.
- d. Reflects per pound weighted-average production and delivery costs and unit net cash costs (net of by-product credits) for all copper mines, excluding 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."
- e. Cash operating margin for oil and gas operations reflects realized revenues less cash production costs. Realized revenues exclude noncash mark-to-market adjustments on derivative contracts, and cash production costs exclude accretion and other costs. For reconciliations of realized revenues and cash production costs per BOE to revenues and production and delivery costs reported in our consolidated financial statements, refer to "Product Revenues and Production Costs."

Revenues

Consolidated revenues totaled \$15.9 billion in 2015, \$21.4 billion in 2014 and \$20.9 billion in 2013. Revenues include the sale of copper concentrate, copper cathode, copper rod, gold, molybdenum, silver, cobalt and beginning June 1, 2013, the sale of oil, natural gas and NGLs by our oil and gas operations. Our consolidated revenues for 2015 include sales of copper (67 percent), oil (11 percent), gold (10 percent) and molybdenum (5 percent).

Following is a summary of changes in our consolidated revenues between periods (in millions):

	2015	2014
Consolidated revenues - prior year	\$ 21,438	\$ 20,921
Mining operations:		
Higher (lower) sales volumes from mining operations:		
Copper	562	(650)
Gold	(1)	58
Molybdenum	(72)	17
(Lower) higher price realizations from mining operations:		
Copper	(2,727)	(817)
Gold	(127)	(105)
Molybdenum	(360)	84
Net adjustments for prior year provisionally priced copper sales	11	(92)
Lower revenues from purchased copper	(95)	(361)
(Lower) higher Atlantic Copper revenues	(442)	371
Oil and gas operations:		
Lower oil sales volumes	(438)	— ^a
Lower oil average realized prices, including cash gains (losses) on derivative contracts	(1,159)	— ^a
Higher oil and gas revenues, including cash losses on derivative contracts	—	1,155
Net noncash mark-to-market adjustments on derivative contracts	(946)	939
Other, including intercompany eliminations	233	(82)
Consolidated revenues - current year	<u>\$ 15,877</u>	<u>\$ 21,438</u>

a. Oil sales volumes and realized prices for the year 2014, are not comparable to the year 2013, as 2013 only includes FM O&G's results beginning June 1, 2013.

Mining Operations

Sales Volumes. Consolidated sales volumes from our mines totaled 4.1 billion pounds of copper, 1.25 million ounces of gold and 89 million pounds of molybdenum in 2015; 3.9 billion pounds of copper, 1.25 million ounces of gold and 95 million pounds of molybdenum in 2014; and 4.1 billion pounds of copper, 1.2 million ounces of gold and 93 million pounds of molybdenum in 2013. Higher consolidated copper sales volumes in 2015, compared with 2014, primarily reflect higher volumes from North America associated with increased production from the Morenci mill expansion project and higher ore grades at the Chino mine, and higher volumes from Indonesia associated with higher mill throughput because of export restrictions in 2014, partly offset by lower volumes from South America as a result of the sale of the Candelaria and Ojos del Salado mines in November 2014.

Lower consolidated copper sales volumes in 2014, compared with 2013, primarily reflect decreased volumes in Indonesia and South America, partly offset by higher volumes from our North America copper mines.

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

Metal Price Realizations. Our consolidated revenues can vary significantly as a result of fluctuations in the market prices of copper, gold and molybdenum, and to a lesser extent silver and cobalt. Our average realized prices were 22 percent lower for copper, 8 percent lower for gold and 32 percent lower for molybdenum in 2015, compared with 2014. In 2014 our average realized prices for copper and gold were 6 percent lower, compared with 2013, and our average realized price for molybdenum was 8 percent higher, compared with 2013.

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 unfavorable net adjustments to prior years' provisionally priced copper sales totaling \$107 million in 2015, \$118 million in 2014 and \$26 million in 2013.

Purchased Copper. We purchased copper cathode for processing by our Rod & Refining segment totaling 121 million pounds in 2015, 125 million pounds in 2014 and 223 million pounds in 2013. Lower purchased copper revenues in 2015, compared with 2014, primarily reflect lower copper prices. Lower purchased copper revenues in 2014, compared with 2013, primarily reflect lower purchased copper volumes and prices.

Atlantic Copper Revenues. Lower Atlantic Copper revenues in 2015, compared with 2014, primarily reflect lower copper prices. Higher Atlantic Copper revenues in 2014, compared with 2013, primarily reflect the impact of a major maintenance turnaround in 2013.

Oil & Gas Operations

Sales Volumes. Oil sales volumes totaled 35.3 MMBbls in 2015, 40.1 MMBbls in 2014, and 26.6 MMBbls for the seven-month period from June 1, 2013, to December 31, 2013. Oil sales volumes were lower in 2015, compared with 2014, primarily reflecting the sale of the Eagle Ford shale assets in June 2014, partly offset by higher volumes in the GOM. Oil sales volumes for 2014, were higher than sales volumes for the seven-month period from June 1, 2013, to December 31, 2013, primarily reflecting a full year of production in 2014.

Refer to "Operations" for further discussion of sales volumes at our oil and gas operations.

Realized Oil Prices and Derivative Contracts. Our average realized price for oil (excluding the impact of derivative contracts) of \$45.58 per barrel in 2015 was 51 percent lower than our average realized price of \$92.76 per barrel in 2014. Our average realized price for oil (excluding the impact of derivative contracts) in 2014 was 7 percent lower than our average realized price of \$99.67 per barrel for the seven-month period from June 1, 2013, to December 31, 2013.

In connection with the acquisition of our oil and gas business, we had derivative contracts for 2015 consisting of crude oil options, and for 2014 and 2013, we had derivative contracts that consisted of crude oil options, and crude oil and natural gas swaps (refer to Note 14 for further discussion of oil and gas derivative contracts). These crude oil and natural gas derivative contracts 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. Cash gains (losses) on crude oil and natural gas derivative contracts totaled \$406 million in 2015, compared with \$(122) million in 2014 and \$(22) million for the seven-month period from June 1, 2013, to December 31, 2013. Net noncash mark-to-market (losses) gains on crude oil and natural gas derivative contracts totaled \$(319) million in 2015, compared with \$627 million for 2014 and \$(312) million for the seven-month period from June 1, 2013, to December 31, 2013. FM O&G currently has no derivative contracts in place for 2016 and future years.

Production and Delivery Costs

Consolidated production and delivery costs totaled \$11.5 billion in 2015, \$11.9 billion in 2014 and \$11.8 billion in 2013. Consolidated production and delivery costs in 2015 include asset impairment, restructuring and other net charges at mining operations totaling \$156 million and charges at oil and gas operations totaling \$188 million, primarily for other asset impairments and inventory write-downs, idle/terminated rig costs and prior year non-income tax assessments related to the California properties. Consolidated production and delivery costs in 2014 include charges at oil and gas operations totaling \$46 million, primarily for idle/terminated rig costs and inventory write-downs. Excluding these amounts, lower production and delivery costs from mining operations in 2015, compared with 2014, primarily reflect lower costs at our South America mines as a result of the sale of the Candelaria and Ojos del Salado mines in November 2014 and lower diesel costs in Indonesia, partly offset by higher costs at our North America mines associated with higher volumes. Lower oil and gas production and delivery costs in 2015, compared with 2014, primarily reflect the sale of Eagle Ford in June 2014 and lower well workover expense and steam costs in California.

Higher production and delivery costs for 2014, compared with 2013, were primarily associated with our oil and gas operations, which include a full year of results for 2014, partly offset by lower costs for our mining operations mostly associated with lower volumes in South America and Indonesia.

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 \$1.78 per pound of copper in 2015, \$1.90 per pound in 2014 and \$1.88 per pound in 2013. Lower consolidated unit site production and delivery costs in 2015, compared with 2014, primarily reflects higher copper sales volumes in North America and Indonesia. Higher consolidated unit site production and delivery costs in 2014, compared with 2013, primarily reflects the impact of lower copper sales volumes in South America and Indonesia, partly offset by higher volumes in North America. 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 energy, principally diesel, electricity, coal and natural gas, most of which is obtained from third parties under long-term contracts. Energy represented 17 percent of our consolidated copper production costs in 2015, including purchases of approximately 250 million gallons of diesel fuel; 7,600 gigawatt hours of electricity at our North America, South America and Africa copper mining operations (we generate all of our power at our Indonesia mining operation); 800 thousand metric tons of coal for our coal power plant in Indonesia; and 1 MMBtu of natural gas at certain of our North America mines. Based on current cost estimates, we estimate energy will approximate 20 percent of our consolidated copper production costs for 2016.

Oil and Gas Production Costs per BOE

Production costs for our oil and gas operations primarily include costs incurred to operate and maintain wells and related equipment and facilities, such as lease operating expenses, steam gas costs, electricity, production and ad valorem taxes, and gathering and transportation expenses. Cash production costs for our oil and gas operations averaged \$18.59 per BOE in 2015, \$20.08 per BOE in 2014 and \$17.14 for the seven-month period from June 1, 2013, to December 31, 2013. Lower cash production costs in 2015, compared with 2014, primarily reflects lower well workover expense and steam costs in California. Higher cash production costs in 2014, compared with 2013, primarily reflects the sale of lower cost Eagle Ford properties in June 2014 and higher operating costs in California and the GOM. Refer to "Operations" for further discussion of cash production costs at our oil and gas operations.

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 and oil and gas operations. Consolidated DD&A totaled \$3.5 billion in 2015, \$3.9 billion in 2014 and \$2.8 billion in 2013. DD&A from our oil and gas operations was \$487 million lower in 2015, compared with 2014, primarily reflecting lower DD&A rates as a result of impairments of oil and gas properties and DD&A from our mining operations was \$121 million higher in 2015, compared with 2014, mostly associated with higher sales volumes in North America and Indonesia.

Higher DD&A in 2014, compared with 2013, was primarily associated with a full year of expense for oil and gas operations (\$2.3 billion in 2014, compared with \$1.4 billion for the seven-month period from June 1, 2013, to December 31, 2013).

Impairment of Oil and Gas Properties

Under the full cost accounting rules, a "ceiling test" is conducted each quarter to review the carrying value of the oil and gas properties for impairment. Each quarter end since September 30, 2014, net capitalized costs with respect to our proved U.S. oil and gas properties have exceeded the related ceiling test limitation, which resulted in the recognition of impairment charges totaling \$13.0 billion in 2015 and \$3.7 billion in 2014. During 2015 we also recognized impairment charges of \$164 million for international oil and gas properties, primarily related to unsuccessful exploration activities in Morocco. Refer to Note 1 and "Critical Accounting Estimates" for further discussion, including discussion of potentially significant additional ceiling test impairments.

Copper and Molybdenum Inventory Adjustments

Lower copper and molybdenum prices resulted in adjustments to inventory carrying values totaling \$338 million in 2015 for copper and molybdenum, and \$6 million in 2014 and \$3 million in 2013 for molybdenum. Refer to Notes 1 and 4 for further discussion.

Selling, General and Administrative Expenses

Consolidated selling, general and administrative expenses totaled \$569 million in 2015, \$592 million in 2014 and \$657 million in 2013. Lower consolidated selling, general and administrative expenses, compared with 2014, primarily reflects lower incentive compensation, partly offset by a charge totaling \$18 million for executive retirement benefits in 2015. Excluding amounts for our oil and gas operations (\$207 million in 2014 and \$120 million for the seven-month period from June 1, 2013, to December 31, 2013) selling, general and administrative expenses were lower in 2014, compared with 2013, primarily because of transaction and related costs incurred during 2013 totaling \$80 million associated with the oil and gas acquisitions.

We expect selling, general and administrative expenses to decline further in 2016, compared with 2015, as a result of ongoing initiatives to reduce costs.

Consolidated selling, general and administrative expenses exclude capitalized general and administrative expenses at our oil and gas operations totaling \$124 million in 2015, \$143 million in 2014 and \$67 million for the seven-month period from June 1, 2013, to December 31, 2013.

Mining Exploration and Research Expenses

Consolidated exploration and research expenses for our mining operations totaled \$127 million in 2015, \$126 million in 2014 and \$210 million in 2013. Our exploration activities are generally near our existing mines with a focus on opportunities to expand reserves and resources to support development of additional future production capacity in the large mineral districts where we currently operate. Exploration results continue to indicate opportunities for what we believe could be significant future potential reserve additions in North and South America, and in the Tenke minerals district. The drilling data in North America also indicates the potential for significantly expanded sulfide production. Drilling results and exploration modeling provide a long-term pipeline for future growth in reserves and production capacity in an established minerals district.

Exploration spending continues to be reduced from historical levels as a result of market conditions and is expected to approximate \$52 million in 2016.

As further discussed in Note 1, exploration costs for our oil and gas operations are capitalized to oil and gas properties.

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 \$78 million in 2015, \$119 million in 2014 and \$66 million in 2013. Refer to Note 12 for further discussion of environmental obligations and litigation matters.

Goodwill Impairment

As further discussed in Notes 1 and 2, the fourth-quarter 2014 goodwill assessment resulted in an impairment charge of \$1.7 billion for the full carrying value of goodwill.

Net Gain on Sales of Assets

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 and \$717 million in 2014 primarily related to the sale of our 80 percent interests in the Candelaria and Ojos del Salado mines. Refer to Note 2 for further discussion.

Interest Expense, Net

Consolidated interest expense (excluding capitalized interest) totaled \$860 million in 2015, \$866 million in 2014 and \$692 million in 2013. Higher interest expense in 2015 and 2014, compared with 2013, reflects higher borrowings related to the oil and gas acquisitions.

Capitalized interest varies with the level of expenditures for our development projects and average interest rates on our borrowings, and totaled \$215 million in 2015, \$236 million in 2014 and \$174 million in 2013. Refer to

"Operations" and "Capital Resources and Liquidity - Investing Activities" for further discussion of current development projects.

Net Gain (Loss) on Early Extinguishment of Debt

Net gains (losses) on early extinguishment of debt totaled \$73 million in 2014, primarily related to senior note redemptions and tender offers and \$(35) million in 2013, associated with the termination of the bridge loan facilities for the oil and gas acquisitions, partly offset by a gain on the redemption of MMR's remaining outstanding 11.875% Senior Notes. Refer to Note 8 for further discussion.

Gain on Investment in MMR

During 2013, we recorded a gain totaling \$128 million related to the carrying value of our preferred stock investment in and the subsequent acquisition of MMR. Refer to Note 2 for further discussion.

Other Income (Expense), Net

Other income (expense) primarily includes foreign currency translation adjustments and interest income, and totaled \$6 million in 2015, \$36 million in 2014 and \$(13) million in 2013. The year 2015 also includes a gain of \$92 million associated with net proceeds received from insurance carriers and other third parties related to the shareholder derivative litigation (refer to Note 12 for further discussion).

Income Taxes

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

	2015			2014		
	Income (Loss) ^a	Effective Tax Rate	Income Tax (Provision) Benefit	Income (Loss) ^a	Effective Tax Rate	Income Tax (Provision) Benefit
U.S.	\$ (1,654) ^b	44%	\$ 720	\$ 1,857	30%	\$ (550) ^{c,d}
South America	(40)	(10)%	(4)	1,221	43%	(531)
Indonesia	430	45%	(195)	709	41%	(293)
Africa	120	40%	(48)	379	31%	(116)
Impairment of oil and gas properties	(13,144)	37%	4,884 ^f	(3,737)	38%	1,413
Valuation allowance, net	—	N/A	(3,338) ^f	—	N/A	—
Gain on sale of Candelaria and Ojos del Salado	—	N/A	—	671	33%	(221)
Eliminations and other	267	N/A	^h (84)	193	N/A	(26)
	<u>(14,021)</u>	<u>14%</u>	<u>1,935</u>	<u>1,293^g</u>	<u>25%</u>	<u>(324)</u>
Goodwill impairment	—	N/A	—	(1,717)	N/A	—
Consolidated FCX	<u><u>\$ (14,021)</u></u>	<u><u>14%</u></u>	<u><u>\$ 1,935</u></u>	<u><u>\$ (424)</u></u>	<u><u>(76)%</u></u>	<u><u>\$ (324)</u></u>

- a. Represents income (loss) by geographic location before income taxes and equity in affiliated companies' net (losses) earnings.
- b. 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 is no related tax provision.
- c. Includes a charge for deferred taxes recorded in connection with the allocation of goodwill to the sale of Eagle Ford shale assets totaling \$84 million.
- d. Includes a net benefit of \$41 million, comprised of \$57 million related to changes in U.S. state income tax filing positions, partly offset by a charge of \$16 million for a change in U.S. federal income tax law regulations.
- e. Includes charges related to changes in Chilean and Peruvian tax rules totaling \$78 million (\$60 million net of noncontrolling interests).
- f. As a result of the impairment to U.S. oil and gas properties, we recorded tax charges to establish valuation allowances against U.S. federal and state deferred tax assets that will not generate a future benefit.
- g. Reflects goodwill impairment charges, which were non-deductible for tax purposes.
- h. 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 \$2.00 per pound for copper, \$1,100 per ounce for gold, \$4.50 per pound for molybdenum and \$34 per barrel of Brent crude oil for

2016, we estimate our consolidated effective tax rate for the year 2016 will approximate 40 percent excluding U.S. domestic losses for which no benefit is expected to be realized.

Following is a summary of the approximate amounts used in the calculation of our consolidated provision for income taxes for the year ended December 31 (in millions, except percentages):

	2013		
	Income ^a	Effective Tax Rate	Income Tax (Provision) Benefit
U.S.	\$ 1,080	23%	\$ (243)
South America	2,021	36%	(720)
Indonesia	1,370	44%	(603)
Africa	425	31%	(131)
Eliminations and other	17	N/A	23
	4,913	34%	(1,674) ^b
Adjustments	—	N/A	199
Consolidated FCX	<u>\$ 4,913</u>	<u>30%</u>	<u>\$ (1,475)</u>

a. Represents income by geographic location before income taxes and equity in affiliated companies' net earnings.

b. Reflects net reductions in our deferred tax liabilities and deferred tax asset valuation allowances resulting from the oil and gas acquisitions.

Refer to Note 11 for further discussion of income taxes.

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 85 percent joint venture interest in Morenci using the proportionate consolidation method.

As further discussed in Note 18, we have entered into a definitive agreement to sell a 13 percent undivided interest in Morenci. Following completion of the transaction, we will own a 72 percent undivided interest in Morenci.

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 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. In the near term, we are deferring developing new projects as a result of current market conditions. Future investments will be undertaken based on the results of economic and technical feasibility studies and market conditions.

The Morenci mill expansion project, which commenced operations in May 2014, successfully achieved full rates in second-quarter 2015. The project expanded mill capacity from 50,000 metric tons of ore per day to approximately 115,000 metric tons of ore per day, which results in incremental annual production of approximately 225 million pounds of copper and an improvement in Morenci's cost structure. Over the next five years, Morenci's copper production, including our joint venture partner share, is expected to average approximately one billion pounds per year.

Our revised operating plans for the North America copper mines incorporate reductions in mining rates to reduce operating and capital costs, including the suspension of mining operations at the Miami mine (which produced 43 million pounds of copper for the year 2015), the suspension of production at the Sierrita mine (which produced 189 million pounds of copper and 21 million pounds of molybdenum for the year 2015), a 50 percent reduction in mining rates at the Tyrone mine (which produced 84 million pounds of copper for the year 2015) and adjustments to mining

rates at other North America mines. The revised plans at each of the operations incorporate the impacts of lower energy, acid and other consumables, reduced labor costs and a significant reduction in capital spending plans. These plans will continue to be reviewed and additional adjustments may be made as market conditions warrant.

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

	2015	2014	2013
Operating Data, Net of Joint Venture Interest			
Copper			
Production (millions of recoverable pounds)	1,947	1,670	1,431
Sales, excluding purchases (millions of recoverable pounds)	1,988	1,664	1,422
Average realized price per pound	\$ 2.47	\$ 3.13	\$ 3.36
Molybdenum			
Production (millions of recoverable pounds) ^a	37	33	32
100% Operating Data			
SX/EW operations			
Leach ore placed in stockpiles (metric tons per day)	909,900	1,005,300	1,003,500
Average copper ore grade (percent)	0.26	0.25	0.22
Copper production (millions of recoverable pounds)	1,134	963	889
Mill operations			
Ore milled (metric tons per day)	312,100	273,800	246,500
Average ore grade (percent):			
Copper	0.49	0.45	0.39
Molybdenum	0.03	0.03	0.03
Copper recovery rate (percent)	85.4	85.8	85.3
Copper production (millions of recoverable pounds)	972	828	642

- a. Refer to "Consolidated Results" for our consolidated molybdenum sales volumes, which includes sales of molybdenum produced at the North America copper mines.

2015 Compared with 2014

Copper sales volumes from our North America copper mines increased to 2.0 billion pounds in 2015, compared with 1.66 billion pounds in 2014, primarily because of higher mining and milling rates at Morenci and higher ore grades at Morenci, Chino and Safford. Sales from the Morenci mine represented 46 percent of total North America copper sales in 2015 and 41 percent in 2014.

Copper sales from North America are expected to approximate 1.8 billion pounds in 2016. Refer to "Outlook" for projected molybdenum sales volumes.

2014 Compared with 2013

Copper sales volumes from our North America copper mines increased to 1.66 billion pounds in 2014, compared with 1.42 billion pounds in 2013, primarily reflecting higher mining and milling rates at Morenci and higher ore grades at Chino.

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.

Gross Profit per Pound of Copper and Molybdenum

The following tables summarize unit net cash costs and gross profit per pound 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.

	2015			2014		
	By- Product Method	Co-Product Method		By- Product Method	Co-Product Method	
		Copper	Molyb- denum ^a		Copper	Molyb- denum ^a
Revenues, excluding adjustments	\$ 2.47	\$ 2.47	\$ 7.02	\$ 3.13	\$ 3.13	\$ 11.74
Site production and delivery, before net noncash and other costs shown below	1.68	1.59	5.61	1.85	1.73	6.85
By-product credits	(0.13)	—	—	(0.24)	—	—
Treatment charges	0.12	0.12	—	0.12	0.12	—
Unit net cash costs	1.67	1.71	5.61	1.73	1.85	6.85
Depreciation, depletion and amortization	0.28	0.27	0.53	0.29	0.27	0.60
Copper and molybdenum inventory adjustments	0.07 ^b	0.07	0.07	—	—	—
Noncash and other costs, net	0.12	0.11	0.16	0.09	0.09	0.07
Total unit costs	2.14	2.16	6.37	2.11	2.21	7.52
Revenue adjustments, primarily for pricing on prior period open sales	(0.01)	(0.01)	—	—	—	—
Gross profit per pound	\$ 0.32	\$ 0.30	\$ 0.65	\$ 1.02	\$ 0.92	\$ 4.22
Copper sales (millions of recoverable pounds)	1,985	1,985		1,657	1,657	
Molybdenum sales (millions of recoverable pounds) ^a			37			33

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 \$0.05 per pound in 2015 for asset impairment, restructuring and other net charges.

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 2015, average unit net cash costs (net of by-product credits) for the North America copper mines ranged from \$1.56 per pound to \$2.23 per pound at the individual mines and averaged \$1.67 per pound. Lower average unit net cash costs (net of by-product credits) in 2015, compared with \$1.73 per pound in 2014, reflects favorable impacts from higher copper sales volumes, partly offset by lower by-product credits.

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.

Assuming achievement of current volume and cost estimates and an average price of \$4.50 per pound of molybdenum for 2016, average unit net cash costs (net of by-product credits) for our North America copper mines are expected to approximate \$1.49 per pound of copper in 2016. North America's average unit net cash costs for 2016 would change by approximately \$0.02 per pound for each \$2 per pound change in the average price of molybdenum during 2016.

	2014			2013		
	By-Product Method	Co-Product Method	Molybdenum ^a	By-Product Method	Co-Product Method	Molybdenum ^a
	\$ 3.13	\$ 3.13	\$ 11.74	\$ 3.36	\$ 3.36	\$ 10.79
Revenues, excluding adjustments						
Site production and delivery, before net noncash and other costs shown below	1.85	1.73	6.85	2.00	1.94	3.79
By-product credits	(0.24)	—	—	(0.24)	—	—
Treatment charges	0.12	0.12	—	0.11	0.11	—
Unit net cash costs	1.73	1.85	6.85	1.87	2.05	3.79
Depreciation, depletion and amortization	0.29	0.27	0.60	0.28	0.27	0.22
Noncash and other costs, net	0.09	0.09	0.07	0.14	0.14	0.04
Total unit costs	2.11	2.21	7.52	2.29	2.46	4.05
Revenue adjustments, primarily for pricing on prior period open sales	—	—	—	—	—	—
Gross profit per pound	\$ 1.02	\$ 0.92	\$ 4.22	\$ 1.07	\$ 0.90	\$ 6.74
Copper sales (millions of recoverable pounds)	1,657	1,657		1,416	1,416	
Molybdenum sales (millions of recoverable pounds) ^a			33			32

- 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 \$0.05 per pound associated with updated mine plans at Morenci that resulted in a loss in recoverable copper in leach stockpiles.

Unit net cash costs (net of by-product credits) for our North America copper mines decreased to \$1.73 per pound of copper in 2014, compared with \$1.87 per pound in 2013, primarily reflecting higher copper sales volumes.

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). These operations 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 copper cathode under long-term contracts. Our South America mines also ship a portion of their copper concentrate and cathode to Atlantic Copper. In addition to copper, the Cerro Verde mine produces molybdenum concentrate and silver.

As further discussed in Note 2, on November 3, 2014, we completed the sale of our 80 percent ownership interests in the Candelaria and Ojos del Salado mines.

Operating and Development Activities. The Cerro Verde expansion project commenced operations in September 2015 and is currently operating at full rates. Cerro Verde's expanded operations will benefit from its large-scale, long-lived reserves and cost efficiencies. The project included expanding the concentrator facilities from 120,000 metric tons of ore per day to 360,000 metric tons of ore per day and is expected to provide incremental annual production of approximately 600 million pounds of copper and 15 million pounds of molybdenum.

Our revised operating plans for our South America mines principally reflect adjustments to our mine plan at El Abra (which produced 324 million pounds of copper for the year 2015) to reduce mining and stacking rates by approximately 50 percent to achieve lower operating and labor costs, defer capital expenditures and extend the life of the existing operations.

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

	2015	2014 ^a	2013 ^a
Copper			
Production (millions of recoverable pounds)	869	1,151	1,323
Sales (millions of recoverable pounds)	871	1,135	1,325
Average realized price per pound	\$ 2.38	\$ 3.08	\$ 3.30
Gold			
Production (thousands of recoverable ounces)	—	72	101
Sales (thousands of recoverable ounces)	—	67	102
Average realized price per ounce	— \$	1,271	\$ 1,350
Molybdenum			
Production (millions of recoverable pounds) ^b	7	11	13
SX/EW operations			
Leach ore placed in stockpiles (metric tons per day)	193,900	275,200	274,600
Average copper ore grade (percent)	0.44	0.48	0.50
Copper production (millions of recoverable pounds)	430	491	448
Mill operations			
Ore milled (metric tons per day)	152,100	180,500	192,600
Average ore grade:			
Copper (percent)	0.46	0.54	0.65
Gold (grams per metric ton)	—	0.10	0.12
Molybdenum (percent)	0.02	0.02	0.02
Copper recovery rate (percent)	81.5	88.1	90.9
Copper production (millions of recoverable pounds)	439	660	875

- a. Includes the results of the Candelaria and Ojos del Salado mines, prior to their sale in November 2014 and had sales volumes totaling 268 million pounds of copper and 67 thousand ounces of gold in 2014 and 424 million pounds of copper and 102 thousand ounces of gold in 2013.
- b. Refer to "Consolidated Results" for our consolidated molybdenum sales volumes, which includes sales of molybdenum produced at Cerro Verde.

2015 Compared with 2014

Lower consolidated copper sales volumes from South America of 871 million pounds in 2015, compared with 1.14 billion in 2014, primarily reflect the November 2014 sale of the Candelaria and Ojos del Salado mines and lower ore grades at El Abra, partly offset by higher mining and milling rates at Cerro Verde.

For the year 2016, consolidated sales volumes from South America mines are expected to approximate 1.3 billion pounds of copper. Refer to "Outlook" for projected molybdenum sales volumes. As discussed in "Risk Factors" contained in Part I, Item 1A. of our annual report on Form 10-K for the year ended December 31, 2015, 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, which could have a negative impact on production at Cerro Verde.

2014 Compared with 2013

Copper sales volumes from our South America mining operations totaled 1.14 billion pounds in 2014, compared with 1.33 billion pounds in 2013, primarily reflecting lower ore grades at Candelaria and Cerro Verde, and the sale of the Candelaria and Ojos del Salado mines in November 2014.

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.

Gross Profit per Pound of Copper

The following tables summarize unit net cash costs and gross profit per pound 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 small amounts of molybdenum, gold and silver sales. 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.

	2015		2014	
	By-Product Method	Co-Product Method	By-Product Method	Co-Product Method
Revenues, excluding adjustments	\$ 2.38	\$ 2.38	\$ 3.08	\$ 3.08
Site production and delivery, before net noncash and other costs shown below	1.60	1.56	1.62	1.51
By-product credits	(0.05)	—	(0.22)	—
Treatment charges	0.19	0.19	0.17	0.17
Royalty on metals	—	—	0.01 ^a	—
Unit net cash costs	1.74	1.75	1.58	1.68
Depreciation, depletion and amortization	0.40	0.39	0.32	0.31
Copper inventory adjustments	0.08	0.08	—	—
Noncash and other costs, net	0.05	0.05	0.06	0.06
Total unit costs	2.27	2.27	1.96	2.05
Revenue adjustments, primarily for pricing on prior period open sales	(0.03)	(0.03)	(0.05)	(0.05)
Gross profit per pound	\$ 0.08	\$ 0.08	\$ 1.07	\$ 0.98
Copper sales (millions of recoverable pounds)	871	871	1,135	1,135

a. Excluding the results of the Candelaria and Ojos del Salado mines, South America mining's unit net cash costs averaged \$1.57 per pound in 2014.

During 2015, unit net cash costs (net of by-product credits) for the South America mines ranged from \$1.64 per pound for the Cerro Verde mine to \$1.91 per pound for the El Abra mine and averaged \$1.74 per pound. Higher average unit net cash costs (net of by-product credits) for our South America mining operations in 2015, compared with \$1.58 per pound in 2014, primarily reflect lower by-product credits.

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. The unit depreciation rate increased in 2015, compared with 2014, primarily because of the Cerro Verde expansion assets being placed in service in 2015.

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.

Assuming achievement of current volume and cost estimates and average prices of \$4.50 per pound of molybdenum in 2016, we estimate that average unit net cash costs (net of by-product credits) for our South America mining operations would approximate \$1.50 per pound of copper in 2016.

	2014		2013	
	By-Product Method	Co-Product Method	By-Product Method	Co-Product Method
	\$ 3.08	\$ 3.08	\$ 3.30	\$ 3.30
Revenues, excluding adjustments				
Site production and delivery, before net noncash and other costs shown below	1.62	1.51	1.53 ^a	1.42
By-product credits	(0.22)	—	(0.27)	—
Treatment charges	0.17	0.17	0.17	0.17
Royalty on metals	0.01	—	— ^b	— ^b
Unit net cash costs	1.58	1.68	1.43	1.59
Depreciation, depletion and amortization	0.32	0.31	0.26	0.24
Noncash and other costs, net	0.06	0.06	0.04	0.03
Total unit costs	1.96	2.05	1.73	1.86
Revenue adjustments, primarily for pricing on prior period open sales	(0.05)	(0.05)	(0.03)	(0.03)
Gross profit per pound	<u>\$ 1.07</u>	<u>\$ 0.98</u>	<u>\$ 1.54</u>	<u>\$ 1.41</u>
Copper sales (millions of recoverable pounds)	1,135	1,135	1,325	1,325

a. Includes labor agreement costs at Cerro Verde totaling \$0.03 per pound.

b. Excluding the results of Candelaria and Ojos del Salado mines, South America mining's unit net cash costs averaged \$1.57 per pound in 2014 and \$1.48 per pound in 2013.

Unit net cash costs (net of by-product credits) for our South America mining operations increased to \$1.58 per pound of copper in 2014, compared with \$1.43 per pound in 2013, primarily reflecting lower sales volumes and by-product credits.

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 2021 in production exceeding specified annual amounts of copper, gold and silver. After 2021, 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, 2015. At December 31, 2015, the amounts allocated 100 percent to PT-FI remaining to be produced totaled 6.4 billion pounds of copper, 9.7 million ounces of gold and 19.5 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 2021.

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 2015, approximately 37 percent of PT-FI's copper concentrate was sold to PT Smelting, its 25-percent-owned smelter and refinery in Gresik, Indonesia.

Regulatory Matters. In January 2014, the Indonesian government published regulations that among other things imposed a progressive export duty on copper concentrate and restricts concentrate exports after January 12, 2017. Despite PT-FI's rights under its Contract of Work (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. Under the MOU, PT-FI provided a \$115 million assurance bond to support its commitment for smelter development, agreed to increase royalty rates and agreed to pay export duties (7.5 percent, declining to 5.0 percent when smelter development progress exceeds 7.5 percent and none when development progress exceeds 30 percent). The MOU also anticipated an amendment of the COW within six months to address other matters; however, no terms of the COW other than those relating to the smelter bond, increased royalties and export duties were changed. In January

2015, the MOU was extended to July 25, 2015, and it expired on that date. The increased royalty rates, export duties and smelter assurance bond remain in effect.

PT-FI is required to apply for renewal of export permits at six-month intervals. On July 29, 2015, PT-FI's export permit was renewed through January 28, 2016. In connection with the renewal, export duties were reduced to 5.0 percent, as a result of smelter development progress. On February 9, 2016, PT-FI's export permit was renewed through August 8, 2016. PT-FI will continue to pay a 5.0 percent export duty on concentrate while it reviews its smelter progress with the Indonesian government.

PT-FI continues to engage in discussions with the Indonesian government regarding its COW and long-term operating rights. In October 2015, the Indonesian government provided a letter of assurance to PT-FI indicating that it will approve the extension of operations beyond 2021, and provide the same rights and the same level of legal and fiscal certainty provided under its current COW.

In connection with its COW negotiations and subject to concluding the agreement to extend PT-FI's operations beyond 2021 on acceptable terms, PT-FI has agreed to construct new smelter capacity in Indonesia and to divest an additional 20.64 percent interest in PT-FI at fair market value. PT-FI continues to advance plans for the smelter in parallel with completing its COW negotiations. Refer to Note 13 for further discussion.

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 agreement with the Indonesian government on its long-term rights, we may be required to reduce or defer investments in underground development projects, which could have a material adverse effect on PT-FI's future production and reserves. In addition, PT-FI would intend to pursue any and all claims against the Indonesian government for breach of contract through international arbitration.

Refer to "Risk Factors" contained in Part I, Item 1A. of our annual report on Form 10-K for the year ended December 31, 2015, for discussion of risks associated with our operations in Indonesia.

Operating and Development Activities. During 2015, PT-FI revised its plans to incorporate improved operational efficiencies, reductions in input costs, supplies and contractor costs, foreign exchange impacts and a deferral of 15 percent of capital expenditures that had been planned for 2016.

PT-FI has several projects in progress 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, currently anticipated to occur in late 2017. Development of the Grasberg Block Cave and Deep Mill Level Zone (DMLZ) underground mines is advancing. Production from the DMLZ mine commenced during September 2015, and the Grasberg Block Cave mine is anticipated to commence production in 2018.

From 2016 to 2020, estimated aggregate capital spending on these projects is currently expected to average \$1.0 billion per year (\$0.8 billion per year net to PT-FI). Considering the long-term nature and size of these projects, actual costs could vary from these estimates. In response to recent market conditions and the uncertain global economic environment, the timing of these expenditures continues to be reviewed.

The following provides additional information on the continued development of the Common Infrastructure project, the Grasberg Block Cave underground mine and the DMLZ ore body that lies below the Deep Ore Zone (DOZ) underground mine.

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 brought into production in 2010. Production from the Big Gossan mine, which is currently suspended, is expected to restart in the first half of 2017 and ramp up to 7,000 metric tons of ore per day in 2019. 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 more than 45 percent of our recoverable proven and probable reserves in Indonesia. Production from the Grasberg Block Cave mine is expected to commence in 2018, 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 160,000 metric tons of ore per day. As a result of current market conditions, PT-FI is reviewing its operating plans to determine the optimum mine plan for the Grasberg Block Cave.

Aggregate mine development capital for the Grasberg Block Cave mine and associated Common Infrastructure is expected to approximate \$6.0 billion (incurred between 2008 to 2022), with PT-FI's share totaling approximately \$5.5 billion. Aggregate project costs totaling \$2.2 billion have been incurred through December 31, 2015 (\$0.5 billion during 2015).

DMLZ. 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. The ore body is mined using a block-cave method. Production from the DMLZ underground mine commenced in September 2015. Ore milled from the DMLZ underground mine averaged 2,900 metric tons of ore per day in 2015 (3,500 metric tons of ore per day in fourth-quarter 2015). 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.

Drilling efforts continue to determine the extent of the DMLZ ore body. Aggregate mine development capital costs for the DMLZ underground mine are expected to approximate \$2.6 billion (incurred between 2009 to 2020), with PT-FI's share totaling approximately \$1.6 billion. Aggregate project costs totaling \$1.5 billion have been incurred through December 31, 2015 (\$0.3 billion during 2015).

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

	2015	2014	2013
Operating Data, Net of Joint Venture Interest			
Copper			
Production (millions of recoverable pounds)	752	636	915
Sales (millions of recoverable pounds)	744	664	885
Average realized price per pound	\$ 2.33	\$ 3.01	\$ 3.28
Gold			
Production (thousands of recoverable ounces)	1,232	1,130	1,142
Sales (thousands of recoverable ounces)	1,224	1,168	1,096
Average realized price per ounce	\$ 1,129	\$ 1,229	\$ 1,312
100% Operating Data			
Ore milled (metric tons per day): ^a			
Grasberg open pit	115,900	69,100	127,700
DOZ underground mine ^b	43,700	50,500	49,400
DMLZ underground mine ^c	2,900	—	—
Big Gossan underground mine ^d	—	900	2,100
Total	<u>162,500</u>	<u>120,500</u>	<u>179,200</u>
Average ore grade:			
Copper (percent)	0.67	0.79	0.76
Gold (grams per metric ton)	0.79	0.99	0.69
Recovery rates (percent):			
Copper	90.4	90.3	90.0
Gold	83.4	83.2	80.0
Production (recoverable):			
Copper (millions of pounds)	752	651	928
Gold (thousands of ounces)	1,232	1,132	1,142

a. Amounts represent the approximate average daily throughput processed at PT-FI's mill facilities from each producing mine.

b. Ore milled from the DOZ underground mine is expected to ramp up to over 60,000 metric tons of ore per day in 2017.

- c. Production from the DMLZ underground mine commenced in September 2015.
- d. Production from the Big Gossan underground mine is expected to restart in the first half of 2017 and ramp up to 7,000 metric tons of ore per day in 2019.

2015 Compared with 2014

Sales volumes from our Indonesia mining operations increased to 744 million pounds of copper and 1.2 million ounces of gold in 2015, compared with 664 million pounds of copper and 1.2 million ounces of gold in 2014, primarily reflecting higher mill rates because of the 2014 export restrictions, partly offset by lower ore grades.

At the Grasberg mine, the sequencing of mining areas with varying ore grades causes fluctuations in quarterly and annual production of copper and gold. PT-FI expects ore grades to improve significantly beginning in the second-half of 2016 with access to higher grade sections of the Grasberg open pit, resulting in higher production and lower unit net cash costs. Consolidated sales volumes from our Indonesia mining operations are expected to approximate 1.5 billion pounds of copper and 1.8 million ounces of gold for 2016, with approximately 65 percent of copper sales and 75 percent of gold sales anticipated in the second half of the year. Damages to semi-autogenous gridding (SAG) mill electrical components in January 2016 will require repairs in the first half of 2016 or as late as 2017, which are expected to have a negative impact on production at PT-FI.

2014 Compared with 2013

Sales volumes from our Indonesia mining operations totaled 664 million pounds of copper and 1.2 million ounces of gold in 2014, compared with 885 million pounds of copper and 1.1 million ounces of gold in 2013, reflecting lower mill throughput resulting from the export restrictions and labor-related work stoppages in 2014, partly offset by higher gold ore grades.

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 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 "Production 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.

	2015			2014		
	By-Product Method	Co-Product Method		By-Product Method	Co-Product Method	
		Copper	Gold		Copper	Gold
Revenues, excluding adjustments	\$ 2.33	\$ 2.33	\$ 1,129	\$ 3.01	\$ 3.01	\$ 1,229
Site production and delivery, before net noncash and other costs shown below		2.39	1.32	638	2.76 ^a	1.59
Gold and silver credits	(1.91)	—	—	(2.25)	—	—
Treatment charges	0.31	0.17	83	0.26	0.15	61
Export duties	0.15	0.08	39	0.12	0.06	27
Royalty on metals	0.15	0.09	41	0.17	0.10	41
Unit net cash costs	1.09	1.66	801	1.06	1.90	777
Depreciation and amortization	0.39	0.22	105	0.40	0.23	94
Noncash and other costs, net	0.05	0.03	14	0.29 ^a	0.17	68
Total unit costs	1.53	1.91	920	1.75	2.30	939
Revenue adjustments, primarily for pricing on prior period open sales	(0.07)	(0.06)	7	(0.08)	(0.08)	15
PT Smelting intercompany profit	0.01	0.01	4	0.05	0.03	12
Gross profit per pound/ounce	\$ 0.74	\$ 0.37	\$ 220	\$ 1.23	\$ 0.66	\$ 317
Copper sales (millions of recoverable pounds)	744	744		664	664	
Gold sales (thousands of recoverable ounces)			1,224			1,168

a. Fixed costs totaling \$0.22 per pound of copper charged directly to cost of sales as a result of the impact of export restrictions on PT-FI's operating rates are excluded from site production and delivery and included in net noncash and other costs in 2014.

A significant portion of PT-FI's costs are fixed and unit costs vary depending on volumes and other factors. Indonesia's unit net cash costs (including gold and silver credits) of \$1.09 per pound of copper in 2015 were higher than unit net cash costs of \$1.06 per pound in 2014, primarily reflecting lower gold and silver credits, partly offset by lower site production and delivery mostly associated with lower diesel costs and foreign exchange impacts.

PT-FI's royalties totaled \$114 million in 2015, \$115 million in 2014 and \$109 million in 2013, and export duties totaled \$109 million in 2015 and \$77 million in 2014. Refer to Note 13 for further discussion of PT-FI's royalties.

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 profit 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 achievement of current volume and cost estimates, and an average gold price of \$1,100 per ounce for 2016, Indonesia's unit net cash costs (net of gold and silver credits) are expected to approximate \$0.17 per pound of copper for the year 2016. Indonesia's projected unit net cash costs would change by approximately \$0.06 per pound for each \$50 per ounce change in the average price of gold during 2016. Because of the fixed nature of a large portion of Indonesia's costs, unit costs vary from quarter to quarter depending on copper and gold volumes. Higher anticipated ore grades from Grasberg in the second half of 2016 are expected to result in lower unit net cash costs in the second half of 2016.

	2014			2013		
	By-Product Method	Co-Product Method		By-Product Method	Co-Product Method	
		Copper	Gold		Copper	Gold
\$	\$	\$	\$	\$	\$	\$
Revenues, excluding adjustments						
Site production and delivery, before net noncash and other costs shown below	2.76 ^a	1.59	648	2.46	1.62	648
Gold and silver credits	(2.25)	—	—	(1.69)	—	—
Treatment charges	0.26	0.15	61	0.23	0.15	61
Export duties	0.12	0.06	27	—	—	—
Royalty on metals	0.17	0.10	41	0.12	0.08	33
Unit net cash costs	1.06	1.90	777	1.12	1.85	742
Depreciation and amortization	0.40 ^a	0.23	94	0.28	0.19	73
Noncash and other costs, net	0.29	0.17	68	0.13	0.09	35
Total unit costs	1.75	2.30	939	1.53	2.13	850
Revenue adjustments, primarily for pricing on prior period open sales	(0.08)	(0.08)	15	—	—	(1)
PT Smelting intercompany profit (loss)	0.05	0.03	12	(0.02)	(0.01)	(6)
Gross profit per pound/ounce	<u>\$ 1.23</u>	<u>\$ 0.66</u>	<u>\$ 317</u>	<u>\$ 1.73</u>	<u>\$ 1.14</u>	<u>\$ 455</u>
Copper sales (millions of recoverable pounds)	664	664		885	885	
Gold sales (thousands of recoverable ounces)			1,168			1,096

- a. Fixed costs totaling \$0.22 per pound of copper charged directly to cost of sales as a result of the impact of export restrictions on PT-FI's operating rates are excluded from site production and delivery and included in net noncash and other costs in 2014.

Unit net cash costs (net of gold and silver credits) for our Indonesia mining operations of \$1.06 per pound of copper in 2014 were lower than unit net cash costs of \$1.12 per pound in 2013, primarily reflecting lower copper sales volumes, the impact of export duties and increased royalty rates, which were more than offset by higher gold and silver credits as a result of lower copper sales volumes.

Africa Mining

Africa mining includes Tenke Fungurume Mining S.A.'s (TFM) Tenke minerals district. We hold an effective 56 percent interest in the Tenke copper and cobalt mining concessions in the Southeast region of the DRC through our consolidated subsidiary TFM, and we are the operator of Tenke.

The Tenke operation includes open-pit mining, leaching and SX/EW operations. Copper production from the Tenke minerals district is sold as copper cathode. In addition to copper, the Tenke minerals district produces cobalt hydroxide.

Operating and Development Activities. TFM completed its second phase expansion project in early 2013, which included increasing mine, mill and processing capacity. Construction of a second sulphuric acid plant is substantially complete. We continue to engage in exploration activities and metallurgical testing to evaluate the potential of the highly prospective minerals district at Tenke. Future development and expansion opportunities are being deferred pending improved market conditions.

Our revised plans at Tenke incorporate a 50 percent reduction in capital spending that had been planned for 2016 and various initiatives to reduce operating, administrative and exploration costs.

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

	2015	2014	2013
Copper			
Production (millions of recoverable pounds)	449	447	462
Sales (millions of recoverable pounds)	467	425	454
Average realized price per pound ^a	\$ 2.42	\$ 3.06	\$ 3.21
Cobalt			
Production (millions of contained pounds)	35	29	28
Sales (millions of contained pounds)	35	30	25
Average realized price per pound	\$ 8.21	\$ 9.66	\$ 8.02
Ore milled (metric tons per day)	14,900	14,700	14,900
Average ore grade (percent):			
Copper	4.00	4.06	4.22
Cobalt	0.43	0.34	0.37
Copper recovery rate (percent)	94.0	92.6	91.4

a. Includes point-of-sale transportation costs as negotiated in customer contracts.

2015 Compared with 2014

Copper sales volumes from TFM increased to 467 million pounds of copper and 35 million pounds of cobalt in 2015, compared with 425 million pounds of copper and 30 million pounds of cobalt in 2014. Higher copper sales volumes primarily reflect timing of shipments and higher cobalt sales volumes primarily reflect higher ore grades.

Consolidated sales volumes from TFM are expected to approximate 495 million pounds of copper and 35 million pounds of cobalt in 2016. Higher projected copper sales volumes from TFM in 2016 primarily reflect higher projected ore grades.

2014 Compared with 2013

Copper sales volumes from TFM decreased to 425 million pounds of copper in 2014, compared with 454 million pounds of copper in 2013, primarily because of lower ore grades.

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.

Gross Profit per Pound of Copper and Cobalt

The following tables summarize the unit net cash costs and gross profit per pound of copper and cobalt at our Africa mining operations for the years ended December 31. Refer to "Production 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.

	2015			2014		
	By-Product Method	Co-Product Method		By-Product Method	Co-Product Method	
		Copper	Cobalt		Copper	Cobalt
Revenues, excluding adjustments ^a	\$ 2.42	\$ 2.42	\$ 8.21	\$ 3.06	\$ 3.06	\$ 9.66
Site production and delivery, before net noncash and other costs shown below	1.58	1.37	5.40	1.56	1.39	5.30
Cobalt credits ^b	(0.42)	—	—	(0.48)	—	—
Royalty on metals	0.05	0.04	0.14	0.07	0.06	0.16
Unit net cash costs	1.21	1.41	5.54	1.15	1.45	5.46
Depreciation, depletion and amortization	0.55	0.46	1.26	0.54	0.46	1.13
Noncash and other costs, net	0.07	0.06	0.16	0.05	0.04	0.11
Total unit costs	1.83	1.93	6.96	1.74	1.95	6.70
Revenue adjustments, primarily for pricing on prior period open sales	(0.01)	(0.01)	(0.02)	—	—	0.07
Gross profit per pound	\$ 0.58	\$ 0.48	\$ 1.23	\$ 1.32	\$ 1.11	\$ 3.03
Copper sales (millions of recoverable pounds)	467	467		425	425	
Cobalt sales (millions of contained pounds)			35			30

a. Includes point-of-sale transportation costs as negotiated in customer contracts.

b. Net of cobalt downstream processing and freight costs.

Higher unit net cash costs (net of cobalt credits) for our Africa mining operations of \$1.21 per pound of copper in 2015, compared with \$1.15 per pound of copper in 2014, primarily reflects lower cobalt credits. Assuming achievement of current volume and cost estimates, and an average cobalt market price of \$10 per pound for 2016, average unit net cash costs (net of cobalt credits) are expected to approximate \$1.32 per pound of copper in 2016. Africa's projected unit net cash costs for 2016 would change by \$0.09 per pound for each \$2 per pound change in the average price of cobalt during 2016.

	2014			2013		
	By-Product Method	Co-Product Method		By-Product Method	Co-Product Method	
		Copper	Cobalt		Copper	Cobalt
Revenues, excluding adjustments ^a	\$ 3.06	\$ 3.06	\$ 9.66	\$ 3.21	\$ 3.21	\$ 8.02
Site production and delivery, before net noncash and other costs shown below	1.56	1.39	5.30	1.43	1.35	4.35
Cobalt credits ^b	(0.48)	—	—	(0.29)	—	—
Royalty on metals	0.07	0.06	0.16	0.07	0.06	0.14
Unit net cash costs	1.15	1.45	5.46	1.21	1.41	4.49
Depreciation, depletion and amortization	0.54	0.46	1.13	0.54	0.48	1.00
Noncash and other costs, net	0.05	0.04	0.11	0.06	0.06	0.11
Total unit costs	1.74	1.95	6.70	1.81	1.95	5.60
Revenue adjustments, primarily for pricing on prior period open sales	—	—	0.07	—	—	0.09
Gross profit per pound	\$ 1.32	\$ 1.11	\$ 3.03	\$ 1.40	\$ 1.26	\$ 2.51
Copper sales (millions of recoverable pounds)	425	425		454	454	
Cobalt sales (millions of contained pounds)			30			25

a. Includes point-of-sale transportation costs as negotiated in customer contracts.

b. Net of cobalt downstream processing and freight costs.

Unit net cash costs (net of cobalt credits) for our Africa mining operations of \$1.15 per pound of copper in 2014 were lower than unit net cash costs of \$1.21 per pound of copper in 2013, primarily reflecting higher cobalt credits, partly offset by higher site production and delivery costs associated with input and mine logistics support costs.

Molybdenum Mines

We have two wholly owned molybdenum mines in North America – 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 molybdenum concentrate produced at the Henderson and Climax mines, as well as from our North and South America copper mines, is processed at our own conversion facilities.

Operating and Development Activities. The revised plans for our Henderson molybdenum mine incorporate lower operating rates, resulting in an approximate 65 percent reduction in Henderson's projected annual production volumes. We have also adjusted production plans at our by-product mines, including the impacts of a planned shutdown at our Sierrita mine. Additionally, we have incorporated changes in the commercial pricing structure for our chemical products to promote continuation of chemical-grade production.

Production from our molybdenum mines totaled 48 million pounds of molybdenum in 2015, 51 million pounds in 2014 and 49 million pounds in 2013 . Refer to "Consolidated Results" for our consolidated molybdenum operating data, which includes sales of molybdenum produced at our molybdenum mines and at our North 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 \$7.11 per pound of molybdenum in 2015, \$7.08 per pound in 2014 and \$7.15 per pound in 2013. Assuming achievement of current volume and cost estimates, we estimate unit net cash costs for the molybdenum mines to average \$8.25 per pound of molybdenum in 2016, primarily reflecting lower projected molybdenum production. 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) 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. Through this form of downstream integration, we are assured placement of a significant portion of our concentrate production. During 2015, approximately 40 percent of our consolidated concentrate production was processed through the Miami smelter, Atlantic Copper and PT Smelting's facilities.

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.

	2015	2014	2013
North America copper mines	23%	21%	13%
South America mining	3 ^a	21	32
Indonesia mining	3	8	16
Third parties	71	50	39
	<u>100%</u>	<u>100%</u>	<u>100%</u>

- a. The decrease in purchases from the South America mines, compared to the years 2014 and 2013, primarily reflects the impact of the November 2014 sale of the Candelaria and Ojos del Salado mines.

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 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 approximately 80 percent of PT Smelting's concentrate requirements in each of the three years ended December 31, 2015, and PT Smelting processed 37 percent in 2015, 58 percent in 2014 and 41 percent in 2013 of PT-FI's concentrate production. PT-Smelting resumed operations in September 2015, following a temporary suspension in July 2015, and operated at approximately 80 percent capacity until November 2015 when required repairs of an acid plant cooling tower that was damaged during the suspension, were completed.

We defer recognizing profits on sales from our mining operations to Atlantic Copper and on 25 percent of Indonesia mining'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 additions (reductions) to net income attributable to common stockholders totaling \$42 million (\$0.04 per share) in 2015, \$43 million (\$0.04 per share) in 2014 and \$(17) million (\$0.02 per share) in 2013. Our net deferred profits on inventories at Atlantic Copper and PT Smelting to be recognized in future periods' net income attributable to common stockholders totaled \$14 million at December 31, 2015. 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

Through our wholly owned oil and gas subsidiary, FM O&G, our portfolio of oil and gas assets includes significant oil production facilities and growth potential in the Deepwater GOM, established oil production onshore and offshore California, large onshore natural gas resources in the Haynesville shale in Louisiana, natural gas production from the Madden area in central Wyoming, and a position in the Inboard Lower Tertiary/Cretaceous natural gas trend onshore in South Louisiana. For the year 2015, 88 percent of our oil and gas revenues, excluding the impact of derivative contracts, were from oil and NGLs.

Impairment of Oil and Gas Properties. Under the SEC's full cost accounting rules, a "ceiling test" is conducted each quarter to review the carrying value of the oil and gas properties for impairment. Each quarter end since September 30, 2014, net capitalized costs with respect to FM O&G's proved U.S. oil and gas properties exceeded the ceiling test limitation specified by full cost accounting rules, which resulted in the recognition of impairment charges totaling \$13.0 billion in 2015 and \$3.7 billion in 2014. Refer to "Critical Accounting Estimates" for further discussion of impairment of oil and gas properties.

In 2015, FM O&G also recognized impairment charges of \$164 million for international oil and gas properties, primarily related to unsuccessful exploration activities in Morocco. Costs associated with the exploration blocks offshore Morocco were transferred to the Morocco full cost pool when drilling of the MZ-1 well associated with the Ouanoukrim prospect was completed to its targeted depth below 20,000 feet to evaluate the primary objectives and did not contain hydrocarbons. As FM O&G does not have proved reserves or production in Morocco, an impairment charge was recorded.

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:

	2015	2014 ^a	2013 ^{a,b}
Sales Volumes			
Oil (MMBbls)	35.3	40.1	26.6
Natural gas (Bcf)	89.7	80.8	54.2
NGLs (MMBbls)	2.4	3.2	2.4
MMBOE	52.6	56.8	38.1
Average Realizations^c			
Oil (per barrel)	\$ 57.11	\$ 90.00	\$ 98.32
Natural gas (per MMBtu)	\$ 2.59	\$ 4.23	\$ 3.99
NGLs (per barrel)	\$ 18.90	\$ 39.73	\$ 38.20
Gross (Loss) Profit per BOE			
Realized revenues ^c	\$ 43.54	\$ 71.83	\$ 76.87
Less: cash production costs ^c	18.59	20.08	17.14
Cash operating margin ^c	24.95	51.75	59.73
Less: depreciation, depletion and amortization	34.28	40.34	35.81
Less: impairment of oil and gas properties	246.67	65.80	—
Less: accretion and other costs	4.41 ^d	1.69	0.79
Plus: net noncash mark-to-market (losses) gains on derivative contracts	(6.07)	11.03	(8.20)
Plus: other net adjustments	0.43	0.06	0.04
Gross (loss) profit	\$ (266.05)	\$ (44.99)	\$ 14.97

- a. Includes results of Eagle Ford prior to its sale in June 2014.
- b. Reflects the results of FM O&G beginning June 1, 2013.
- c. Cash operating margin for oil and gas operations reflects realized revenues less cash production costs. Realized revenues exclude noncash mark-to-market adjustments on derivative contracts, and cash production costs exclude accretion and other costs. For reconciliations of realized revenues (including average realizations for oil, natural gas and NGLs) and cash production costs to revenues and production and delivery costs reported in our consolidated financial statements, refer to the supplemental schedule, "Product Revenues and Production Costs."
- d. Includes \$3.58 per BOE primarily for other asset impairments and inventory write-downs, idle/terminated rig costs and prior year non-income tax assessments at the California properties.

Excluding the impact of realized cash gains (losses) on derivative contracts of \$11.53 per barrel for 2015, \$(2.76) per barrel in 2014 and \$(1.35) per barrel for the seven-month period from June 1, 2013, to December 31, 2013, the average realized price for crude oil was \$45.58 per barrel in 2015 (85 percent of the average Brent crude oil price of \$53.64 per barrel), \$92.76 per barrel in 2014 (93 percent of the average Brent crude oil price of \$99.45 per barrel) and \$99.67 per barrel in for the seven-month period from June 1, 2013, to December 31, 2013 (92 percent of the average Brent crude oil price of \$108.66 per barrel).

FM O&G's average realized price for natural gas was \$2.59 per MMBtu in 2015, \$4.23 per MMBtu in 2014 (\$4.37 per MMBtu excluding the impact of derivative contracts) and \$3.99 per MMBtu (\$3.73 per MMBtu excluding the impact of derivative contracts) for the seven-month period from June 1, 2013, to December 31, 2013, compared to the NYMEX natural gas price average of \$2.66 per MMBtu for the year 2015 contracts, \$4.41 per MMBtu for the year 2014 contracts, and \$3.67 per MMBtu for the June through December 2013 contracts.

2015 Compared with 2014

Realized revenues for oil and gas operations of \$43.54 per BOE for the year 2015 were lower than realized revenues of \$71.83 per BOE for the year 2014, primarily reflecting lower oil prices, partly offset by the impact of higher cash gains on derivative contracts (cash gains of \$7.72 per BOE in 2015, compared with cash losses of \$2.15 per BOE in 2014).

Cash production costs for oil and gas operations of \$18.59 per BOE for the year 2015 were lower than cash production costs of \$20.08 for the year 2014, primarily reflecting lower well workover expense and steam costs in California.

Based on current sales volume and cost estimates, cash production costs are expected to decline to approximately \$15 per BOE for the year 2016, primarily reflecting increased production from the Deepwater GOM and cost reduction efforts.

2014 Compared with 2013

Realized revenues for oil and gas operations of \$71.83 per BOE for the year 2014 were lower than realized revenues of \$76.87 per BOE for the seven-month period from June 1, 2013, to December 31, 2013, primarily reflecting lower oil prices and higher cash losses on derivative contracts (cash losses of \$2.15 per BOE in 2014, compared with \$0.58 per BOE for the seven-month period from June 1, 2013, to December 31, 2013).

Cash production costs of \$20.08 per BOE for the year 2014 were higher than cash production costs of \$17.14 per BOE for the seven-month period from June 1, 2013, to December 31, 2013, primarily reflecting the sale of lower cost Eagle Ford properties in June 2014 and higher operating costs in California and the GOM.

Daily Sales Volumes. Following is a summary of average sales volumes per day by region for oil and gas operations for the years ended December 31:

	2015	2014	2013 ^a
Sales Volumes (MBOE per day):			
GOM ^b	83	73	72
California	37	39	39
Haynesville/Madden/Other	24	20 ^c	21
Eagle Ford	—	24	46
Total oil and gas operations	<u>144</u>	<u>156</u>	<u>178</u>

- a. Reflects the results of FM O&G beginning June 1, 2013.
- b. Includes sales from properties on the GOM Shelf and in the Deepwater GOM; 2015 also includes sales from properties in the Inboard Lower Tertiary/Cretaceous natural gas trend.
- c. Results include volume adjustments related to Eagle Ford's pre-close sales; FM O&G completed the sale of Eagle Ford in June 2014.

Daily sales volumes averaged 144 MBOE for the year 2015, including 96 MBbls of crude oil, 246 MMcf of natural gas and 7 MBbls of NGLs; 156 MBOE for the year 2014, including 110 MBbls of crude oil, 221 MMcf of natural gas and 9 MBbls of NGLs; and 178 MBOE for the seven-month period from June 1, 2013, including 124 MBbls of crude oil, 254 MMcf of natural gas and 11 MBbls of NGLs. Oil and gas sales volumes are expected to average 158 MBOE per day for the year 2016, comprised of 74 percent oil, 21 percent natural gas and 5 percent NGLs.

Exploration, Operating and Development Activities. Our oil and gas business has significant proved, probable and possible reserves with valuable infrastructure and associated resources with long-term production and development potential.

Since commencing development activities in 2014 at its three 100-percent-owned production platforms in the Deepwater GOM, FM O&G has drilled 14 wells in producing fields with positive results, including the King D-10 well in fourth-quarter 2015. Four of these wells have been brought on production, including the King D-12 well in November 2015. FM O&G plans to complete and place six additional wells on production in 2016.

We are taking continuing actions to reduce oil and gas costs and capital expenditures, including undertaking a near-term deferral of exploration and development activities by idling the three Deepwater GOM drillships FM O&G has under contract. Past investments are expected to enable production to be increased from rates of 144 MBOE per day in 2015 to an average of 157 MBOE per day in 2016 and 2017, and cash production costs to decline to approximately \$15 per BOE in 2016 and 2017.

FM O&G expects to incur idle rig costs associated with its drillship contracts totaling an estimated \$0.6 billion in 2016 and \$0.4 billion in 2017.

Oil and Gas Capital Expenditures. Capital expenditures for our oil and gas operations totaled \$3.0 billion in 2015 (including \$2.5 billion incurred for Deepwater GOM and \$0.2 billion for the Inboard Lower Tertiary/Cretaceous natural gas trend). Capital expenditures for oil and gas operations for the year 2016 are estimated to total \$1.5

billion, which excludes \$0.6 billion for idle rig costs. Approximately 85 percent of the 2016 capital budget is expected to be directed to the GOM.

Deepwater GOM. FM O&G operates and owns 100-percent working interests in the large-scale Holstein, Marlin and Horn Mountain deepwater production platforms, which in total have processing capacity of 250 MBbls of oil per day. In addition, FM O&G has interests in the Lucius and Heidelberg oil fields and in the Atwater Valley focus area, as well as interests in the Ram Powell and Hoover deepwater production platforms.

During 2015, field development continued at Heidelberg in the Green Canyon focus area and first oil production commenced in January 2016. Three wells are expected to begin producing during the initial phase and another two wells are scheduled to be drilled and come on line at a later date. Heidelberg is a subsea development consisting of five subsea wells tied back to a truss spar hull located in 5,300 feet of water. Heidelberg field was discovered in November 2008 and the subsequent development project was sanctioned in early 2013. FM O&G has a 12.5 percent working interest in Heidelberg.

During 2015, FM O&G continued drilling at Holstein Deep. Completion activities for the initial three-well subsea tieback development program are progressing on schedule, with first production expected by mid-2016. In aggregate, the three wells are estimated to commence production at approximately 24 MBOE per day. The Holstein Deep development is located in Green Canyon Block 643, west of the 100-percent-owned Holstein platform in 3,890 feet of water, with production facilities capable of processing 113 MBbls of oil per day.

FM O&G's 100-percent-owned Marlin Hub is located in the Mississippi Canyon focus area and has production facilities capable of processing 60 MBbls of oil per day. FM O&G has drilled five successful tieback opportunities in the area since 2014, including the 100-percent-owned Dorado and King development projects.

During 2015, FM O&G drilled three successful wells at the King field, which is located in Mississippi Canyon south of the Marlin facility in 5,200 feet of water. During fourth-quarter 2015, FM O&G established production from the first King well (D-12) and logged oil pay in the King D-10 well. In 2016, FM O&G plans to complete and tieback the King D-13 well to the Marlin production platform. The King D-9 and D-10 wells are expected to be completed in future periods.

FM O&G's 100-percent-owned Horn Mountain field is also located in the Mississippi Canyon focus area and has production facilities capable of processing 75 MBbls of oil per day. During 2015, FM O&G successfully drilled three wells in the Horn Mountain area, including the Quebec/Victory (Q/V), Kilo/Oscar (K/O) and Horn Mountain Deep wells. To enhance recovery of remaining oil in place, future development plans will target subsea tieback from multiple stacked sands in the area. In 2016, FM O&G plans to complete and tie back two wells to the Horn Mountain production platform, including the Q/V and K/O wells.

FM O&G has a broad set of assets with valuable infrastructure and associated resources with attractive long-term production and development potential, including the Vito and Power Nap oil discoveries in the Atwater Valley area and a large Deepwater GOM project inventory with over 150 undeveloped locations.

Inboard Lower Tertiary/Cretaceous. FM O&G has a position in the Inboard Lower Tertiary/Cretaceous natural gas trend, located onshore in South Louisiana. During November 2015, FM O&G completed the installation of additional processing facilities to accommodate higher flow rates from the Highlander well, which began production in February 2015. In December 2015, gross rates from the Highlander well averaged approximately 44 MMcf per day (approximately 21 MMcf per day net to FM O&G). FM O&G is the operator and has a 72 percent working interest and an approximate 49 percent net revenue interest in Highlander.

California. Sales volumes from California averaged 37 MBOE per day for 2015, compared with 39 MBOE per day for 2014. FM O&G's position in California is located onshore in the San Joaquin Valley and Los Angeles Basin, and offshore in the Point Pedernales field. Since second-quarter 2015, production from Point Arguello platforms has been shut in following the shutdown of a third-party operated pipeline system that transports oil to various California refineries.

Haynesville. FM O&G has rights to a substantial natural gas resource, located in the Haynesville shale in Louisiana. Drilling activities remain constrained in response to low natural gas prices in order to maximize near-term cash flows and to preserve the resource for potentially higher future natural gas prices.

CAPITAL RESOURCES AND LIQUIDITY

Our consolidated operating cash flows vary with prices realized from copper, gold, molybdenum and oil sales, our sales volumes, production costs, income taxes, other working capital changes and other factors. During 2015, in response to weak market conditions, we took actions to enhance our financial position, including significant reductions in capital spending, production curtailments at certain North and South America mines and actions to reduce operating, exploration and administrative costs (refer to "Operations" for further discussion). In addition, we generated approximately \$2 billion in gross proceeds from at-the-market equity programs, and our 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. Further weakening of commodity prices in early 2016, and the uncertainty about the timing of economic and commodity price recovery require us to continue taking actions to strengthen our financial position, reduce debt and re-focus our portfolio of assets. Our business strategy is focused on our position as a leading global copper producer. We will continue to manage our production activities, spending on capital projects and operations, and the administration of our business to enhance cash flows, and intend to complete significant asset sale transactions to reduce debt.

Cash

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

	2015	2014
Cash at domestic companies	\$ 6	\$ 78
Cash at international operations	218	386
Total consolidated cash and cash equivalents	<u>224</u>	<u>464</u>
Less: noncontrolling interests' share	(44)	(91)
Cash, net of noncontrolling interests' share	180	373
Less: withholding taxes and other	(11)	(16)
Net cash available	<u>\$ 169</u>	<u>\$ 357</u>

Cash held at our international operations is generally used to support our foreign operations' capital expenditures, operating expenses, 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 and uncommitted lines of credit (refer to Note 8). With the exception of TFM, 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. 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.

Debt

We continue to focus on cost and capital management and cash flow generation from our operations in the current weak commodity price environment and are taking further immediate actions to reduce debt by pursuing asset sales and joint venture transactions. Following is a summary of our total debt and related weighted-average interest rates at December 31 (in billions, except percentages):

	2015			2014		
		Weighted-Average Interest Rate			Weighted-Average Interest Rate	
FCX Senior Notes	\$ 11.9	3.8%		\$ 11.9	3.8%	
FCX Term Loan	3.0	2.2%		3.0	1.7%	
FM O&G LLC Senior Notes	2.5	6.6%		2.6	6.6%	
Cerro Verde Credit Facility	1.8	2.8%		0.4	2.1%	
Other FCX debt	1.2	3.9%		0.9	3.9%	
Total debt	<u>\$ 20.4</u>	<u>3.8%</u>		<u>\$ 18.8</u>	<u>3.8%</u>	

As of December 31, 2015, we had \$36 million in letters of credit issued and availability of \$4.0 billion under our credit facility.

In December 2015, we reached agreement with our bank group to amend the Leverage Ratio (Net Debt/EBITDA, as defined in the agreement) under our revolving credit facility and term loan from the previous limit. In addition, the amendment increased the interest rate spreads under specified conditions and requires prepayment of the term loan with 50 percent of the net proceeds of certain asset dispositions.

On February 26, 2016, we reached agreement with our bank group to amend our revolving credit facility and term loan. The changes pursuant to the revolving credit facility and the term loan included modifications of the maximum leverage ratio and minimum interest expense coverage ratio to provide us with additional flexibility, and the commitment under our revolving credit facility has been reduced by \$500 million from \$4.0 billion to \$3.5 billion. A springing collateral and guarantee trigger was added to the revolving credit facility and term loan. Under this provision, if we have not entered into definitive agreements for asset sales totaling \$3.0 billion in aggregate by June 30, 2016, that are reasonably expected to close by December 31, 2016, we will be required to secure the revolving credit facility and term loan with a mutually acceptable collateral and guarantee package. If such asset sales totaling \$3.0 billion in aggregate have not occurred by December 31, 2016, then the springing collateral and guarantee trigger will go into effect.

Refer to Notes 8 and 18 for further discussion of our debt, include the modifications to our revolving credit facility and term loan.

Operating Activities

We generated consolidated operating cash flows totaling \$3.2 billion in 2015 (including \$0.4 billion in working capital sources and changes in other tax payments), \$5.6 billion in 2014 (net of \$0.6 billion for working capital uses and changes in other tax payments) and \$6.1 billion in 2013 (net of \$0.4 billion for working capital uses and changes in other tax payments).

Lower consolidated operating cash flows for 2015, compared with 2014, primarily reflects the impact of lower commodity price realizations, partly offset by an increase in working capital sources mostly associated with accounts receivable associated with settlements of oil and gas derivative contracts and inventories reflecting a decrease in volumes and lower average costs.

Lower consolidated operating cash flows for 2014, compared with 2013, reflect the impact of lower copper and gold price realizations and lower copper sales volumes, partly offset by a full year of our oil and gas operations.

Based on current operating plans and subject to future commodity prices for copper, gold, molybdenum and crude oil, we expect estimated consolidated operating cash flows for the year 2016, plus available cash and availability under our credit facility and uncommitted lines of credit, to be sufficient to fund our budgeted capital expenditures, scheduled debt maturities, noncontrolling interest distributions and other cash requirements for the year 2016. Refer to "Outlook" for further discussion of projected operating cash flows for the year 2016.

Investing Activities

Capital Expenditures. Capital expenditures, including capitalized interest, totaled \$6.35 billion in 2015 (including \$2.4 billion for major projects at mining operations and \$3.0 billion for oil and gas operations), \$7.2 billion in 2014 (including \$2.9 billion for major projects at mining operations and \$3.2 billion for oil and gas operations) and \$5.3 billion in 2013 (including \$2.3 billion for major projects at mining operations and \$1.45 billion for oil and gas operations).

Lower capital expenditures in 2015, compared with 2014, primarily reflected decreased spending for major projects at mining operations, mostly resulting from the completion of the Morenci mill expansion (substantially completed in May 2014). Higher capital expenditures in 2014, compared with 2013, reflect increased capital expenditures at our oil and gas operations and increased spending for major projects at mining operations primarily associated with the expansion project at Cerro Verde.

Refer to "Outlook" for further discussion of projected capital expenditures for the year 2016.

Dispositions and Acquisitions. In November 2014, we completed the sale of our 80 percent ownership interests in the Candelaria and Ojos del Salado mines for \$1.8 billion in cash (after-tax net proceeds of \$1.5 billion).

In June 2014, we completed the sale of the Eagle Ford shale assets for cash consideration of \$3.1 billion. Approximately \$1.3 billion of the proceeds was placed in a like-kind exchange escrow to reinvest in additional oil and gas interests and the remaining net proceeds were used to repay debt. In June 2014 and September 2014, we completed acquisitions of Deepwater GOM interests totaling \$1.4 billion.

In June 2013, we paid \$3.5 billion in cash (net of cash acquired) for the acquisition of Plains Exploration & Production Company (PXP) and \$1.6 billion in cash (net of cash acquired) for the acquisition of MMR.

In March 2013, we paid \$348 million (net of cash acquired) for the acquisition of a cobalt chemical refinery in Kokkola, Finland, and the related sales and marketing business. The acquisition was funded 70 percent by us and 30 percent by Lundin, our joint venture partner.

Refer to Note 2 for further discussion of these dispositions and acquisitions.

Financing Activities

Debt Transactions. Net proceeds from debt in 2015 primarily include borrowings of \$1.4 billion under Cerro Verde's nonrecourse senior unsecured credit facility to fund its expansion project.

During 2014, we completed the sale of \$3.0 billion of senior notes, which were comprised of four tranches with a weighted-average interest rate of 4.1 percent. The proceeds from these senior notes were used to fund our December 2014 tender offers for \$1.14 billion aggregate principal of senior notes (with a weighted-average interest rate of 6.5 percent), essentially all of our 2015 scheduled maturities (including scheduled term loan amortization and \$500 million of 1.40% Senior Notes), \$300 million in 7.625% Senior Notes, and to repay borrowings under our revolving credit facility. Other senior note redemptions during 2014 include \$400 million of our 8.625% Senior Notes, \$1.7 billion of the aggregate principal amount of certain senior notes (with a weighted-average interest rate of 6.6 percent) and \$210 million of the aggregate principal amount of our 6.625% Senior Notes.

During 2013, we sold \$6.5 billion of senior notes in four tranches with a weighted-average interest rate of 3.9 percent, and borrowed \$4.0 billion under an unsecured bank term loan with an interest rate of London Interbank Offered Rate (LIBOR) plus 1.75 percent. Net proceeds from these borrowings were used to fund the acquisitions of PXP and MMR, repay certain debt of PXP and for general corporate purposes. Also in 2013, we redeemed the \$299 million of MMR's outstanding 11.875% Senior Notes and \$400 million of PXP's 7 $\frac{5}{8}$ % Senior Notes, which were assumed in the acquisitions.

Refer to Note 8 for further discussion of these transactions.

Equity Transactions. Since August 2015 and through January 5, 2016, we sold 210 million shares of common stock, generating gross proceeds of approximately \$2 billion under our at-the-market equity programs (including 206 million shares of common stock, generating gross proceeds of \$1.96 billion during 2015). Net proceeds from the at-the-market equity programs were used for general corporate purposes, including the repayment of amounts outstanding under the revolving credit facility and other borrowings, and the financing of working capital and capital expenditures. Refer to Note 10 for further discussion.

During 2013, conversion of MMR's 8% Convertible Perpetual Preferred Stock and 5.75% Convertible Perpetual Preferred Stock, Series 1 required cash payments of \$228 million. Refer to Note 2 for further discussion.

Dividends. We paid dividends on our common stock totaling \$605 million in 2015 (including \$115 million for special dividends of \$0.1105 per share paid in accordance with the settlement terms of the shareholder derivative litigation), \$1.3 billion in 2014 and \$2.3 billion in 2013 (including \$1.0 billion for a supplemental dividend of \$1.00 per share paid in July 2013).

In March 2015, our Board reduced our annual common stock dividend from \$1.25 per share to \$0.20 per share, and in December 2015, our Board suspended the annual common stock dividend. These actions will provide annual cash savings of approximately \$1.6 billion (based on outstanding common shares of 1.25 billion at December 31, 2015) and further enhance our liquidity during this period of weak market conditions. 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 by our Board.

Cash dividends and other distributions paid to noncontrolling interests totaled \$120 million in 2015, \$424 million in 2014 and \$256 million in 2013. 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 based on the principal amounts, 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 summary of these various obligations at December 31, 2015 (in millions):

	Total	2016	2017 to 2018	2019 to 2020	Thereafter
Debt maturities	\$ 20,347	\$ 649	\$ 5,199	\$ 4,311	\$ 10,188
Scheduled interest payment obligations ^a	7,258	760	1,428	1,155	3,915
ARO and environmental obligations ^b	8,538	324	907	325	6,982
Take-or-pay contracts:					
Mining operations ^c	2,156	1,150	481	112	413
Oil and gas operations ^d	1,773	1,035	615	54	69
Operating lease obligations	337	54	89	48	146
Total^e	\$ 40,409	\$ 3,972	\$ 8,719	\$ 6,005	\$ 21,713

- a. Scheduled interest payment obligations were calculated using stated coupon rates for fixed-rate debt and interest rates applicable at December 31, 2015, for variable-rate debt.
- b. Represents estimated cash payments, on an undiscounted and unescalated basis, associated with ARO and environmental activities (including \$2.1 billion 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 including the procurement of copper concentrate (\$854 million), electricity (\$601 million) and transportation services (\$450 million). 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 contractual minimum demand at the South America mines. Transportation obligations are primarily for South America contracted ocean freight.
- d. Represents contractual obligations for purchases of goods or service agreements enforceable and legally binding and that specify all significant terms, including minimum commitments for Deepwater GOM drillships (\$1.2 billion) and transportation services (\$221 million). Drillship obligations provide for an operating rate over the contractual term. Transportation obligations are primarily for FM O&G contracted rates for natural gas and crude oil gathering systems.
- e. 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 \$101 million and unrecognized tax benefits totaling \$152 million where the timing of settlement is not determinable, and other less significant amounts. This table also excludes purchase orders for the purchase of 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) TFM's commitment to provide 0.3 percent of net sales revenue from production for the development of the local people in its area of operations, (iii) Cerro Verde's scheduled installment payments for disputed mining royalty assessments and (iv) 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, 2015, we had \$1.2 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.

During 2015, we incurred environmental capital expenditures and other environmental costs (including our joint venture partners' shares) of \$421 million for programs primarily to comply with applicable environmental laws and regulations that affect our operations, compared with \$405 million in 2014 and \$595 million in 2013. Higher costs in 2013 primarily reflect the completion of a water treatment facility at one of our molybdenum mines.

For 2016, we expect to incur approximately \$495 million of aggregate environmental capital expenditures and other environmental costs, which are part of our overall 2016 operating budget. The timing and amount of estimated payments could change as a result of changes in regulatory requirements, changes in scope and timing of reclamation activities, the settlement of environmental matters and as actual spending occurs.

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, 2015, 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 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, 2015, we had \$2.8 billion recorded in our consolidated balance sheet for AROs, including \$1.1 billion related to our oil and gas properties. Spending on AROs totaled \$133 million in 2015, \$99 million in 2014 and \$107 million in 2013 (including \$92 million in 2015, \$74 million in 2014 and \$64 million in 2013 for our oil and gas operations). For 2016, we expect to incur approximately \$172 million for aggregate ARO payments. Refer to Note 12 for further discussion.

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, 2015, for further discussion of contingencies associated with legal proceedings and other matters.

DISCLOSURES ABOUT MARKET RISKS

Commodity Price Risk

Metals. 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 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 copper cathode and cobalt hydroxide by our Africa 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 can vary significantly as a result of fluctuations in the market prices of copper, gold, molybdenum, silver and cobalt. 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, 2015, for further discussion of financial risks associated with fluctuations in the market prices of the commodities we sell.

For 2015, 43 percent of our mined copper was sold in concentrate, 33 percent as cathode and 24 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 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):

	2015	2014	2013
Revenues	\$ (107)	\$ (118)	\$ (26)
Net income attributable to common stockholders	\$ (53)	\$ (65)	\$ (12)
Net income per share attributable to common stockholders	\$ (0.05)	\$ (0.06)	\$ (0.01)

At December 31, 2015, we had provisionally priced copper sales at our copper mining operations totaling 515 million pounds of copper (net of intercompany sales and noncontrolling interests) recorded at an average price of \$2.13 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, 2015, provisional price recorded would have an approximate \$19 million effect on 2016 net income attributable to common stockholders. The LME spot copper price closed at \$2.08 per pound on February 19, 2016.

Oil & Gas. Our financial results from oil and gas operations vary with fluctuations in crude oil prices and, to a lesser extent natural gas prices. Market prices for crude oil and natural gas have fluctuated historically and are affected by numerous factors beyond our control. Refer to "Risk Factors" contained in Part 1, Item 1A. of our annual report on Form 10-K for the year ended December 31, 2015, for further discussion of financial risks associated with fluctuations in the market prices of the commodities we sell.

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, Chilean peso, Peruvian sol and euro. We recognized foreign currency translation losses on balances denominated in foreign currencies totaling \$93 million in 2015, \$4 million in 2014 and \$36 million in 2013, 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 adversely affected when the U.S. dollar weakens in relation to those foreign currencies.

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			10% Change in Exchange Rate (in millions) ^a		
	2015	2014	2013	(in local currency)	(in millions) ^b		Increase	Decrease	
Indonesia									
Rupiah	13,726	12,378	12,128	8.8 trillion	\$ 641	\$ (58)	\$ 71		
Australian dollar	1.37	1.22	1.12	200 million	\$ 146	\$ (13)	\$ 15		
South America									
Chilean peso	710	607	525	155 billion	\$ 218	\$ (20)	\$ 25		
Peruvian sol	3.41	2.99	2.80	835 million	\$ 244	\$ (22)	\$ 27		
Atlantic Copper									
Euro	0.92	0.82	0.73	135 million	\$ 147	\$ (13)	\$ 15		

a. Reflects the estimated impact on annual operating costs assuming a 10 percent increase or decrease in the exchange rate reported at December 31, 2015.

b. Based on December 31, 2015, exchange rates.

Interest Rate Risk

At December 31, 2015, we had total debt maturities based on the principal amounts of \$20.3 billion, of which approximately 32 percent was variable-rate debt with interest rates based on the LIBOR or the Euro 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 the related fair values at December 31, 2015 (in millions, except percentages):

	2016	2017	2018	2019	2020	Thereafter	Fair Value
Fixed-rate debt	\$ 3	\$ 1,251	\$ 1,500	\$ 237	\$ 1,618	\$ 10,084	\$ 9,473
Average interest rate	1.4%	2.2%	2.4%	6.1%	4.4%	4.9%	4.4%
Variable-rate debt	\$ 646	\$ 542	\$ 1,906	\$ 1,202	\$ 1,254	\$ 104	\$ 4,514
Average interest rate	1.6%	2.5%	2.5%	2.8%	2.2%	4.3%	2.4%

NEW ACCOUNTING STANDARDS

We do not expect the provisions of recently issued accounting standards to have a significant impact on our future financial statements and disclosures. Refer to Note 1 for further discussion.

OFF-BALANCE SHEET ARRANGEMENTS

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

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. This measure is 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. In the co-product method presentation below, 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, we have reflected these separately from revenues on current period sales. Noncash and other costs consist of items such as stock-based compensation costs, start-up costs, inventory adjustments, long-lived asset impairments, restructuring, write-offs of equipment and/or unusual charges, which are removed from site production and delivery costs in the calculation of unit net cash costs. 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 for our mining operations are presentations under both the by-product and co-product methods together with reconciliations to amounts reported in our consolidated financial statements.

Oil and Gas Product Revenues and Cash Production Costs per Unit

Realized revenues and cash production costs per unit are measures intended to provide investors with information about the cash operating margin of our oil and gas operations expressed on a basis relating to each product sold. We use this measure for the same purpose and for monitoring operating performance by our oil and gas 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. Our measures may not be comparable to similarly titled measures reported by other companies.

We show revenue adjustments from derivative contracts as separate line items. Because these adjustments do not result from oil and gas sales, these gains and losses have been reflected separately from revenues on current period sales. Additionally, accretion, charges for asset retirement obligations and other costs, such as idle/terminated rig costs, inventory write-downs and/or unusual charges, are removed from production and delivery costs in the calculation of cash production costs per BOE. The following schedules include calculations of oil and gas product revenues and cash production costs together with a reconciliation to amounts reported in our consolidated financial statements.

North America Copper Mines Product Revenues and Production Costs

Year Ended December 31, 2015

(In millions)

	By-Product Method	Co-Product Method			
		Copper	Molybdenum ^a	Other ^b	Total
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
Depreciation, depletion and amortization	558	528	20	10	558
Copper and molybdenum inventory adjustments	142 ^c	139	2	1	142
Noncash and other costs, net	233	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	<u>\$ 628</u>	<u>\$ 593</u>	<u>\$ 24</u>	<u>\$ 11</u>	<u>\$ 628</u>
Copper sales (millions of recoverable pounds)	1,985	1,985			
Molybdenum sales (millions of recoverable pounds) ^a				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		
Depreciation, depletion and amortization	0.28	0.27	0.53		
Copper and molybdenum inventory adjustments	0.07	0.07	0.07		
Noncash and other costs, net	0.12 ^c	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	<u>\$ 0.32</u>	<u>\$ 0.30</u>	<u>\$ 0.65</u>		

Reconciliation to Amounts Reported

(In millions)

	Revenues	Production and Delivery	Depreciation, Depletion and Amortization	Copper and Molybdenum Inventory Adjustments
Totals presented above	\$ 5,270	\$ 3,441	\$ 558	\$ 142
Treatment charges	—	240 ^c	—	—
Noncash and other costs, net	—	233	—	—
Revenue adjustments, primarily for pricing on prior period open sales	(28)	—	—	—
Eliminations and other	(116)	(115)	2	—
North America copper mines	5,126	3,799	560	142
Other mining & eliminations ^d	8,756	6,536	1,119	196
Total mining	13,882	10,335	1,679	338
U.S. oil & gas operations	1,994	1,211	1,804	—
Corporate, other & eliminations	1	(1)	14	—
As reported in FCX's consolidated financial statements	<u>\$ 15,877</u>	<u>\$ 11,545</u>	<u>\$ 3,497</u>	<u>\$ 338</u>

- 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 impairment, restructuring charges and other net charges.
- d. Represents the combined total for all other mining operations and the related eliminations, as presented in Note 16.

North America Copper Mines Product Revenues and Production Costs (continued)

Year Ended December 31, 2014

(In millions)

Revenues, excluding adjustments	
Site production and delivery, before net noncash and other costs shown below	3,057
By-product credits	(399)
Treatment charges	203
Net cash costs	2,861
Depreciation, depletion and amortization	473
Noncash and other costs, net	149
Total costs	3,483
Revenue adjustments, primarily for pricing on prior period open sales	(7)
Gross profit	<u>\$ 1,696</u>

Copper sales (millions of recoverable pounds)

Molybdenum sales (millions of recoverable pounds)^a

Gross profit per pound of copper/molybdenum:

Revenues, excluding adjustments	\$ 3.13
Site production and delivery, before net noncash and other costs shown below	1.85
By-product credits	(0.24)
Treatment charges	0.12
Unit net cash costs	1.73
Depreciation, depletion and amortization	0.29
Noncash and other costs, net	0.09
Total unit costs	2.11
Revenue adjustments, primarily for pricing on prior period open sales	—
Gross profit per pound	<u>\$ 1.02</u>

By-Product Method	Co-Product Method			
	Copper	Molybdenum ^a	Other ^b	Total
\$ 5,186	\$ 5,186	\$ 386	\$ 120	\$ 5,692
3,057	2,860	226	78	3,164
(399)	—	—	—	—
203	198	—	5	203
2,861	3,058	226	83	3,367
473	448	19	6	473
149	146	2	1	149
3,483	3,652	247	90	3,989
(7)	(7)	—	—	(7)
<u>\$ 1,696</u>	<u>\$ 1,527</u>	<u>\$ 139</u>	<u>\$ 30</u>	<u>\$ 1,696</u>

1,657

1,657

33

Reconciliation to Amounts Reported

(In millions)

Totals presented above	
Treatment charges	—
Noncash and other costs, net	—
Revenue adjustments, primarily for pricing on prior period open sales	(7)
Eliminations and other	(69)
North America copper mines	5,616
Other mining & eliminations ^c	11,112
Total mining	16,728
U.S. oil & gas operations	4,710
Corporate, other & eliminations	—
As reported in FCX's consolidated financial statements	<u>\$ 21,438</u>

Revenues	Production and Delivery	Depreciation, Depletion and Amortization
\$ 5,692	\$ 3,164	\$ 473
—	203	—
—	149	—
(7)	—	—
(69)	(76)	11
5,616	3,440	484
11,112	7,219	1,074
16,728	10,659	1,558
4,710	1,237	2,291
—	2	14
<u>\$ 21,438</u>	<u>\$ 11,898</u>	<u>\$ 3,863</u>

- 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 and the related eliminations, as presented in Note 16.

North America Copper Mines Product Revenues and Production Costs (continued)

Year Ended December 31, 2013

(In millions)

	By-Product Method	Co-Product Method			
		Copper	Molybdenum ^a	Other ^b	Total
Revenues, excluding adjustments	\$ 4,752	\$ 4,752	\$ 349	\$ 106	\$ 5,207
Site production and delivery, before net noncash and other costs shown below	2,828	2,744	123	74	2,941
By-product credits	(342)	—	—	—	—
Treatment charges	155	151	—	4	155
Net cash costs	2,641	2,895	123	78	3,096
Depreciation, depletion and amortization	391	378	7	6	391
Noncash and other costs, net	202 ^c	200	1	1	202
Total costs	3,234	3,473	131	85	3,689
Revenue adjustments, primarily for pricing on prior period open sales	(4)	(4)	—	—	(4)
Gross profit	<u>\$ 1,514</u>	<u>\$ 1,275</u>	<u>\$ 218</u>	<u>\$ 21</u>	<u>\$ 1,514</u>

Copper sales (millions of recoverable pounds)

Molybdenum sales (millions of recoverable pounds)^a

1,416

1,416

32

Gross profit per pound of copper/molybdenum:

Revenues, excluding adjustments	\$ 3.36	\$ 3.36	\$ 10.79
Site production and delivery, before net noncash and other costs shown below	2.00	1.94	3.79
By-product credits	(0.24)	—	—
Treatment charges	0.11	0.11	—
Unit net cash costs	1.87	2.05	3.79
Depreciation, depletion and amortization	0.28	0.27	0.22
Noncash and other costs, net	0.14 ^c	0.14	0.04
Total unit costs	2.29	2.46	4.05
Revenue adjustments, primarily for pricing on prior period open sales	—	—	—
Gross profit per pound	<u>\$ 1.07</u>	<u>\$ 0.90</u>	<u>\$ 6.74</u>

Reconciliation to Amounts Reported

(In millions)

Totals presented above	
Treatment charges	—
Noncash and other costs, net	—
Revenue adjustments, primarily for pricing on prior period open sales	(4)
Eliminations and other	(20)
North America copper mines	5,183
Other mining & eliminations ^d	13,118
Total mining	18,301
U.S. oil & gas operations	2,616
Corporate, other & eliminations	4
As reported in FCX's consolidated financial statements	<u>\$ 20,921</u>

	Revenues	Production and Delivery	Depreciation, Depletion and Amortization
	\$ 5,207	\$ 2,941	\$ 391
Treatment charges	—	155	—
Noncash and other costs, net	—	202 ^c	—
Revenue adjustments, primarily for pricing on prior period open sales	(4)	—	—
Eliminations and other	(20)	(32)	11
North America copper mines	5,183	3,266	402
Other mining & eliminations ^d	13,118	7,882	1,020
Total mining	18,301	11,148	1,422
U.S. oil & gas operations	2,616	682	1,364
Corporate, other & eliminations	4	7	11
As reported in FCX's consolidated financial statements	<u>\$ 20,921</u>	<u>\$ 11,837</u>	<u>\$ 2,797</u>

- 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 \$76 million (\$0.05 per pound) associated with updated mine plans at Morenci that resulted in a loss in recoverable copper in leach stockpiles.
- d. Represents the combined total for all other mining operations and the related eliminations, as presented in Note 16.

South America Mining Product Revenues and Production Costs

Year Ended December 31, 2015

(In millions)

	By-Product Method	Co-Product Method		
		Copper	Other ^a	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
Depreciation, depletion and amortization	352	341	11	352
Copper 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
Depreciation, depletion and amortization	0.40	0.39
Copper 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	Depreciation, Depletion and Amortization	Copper and Molybdenum 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)	—	—	—
Eliminations and other	(13)	(17)	—	—
South America mining	1,934	1,438	352	73
Other mining & eliminations ^b	11,948	8,897	1,327	265
Total mining	13,882	10,335	1,679	338
U.S. oil & gas operations	1,994	1,211	1,804	—
Corporate, other & eliminations	1	(1)	14	—
As reported in FCX's consolidated financial statements	\$ 15,877	\$ 11,545	\$ 3,497	\$ 338

a. 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.

b. Represents the combined total for all other mining operations and the related eliminations, as presented in Note 16.

South America Mining Product Revenues and Production Costs (continued)**Year Ended December 31, 2014**

(In millions)

	By-Product Method	Co-Product Method			Total
		Copper	Other ^a	Total	
Revenues, excluding adjustments	\$ 3,498	\$ 3,498	\$ 269	\$ 3,767	
Site production and delivery, before net noncash and other costs shown below		1,839	1,710	151	1,861
By-product credits	(247)	—	—	—	
Treatment charges	191	191	—	191	
Royalty on metals	6	5	1	6	
Net cash costs	1,789	1,906	152	2,058	
Depreciation, depletion and amortization	367	345	22	367	
Noncash and other costs, net	67	64	3	67	
Total costs	2,223	2,315	177	2,492	
Revenue adjustments, primarily for pricing on prior period open sales	(65)	(65)	—	(65)	
Gross profit	\$ 1,210	\$ 1,118	\$ 92	\$ 1,210	
Copper sales (millions of recoverable pounds)	1,135	1,135			
Gross profit per pound of copper:					
Revenues, excluding adjustments	\$ 3.08	\$ 3.08			
Site production and delivery, before net noncash and other costs shown below		1.62	1.51		
By-product credits	(0.22)	—	—		
Treatment charges	0.17	0.17			
Royalty on metals	0.01	—			
Unit net cash costs	1.58	1.68			
Depreciation, depletion and amortization	0.32	0.31			
Noncash and other costs, net	0.06	0.06			
Total unit costs	1.96	2.05			
Revenue adjustments, primarily for pricing on prior period open sales	(0.05)	(0.05)			
Gross profit per pound	\$ 1.07	\$ 0.98			

Reconciliation to Amounts Reported

(In millions)

	Revenues	Production and Delivery	Depreciation, Depletion and Amortization
Totals presented above	\$ 3,767	\$ 1,861	\$ 367
Treatment charges	(191)	—	—
Royalty on metals	(6)	—	—
Noncash and other costs, net	—	67	—
Revenue adjustments, primarily for pricing on prior period open sales	(65)	—	—
Eliminations and other	27	11	—
South America mining	3,532	1,939	367
Other mining & eliminations ^c	13,196	8,720	1,191
Total mining	16,728	10,659	1,558
U.S. oil & gas operations	4,710	1,237	2,291
Corporate, other & eliminations	—	2	14
As reported in FCX's consolidated financial statements	\$ 21,438	\$ 11,898	\$ 3,863

a. Includes gold sales of 67 thousand ounces (\$1,271 per ounce average realized price) and silver sales of 2.9 million ounces (\$18.54 per ounce average realized price). Also reflects sales of molybdenum produced by Cerro Verde to our molybdenum sales company at market-based pricing.

b. Following is a reconciliation of South America mining's 2014 unit net cash costs, excluding the Candelaria and Ojos del Salado mines:

	Net Cash Costs (in millions)	Copper Sales (millions of recoverable pounds)	Unit Net Cash Costs (per pound of copper)
Presented above	\$ 1,789	1,135	\$ 1.58
Less: Candelaria and Ojos del Salado mines	425	268	
	\$ 1,364	\$ 867	\$ 1.57

c. Represents the combined total for all other mining operations and the related eliminations, as presented in Note 16.

South America Mining Product Revenues and Production Costs (continued)**Year Ended December 31, 2013**

(In millions)

Revenues, excluding adjustments
 Site production and delivery, before net noncash
 and other costs shown below
 By-product credits
 Treatment charges
 Net cash costs
 Depreciation, depletion and amortization
 Noncash and other costs, net
 Total costs
 Revenue adjustments, primarily for pricing
 on prior period open sales
 Gross profit

	By-Product Method	Co-Product Method		
		Copper	Other ^a	Total
\$ 4,366	\$ 4,366	\$ 374	\$ 4,740	
2,023 ^b	1,875	170	2,045	
(352)	—	—	—	
226	226	—	226	
1,897	2,101	170	2,271	
346	323	23	346	
49	44	5	49	
2,292	2,468	198	2,666	
(28)	(28)	—	(28)	
\$ 2,046	\$ 1.870	\$ 176	\$ 2,046	

Copper sales (millions of recoverable pounds)

1,325^c

1,325

Gross profit per pound of copper:

Revenues, excluding adjustments
 Site production and delivery, before net noncash
 and other costs shown below
 By-product credits
 Treatment charges
 Unit net cash costs
 Depreciation, depletion and amortization
 Noncash and other costs, net
 Total unit costs
 Revenue adjustments, primarily for pricing
 on prior period open sales
 Gross profit per pound

\$ 3.30	\$ 3.30
1.53 ^b	1.42
(0.27)	—
0.17 ^c	0.17
1.43	1.59
0.26	0.24
0.04	0.03
1.73	1.86
(0.03)	(0.03)
\$ 1.54	\$ 1.41

Reconciliation to Amounts Reported

(In millions)

Totals presented above
 Treatment charges
 Noncash and other costs, net
 Revenue adjustments, primarily for pricing
 on prior period open sales
 Eliminations and other
 South America mining
 Other mining & eliminations^d
 Total mining
 U.S. oil & gas operations
 Corporate, other & eliminations
 As reported in FCX's consolidated financial statements

	Revenues	Production and Delivery	Depreciation, Depletion and Amortization
\$ 4,740	\$ 2,045 ^b	\$ 346	
(226)	—	—	
—	49	—	
(28)	—	—	
(1)	(25)	—	
4,485	2,069	346	
13,816	9,079	1,076	
18,301	11,148	1,422	
2,616	682	1,364	
4	7	11	
\$ 20,921	\$ 11,837	\$ 2,797	

- a. Includes gold sales of 102 thousand ounces (\$1,350 per ounce average realized price) and silver sales of 4.1 million ounces (\$21.88 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 \$36 million (\$0.03 per pound) associated with labor agreement costs at Cerro Verde.
- c. Following is a reconciliation of South America mining's 2014 unit net cash costs, excluding the Candelaria and Ojos del Salado mines:

	Net Cash Costs (in millions)	Copper Sales (millions of recoverable pounds)	Unit Net Cash Costs (per pound of copper)
Presented above	\$ 1,897	1,325	\$ 1.43
Less: Candelaria and Ojos del Salado	564	424	
	\$ 1,333	901	\$ 1.48

- d. Represents the combined total for all other mining operations and the related eliminations, as presented in Note 16.

Indonesia Mining Product Revenues and Production Costs**Year Ended December 31, 2015**

(In millions)

Revenues, excluding adjustments
 Site production and delivery, before net noncash
 and other costs shown below
 Gold and silver credits
 Treatment charges
 Export duties
 Royalty on metals
 Net cash costs
 Depreciation and amortization
 Noncash and other costs, net
 Total costs
 Revenue adjustments, primarily for pricing
 on prior period open sales
 PT Smelting intercompany profit
 Gross profit

Copper sales (millions of recoverable pounds)
 Gold sales (thousands of recoverable ounces)

Gross profit per pound of copper/per ounce of gold:

Revenues, excluding adjustments
 Site production and delivery, before net noncash
 and other costs shown below
 Gold and silver credits
 Treatment charges
 Export duties
 Royalty on metals
 Unit net cash costs
 Depreciation and amortization
 Noncash and other costs, net
 Total unit costs
 Revenue adjustments, primarily for pricing
 on prior period open sales
 PT Smelting intercompany profit
 Gross profit per pound/ounce

	By-Product Method	Co-Product Method			
		Copper	Gold	Silver ^a	Total
	\$ 1,735	\$ 1,735	\$ 1,382	\$ 31	\$ 3,148
Revenues, excluding adjustments	1,780	981	781	18	1,780
Site production and delivery, before net noncash and other costs shown below	(1,422)	—	—	—	—
Gold and silver credits	231	127	101	3	231
Treatment charges	109	60	48	1	109
Export duties	114	63	50	1	114
Royalty on metals	812	1,231	980	23	2,234
Net cash costs	293	161	129	3	293
Depreciation and amortization	38	21	17	—	38
Noncash and other costs, net	1,143	1,413	1,126	26	2,565
Total costs	(50)	(50)	8	1	(41)
Revenue adjustments, primarily for pricing on prior period open sales	10	5	5	—	10
PT Smelting intercompany profit	\$ 552	\$ 277	\$ 269	\$ 6	\$ 552

744 744 1,224

Reconciliation to Amounts Reported

(In millions)

Totals presented above
 Treatment charges
 Export duties
 Royalty on metals
 Noncash and other costs, net
 Revenue adjustments, primarily for pricing
 on prior period open sales
 PT Smelting intercompany profit
 Indonesia mining
 Other mining & eliminations^b
 Total mining
 U.S. oil & gas operations
 Corporate, other & eliminations
 As reported in FCX's consolidated financial statements

Revenues	Production and Delivery	Depreciation, Depletion and Amortization
		\$ 293
\$ 3,148	\$ 1,780	\$ 293
(231)	—	—
(109)	—	—
(114)	—	—
—	38	—
(41)	—	—
—	(10)	—
2,653	1,808	293
11,229	8,527	1,386
13,882	10,335	1,679
1,994	1,211	1,804
1	(1)	14
\$ 15,877	\$ 11,545	\$ 3,497

a. Includes silver sales of 2.1 million ounces (\$14.81 per ounce average realized price).

b. Represents the combined total for all other mining operations and the related eliminations, as presented in Note 16.

Indonesia Mining Product Revenues and Production Costs (continued)**Year Ended December 31, 2014**

(In millions)

	By-Product Method	Co-Product Method			
		Copper	Gold	Silver ^a	Total
	\$ 1,998	\$ 1,998	\$ 1,434	\$ 39	\$ 3,471
Revenues, excluding adjustments					
Site production and delivery, before net noncash and other costs shown below	1,831	1,054	757	20	1,831
Gold and silver credits	(1,491)	—	—	—	—
Treatment charges	171	99	70	2	171
Export duties	77	44	32	1	77
Royalty on metals	115	66	48	1	115
Net cash costs	703	1,263	907	24	2,194
Depreciation and amortization	266	153	110	3	266
Noncash and other costs, net	191	110	79	2	191
Total costs	1,160	1,526	1,096	29	2,651
Revenue adjustments, primarily for pricing on prior period open sales	(55)	(55)	18	—	(37)
PT Smelting intercompany profit	34	20	14	—	34
Gross profit	<u>\$ 817</u>	<u>\$ 437</u>	<u>\$ 370</u>	<u>\$ 10</u>	<u>\$ 817</u>

Copper sales (millions of recoverable pounds)

664

Gold sales (thousands of recoverable ounces)

1,168

Gross profit per pound of copper/per ounce of gold:

	\$ 3.01	\$ 3.01	\$ 1,229
Revenues, excluding adjustments			
Site production and delivery, before net noncash and other costs shown below	2.76	1.59	648
Gold and silver credits	(2.25)	—	—
Treatment charges	0.26	0.15	61
Export duties	0.12	0.06	27
Royalty on metals	0.17	0.10	41
Unit net cash costs	1.06	1.90	777
Depreciation and amortization	0.40	0.23	94
Noncash and other costs, net	0.29	0.17	68
Total unit costs	1.75	2.30	939
Revenue adjustments, primarily for pricing on prior period open sales	(0.08)	(0.08)	15
PT Smelting intercompany profit	0.05	0.03	12
Gross profit per pound/ounce	<u>\$ 1.23</u>	<u>\$ 0.66</u>	<u>\$ 317</u>

Reconciliation to Amounts Reported

(In millions)

	Revenues	Production and Delivery	Depreciation, Depletion and Amortization
Totals presented above	\$ 3,471	\$ 1,831	\$ 266
Treatment charges	(171)	—	—
Export duties	(77)	—	—
Royalty on metals	(115)	—	—
Noncash and other costs, net	—	191	—
Revenue adjustments, primarily for pricing on prior period open sales	(37)	—	—
PT Smelting intercompany profit	—	(34)	—
Indonesia mining	3,071	1,988	266
Other mining & eliminations ^c	13,657	8,671	1,292
Total mining	16,728	10,659	1,558
U.S. oil & gas operations	4,710	1,237	2,291
Corporate, other & eliminations	—	2	14
As reported in FCX's consolidated financial statements	<u>\$ 21,438</u>	<u>\$ 11,898</u>	<u>\$ 3,863</u>

- a. Includes silver sales of 2.2 million ounces (\$17.42 per ounce average realized price).
- b. Includes \$143 million (\$0.22 per pound) of fixed costs charged directly to cost of sales as a result of the impact of export restrictions on PT FI's operating rates.
- c. Represents the combined total for all other mining operations and the related eliminations, as presented in Note 16.

Indonesia Mining Product Revenues and Production Costs (continued)**Year Ended December 31, 2013**

(In millions)

	By-Product Method	Co-Product Method			
		Copper	Gold	Silver ^a	Total
	\$ 2,903	\$ 2,903	\$ 1,438	\$ 61	\$ 4,402
Revenues, excluding adjustments					
Site production and delivery, before net noncash and other costs shown below	2,174	1,434	710	30	2,174
Gold and silver credits	(1,497)	—	—	—	—
Treatment charges	205	135	67	3	205
Royalty on metals	109	72	36	1	109
Net cash costs	991	1,641	813	34	2,488
Depreciation and amortization	247	163	80	4	247
Noncash and other costs, net	116	77	38	1	116
Total costs	1,354	1,881	931	39	2,851
Revenue adjustments, primarily for pricing on prior period open sales	1	1	(2)	—	(1)
PT Smelting intercompany loss	(19)	(12)	(6)	(1)	(19)
Gross profit	<u>\$ 1,531</u>	<u>\$ 1,011</u>	<u>\$ 499</u>	<u>\$ 21</u>	<u>\$ 1,531</u>

Copper sales (millions of recoverable pounds)

885

Gold sales (thousands of recoverable ounces)

1,096

Gross profit per pound of copper/per ounce of gold:

	\$ 3.28	\$ 3.28	\$ 1,312
Revenues, excluding adjustments			
Site production and delivery, before net noncash and other costs shown below	2.46	1.62	648
Gold and silver credits	(1.69)	—	—
Treatment charges	0.23	0.15	61
Royalty on metals	0.12	0.08	33
Unit net cash costs	1.12	1.85	742
Depreciation and amortization	0.28	0.19	73
Noncash and other costs, net	0.13	0.09	35
Total unit costs	1.53	2.13	850
Revenue adjustments, primarily for pricing on prior period open sales	—	—	(1)
PT Smelting intercompany loss	(0.02)	(0.01)	(6)
Gross profit per pound/ounce	<u>\$ 1.73</u>	<u>\$ 1.14</u>	<u>\$ 455</u>

Reconciliation to Amounts Reported

(In millions)

	Revenues	Production and Delivery	Depreciation, Depletion and Amortization
Totals presented above	\$ 4,402	\$ 2,174	\$ 247
Treatment charges	(205)	—	—
Royalty on metals	(109)	—	—
Noncash and other costs, net	—	116	—
Revenue adjustments, primarily for pricing on prior period open sales	(1)	—	—
PT Smelting intercompany loss	—	19	—
Indonesia mining	4,087	2,309	247
Other mining & eliminations ^b	14,214	8,839	1,175
Total mining	18,301	11,148	1,422
U.S. oil & gas operations	2,616	682	1,364
Corporate, other & eliminations	4	7	11
As reported in FCX's consolidated financial statements	<u>\$ 20,921</u>	<u>\$ 11,837</u>	<u>\$ 2,797</u>

a. Includes silver sales of 2.9 million ounces (\$21.32 per ounce average realized price).

b. Represents the combined total for all other mining operations and the related eliminations, as presented in Note 16.

Africa Mining Product Revenues and Production Costs

Year Ended December 31, 2015

(In millions)

	By-Product Method	Co-Product Method		
		Copper	Cobalt	Total
Revenues, excluding adjustments ^a	\$ 1,129	\$ 1,129	\$ 287	\$ 1,416
Site production and delivery, before net noncash and other costs shown below	738	639	189	828
Cobalt credits ^b	(196)	—	—	—
Royalty on metals	25	20	5	25
Net cash costs	567	659	194	853
Depreciation, depletion and amortization	257	213	44	257
Noncash and other costs, net	32 ^c	27	5	32
Total costs	856	899	243	1,142
Revenue adjustments, primarily for pricing on prior period open sales	(6)	(6)	(1)	(7)
Gross profit	<u>\$ 267</u>	<u>\$ 224</u>	<u>\$ 43</u>	<u>\$ 267</u>
 Copper sales (millions of recoverable pounds)	467	467		
Cobalt sales (millions of contained pounds)			35	
 Gross profit per pound of copper/cobalt:				
 Revenues, excluding adjustments ^a	\$ 2.42	\$ 2.42	\$ 8.21	
Site production and delivery, before net noncash and other costs shown below	1.58	1.37	5.40	
Cobalt credits ^b	(0.42)	—	—	
Royalty on metals	0.05	0.04	0.14	
Unit net cash costs	1.21	1.41	5.54	
Depreciation, depletion and amortization	0.55	0.46	1.26	
Noncash and other costs, net	0.07 ^c	0.06	0.16	
Total unit costs	1.83	1.93	6.96	
Revenue adjustments, primarily for pricing on prior period open sales	(0.01)	(0.01)	(0.02)	
Gross profit per pound	<u>\$ 0.58</u>	<u>\$ 0.48</u>	<u>\$ 1.23</u>	

Reconciliation to Amounts Reported

(In millions)

	Revenues	Production and Delivery	Depreciation, Depletion and Amortization
Totals presented above	\$ 1,416	\$ 828	\$ 257
Royalty on metals	(25)	—	—
Noncash and other costs, net	—	32 ^c	—
Revenue adjustments, primarily for pricing on prior period open sales	(7)	—	—
Africa mining	1,384	860	257
Other mining & eliminations ^d	12,498	9,475	1,422
Total mining	13,882	10,335	1,679
U.S. oil & gas operations	1,994	1,211	1,804
Corporate, other & eliminations	1	(1)	14
As reported in FCX's consolidated financial statements	<u>\$ 15,877</u>	<u>\$ 11,545</u>	<u>\$ 3,497</u>

- a. Includes point-of-sale transportation costs as negotiated in customer contracts.
- b. Net of cobalt downstream processing and freight costs.
- c. Includes \$11 million (\$0.02 per pound) for restructuring and other charges.
- d. Represents the combined total for all other mining operations and the related eliminations, as presented in Note 16.

Africa Mining Product Revenues and Production Costs (continued)**Year Ended December 31, 2014**

(In millions)

	By-Product Method	Co-Product Method		
		Copper	Cobalt	Total
Revenues, excluding adjustments ^a	\$ 1,301	\$ 1,301	\$ 285	\$ 1,586
Site production and delivery, before net noncash and other costs shown below	665	591	157	748
Cobalt credits ^b	(204)	—	—	—
Royalty on metals	29	24	5	29
Net cash costs	490	615	162	777
Depreciation, depletion and amortization	228	195	33	228
Noncash and other costs, net	22	19	3	22
Total costs	740	829	198	1,027
Revenue adjustments, primarily for pricing on prior period open sales	(1)	(1)	2	1
Gross profit	\$ 560	\$ 471	\$ 89	\$ 560
Copper sales (millions of recoverable pounds)	425	425		
Cobalt sales (millions of contained pounds)			30	
Gross profit per pound of copper/cobalt:				
Revenues, excluding adjustments ^a	\$ 3.06	\$ 3.06	\$ 9.66	
Site production and delivery, before net noncash and other costs shown below	1.56	1.39	5.30	
Cobalt credits ^b	(0.48)	—	—	
Royalty on metals	0.07	0.06	0.16	
Unit net cash costs	1.15	1.45	5.46	
Depreciation, depletion and amortization	0.54	0.46	1.13	
Noncash and other costs, net	0.05	0.04	0.11	
Total unit costs	1.74	1.95	6.70	
Revenue adjustments, primarily for pricing on prior period open sales	—	—	0.07	
Gross profit per pound	\$ 1.32	\$ 1.11	\$ 3.03	

Reconciliation to Amounts Reported

(In millions)

	Revenues	Production and Delivery	Depreciation, Depletion and Amortization
Totals presented above	\$ 1,586	\$ 748	\$ 228
Royalty on metals	(29)	—	—
Noncash and other costs, net	—	22	—
Revenue adjustments, primarily for pricing on prior period open sales	1	—	—
Africa mining	1,558	770	228
Other mining & eliminations ^c	15,170	9,889	1,330
Total mining	16,728	10,659	1,558
U.S. oil & gas operations	4,710	1,237	2,291
Corporate, other & eliminations	—	2	14
As reported in FCX's consolidated financial statements	\$ 21,438	\$ 11,898	\$ 3,863

- a. Includes point-of-sale transportation costs as negotiated in customer contracts.
- b. Net of cobalt downstream processing and freight costs.
- c. Represents the combined total for all other mining operations and the related eliminations, as presented in Note 16.

Africa Mining Product Revenues and Production Costs (continued)Year Ended December 31, 2013

(In millions)

	By-Product Method	Co-Product Method		
		Copper	Cobalt	Total
Revenues, excluding adjustments ^a	\$ 1,457	\$ 1,457	\$ 205	\$ 1,662
Site production and delivery, before net noncash and other costs shown below	649	614	111	725
Cobalt credits ^b	(131)	—	—	—
Royalty on metals	29	26	3	29
Net cash costs	547	640	114	754
Depreciation, depletion and amortization	246	220	26	246
Noncash and other costs, net	29	26	3	29
Total costs	822	886	143	1,029
Revenue adjustments, primarily for pricing on prior period open sales	2	2	2	4
Gross profit	<u>\$ 637</u>	<u>\$ 573</u>	<u>\$ 64</u>	<u>\$ 637</u>
Copper sales (millions of recoverable pounds)	454	454		
Cobalt sales (millions of contained pounds)			25	
Gross profit per pound of copper/cobalt:				
Revenues, excluding adjustments ^a	\$ 3.21	\$ 3.21	\$ 8.02	
Site production and delivery, before net noncash and other costs shown below	1.43	1.35	4.35	
Cobalt credits ^b	(0.29)	—	—	
Royalty on metals	0.07	0.06	0.14	
Unit net cash costs	1.21	1.41	4.49	
Depreciation, depletion and amortization	0.54	0.48	1.00	
Noncash and other costs, net	0.06	0.06	0.11	
Total unit costs	1.81	1.95	5.60	
Revenue adjustments, primarily for pricing on prior period open sales	—	—	0.09	
Gross profit per pound	<u>\$ 1.40</u>	<u>\$ 1.26</u>	<u>\$ 2.51</u>	

Reconciliation to Amounts Reported

(In millions)

	Revenues	Production and Delivery	Depreciation, Depletion and Amortization
Totals presented above	\$ 1,662	\$ 725	\$ 246
Royalty on metals	(29)	—	—
Noncash and other costs, net	—	29	—
Revenue adjustments, primarily for pricing on prior period open sales	4	—	—
Africa mining	1,637	754	246
Other mining & eliminations ^c	16,664	10,394	1,176
Total mining	18,301	11,148	1,422
U.S. oil & gas operations	2,616	682	1,364
Corporate, other & eliminations	4	7	11
As reported in FCX's consolidated financial statements	<u>\$ 20,921</u>	<u>\$ 11,837</u>	<u>\$ 2,797</u>

a. Includes point-of-sale transportation costs as negotiated in customer contracts.

b. Net of cobalt downstream processing and freight costs.

c. Represents the combined total for all other mining operations and the related eliminations, as presented in Note 16.

Molybdenum Mines Product Revenues and Production Costs

(In millions)	Years Ended December 31,		
	2015	2014	2013
Revenues, excluding adjustments ^a	\$ 388	\$ 630	\$ 566
Site production and delivery, before net noncash and other costs shown below	299	321	303
Treatment charges and other	40	43	44
Net cash costs	339	364	347
Depreciation, depletion and amortization	97	92	82
Molybdenum inventory adjustments	11	—	—
Noncash and other costs, net	13 ^b	7	14
Total costs	460	463	443
Gross (loss) profit	<u>\$ (72)</u>	<u>\$ 167</u>	<u>\$ 123</u>
Molybdenum sales (millions of recoverable pounds) ^a	48	51	49
Gross (loss) profit per pound of molybdenum:			
Revenues, excluding adjustments ^a	\$ 8.14	\$ 12.28	\$ 11.65
Site production and delivery, before net noncash and other costs shown below	6.27	6.24	6.24
Treatment charges and other	0.84	0.84	0.91
Unit net cash costs	7.11	7.08	7.15
Depreciation, depletion and amortization	2.04	1.80	1.68
Molybdenum inventory adjustments	0.22 ^b	—	—
Noncash and other costs, net	0.28	0.15	0.29
Total unit costs	9.65	9.03	9.12
Gross (loss) profit per pound	<u>\$ (1.51)</u>	<u>\$ 3.25</u>	<u>\$ 2.53</u>

Reconciliation to Amounts Reported

(In millions)

Year Ended December 31, 2015

	Revenues	Production and Delivery	Depreciation, Depletion and Amortization	Copper and Molybdenum Inventory Adjustments
Totals presented above	\$ 388	\$ 299	\$ 97	\$ 11
Treatment charges and other	(40)	— ^b	—	—
Noncash and other costs, net	—	13	—	—
Molybdenum mines	348	312	97	11
Other mining & eliminations ^c	13,534	10,023	1,582	327
Total mining	13,882	10,335	1,679	338
U.S. oil & gas operations	1,994	1,211	1,804	—
Corporate, other & eliminations	1	(1)	14	—
As reported in FCX's consolidated financial statements	<u>\$ 15,877</u>	<u>\$ 11,545</u>	<u>\$ 3,497</u>	<u>\$ 338</u>

Year Ended December 31, 2014

	Revenues	Production and Delivery	Depreciation, Depletion and Amortization	Copper and Molybdenum Inventory Adjustments
Totals presented above	\$ 630	\$ 321	\$ 92	\$ —
Treatment charges and other	(43)	—	—	—
Noncash and other costs, net	—	7	—	—
Molybdenum mines	587	328	92	—
Other mining & eliminations ^c	16,141	10,331	1,466	6
Total mining	16,728	10,659	1,558	6
U.S. oil & gas operations	4,710	1,237	2,291	—
Corporate, other & eliminations	—	2	14	—
As reported in FCX's consolidated financial statements	<u>\$ 21,438</u>	<u>\$ 11,898</u>	<u>\$ 3,863</u>	<u>\$ 6</u>

Year Ended December 31, 2013

	Revenues	Production and Delivery	Depreciation, Depletion and Amortization	Copper and Molybdenum Inventory Adjustments
Totals presented above	\$ 566	\$ 303	\$ 82	\$ —
Treatment charges and other	(44)	—	—	—
Noncash and other costs, net	—	14	—	—
Molybdenum mines	522	317	82	—
Other mining & eliminations ^c	17,779	10,831	1,340	3
Total mining	18,301	11,148	1,422	3
U.S. oil & gas operations	2,616	682	1,364	—
Corporate, other & eliminations	4	7	11	—
As reported in FCX's consolidated financial statements	<u>\$ 20,921</u>	<u>\$ 11,837</u>	<u>\$ 2,797</u>	<u>\$ 3</u>

- a. 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 \$7 million (\$0.15 per pound) for restructuring and other charges.
- c. Represents the combined total for all other mining operations and the related eliminations, as presented in Note 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 and South America copper mines.

U.S. Oil & Gas Product Revenues, Cash Production Costs and RealizationsYear Ended December 31, 2015

(In millions)	Oil	Natural Gas	NGLs	Total U.S. Oil & Gas
Oil and gas revenues before derivatives	\$ 1,607	\$ 232	\$ 46	\$ 1,885
Cash gains on derivative contracts	406	—	—	406
Realized revenues	<u>\$ 2,013</u>	<u>\$ 232</u>	<u>\$ 46</u>	<u>2,291</u>
Less: cash production costs				979
Cash operating margin				1,312
Less: depreciation, depletion and amortization				1,804
Less: impairment of oil and gas properties				12,980 ^a
Less: accretion and other costs				232 ^a
Plus: net noncash mark-to-market losses on derivative contracts				(319)
Plus: other net adjustments				22
Gross loss				<u>\$ (14,001)</u>
Oil (MMBbls)	35.3			
Gas (Bcf)		89.7		
NGLs (MMBbls)			2.4	
Oil Equivalents (MMBOE)				52.6
	Oil (per barrel)	Natural Gas (per MMBtu)	NGLs (per barrel)	Per BOE
Oil and gas revenues before derivatives	\$ 45.58	\$ 2.59	\$ 18.90	\$ 35.82
Cash gains on derivative contracts	11.53	—	—	7.72
Realized revenues	<u>\$ 57.11</u>	<u>\$ 2.59</u>	<u>\$ 18.90</u>	<u>43.54</u>
Less: cash production costs				18.59
Cash operating margin				24.95
Less: depreciation, depletion and amortization				34.28
Less: impairment of oil and gas properties				246.67 ^a
Less: accretion and other costs				4.41 ^a
Plus: net noncash mark-to-market losses on derivative contracts				(6.07)
Plus: other net adjustments				0.43
Gross loss				<u>\$ (266.05)</u>

Reconciliation to Amounts Reported

(In millions)

	Revenues	Production and Delivery	Depreciation, Depletion and Amortization	Impairment of Oil and Gas Properties
Totals presented above	\$ 1,885	\$ 979	\$ 1,804	\$ 12,980
Cash gains on derivative contracts	406	—	—	—
Net noncash mark-to-market losses on derivative contracts	(319)	—	—	—
Accretion and other costs	—	232 ^a	—	—
Other net adjustments	22	—	—	—
U.S. oil & gas operations	1,994	1,211	1,804	12,980
Total mining ^b	13,882	10,335	1,679	—
Corporate, other & eliminations	1	(1)	14	164 ^c
As reported in FCX's consolidated financial statements	<u>\$ 15,877</u>	<u>\$ 11,545</u>	<u>\$ 3,497</u>	<u>\$ 13,144</u>

- a. Includes \$188 million (\$3.58 per BOE) primarily for other asset impairments and inventory write-downs, idle/terminated rig costs and prior year non-income tax assessments at the California properties.
- b. Represents the combined total for mining operations and the related eliminations, as presented in Note 16.
- c. Reflects impairment charges for international oil and gas properties, primarily related to Morocco.

U.S. Oil & Gas Product Revenues, Cash Production Costs and Realizations (continued)Year Ended December 31, 2014

(In millions)	Oil	Natural Gas	NGLs	Total U.S. Oil & Gas
Oil and gas revenues before derivatives	\$ 3,721	\$ 353	\$ 128	\$ 4,202
Cash losses on derivative contracts	(111)	(11)	—	(122)
Realized revenues	<u><u>\$ 3,610</u></u>	<u><u>\$ 342</u></u>	<u><u>\$ 128</u></u>	<u><u>4,080</u></u> ^a
Less: cash production costs				1,140
Cash operating margin				2,940
Less: depreciation, depletion and amortization				2,291
Less: impairment of oil and gas properties				3,737 ^b
Less: accretion and other costs				97
Plus: net noncash mark-to-market gains on derivative contracts				627
Plus: other net adjustments				3
Gross loss				<u><u>\$ (2,555)</u></u>
Oil (MMBbls)	40.1			
Gas (Bcf)		80.8		
NGLs (MMBbls)			3.2	
Oil Equivalents (MMBOE)				56.8 ^a
	Oil (per barrel)	Natural Gas (per MMbtu)	NGLs (per barrel)	Per BOE
Oil and gas revenues before derivatives	\$ 92.76	\$ 4.37	\$ 39.73	\$ 73.98
Cash losses on derivative contracts	(2.76)	(0.14)	—	(2.15)
Realized revenues	<u><u>\$ 90.00</u></u>	<u><u>\$ 4.23</u></u>	<u><u>\$ 39.73</u></u>	<u><u>71.83</u></u> ^a
Less: cash production costs				20.08
Cash operating margin				51.75
Less: depreciation, depletion and amortization				40.34
Less: impairment of oil and gas properties				65.80 ^b
Less: accretion and other costs				1.69
Plus: net noncash mark-to-market gains on derivative contracts				11.03
Plus: other net adjustments				0.06
Gross loss				<u><u>\$ (44.99)</u></u>

Reconciliation to Amounts Reported

(In millions)

	Revenues	Production and Delivery	Depreciation, Depletion and Amortization	Impairment of Oil and Gas Properties
Totals presented above	\$ 4,202	\$ 1,140	\$ 2,291	\$ 3,737
Cash losses on derivative contracts	(122)	—	—	—
Net noncash mark-to-market gains on derivative contracts	627	— ^b	—	—
Accretion and other costs	—	97	—	—
Other net adjustments	3	—	—	—
U.S. oil & gas operations	4,710	1,237	2,291	3,737
Total mining ^c	16,728	10,659	1,558	—
Corporate, other & eliminations	—	2	14	—
As reported in FCX's consolidated financial statements	<u><u>\$ 21,438</u></u>	<u><u>\$ 11,898</u></u>	<u><u>\$ 3,863</u></u>	<u><u>\$ 3,737</u></u>

a. Following is a reconciliation of FM O&G's cash production costs per BOE for 2014 unit net cash costs, excluding Eagle Ford:

	Cash Production Costs (in millions)	Oil Equivalents (MMBOE)	Cash Production Costs Per BOE
Presented above	\$ 1,140	56.8	\$ 20.08
Less: Eagle Ford	113	8.7	12.97
	<u><u>\$ 1,027</u></u>	<u><u>\$ 48.1</u></u>	<u><u>\$ 21.36</u></u>

b. Includes \$46 million (\$0.81 per BOE) primarily for idle/terminated rig costs and inventory write-downs.

c. Represents the combined total for mining operations and the related eliminations, as presented in Note 16.

U.S. Oil & Gas Product Revenues, Cash Production Costs and Realizations (continued)Seven Months from June 1, 2013, to December 31, 2013

(In millions)	Oil	Natural Gas	NGLs	Total U.S. Oil & Gas
Oil and gas revenues before derivatives	\$ 2,655	\$ 202	\$ 92	\$ 2,949
Cash (losses) gains on derivative contracts	(36)	14	—	(22)
Realized revenues	<u>\$ 2,619</u>	<u>\$ 216</u>	<u>\$ 92</u>	<u>2,927</u>
Less: cash production costs				653 ^a
Cash operating margin				2,274
Less: depreciation, depletion and amortization				1,364
Less: accretion and other costs				29
Plus: net noncash mark-to-market losses on derivative contracts				(312)
Plus: other net adjustments				1
Gross profit				<u>\$ 570</u>
Oil (MMBbls)	26.6			
Gas (Bcf)		54.2		
NGLs (MMBbls)			2.4	
Oil Equivalents (MMBOE)				38.1 ^a
	Oil (per barrel)	Natural Gas (per MMbtu)	NGLs (per barrel)	Per BOE
Oil and gas revenues before derivatives	\$ 99.67	\$ 3.73	\$ 38.20	\$ 77.45
Cash (losses) gains on derivative contracts	(1.35)	0.26	—	(0.58)
Realized revenues	<u>\$ 98.32</u>	<u>\$ 3.99</u>	<u>\$ 38.20</u>	<u>76.87</u>
Less: cash production costs				17.14 ^a
Cash operating margin				59.73
Less: depreciation, depletion and amortization				35.81
Less: accretion and other costs				0.79
Plus: net noncash mark-to-market losses on derivative contracts				(8.20)
Plus: other net adjustments				0.04
Gross profit				<u>\$ 14.97</u>

Reconciliation to Amounts Reported

(In millions)

Totals presented above	
Cash losses on derivative contracts	
Net noncash mark-to-market losses on derivative contracts	
Accretion and other costs	
Other net adjustments	
U.S. oil & gas operations	
Total mining ^b	
Corporate, other & eliminations	
As reported in FCX's consolidated financial statements	

	Revenues	Production and Delivery	Depreciation, Depletion and Amortization
\$ 2,949	\$ 653	\$ 1,364	
(22)	—	—	
(312)	—	—	
—	29	—	
1	—	—	
<u>2,616</u>	<u>682</u>	<u>1,364</u>	
18,301	11,148	1,422	
4	7	11	
<u>\$ 20,921</u>	<u>\$ 11,837</u>	<u>\$ 2,797</u>	

- a. Following is a reconciliation of FM O&G's cash production costs per BOE for 2013 unit net cash costs, excluding Eagle Ford:

	Cash Production Costs (in millions)	Oil Equivalents (MMBOE)	Cash Production Costs Per BOE
Presented above	\$ 653	38.1	\$ 17.14
Less: Eagle Ford	119	9.9	11.97
	<u>\$ 534</u>	<u>28.2</u>	<u>\$ 18.95</u>

- b. Represents the combined total for all mining operations and the related eliminations, as presented in Note 16.

CAUTIONARY STATEMENT

Our discussion and analysis contains forward-looking statements in which we discuss factors we believe may affect our 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; cash production costs per BOE; operating cash flows; capital expenditures; debt reduction initiatives; exploration efforts and results; development and production activities and costs; liquidity; tax rates; the impact of copper, gold, molybdenum, cobalt, crude oil and natural gas 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," "potential," "estimates," "expects," "projects," "targets," "intends," "likely," "will," "should," "to be" and any similar expressions are intended to identify those assertions as forward-looking statements. The declaration of dividends is at the discretion of the Board and will depend on our financial results, cash requirements, future prospects, and other factors deemed relevant by the Board.

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, demand for, and prices of copper, gold, molybdenum, cobalt, crude oil and natural gas; mine sequencing; production rates; drilling results; potential effects of cost and capital expenditure reductions and production curtailments on financial results and cash flow; the outcome of our strategic review of our oil and gas business; the outcome of our debt reduction initiatives; potential additional oil and gas property impairment charges; potential inventory adjustments; potential impairment of long-lived mining assets; the outcome of ongoing discussions with the Indonesian government regarding PT-FI's COW; PT-FI's ability to obtain renewal of its export permit after August 8, 2016; the potential effects of violence in Indonesia generally and in the province of Papua; the resolution of administrative disputes in the DRC; industry risks; regulatory changes; political risks; weather- and climate-related risks; labor relations; environmental risks; litigation results 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, 2015.

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.

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 our management's assessment, management concluded that, as of December 31, 2015, 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

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

TO THE BOARD OF DIRECTORS AND STOCKHOLDERS OF
FREEPORT-McMoRan INC.

We have audited Freeport-McMoRan Inc.'s internal control over financial reporting as of December 31, 2015, 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). Freeport-McMoRan Inc.'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 conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). 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.

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.

In our opinion, Freeport-McMoRan Inc. maintained, in all material respects, effective internal control over financial reporting as of December 31, 2015, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of Freeport-McMoRan Inc. as of December 31, 2015 and 2014, and the related consolidated statements of operations, comprehensive (loss) income, equity and cash flows for each of the three years in the period ended December 31, 2015, and our report dated February 26, 2016 expressed an unqualified opinion thereon.

/s/ Ernst & Young LLP

Phoenix, Arizona
February 26, 2016

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

TO THE BOARD OF DIRECTORS AND STOCKHOLDERS OF
FREEPORT-McMoRan INC.

We have audited the accompanying consolidated balance sheets of Freeport-McMoRan Inc. as of December 31, 2015 and 2014, and the related consolidated statements of operations, comprehensive (loss) income, equity and cash flows for each of the three years in the period ended December 31, 2015. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of Freeport-McMoRan Inc. at December 31, 2015 and 2014, and the consolidated results of its operations and its cash flows for each of the three years in the period ended December 31, 2015, 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), Freeport-McMoRan Inc.'s internal control over financial reporting as of December 31, 2015, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) and our report dated February 26, 2016 expressed an unqualified opinion thereon.

/s/ Ernst & Young LLP

Phoenix, Arizona
February 26, 2016

FREEPOR-T-McMoRan INC.
CONSOLIDATED STATEMENTS OF OPERATIONS

	Years Ended December 31,		
	2015	2014	2013
Revenues	\$ 15,877	\$ 21,438	\$ 20,921
Cost of sales:		(In millions, except per share amounts)	
Production and delivery	11,545	11,898	11,837
Depreciation, depletion and amortization	3,497	3,863	2,797
Impairment of oil and gas properties	13,144	3,737	—
Copper and molybdenum inventory adjustments	338	6	3
Total cost of sales	<u>28,524</u>	<u>19,504</u>	<u>14,637</u>
Selling, general and administrative expenses	569	592	657
Mining exploration and research expenses	127	126	210
Environmental obligations and shutdown costs	78	119	66
Goodwill impairment	—	1,717	—
Net gain on sales of assets	(39)	(717)	—
Total costs and expenses	<u>29,259</u>	<u>21,341</u>	<u>15,570</u>
Operating (loss) income	(13,382)	97	5,351
Interest expense, net	(645)	(630)	(518)
Net gain (loss) on early extinguishment of debt	—	73	(35)
Gain on investment in McMoRan Exploration Co. (MMR)	—	—	128
Other income (expense), net	6	36	(13)
(Loss) income before income taxes and equity in affiliated companies' net (losses) earnings	<u>(14,021)</u>	<u>(424)</u>	<u>4,913</u>
Benefit from (provision for) income taxes	1,935	(324)	(1,475)
Equity in affiliated companies' net (losses) earnings	(3)	3	3
Net (loss) income	<u>(12,089)</u>	<u>(745)</u>	<u>3,441</u>
Net income attributable to noncontrolling interests	(106)	(523)	(761)
Preferred dividends attributable to redeemable noncontrolling interest	(41)	(40)	(22)
Net (loss) income attributable to common stockholders	<u>\$ (12,236)</u>	<u>\$ (1,308)</u>	<u>\$ 2,658</u>
Net (loss) income per share attributable to common stockholders:			
Basic	\$ (11.31)	\$ (1.26)	\$ 2.65
Diluted	<u>\$ (11.31)</u>	<u>\$ (1.26)</u>	<u>\$ 2.64</u>
Weighted-average common shares outstanding:			
Basic	1,082	1,039	1,002
Diluted	<u>1,082</u>	<u>1,039</u>	<u>1,006</u>
Dividends declared per share of common stock	<u>\$ 0.2605</u>	<u>\$ 1.25</u>	<u>\$ 2.25</u>

The accompanying Notes to Consolidated Financial Statements are an integral part of these consolidated financial statements.

FREEPOR-T-McMoRan INC.
CONSOLIDATED STATEMENTS OF COMPREHENSIVE (LOSS) INCOME

	Years Ended December 31,		
	2015	2014	2013
	(In millions)		
Net (loss) income	\$ (12,089)	\$ (745)	\$ 3,441
Other comprehensive income (loss), net of taxes:			
Defined benefit plans:			
Actuarial (losses) gains arising during the period	(5)	(166)	73
Prior service costs arising during the period	—	—	(21)
Amortization of unrecognized amounts included in net periodic benefit costs	38	25	30
Foreign exchange gains	8	1	12
Translation adjustments and unrealized losses on securities	—	(1)	4
Other comprehensive income (loss)	<u>41</u>	<u>(141)</u>	<u>98</u>
Total comprehensive (loss) income	(12,048)	(886)	3,539
Total comprehensive income attributable to noncontrolling interests	(106)	(521)	(758)
Preferred dividends attributable to redeemable noncontrolling interest	(41)	(40)	(22)
Total comprehensive (loss) income attributable to common stockholders	<u>\$ (12,195)</u>	<u>\$ (1,447)</u>	<u>\$ 2,759</u>

The accompanying Notes to Consolidated Financial Statements are an integral part of these consolidated financial statements.

FREEPORT-McMORAN INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS

	Years Ended December 31,		
	2015	2014	2013
	(In millions)		
Cash flow from operating activities:			
Net (loss) income	\$ (12,089)	\$ (745)	\$ 3,441
Adjustments to reconcile net (loss) income to net cash provided by operating activities:			
Depreciation, depletion and amortization	3,497	3,863	2,797
Impairment of oil and gas properties and goodwill	13,144	5,454	—
Copper and molybdenum inventory adjustments	338	6	3
Other asset impairments, inventory write-downs, restructuring and other	256	18	—
Net gain on sales of assets	(39)	(717)	—
Net (gains) losses on crude oil and natural gas derivative contracts	(87)	(504)	334
Gain on investment in MMR	—	—	(128)
Stock-based compensation	85	106	173
Net charges for environmental and asset retirement obligations, including accretion	209	200	164
Payments for environmental and asset retirement obligations	(198)	(176)	(237)
Net (gain) loss on early extinguishment of debt	—	(73)	35
Deferred income taxes	(2,039)	(929)	277
Increase in long-term mill and leach stockpiles	(212)	(233)	(431)
Other, net	(18)	(7)	88
Changes in working capital and other tax payments, excluding amounts from acquisitions and dispositions:			
Accounts receivable	813	215	49
Inventories	379	(249)	(288)
Other current assets	97	—	26
Accounts payable and accrued liabilities	(217)	(394)	(359)
Accrued income taxes and changes in other tax payments	(699)	(204)	195
Net cash provided by operating activities	<u>3,220</u>	<u>5,631</u>	<u>6,139</u>
Cash flow from investing activities:			
Capital expenditures:			
North America copper mines	(355)	(969)	(1,066)
South America	(1,722)	(1,785)	(1,145)
Indonesia	(913)	(948)	(1,030)
Africa	(229)	(159)	(205)
Molybdenum mines	(13)	(54)	(164)
United States oil and gas operations	(2,948)	(3,205)	(1,436)
Other	(173)	(95)	(240)
Acquisitions of Deepwater Gulf of Mexico interests	—	(1,426)	—
Acquisition of Plains Exploration & Production Company, net of cash acquired	—	—	(3,465)
Acquisition of MMR, net of cash acquired	—	—	(1,628)
Acquisition of cobalt chemical business, net of cash acquired	—	—	(348)
Net proceeds from sale of Candelaria and Ojos del Salado	—	1,709	—
Net proceeds from sale of Eagle Ford shale assets	—	2,910	—
Other, net	107	221	(181)
Net cash used in investing activities	<u>(6,246)</u>	<u>(3,801)</u>	<u>(10,908)</u>
Cash flow from financing activities:			
Proceeds from debt	8,272	8,710	11,501
Repayments of debt	(6,677)	(10,306)	(5,476)
Net proceeds from sale of common stock	1,936	—	—
Redemption of MMR preferred stock	—	—	(228)
Cash dividends and distributions paid:			
Common stock	(605)	(1,305)	(2,281)
Noncontrolling interests	(120)	(424)	(256)
Stock-based awards net (payments) proceeds, including excess tax benefit	(4)	9	(98)
Debt financing costs and other, net	(16)	(35)	(113)
Net cash provided by (used in) financing activities	<u>2,786</u>	<u>(3,351)</u>	<u>3,049</u>
Net decrease in cash and cash equivalents	(240)	(1,521)	(1,720)
Cash and cash equivalents at beginning of year	464	1,985	3,705
Cash and cash equivalents at end of year	<u>\$ 224</u>	<u>\$ 464</u>	<u>\$ 1,985</u>

The accompanying Notes to Consolidated Financial Statements are an integral part of these consolidated financial statements.

FREEPOR-T-McMoRAN INC.
CONSOLIDATED BALANCE SHEETS

	December 31,		
	2015		2014
	(In millions, except par value)		
ASSETS			
Current assets:			
Cash and cash equivalents	\$ 224	\$ 464	
Trade accounts receivable	689	953	
Income and other tax receivables	1,414	1,322	
Other accounts receivable	174	288	
Inventories:			
Materials and supplies, net	1,869	1,886	
Mill and leach stockpiles	1,724	1,914	
Product	1,195	1,561	
Other current assets	173	657	
Total current assets	7,462	9,045	
Property, plant, equipment and mining development costs, net	27,509	26,220	
Oil and gas properties, net - full cost method:			
Subject to amortization, less accumulated amortization and impairment of \$22,276 and \$7,360, respectively	2,262	9,187	
Not subject to amortization	4,831	10,087	
Long-term mill and leach stockpiles	2,271	2,179	
Other assets	2,242	1,956	
Total assets	<u>\$ 46,577</u>	<u>\$ 58,674</u>	
LIABILITIES AND EQUITY			
Current liabilities:			
Accounts payable and accrued liabilities	\$ 3,355	\$ 3,653	
Current portion of debt	649	478	
Current portion of environmental and asset retirement obligations	272	296	
Accrued income taxes	23	410	
Dividends payable	8	335	
Total current liabilities	4,307	5,172	
Long-term debt, less current portion	19,779	18,371	
Deferred income taxes	4,288	6,398	
Environmental and asset retirement obligations, less current portion	3,739	3,647	
Other liabilities	1,656	1,861	
Total liabilities	33,769	35,449	
Redeemable noncontrolling interest	764	751	
Equity:			
Stockholders' equity:			
Common stock, par value \$0.10, 1,374 shares and 1,167 shares issued, respectively	137	117	
Capital in excess of par value	24,283	22,281	
(Accumulated deficit) retained earnings	(12,387)	128	
Accumulated other comprehensive loss	(503)	(544)	
Common stock held in treasury – 128 shares at cost	(3,702)	(3,695)	
Total stockholders' equity	7,828	18,287	
Noncontrolling interests	4,216	4,187	
Total equity	12,044	22,474	
Total liabilities and equity	<u>\$ 46,577</u>	<u>\$ 58,674</u>	

The accompanying Notes to Consolidated Financial Statements are an integral part of these consolidated financial statements.

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 (In millions)	Common Stock Held in Treasury		Total Stockholders' Equity	Non-controlling Interests	Total Equity		
	Number of Shares	At Par Value				Number of Shares	At Cost					
Balance at January 1, 2013	1,073	\$ 107	\$ 19,119	\$ 2,399	\$ (506)	124	\$ (3,576)	\$ 17,543	\$ 3,768	\$ 21,311		
Common stock issued to acquire Plains Exploration & Production Company	91	9	2,822	—	—	—	—	2,831	—	2,831		
Exchange of employee stock-based awards in connection with acquisitions	—	—	67	—	—	—	—	67	—	67		
Exercised and issued stock-based awards	1	1	8	—	—	—	—	9	—	9		
Stock-based compensation	—	—	153	—	—	—	—	153	—	153		
Reserve of tax benefit for stock-based awards	—	—	(1)	—	—	—	—	(1)	—	(1)		
Tender of shares for stock-based awards	—	—	—	—	—	3	(105)	(105)	—	(105)		
Dividends on common stock	—	—	—	(2,315)	—	—	—	(2,315)	—	(2,315)		
Dividends to noncontrolling interests	—	—	—	—	—	—	—	—	(236)	(236)		
Noncontrolling interests' share of contributed capital in subsidiary	—	—	(7)	—	—	—	—	(7)	7	—		
Net income attributable to common stockholders	—	—	—	2,658	—	—	—	2,658	—	2,658		
Net income attributable to noncontrolling interests	—	—	—	—	—	—	—	—	761	761		
Other comprehensive income (loss)	—	—	—	—	101	—	—	101	(3)	98		
Balance at December 31, 2013	1,165	117	22,161	2,742	(405)	127	(3,681)	20,934	4,297	25,231		
Exercised and issued stock-based awards	2	—	12	—	—	—	—	12	—	12		
Stock-based compensation	—	—	98	—	—	—	—	98	—	98		
Tax benefit for stock-based awards	—	—	5	—	—	—	—	5	1	6		
Tender of shares for stock-based awards	—	—	6	—	—	1	(14)	(8)	—	(8)		
Dividends on common stock	—	—	—	(1,306)	—	—	—	(1,306)	—	(1,306)		
Dividends to noncontrolling interests	—	—	—	—	—	—	—	—	(396)	(396)		
Noncontrolling interests' share of contributed capital in subsidiary	—	—	(1)	—	—	—	—	(1)	7	6		
Sale of Candelaria and Ojos del Salado mines	—	—	—	—	—	—	—	—	(243)	(243)		
Net loss attributable to common stockholders	—	—	—	(1,308)	—	—	—	(1,308)	—	(1,308)		
Net income attributable to noncontrolling interests	—	—	—	—	—	—	—	—	523	523		
Other comprehensive loss	—	—	—	—	(139)	—	—	(139)	(2)	(141)		
Balance at December 31, 2014	1,167	\$ 117	\$ 22,281	\$ 128	\$ (544)	128	\$ (3,695)	\$ 18,287	\$ 4,187	\$ 22,474		

FREEPORT-MCMORAN INC.
CONSOLIDATED STATEMENTS OF EQUITY (CONTINUED)

	Stockholders' Equity											
	Common Stock		Capital in Excess of Par Value	(Accumulated Deficit) Retained Earnings	Accumu- lated Other Compre- hensive Loss	Common Stock Held in Treasury		Total Stock- holders' Equity	Non- controlling Interests	Total Equity		
	Number of Shares	At Par Value				Number of Shares	At Cost					
Balance at December 31, 2014	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	—	—	91	—	—	—	—	91	7	98		
Reserve on tax benefit for stock-based awards	—	—	(1)	—	—	—	—	(1)	—	(1)		
Tender of shares for stock-based awards	—	—	—	—	—	—	(7)	(7)	—	(7)		
Dividends on common stock	—	—	—	(279)	—	—	—	(279)	—	(279)		
Dividends to noncontrolling interests	—	—	—	—	—	—	—	—	(91)	(91)		
Noncontrolling interests' share of contributed capital in subsidiary	—	—	(7)	—	—	—	—	(7)	7	—		
Net loss attributable to common stockholders	—	—	—	(12,236)	—	—	—	(12,236)	—	(12,236)		
Net income attributable to noncontrolling interests	—	—	—	—	—	—	—	—	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		

The accompanying Notes to Consolidated Financial Statements are an integral part of these consolidated financial statements.

**FREEPOR-T-McMoRan INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

NOTE 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Presentation. Effective July 14, 2014, Freeport-McMoRan Copper & Gold Inc. changed its name to Freeport-McMoRan Inc. (FCX). The consolidated financial statements of 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. 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, formerly Freeport-McMoRan Corporation), Atlantic Copper, S.L.U. (Atlantic Copper) and FCX Oil & Gas Inc. (FM O&G).

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 FM O&G, on May 31, 2013, and June 3, 2013, respectively. The results included in these financial statements for the year ended December 31, 2013, include PXP's results beginning June 1, 2013, and MMR's results beginning June 4, 2013 (refer to Note 2 for further discussion).

FCX's unincorporated joint ventures with Rio Tinto plc (Rio Tinto) and Sumitomo Metal Mining Arizona, Inc. (Sumitomo) 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 five primary divisions – North America copper mines, South America mining, Indonesia mining, Africa mining and Molybdenum mines, and operating segments that meet certain thresholds are reportable segments. For oil and gas operations, FCX determines its operating segments on a country-by-country basis. FCX's reportable segments include the Morenci, Cerro Verde, Grasberg and Tenke Fungurume copper mines, the Rod & Refining operations and the United States (U.S.) Oil & Gas operations. 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 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 reserve estimation (minerals, and oil and natural gas); timing of transfers of oil and gas properties not subject to amortization into the full cost pool; 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; determination of fair value of assets acquired, liabilities assumed and redeemable noncontrolling interest, and recognition of goodwill and deferred taxes in connection with business combinations; 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 development costs, are translated at historical rates. Gains and losses resulting from translation of such account balances are included in other income (expense), as are gains and losses from foreign currency transactions. Foreign currency losses totaled \$93 million in 2015, \$4 million in 2014 and \$36 million in 2013.

Cash Equivalents. Highly liquid investments purchased with maturities of three months or less are considered cash equivalents.

Inventories. Inventories include mill and leach stockpiles, materials and supplies, and product inventories. Beginning in third-quarter 2015, inventories are stated at the lower of weighted-average cost or net realizable value. Prior to third-quarter 2015, inventories were stated at the lower of weighted-average cost or market (refer to "New Accounting Standards" in this note for discussion of the change in accounting principle). Refer to Note 4 for further discussion.

Mill and Leach Stockpiles. Mill and leach stockpiles are work-in-process inventories for FCX's mining operations. Mill and leach stockpiles 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 (*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, depletion, amortization and site overhead costs. Material is removed from the stockpiles at a weighted-average cost per pound.

Because it is generally 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 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, high-purity molybdenum chemicals and other metallurgical products, and various cobalt 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 Mining Development Costs. Property, plant, equipment and mining 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. Other assets are depreciated on a straight-line basis over estimated useful lives of up to 39 years for buildings and three to 25 years for machinery and equipment, and mobile equipment.

Included in property, plant, equipment and mining 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. 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 estimated discounted after-tax 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 are excluded from amortization until the properties are evaluated. Costs are transferred into the amortization base on an ongoing basis as the properties are evaluated and proved oil and natural gas reserves are established or if impairment is determined. Unproved oil and gas properties are assessed periodically, at least annually, to determine whether impairment has occurred. FCX assesses unproved oil and gas properties for impairment on an individual basis or as a group if properties are individually insignificant. The

assessment considers 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 are assigned and other current market conditions. During any period in which these factors indicate an impairment, the cumulative drilling costs incurred to date for such property and all or a portion of the associated leasehold costs are transferred to the full cost pool and are then subject to amortization. Including amounts determined to be impaired, FCX transferred \$6.4 billion of costs associated with unevaluated properties to the full cost pool in 2015, \$2.5 billion in 2014 and \$0.7 billion for the seven-month period from June 1, 2013, through December 31, 2013. The transfer of costs into the amortization base involves a significant amount of judgment and may be subject to changes over time based on drilling plans and results, geological and geophysical evaluations, the assignment of proved oil and natural gas reserves, availability of capital and other factors. Costs not subject to amortization consist primarily of capitalized costs incurred for undeveloped acreage and wells in progress pending determination, together with capitalized interest for these projects. The ultimate evaluation of the properties will occur over a period of several years. Interest costs totaling \$58 million in 2015, \$88 million in 2014 and \$69 million in 2013 were capitalized on oil and gas properties not subject to amortization and in the process of development.

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 2015 and 2014, net capitalized costs with respect to FCX's proved oil and gas properties exceeded the related ceiling test limitation; therefore, impairment charges of \$13.1 billion were recorded in 2015 and \$3.7 billion in 2014, primarily because of the lower twelve-month average of the first-day-of-the-month historical reference oil price and additional capitalized costs. The twelve-month average WTI reference oil price was \$50.28 per barrel at December 31, 2015, compared with \$94.99 per barrel at December 31, 2014.

Goodwill. Goodwill has an indefinite useful life and is not amortized, but rather is tested for impairment at least annually during the fourth quarter, unless events occur or circumstances change between annual tests that would more likely than not reduce the fair value of a related reporting unit below its carrying value. Impairment occurs when the carrying amount of goodwill exceeds its implied fair value. FCX generally uses a discounted cash flow model to determine if the carrying value of a reporting unit, including goodwill, is less than the fair value of the reporting unit. FCX's approach to allocating goodwill includes the identification of the reporting unit it believes has contributed to the excess purchase price and includes consideration of the reporting unit's potential for future growth. Goodwill arose in 2013 with FCX's acquisitions of PXP and MMR, and was allocated to the U.S. oil and gas reporting unit. When a sale of oil and gas properties occurs, goodwill is allocated to that property based on the relationship of the fair value of the property sold to the total reporting unit's fair value. Events affecting crude oil and natural gas prices caused a decrease in the fair value of the U.S. oil and gas reporting unit in 2014, which resulted in the full impairment of goodwill (refer to Note 2 for further discussion).

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 Expenditures. 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.

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 mining 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 (refer to Note 12 for further discussion).

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 (refer to Note 12 for further discussion).

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.

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 is 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 (NYMEX). 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 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 2015 molybdenum sales were priced based on prices published in *Metals Week*, *Ryan's Notes* or *Metal Bulletin*, plus conversion premiums for products that undergo additional processing, such as ferromolybdenum and molybdenum chemical products. Most of these sales use the average price of the previous month quoted by the applicable publication. In 2015, FCX's remaining molybdenum sales generally had pricing that was either based on the current month published prices or a fixed price. FCX engaged in discussions with its molybdenum chemical product customers during the second half of 2015 and established floor index prices or prices that adjust within certain ranges for its chemical products to promote continuation of chemical-grade production.

PT-FI concentrate sales, Tenke Fungurume Mining S.A. (TFM or Tenke) metal sales and certain Sociedad Minera Cerro Verde S.A.A. (Cerro Verde) metal sales are subject to certain royalties, which are recorded as a reduction to revenues. TFM and Cerro Verde are subsidiaries of FMC. In addition, PT-FI concentrate sales are also subject to export duties beginning in 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. Approximately 30 percent of gas sales is priced monthly using industry-recognized, published index pricing, and the remainder is priced daily on 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, 2015.

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 the performance share units (PSUs) and the performance-based RSUs are determined using a Monte-Carlo simulation model. The fair value for liability-classified awards (*i.e.*, cash-settled stock appreciation rights (SARs) and cash-settled RSUs) is remeasured each reporting period using the Black-Scholes-Merton option valuation model for SARs and FCX's stock price for cash-settled RSUs. 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 on the graded-vesting method over the vesting period. Refer to Note 10 for further discussion.

Earnings Per Share. FCX's basic net (loss) income per share of common stock was computed by dividing net (loss) income attributable to FCX common stockholders by the weighted-average shares of common stock outstanding during the year. Diluted net income per share of common stock was computed using the most dilutive of (a) the two-class method or (b) the treasury stock method. Under the two-class method, net income is allocated to each class of common stock and participating securities as if all of the earnings for the period had been distributed. FCX's participating securities consist of vested RSUs for which the underlying common shares are not yet issued and entitle holders to non-forfeitable dividends.

A reconciliation of net (loss) income and weighted-average shares of common stock outstanding for purposes of calculating basic and diluted net (loss) income per share for the years ended December 31 follows:

	2015	2014	2013
Net (loss) income	\$ (12,089)	\$ (745)	\$ 3,441
Net income attributable to noncontrolling interests	(106)	(523)	(761)
Preferred dividends on redeemable noncontrolling interest	(41)	(40)	(22)
Undistributed earnings allocable to participating securities	(3)	(3)	—
Net (loss) income allocable to FCX common stockholders	\$ (12,239)	\$ (1,311)	\$ 2,658
Basic weighted-average shares of common stock outstanding (millions)	1,082	1,039	1,002
Add shares issuable upon exercise or vesting of dilutive stock options and RSUs (millions)	— ^a	— ^a	4 ^a
Diluted weighted-average shares of common stock outstanding (millions)	<u>1,082</u>	<u>1,039</u>	<u>1,006</u>
Basic net (loss) income per share attributable to common stockholders	\$ (11.31)	\$ (1.26)	\$ 2.65
Diluted net (loss) income per share attributable to common stockholders	<u>\$ (11.31)</u>	<u>\$ (1.26)</u>	<u>\$ 2.64</u>

a. Excludes approximately 9 million shares of common stock in 2015, 10 million in 2014 and 1 million in 2013 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 per share of common stock. Excluded stock options totaled 45 million shares of common stock in 2015, 31 million in 2014 and 30 million in 2013.

New Accounting Standards. In May 2014, the Financial Accounting Standards Board (FASB) issued an Accounting Standard Update (ASU) that provides a single comprehensive revenue recognition model, which will replace 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. For public entities, this ASU is effective for annual reporting periods beginning after December 15, 2017 (following FASB's August 2015 ASU of a one-year deferral of the effective date), and interim reporting periods within that reporting period. Early adoption is permitted for annual reporting periods beginning after December 15, 2016, and interim reporting periods within that reporting period. This ASU may be applied either retrospectively to each period presented or as a cumulative-effect adjustment as of the date of adoption. FCX is currently evaluating the

impact of the new guidance on its financial reporting and disclosures, but at this time does not expect adoption of this ASU to have a material impact on its financial statements.

In April 2015, FASB issued an ASU to simplify the presentation of debt issuance costs. This ASU requires that debt issuance costs related to a recognized debt liability be presented in the balance sheet as a direct deduction from the carrying amount of that debt liability, consistent with debt discounts. Since the April 2015 ASU did not address the presentation or subsequent measurement of debt issuance costs related to line-of-credit arrangements, FASB issued an ASU in August 2015 that allows an entity to defer and present debt issuance costs related to these arrangements as an asset and subsequently amortize the debt issuance costs ratably over the term of the arrangement, regardless of whether there are any outstanding borrowings on the line-of-credit arrangement. For public entities, these ASUs are effective for annual periods beginning after December 15, 2015, and interim periods within those fiscal years. Early adoption is permitted for financial statements that have not been previously issued. FCX adopted these ASUs and retrospectively adjusted its previously issued financial statements. Upon adoption, FCX adjusted its December 31, 2014, balance sheet by decreasing other assets and long-term debt by \$121 million for debt issuance costs related to corresponding debt balances. FCX elected to continue presenting debt issuance costs (\$22 million as of December 31, 2015) for its revolving credit facility as a deferred charge (asset) because of the volatility of its borrowings and repayments under the facility.

In July 2015, FASB issued an ASU that simplifies the subsequent measurement of inventory by requiring entities to measure inventory at the lower of cost or net realizable value, except for inventory measured using the last-in, first-out (LIFO) or the retail inventory methods. Under the new guidance, entities are only required to compare the cost of inventory to one measure - net realizable value. Net realizable value is the estimated selling price in the ordinary course of business, less reasonably predictable costs of completion, disposal and transportation. For public entities, this ASU is effective for annual periods beginning after December 15, 2016, and interim periods within those fiscal years. Early adoption is permitted as of the beginning of an interim or annual reporting period. This ASU must be applied prospectively. FCX adopted this ASU effective July 1, 2015, and it had no impact on its results of operations.

In November 2015, FASB issued an ASU to simplify the presentation of deferred income taxes by requiring entities to classify all deferred tax assets and liabilities as noncurrent on the balance sheet, rather than separating deferred taxes into current and noncurrent amounts. For public entities, this ASU is effective for annual and interim periods beginning after December 15, 2016. Early adoption is permitted as of the beginning of an interim or annual reporting period. This ASU may be applied either prospectively to all deferred tax liabilities and assets or retrospectively to all periods presented. FCX adopted this ASU prospectively effective October 1, 2015, and prior periods were not retrospectively adjusted.

Reclassifications. As a result of adopting new accounting guidance in 2015, debt issuance costs as of December 31, 2014, have been reclassified to conform with the current year presentation.

NOTE 2. DISPOSITIONS AND ACQUISITIONS

Candelaria and Ojos del Salado Disposition. On November 3, 2014, FCX completed the sale of its 80 percent ownership interests in the Candelaria and Ojos del Salado copper mining operations and supporting infrastructure located in Chile to Lundin Mining Corporation (Lundin) for \$1.8 billion in cash, before closing adjustments, and contingent consideration of up to \$200 million. Contingent consideration is calculated as five percent of net copper revenues in any annual period over the ensuing five years when the average realized copper price exceeds \$4.00 per pound. Excluding contingent consideration, after-tax net proceeds totaled \$1.5 billion, and FCX recorded a gain of \$671 million (\$450 million to net loss attributable to common stockholders) associated with this transaction. The transaction had an effective date of June 30, 2014. FCX used the proceeds from this transaction to repay indebtedness.

This sale did not meet the criteria for classification as a discontinued operation under the April 2014 ASU issued by FASB, which FCX early adopted in first-quarter 2014. The following table provides balances of the major classes of assets and liabilities for the Candelaria and Ojos del Salado mines at November 3, 2014:

Current assets	\$	482
Long-term assets		1,155
Current liabilities		129
Long-term liabilities		89
Noncontrolling interests		243

The following table provides net income before income taxes and net income attributable to common stockholders for the Candelaria and Ojos del Salado mines:

	January 1, 2014, to November 3, 2014	Year Ended December 31, 2013
Net income before income taxes	\$ 270	\$ 689
Net income attributable to common stockholders	144	341

Eagle Ford Disposition. On June 20, 2014, FCX completed the sale of its Eagle Ford shale assets to a subsidiary of Encana Corporation for cash consideration of \$3.1 billion, before closing adjustments from the April 1, 2014, effective date. Under full cost accounting rules, the proceeds were recorded as a reduction of capitalized oil and gas properties, with no gain or loss recognition, except for \$84 million of deferred tax expense recorded in connection with the allocation of \$221 million of goodwill (for which deferred taxes were not previously provided) to the Eagle Ford shale assets. Approximately \$1.3 billion of proceeds from this transaction was placed in a like-kind exchange escrow and was used to reinvest in additional Deepwater Gulf of Mexico (GOM) oil and gas interests, as discussed below. The remaining proceeds were used to repay debt.

Deepwater GOM Acquisitions. On June 30, 2014, FCX completed the acquisition of oil and gas interests in the Deepwater GOM from a subsidiary of Apache Corporation, including interests in the Lucius and Heidelberg oil fields and several exploration leases, for \$918 million (\$451 million for oil and gas properties subject to amortization and \$477 million for costs not subject to amortization, including transaction costs and \$10 million of asset retirement costs). The Deepwater GOM acquisition was funded by the like-kind exchange escrow.

On September 8, 2014, FCX completed the acquisition of additional Deepwater GOM interests for \$496 million (\$509 million for oil and gas properties not subject to amortization, including purchase price adjustments and transaction costs), including an interest in the Vito oil discovery in the Mississippi Canyon area and a significant lease position in the Vito Basin area. This acquisition was funded in part with the remaining \$414 million of funds from the like-kind exchange escrow.

PXP and MMR Acquisitions. FCX acquired PXP on May 31, 2013, and MMR on June 3, 2013. These acquisitions added a portfolio of oil and gas assets to FCX's global mining business, creating a U.S.-based natural resources company. At the time of the acquisitions, FCX's portfolio of oil and gas assets included oil and natural gas production facilities in the GOM, Texas, onshore and offshore California, Louisiana and in central Wyoming, and a position in the Inboard Lower Tertiary/Cretaceous natural gas trend onshore in South Louisiana. The acquisitions have been accounted for under the acquisition method, with FCX as the acquirer. As further discussed in Note 8, FCX issued \$6.5 billion of unsecured senior notes in March 2013 for net proceeds of \$6.4 billion, which were used, together with borrowings under a \$4.0 billion unsecured five-year bank term loan, to fund the cash portion of the merger consideration for both transactions, to repay certain indebtedness of PXP and for general corporate purposes.

In the PXP acquisition, FCX acquired PXP for per-share consideration equivalent to 0.6531 shares of FCX common stock and \$25.00 in cash. FCX issued 91 million shares of its common stock and paid \$3.8 billion in cash (which included \$411 million for the value of the \$3 per share special dividend paid to PXP stockholders on May 31, 2013). Following is a summary of the \$6.6 billion purchase price for PXP:

Number of shares of PXP common stock acquired (millions)	132.280
Exchange ratio of FCX common stock for each PXP share	0.6531
	86.392
Shares of FCX common stock issued for certain PXP equity awards (millions)	4.769
Total shares of FCX common stock issued (millions)	91.161
Closing share price of FCX common stock at May 31, 2013	\$ 31.05
FCX stock consideration	\$ 2,831
Cash consideration	3,725 ^a
Employee stock-based awards, primarily cash-settled stock-based awards	83
Total purchase price	<u>\$ 6,639</u>

- a. Cash consideration includes the payment of \$25.00 in cash for each PXP share (\$3.3 billion), cash paid in lieu of any fractional shares of FCX common stock, cash paid for certain equity awards (\$7 million) and the value of the \$3 per share PXP special cash dividend (\$411 million) paid on May 31, 2013.

In the MMR acquisition, for each MMR share owned, MMR stockholders received \$14.75 in cash and 1.15 units of a royalty trust, which holds a 5 percent overriding royalty interest in future production from MMR's Inboard Lower Tertiary/Cretaceous exploration prospects that existed as of December 5, 2012, the date of the merger agreement. MMR conveyed the royalty interests to the royalty trust immediately prior to the effective time of the merger, and they were "carved out" of the mineral interests that were acquired by FCX and not considered part of purchase consideration.

Prior to June 3, 2013, FCX owned 500,000 shares of MMR's 5.75% Convertible Perpetual Preferred Stock, Series 2, which were accounted for under the cost method and recorded on FCX's balance sheet at \$432 million on May 31, 2013. Through its acquisition of PXP on May 31, 2013, FCX acquired 51 million shares of MMR's common stock, which had a fair value of \$848 million on that date based upon the closing market price of MMR's common stock (\$16.63 per share, *i.e.*, Level 1 measurement). As a result of FCX obtaining control of MMR on June 3, 2013, FCX remeasured its ownership interests in MMR to a fair value of \$1.4 billion, resulting in a gain of \$128 million that was recorded in 2013. Fair value was calculated using the closing quoted market price of MMR's common stock on June 3, 2013, of \$16.75 per share (*i.e.*, Level 1 measurement) and a valuation model using observable inputs (*i.e.*, Level 2 measurement) for the preferred stock. Following is a summary of the \$3.1 billion purchase price for MMR:

Number of shares of MMR common stock acquired (millions)		112.362 ^a
Cash consideration of \$14.75 per share	\$	14.75
Cash consideration paid by FCX	\$	1,657
Employee stock-based awards		63
Total		1,720
Fair value of FCX's investment in 51 million shares of MMR common stock acquired on May 31, 2013, through the acquisition of PXP		854
Fair value of FCX's investment in MMR's 5.75% Convertible Perpetual Preferred Stock, Series 2		554
Total purchase price	\$	3,128

a. Excludes 51 million shares of MMR common stock owned by FCX through its acquisition of PXP on May 31, 2013.

The following table summarizes the final purchase price allocations for PXP and MMR:

	PXP	MMR	Eliminations	Total
Current assets	\$ 1,193	\$ 98	\$ —	\$ 1,291
Oil and gas properties - full cost method:				
Subject to amortization	11,447	751	—	12,198
Not subject to amortization	9,401	1,711	—	11,112
Property, plant and equipment	261	1	—	262
Investment in MMR ^a	848	—	(848)	—
Other assets	12	382	—	394
Current liabilities	(906)	(174)	—	(1,080)
Debt (current and long-term)	(10,631)	(620)	—	(11,251)
Deferred income taxes ^b	(3,917)	—	—	(3,917)
Other long-term liabilities	(799)	(262)	—	(1,061)
Redeemable noncontrolling interest	(708)	(259)	—	(967)
Total fair value, excluding goodwill	6,201	1,628	(848)	6,981
Goodwill	438	1,500	—	1,938
Total purchase price	\$ 6,639	\$ 3,128	\$ (848)	\$ 8,919

- a. PXP owned 51 million shares of MMR common stock, which were eliminated in FCX's consolidated balance sheet at the acquisition date of MMR.
- b. Deferred income taxes have been recognized based on the estimated fair value adjustments to net assets using a 38 percent tax rate, which reflected a 35 percent federal statutory rate and a 3 percent weighted-average of the applicable statutory state tax rates (net of federal benefit).

In accordance with the acquisition method of accounting, the purchase price from FCX's acquisitions of both PXP and MMR has been allocated to the assets acquired, liabilities assumed and redeemable noncontrolling interest based on their estimated fair values on the respective acquisition dates. The fair value estimates were based on, but not limited to, quoted market prices, where available; expected future cash flows based on estimated reserve quantities; costs to produce and develop reserves; current replacement cost for similar capacity for certain fixed

assets; market rate assumptions for contractual obligations; appropriate discount rates and growth rates; and crude oil and natural gas forward prices. The excess of the total consideration over the estimated fair value of the amounts assigned to the identifiable assets acquired, liabilities assumed and redeemable noncontrolling interest was recorded as goodwill. Goodwill recorded in connection with the acquisitions is not deductible for income tax purposes.

The fair value measurement of the oil and gas properties, asset retirement obligations included in other liabilities (refer to Note 12 for further discussion) and redeemable noncontrolling interest were based, in part, on significant inputs not observable in the market (as discussed above) and thus represents a Level 3 measurement. The fair value measurement of long-term debt, including the current portion, was based on prices obtained from a readily available pricing source and thus represents a Level 2 measurement.

During second-quarter 2014, FCX finalized the purchase price allocations, which resulted in a decrease of \$5 million to oil and gas properties subject to amortization, an increase of \$25 million to oil and gas properties not subject to amortization, a net decrease of \$42 million to deferred income tax assets and an increase of \$22 million to goodwill.

Goodwill arose on these acquisitions principally because of limited drilling activities to date and the absence of production history and material reserve data associated with the very large estimated geologic potential of an emerging trend targeting deep-seated structures in the shallow waters of the GOM and onshore analogous to large discoveries in the Deepwater GOM and other proven basins' prospects. In addition, goodwill also resulted from the requirement to recognize deferred taxes on the difference between the fair value and the tax basis of the acquired assets.

A summary of changes in the carrying amount of goodwill follows:

Balance at January 1, 2013	\$	—
Acquisitions of PXP and MMR		1,916
Balance at December 31, 2013		1,916
Purchase accounting adjustments		22
Disposal of Eagle Ford (see above)		(221)
Impairment charge		(1,717)
Balance at December 31, 2014	\$	—

During fourth-quarter 2014, FCX conducted a goodwill impairment assessment because of the significant decline in oil prices, which resulted in an impairment charge of \$1.7 billion for the full carrying value of goodwill. Crude oil prices and FCX's estimates of oil reserves at December 31, 2014, represented the most significant assumptions used in FCX's evaluation of goodwill (*i.e.*, Level 3 measurement). Forward strip Brent oil prices used in FCX's estimates at December 31, 2014, ranged from approximately \$62 per barrel to \$80 per barrel for the years 2015 through 2021, compared with a range from approximately \$90 per barrel to \$98 per barrel at the acquisition date.

Refer to Note 16 for the revenue and operating (loss) income that FM O&G contributed to FCX's consolidated results for the years ended December 31, 2015 and 2014, and for the seven-month period from June 1, 2013, to December 31, 2013. FCX's acquisition-related costs for PXP and MMR totaled \$74 million in 2013 and were included in selling, general and administrative expenses in the consolidated statement of operations. In addition, FCX deferred debt issuance costs of \$96 million in connection with the debt financings for the acquisitions (refer to Note 8 for further discussion of the debt financings).

Redeemable Noncontrolling Interest - PXP. In 2011, PXP issued (i) 450,000 shares of Plains Offshore Operations Inc. (Plains Offshore, a consolidated subsidiary of FM O&G) 8% Convertible Preferred Stock (Preferred Stock) for gross proceeds of \$450 million and (ii) non-detachable warrants with an exercise price of \$20 per share to purchase in aggregate 9.1 million shares of Plains Offshore's common stock. In 2011, Plains Offshore also issued 87 million shares of Plains Offshore Class A common stock, which will be held in escrow until the conversion and cancellation of the Preferred Stock or the exercise of the warrants. In January 2014, Plains Offshore issued (i) 24,000 shares of Preferred Stock for gross proceeds of \$24 million and (ii) non-detachable warrants with an exercise price of \$20 per share to purchase in aggregate 0.5 million shares of Plains Offshore's common stock. Plains Offshore holds certain of FM O&G's oil and gas properties and assets located in the GOM in water depths of 500 feet or more, including the Lucius oil field and the Phobos discovery, but excluding the properties acquired by PXP in 2012 from BP

Exploration & Production Inc., BP America Production Company and Shell Offshore Inc. The Preferred Stock represents a 20 percent equity interest in Plains Offshore and is entitled to a dividend of 8 percent per annum, payable quarterly, of which 2 percent may be deferred (\$47 million of accumulated deferred dividends as of December 31, 2015). The preferred holders are entitled to vote on all matters on which Plains Offshore common stockholders are entitled to vote. The shares of Preferred Stock also fully participate, on an as-converted basis at four times, in cash dividends distributed to any class of common stockholders of Plains Offshore. Plains Offshore has not distributed any dividends to its common stockholders.

The holders of the Preferred Stock (preferred holders) have the right, at any time at their option, to convert any or all of such holder's shares of Preferred Stock and exercise any of the associated non-detachable warrants into shares of Class A common stock of Plains Offshore, at an initial conversion/exercise price of \$20 per share; the conversion price is subject to adjustment as a result of certain events. At any time on or after November 17, 2016, the fifth anniversary of the closing date, FM O&G may exercise a call right to purchase all, but not less than all, of the outstanding shares of Preferred Stock and associated non-detachable warrants for cash, at a price equal to a liquidation preference as defined in the agreement. At any time, a majority of the preferred holders may cause Plains Offshore to use its commercially reasonable efforts to consummate an exit event as defined in the agreement.

The non-detachable warrants are considered to be embedded derivative instruments for accounting purposes and have been assessed as not being clearly and closely related to the Preferred Stock. Therefore, the warrants are classified as a long-term liability in the accompanying consolidated balance sheets and are adjusted to fair value each reporting period with adjustments recorded in other income (expense).

The Preferred Stock of Plains Offshore is classified as temporary equity because of its redemption features and is therefore reported outside of permanent equity in FCX's consolidated balance sheets. The redeemable noncontrolling interest totaled \$764 million as of December 31, 2015, and \$751 million as of December 31, 2014. Remeasurement of the redeemable noncontrolling interest represents its initial carrying amount adjusted for any noncontrolling interest's share of net income (loss) or changes to the redemption value. Additionally, the carrying amount will be further increased by amounts representing dividends not currently declared or paid, but which are payable under the redemption features. Future mark-to-market adjustments to the redemption value, subject to a minimum balance of the original recorded value (\$708 million) on May 31, 2013, shall be reflected in retained earnings and earnings per share. Changes in the redemption value above the original recorded value are accreted over the period from the date FCX acquired PXP to the earliest redemption date. Because the redemption value has not exceeded the original recorded value, no amounts have been accreted.

Redeemable Noncontrolling Interest - MMR. Following FCX's acquisition of MMR, MMR's 8% Convertible Perpetual Preferred Stock and 5.75% Convertible Perpetual Preferred Stock, Series 1 (totaling \$259 million) converted during 2013 primarily at the make-whole conversion rates for which holders received cash of \$228 million and 17.7 million royalty trust units with a fair value of \$31 million at the acquisition date.

Unaudited Pro Forma Consolidated Financial Information. The following unaudited FCX consolidated pro forma financial information has been prepared to reflect the acquisitions of PXP and MMR. The unaudited pro forma financial information combines the historical statements of income of FCX, PXP and MMR (including the pro forma effects of PXP's GOM acquisition that was completed on November 30, 2012) for the year ended December 31, 2013, giving effect to the mergers as if they had occurred on January 1, 2012. The historical consolidated financial information for the year ended December 31, 2013, shown below has been adjusted to reflect factually supportable items that are directly attributable to the acquisitions.

Revenues	\$ 23,075
Operating income	6,267
Income from continuing operations	3,626
Net income attributable to common stockholders	2,825
 Net income per share attributable to common stockholders:	
Basic	\$ 2.71
Diluted	2.70

The above unaudited pro forma consolidated information has been prepared for illustrative purposes only and is not intended to be indicative of the results of operations that actually would have occurred, or the results of operations

expected in future periods, had the events reflected herein occurred on the date indicated. The most significant pro forma adjustments to income from continuing operations for the year ended December 31, 2013, were to exclude \$519 million of acquisition-related costs, the net tax benefit of \$199 million of acquisition-related adjustments and the \$128 million gain on the investment in MMR. Additionally, the pro forma consolidated information excluded a \$77 million gain on the sale of oil and gas properties reflected in MMR's results of operations prior to the acquisition because of the application of the full cost accounting method.

Cobalt Chemical Refinery Business. On March 29, 2013, FCX, through a newly formed consolidated joint venture, completed the acquisition of a cobalt chemical refinery in Kokkola, Finland, and the related sales and marketing business. The acquisition provides direct end-market access for the cobalt hydroxide production at Tenke. The joint venture operates under the name Freeport Cobalt, and FCX is the operator with an effective 56 percent ownership interest. The remaining effective ownership interest is held by FCX's partners in TFM, including 24 percent by Lundin and 20 percent by La Générale des Carrières et des Mines (Gécamines). Consideration paid was \$382 million, which included \$34 million for cash acquired, and was funded 70 percent by FCX and 30 percent by Lundin. Under the terms of the acquisition agreement, there is also the potential for additional consideration of up to \$110 million over a period of three years, contingent upon the achievement of revenue-based performance targets. As of December 31, 2015, no amount was recorded for this contingency because these targets are not expected to be achieved.

NOTE 3. OWNERSHIP IN SUBSIDIARIES AND JOINT VENTURES

Ownership in Subsidiaries. FMC is a fully integrated producer of copper and molybdenum, with mines in North America, South America and the Tenke minerals district in the Democratic Republic of Congo (DRC). At December 31, 2015, 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 an 85 percent interest in Morenci (refer to "Joint Ventures – Sumitomo") and owns 100 percent of the other North America mines. At December 31, 2015, 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, 2015, FMC owned an effective 56 percent interest in the Tenke minerals district in the DRC. At December 31, 2015, FMC's net assets totaled \$18.9 billion and its accumulated deficit totaled \$10.4 billion. FCX had no loans outstanding to FMC at December 31, 2015.

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 ventures. At December 31, 2015, PT-FI's net assets totaled \$5.6 billion and its retained earnings totaled \$5.4 billion. FCX had \$310 million in intercompany loans outstanding to PT-FI at December 31, 2015.

FCX owns 100 percent of the outstanding Atlantic Copper common stock. At December 31, 2015, Atlantic Copper's net liabilities totaled \$79 million and its accumulated deficit totaled \$489 million. FCX had \$248 million in intercompany loans outstanding to Atlantic Copper at December 31, 2015.

FCX owns 100 percent of FM O&G, which has a portfolio of oil and gas assets. At December 31, 2015, FM O&G's net liabilities totaled \$7.4 billion and its accumulated deficit totaled \$19.0 billion. FCX had \$6.6 billion in intercompany loans outstanding to FM O&G at December 31, 2015.

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.

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 2021 in Block A of PT-FI's COW, and, after 2021, 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 2021 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 \$10 million at December 31, 2015, and \$29 million at December 31, 2014.

Sumitomo. FCX owns an 85 percent undivided interest in Morenci via an unincorporated joint venture. The remaining 15 percent is owned by Sumitomo, a jointly owned subsidiary of Sumitomo Metal Mining Co., Ltd. (SMM) and Sumitomo Corporation. Each partner takes in kind its share of Morenci's production. FMC purchased 98 million pounds of Morenci's copper cathode from Sumitomo at market prices for \$244 million during 2015. FCX had a receivable from Sumitomo of \$10 million at December 31, 2015, and \$11 million at December 31, 2014.

In February 2016, FCX entered into a definitive agreement to sell a 13 percent undivided interest in its Morenci unincorporated joint venture to SMM (refer to Note 18 for further discussion).

NOTE 4. INVENTORIES, INCLUDING LONG-TERM MILL AND LEACH STOCKPILES

The components of inventories follow:

	December 31,	
	2015	2014
Current inventories:		
Total materials and supplies, net ^a	<u>\$ 1,869</u>	<u>\$ 1,886</u>
Mill stockpiles	\$ 137	\$ 86
Leach stockpiles	1,587	1,828
Total current mill and leach stockpiles	<u>\$ 1,724</u>	<u>\$ 1,914</u>
Raw materials (primarily concentrate)	\$ 220	\$ 288
Work-in-process	108	174
Finished goods	867	1,099
Total product inventories	<u>\$ 1,195</u>	<u>\$ 1,561</u>
Long-term inventories:		
Mill stockpiles	\$ 480	\$ 360
Leach stockpiles	1,791	1,819
Total long-term inventories ^b	<u>\$ 2,271</u>	<u>\$ 2,179</u>

a. Materials and supplies inventory was net of obsolescence reserves totaling \$29 million at December 31, 2015, and \$20 million at December 31, 2014.

b. Estimated metals in stockpiles not expected to be recovered within the next 12 months.

FCX recorded charges for adjustments to inventory carrying values of \$338 million (\$215 million for copper inventories and \$123 million for molybdenum inventories) for 2015, primarily because of lower copper and molybdenum prices (refer to Note 16 for inventory adjustments by business segment).

NOTE 5. PROPERTY, PLANT, EQUIPMENT AND MINING DEVELOPMENT COSTS, NET

The components of net property, plant, equipment and mining development costs follow:

	December 31,	
	2015	2014
Proven and probable mineral reserves	\$ 4,663	\$ 4,651
VBPP	1,037	1,042
Mining development and other	5,184	4,712
Buildings and infrastructure	7,451	5,100
Machinery and equipment	13,759	11,251
Mobile equipment	4,158	3,926
Construction in progress	3,999	6,802
Property, plant, equipment and mining development costs	<u>40,251</u>	<u>37,484</u>
Accumulated depreciation, depletion and amortization	(12,742)	(11,264)
Property, plant, equipment and mining development costs, net	<u><u>\$ 27,509</u></u>	<u><u>\$ 26,220</u></u>

FCX recorded \$2.2 billion for VBPP in connection with the FMC acquisition in 2007 and transferred \$10 million to proven and probable mineral reserves during 2015, \$2 million during 2014 and \$784 million prior to 2014. 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 \$157 million in 2015, \$148 million in 2014 and \$105 million in 2013.

Because of a decline in commodity prices, FCX made adjustments to its operating plans for its mining operations in the third and fourth quarters of 2015. Although FCX's long-term strategy of developing its mining resources to their full potential remains in place, the decline in copper and molybdenum prices has limited FCX's ability to invest in growth projects and caused FCX to make adjustments to its near-term plans by revising its strategy to protect liquidity while preserving its mineral resources and growth options for the longer term. Accordingly, operating plans were revised primarily to reflect: (a) the suspension of mining operations at the Miami mine in Arizona; (b) a 50 percent reduction in mining rates at the Tyrone mine in New Mexico; (c) the suspension of production at the Sierrita mine in Arizona; (d) adjustments to mining rates at other North America copper mines; (e) an approximate 50 percent reduction in mining and stacking rates at the El Abra mine in Chile; (f) an approximate 65 percent reduction in molybdenum production volumes at the Henderson molybdenum mine in Colorado; (g) capital cost reductions, including project deferrals associated with future development and expansion opportunities at the Tenke Fungurume minerals district in the DRC; and (h) reductions in operating, administrative and exploration costs, including workforce reductions.

In connection with the decline in copper and molybdenum prices and the revised operating plans discussed above, 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 approximately \$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 are consistent with 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.

NOTE 6. OTHER ASSETS

The components of other assets follow:

	December 31,	
	2015	2014
Disputed tax assessments: ^a		
Cerro Verde	\$ 254	\$ 232
PT-FI	209	279
Intangible assets ^b	317	334
Investments:		
Assurance bond ^c	118	115
PT Smelting ^d	112	107
Available-for-sale securities	47	46
Other	62	60
Long-term receivable for taxes ^e	280	63
Long-lead equipment	187	43
Loan to a DRC public electric utility	174	164
Legally restricted funds ^f	171	172
Deferred drillship costs	81	113
Rio Tinto's share of ARO	49	50
Loan to Gécamines (related party)	39	37
Other	142	141
Total other assets	<u>\$ 2,242</u>	<u>\$ 1,956</u>

a. Refer to Note 12 for further discussion.

b. Intangible assets were net of accumulated amortization totaling \$61 million at December 31, 2015, and \$62 million at December 31, 2014.

c. Relates to PT-FI's commitment for smelter development in Indonesia (refer to Note 13 for further discussion).

d. FCX'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 \$14 million at December 31, 2015, and \$24 million at December 31, 2014. Trade accounts receivable from PT Smelting totaled \$160 million at December 31, 2015, and \$182 million at December 31, 2014.

e. Includes tax overpayments and refunds not expected to be realized within the next 12 months (primarily at PT-FI, Cerro Verde and Tenke).

f. Includes \$169 million at December 31, 2015, and \$168 million at December 31, 2014, for AROs related to properties in New Mexico (refer to Note 12 for further discussion).

NOTE 7. ACCOUNTS PAYABLE AND ACCRUED LIABILITIES

Additional information regarding accounts payable and accrued liabilities follows:

	December 31,	
	2015	2014
Accounts payable		
Salaries, wages and other compensation	\$ 2,342	\$ 2,439
Other accrued taxes	232	373
Accrued interest ^a	202	137
Pension, postretirement, postemployment and other employee benefits ^b	165	166
Oil and gas royalty and revenue payable	132	106
Deferred revenue	53	76
Other	48	105
Total accounts payable and accrued liabilities	<u>\$ 3,355</u>	<u>\$ 3,653</u>

a. Third-party interest paid, net of capitalized interest, was \$570 million in 2015, \$637 million in 2014 and \$397 million in 2013.

b. Refer to Note 9 for long-term portion.

NOTE 8. DEBT

FCX's debt at December 31, 2015, included additions of \$210 million for unamortized fair value adjustments (primarily from the 2013 oil and gas acquisitions), and is net of reductions of \$129 million for unamortized net discounts and unamortized debt issuance costs; and at December 31, 2014, included additions of \$240 million for unamortized fair value adjustments, and is net of reductions of \$143 million for unamortized net discounts and unamortized debt issuance costs. The components of debt follow:

	December 31,	
	2015	2014
Bank term loan	\$ 3,032	\$ 3,036
Revolving credit facility	—	—
Lines of credit	442	474
Cerro Verde credit facility	1,781	402
Cerro Verde shareholder loans	259	—
Senior notes and debentures:		
Issued by FCX:		
2.15% Senior Notes due 2017	499	498
2.30% Senior Notes due 2017	747	745
2.375% Senior Notes due 2018	1,495	1,493
3.100% Senior Notes due 2020	995	993
4.00% Senior Notes due 2021	594	593
3.55% Senior Notes due 2022	1,987	1,985
3.875% Senior Notes due 2023	1,987	1,986
4.55% Senior Notes due 2024	843	842
5.40% Senior Notes due 2034	788	787
5.450% Senior Notes due 2043	1,973	1,972
Issued by Freeport-McMoRan Oil & Gas LLC (FM O&G LLC):		
6.125% Senior Notes due 2019	251	255
6½% Senior Notes due 2020	662	670
6.625% Senior Notes due 2021	281	284
6.75% Senior Notes due 2022	488	493
6⅞% Senior Notes due 2023	857	866
Issued by FMC:		
7⅛% Debentures due 2027	115	115
9½% Senior Notes due 2031	128	129
6⅓% Senior Notes due 2034	116	116
Other (including equipment capital leases and other short-term borrowings)	108	115
Total debt	<u>20,428</u>	<u>18,849</u>
Less current portion of debt	<u>(649)</u>	<u>(478)</u>
Long-term debt	<u>\$ 19,779</u>	<u>\$ 18,371</u>

Bank Term Loan. In February 2013, FCX entered into an agreement for a \$4.0 billion unsecured bank term loan (Term Loan) in connection with the acquisitions of PXP and MMR. Upon closing the PXP acquisition, FCX borrowed \$4.0 billion under the Term Loan, and FM O&G LLC (a wholly owned subsidiary of FM O&G and the successor entity of PXP) joined the Term Loan as a borrower. In February and December 2015, FCX's Term Loan was modified to amend the maximum total leverage ratio. In addition, in conjunction with the February 2015 amendment, the Term Loan amortization schedule was extended such that, as amended, the Term Loan's scheduled payments total \$205 million in 2016, \$272 million in 2017, \$1.0 billion in 2018, \$313 million in 2019 and \$1.3 billion in 2020, compared with the previous amortization schedule of \$650 million in 2016, \$200 million in 2017 and \$2.2 billion in 2018. At FCX's option, the Term Loan bears interest at either an adjusted London Interbank Offered Rate (LIBOR) or an alternate base rate (ABR) (as defined under the Term Loan agreement) plus a spread determined by reference to FCX's credit ratings (LIBOR plus 1.75 percent or ABR plus 0.75 percent at December 31, 2015; as of February 12, 2016, LIBOR plus 2.25 percent or ABR plus 1.25 percent). The interest rate on the Term Loan was 2.18 percent at December 31, 2015. In February 2016, the Term Loan was amended (refer to Note 18 for further discussion).

Revolving Credit Facility. In May 2014, FCX, PT-FI and FM O&G LLC amended the senior unsecured \$3.0 billion revolving credit facility to extend the maturity date one year to May 31, 2019, and increase the aggregate facility amount from \$3.0 billion to \$4.0 billion, with \$500 million available to PT-FI. FCX, PT-FI and FM O&G LLC had

entered into the \$3.0 billion revolving credit facility on May 31, 2013 (upon completion of the acquisition of PXP). In February and December 2015, FCX modified the revolving credit facility to amend the maximum total leverage ratio. At December 31, 2015, FCX had no borrowings outstanding and \$36 million of letters of credit issued under the revolving credit facility, resulting in availability of approximately \$4 billion, of which \$1.5 billion could be used for additional letters of credit. In February 2016, the revolving credit facility was amended (refer to Note 18 for further discussion).

Interest on the revolving credit facility (LIBOR plus 1.75 percent or ABR plus 0.75 percent at December 31, 2015; as of February 12, 2016, LIBOR plus 2.25 percent or ABR plus 1.25 percent) is determined by reference to FCX's credit ratings.

Lines of Credit. At December 31, 2015, FCX had \$442 million outstanding on its uncommitted and short-term lines of credit with certain financial institutions. These unsecured lines of credit allow FCX to borrow at a spread over LIBOR or the respective financial institution's cost of funds with terms and pricing that are generally more favorable than FCX's revolving credit facility. The weighted-average effective interest rate on the lines of credit was 1.36 percent at December 31, 2015, and 1.29 percent at December 31, 2014.

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. The credit facility allows for term loan borrowings up to the full amount of the facility, less any amounts issued and outstanding under a \$500 million letter of credit sublimit. Interest on amounts drawn under the term loan is based on LIBOR plus a spread (2.40 percent at December 31, 2015) based on Cerro Verde's total net debt to EBITDA ratio as defined in the agreement. At December 31, 2015, term loan borrowings under the facility totaled \$1.8 billion and were used to fund a portion of Cerro Verde's expansion project and for Cerro Verde's general corporate purposes. The credit facility amortizes in four installments in amounts necessary for the aggregate borrowings and outstanding letters of credit not to exceed 85 percent of the \$1.8 billion commitment on September 30, 2017, 70 percent on March 31, 2018, and 35 percent on September 30, 2018, with the remaining balance due on the maturity date of March 10, 2019. At December 31, 2015, no letters of credit were issued under Cerro Verde's credit facility. The interest rate on Cerro Verde's credit facility was 2.82 percent at December 31, 2015.

Cerro Verde Shareholder Loans. In December 2014, Cerro Verde entered into loan agreements with its largest shareholders for borrowings up to \$800 million. Cerro Verde can designate all or a portion of the shareholder loans as subordinated. If the loans are not designated as subordinated, they bear interest at LIBOR plus the current spread on Cerro Verde's credit facility. If they are designated as subordinated, they bear interest at the same rate plus 0.5 percent. The loans mature on December 22, 2019, unless at that time there is senior financing associated with the Cerro Verde expansion project that is senior to the shareholder loans, in which case the shareholder loans mature two years following the maturity of the senior financing. During 2015, Cerro Verde borrowed \$600 million under these shareholder loans (including \$341 million from FMC, which is eliminated in consolidation).

Senior Notes issued by FCX. In November 2014, FCX sold \$750 million of 2.30% Senior Notes due 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. The 2.30% Senior Notes and the 4.00% Senior Notes are redeemable in whole or in part, at the option of FCX, at a make-whole redemption price. The 4.55% Senior Notes are redeemable in whole or in part, at the option of FCX, at a make-whole redemption price prior to August 14, 2024, and thereafter at 100 percent of principal. The 5.40% Senior Notes are redeemable in whole or in part, at the option of FCX, at a make-whole redemption price prior to May 14, 2034, and thereafter at 100 percent of principal. FCX used the net proceeds from these senior notes to repay certain of its outstanding debt.

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. The 2.375% Senior Notes and the 3.100% Senior Notes are redeemable in whole or in part, at the option of FCX, at a make-whole redemption price. The 3.875% Senior Notes are redeemable in whole or in part, at the option of FCX, at a make-whole redemption price prior to December 15, 2022, and thereafter at 100 percent of principal. The 5.450% Senior Notes are redeemable in whole or in part, at the option of FCX, at a make-whole redemption price prior to September 15, 2042, and thereafter at 100 percent of principal.

In February 2012, FCX sold \$500 million of 2.15% Senior Notes due 2017 and \$2 billion of 3.55% Senior Notes due 2022 for total net proceeds of \$2.47 billion. The 2.15% Senior Notes are redeemable in whole or in part, at the option of FCX, at a make-whole redemption price prior to the redemption date. The 3.55% Senior Notes are redeemable in whole or in part, at the option of FCX, at a make-whole redemption price prior to December 1, 2021, and thereafter at 100 percent of principal.

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 a number of redemptions, as of December 31, 2015, the stated value of these notes totaled \$2.3 billion, which was increased by \$197 million to reflect the remaining unamortized acquisition-date fair market value adjustments that are being amortized over the term of the senior notes and recorded as a reduction of interest expense. These senior notes are redeemable in whole or in part, at the option of FM O&G LLC, at make-whole redemption prices prior to the dates stated below, and beginning on the dates stated below at specified redemption prices. Upon completion of the acquisition of PXP, FCX guaranteed these senior notes.

Debt Instrument	Date
6.125% Senior Notes due 2019	June 15, 2016
6½% Senior Notes due 2020	November 15, 2015
6.625% Senior Notes due 2021	May 1, 2016
6.75% Senior Notes due 2022	February 1, 2017
6 ⁷ / ₈ % Senior Notes due 2023	February 15, 2018

Additionally, in connection with the acquisition of MMR, FCX assumed MMR's 11.875% Senior Notes due 2014, 4% Convertible Senior Notes due 2017 and 5¼% Convertible Senior Notes due 2013 with a total stated value of \$558 million, which was increased by \$62 million to reflect the acquisition-date fair market value of these obligations. During 2013, all of the 11.875% Senior Notes due 2014 were redeemed, and holders of 4% Convertible Senior Notes due 2017 and 5¼% Convertible Senior Notes due 2013 converted their notes into merger consideration totaling \$306 million, including cash payments of \$270 million and 21.0 million royalty trust units with a fair value of \$36 million at the acquisition date. At December 31, 2015 and 2014, there were no outstanding amounts in connection with MMR's senior notes.

Early Extinguishments of Debt. A summary of debt extinguishments during 2014 resulting from redemptions and tender offers follows:

	Principal Amount	Purchase Accounting Fair Value Adjustments	Book Value	(Loss) Gain
1.40% Senior Notes due 2015	\$ 500	\$ —	\$ 500	\$ (1)
6.125% Senior Notes due 2019	513	40	553	(2)
8.625% Senior Notes due 2019	400	41	441	24
7.625% Senior Notes due 2020	300	32	332	14
6½% Senior Notes due 2020	883	79	962	10
6.625% Senior Notes due 2021	339	31	370	3
6.75% Senior Notes due 2022	551	57	608	8
6 ⁷ / ₈ % Senior Notes due 2023	722	84	806	21
	<u>\$ 4,208</u>	<u>\$ 364</u>	<u>\$ 4,572</u>	<u>\$ 77</u>

In addition, FCX recorded a loss on early extinguishment of debt of \$4 million associated with the modification of its revolving credit facility in May 2014 and for fees related to the tender offers in December 2014.

In 2013, FCX completed the following transactions that resulted in a net loss on early extinguishment of debt of \$35 million: (i) the termination of its \$9.5 billion acquisition bridge loan facility, which was entered into in December 2012 to provide interim financing for the acquisitions of PXP and MMR but was replaced with other financing, that resulted in a loss of \$45 million; (ii) the repayment of the \$3.9 billion outstanding under PXP's amended credit facility and the redemption of all of PXP's 7⁵/₈% Senior Notes due 2018 for \$415 million, which did not result in a

gain or loss; partially offset by (iii) the redemption of MMR's remaining outstanding 11.875% Senior Notes due 2014 for \$299 million, which resulted in a gain of \$10 million.

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 Term Loan and revolving credit facility contain customary affirmative covenants and representations, and also contain 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 all or substantially all of the assets of FCX and its subsidiaries, taken as a whole. FCX's Term Loan and revolving credit facility also contain financial ratios governing maximum total leverage and minimum interest coverage. Following the December 2015 amendment, FCX's leverage ratio (Net Debt/EBITDA, as defined in the credit agreement) cannot exceed 5.5x at December 31, 2015, 5.9x for the quarters ending March 31, 2016, and June 30, 2016, and declining to 5.0x by the quarter ending December 31, 2016, 4.25x in 2017 and 3.75x thereafter. The December 2015 amendment also increases the interest rate spreads under specified conditions. Additionally, the Term Loan's December 2015 amendment requires prepayment of the Term Loan with 50 percent of the net proceeds of certain asset dispositions. In February 2016, the Term Loan and revolving credit facility were amended (refer to Note 18 for further discussion). FCX's senior notes contain limitations on liens. At December 31, 2015, 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, 2015, total \$649 million in 2016, \$1.8 billion in 2017, \$3.4 billion in 2018, \$1.4 billion in 2019, \$2.9 billion in 2020 and \$10.2 billion thereafter.

NOTE 9. OTHER LIABILITIES, INCLUDING EMPLOYEE BENEFITS

Information regarding other liabilities follows:

	December 31,	
	2015	2014
Pension, postretirement, postemployment and other employment benefits ^a	\$ 1,260	\$ 1,430
Provision for tax positions	152	157
Legal matters	77	63
Insurance claim reserves	59	56
Other	108	155
Total other liabilities	<u>\$ 1,656</u>	<u>\$ 1,861</u>

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 and liability studies 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. FCX's investment objective emphasizes

the need to maintain a well-diversified investment program through both the allocation of the Master Trust assets among 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 43 percent equity investments (primarily global equities), 46 percent fixed income (primarily long-term treasury STRIPS or "separate trading or registered 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 11 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 returns 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 7.25 percent per annum beginning January 1, 2016. The 7.25 percent estimation was based on a passive return on a compound basis of 6.75 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 income or expense, 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 expense 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.

Other FCX Plans. In 2004, FCX established an unfunded Supplemental Executive Retirement Plan (SERP) for its two most senior executive officers. The SERP provides for retirement benefits payable in the form of a joint and survivor annuity or an equivalent lump sum. The annuity will equal a percentage of the executive's highest average compensation for any consecutive three-year period during the five years immediately preceding 25 years of credited service. The SERP benefit will be reduced by the value of all benefits paid or due under any defined benefit or defined contribution plan sponsored by FM Services Company, FCX's wholly owned subsidiary, FCX or its predecessor, but not including accounts funded exclusively by deductions from participant's pay. One of the executive officers retired in December 2015 and will receive a lump sum payment of \$27 million in 2016.

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 13,726 rupiah to one U.S. dollar on December 31, 2015, and 12,378 rupiah to one U.S. dollar on December 31, 2014. 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 disclosures include 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, 2016. 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.

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,	
	2015	2014
Projected benefit obligation	\$ 2,139	\$ 2,221
Accumulated benefit obligation	2,037	2,090
Fair value of plan assets	1,399	1,433

Information on the FCX (including FMC's plans and FCX's SERP plans) and PT-FI plans as of December 31 follows:

	FCX		PT-FI	
	2015	2014	2015	2014
Change in benefit obligation:				
Benefit obligation at beginning of year	\$ 2,179	\$ 1,871	\$ 318	\$ 259
Service cost	36	30	26	22
Interest cost	87	92	23	23
Actuarial (gains) losses	(118)	278	(7)	30
Foreign exchange gains	(2)	(2)	(32)	(7)
Special retirement benefits ^a	22	—	—	—
Benefits paid	(100)	(90)	(10)	(9)
Benefit obligation at end of year	2,104	2,179	318	318
Change in plan assets:				
Fair value of plan assets at beginning of year	1,416	1,350	185	124
Actual return on plan assets	(26)	151	6	20
Employer contributions ^b	90	6	42	55
Foreign exchange losses	(1)	(1)	(19)	(5)
Benefits paid	(100)	(90)	(10)	(9)
Fair value of plan assets at end of year	1,379	1,416	204	185
Funded status	\$ (725)	\$ (763)	\$ (114)	\$ (133)
Accumulated benefit obligation	\$ 2,001	\$ 2,048	\$ 175	\$ 168
Weighted-average assumptions used to determine benefit obligations:				
Discount rate	4.60%	4.10%	9.00%	8.25%
Rate of compensation increase	3.25%	3.25%	9.40%	9.00%
Balance sheet classification of funded status:				
Other assets	\$ 8	\$ 8	\$ —	\$ —
Accounts payable and accrued liabilities	(35)	(4)	—	—
Other liabilities	(698)	(767)	(114)	(133)
Total	\$ (725)	\$ (763)	\$ (114)	\$ (133)

- a. Resulted from revised mine operating plans and reductions in the workforce (refer to Note 5 for further discussion).
- b. Employer contributions for 2016 are expected to approximate \$38 million for the FCX plans and \$38 million for the PT-FI plan (based on a December 31, 2015, exchange rate of 13,726 Indonesian rupiah to one U.S. dollar).

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:

	2015	2014	2013
Weighted-average assumptions:^a			
Discount rate	4.10%	5.00%	4.10%
Expected return on plan assets	7.25%	7.50%	7.50%
Rate of compensation increase	3.25%	3.75%	3.75%
Service cost	\$ 36	\$ 30	\$ 30
Interest cost	87	92	77
Expected return on plan assets	(102)	(98)	(95)
Amortization of prior service credit	—	(1)	—
Amortization of net actuarial losses	45	28	38
Special retirement benefits	22	—	—
Net periodic benefit cost	\$ 88	\$ 51	\$ 50

a. The assumptions shown relate only to the FMC plans.

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:

	2015	2014	2013
Weighted-average assumptions:			
Discount rate	8.25%	9.00%	6.25%
Expected return on plan assets	7.75%	7.75%	7.50%
Rate of compensation increase	9.00%	9.00%	8.00%
Service cost	\$ 26	\$ 22	\$ 20
Interest cost	23	23	14
Expected return on plan assets	(14)	(10)	(10)
Amortization of prior service cost	3	3	—
Amortization of net actuarial loss	6	8	8
Net periodic benefit cost	\$ 44	\$ 46	\$ 32

Included in accumulated other comprehensive loss are the following amounts that have not been recognized in net periodic pension cost as of December 31:

	2015		2014	
			After Taxes and Noncontrolling Interests	
	Before Taxes	Noncontrolling Interests	Before Taxes	Noncontrolling Interests
Prior service costs	\$ 23	\$ 12	\$ 28	\$ 15
Net actuarial loss	697	426	749	456
	\$ 720	\$ 438	\$ 777	\$ 471

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 2016 net periodic pension cost for actuarial losses is \$47 million (\$29 million net of tax and noncontrolling interests).

FCX does not expect to have any plan assets returned to it in 2016. 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).

A summary of the fair value hierarchy for pension plan assets associated with the FCX plans follows:

	Fair Value at December 31, 2015				
	Total	Level 1	Level 2	Level 3	
Commingled/collective funds:					
Global equity	\$ 399	\$ —	\$ 399	\$ —	
Fixed income securities	129	—	129	—	
Global fixed income securities	101	—	101	—	
Real estate property	66	—	—	66	
Emerging markets equity	60	—	60	—	
U.S. small-cap equity	56	—	56	—	
International small-cap equity	56	—	56	—	
U.S. real estate securities	55	—	55	—	
Short-term investments	25	—	25	—	
Fixed income:					
Government bonds	215	—	215	—	
Corporate bonds	145	—	145	—	
Private equity investments	31	—	—	31	
Other investments	39	1	38	—	
Total investments	<u>1,377</u>	<u>\$ 1</u>	<u>\$ 1,279</u>	<u>\$ 97</u>	
Cash and receivables	6				
Payables	(4)				
Total pension plan net assets	<u><u>\$ 1,379</u></u>				

	Fair Value at December 31, 2014				
	Total	Level 1	Level 2	Level 3	
Commingled/collective funds:					
Global equity	\$ 487	\$ —	\$ 487	\$ —	
Global fixed income securities	106	—	106	—	
Fixed income securities	99	—	99	—	
U.S. small-cap equity	69	—	69	—	
U.S. real estate securities	54	—	54	—	
Real estate property	54	—	—	54	
Short-term investments	8	—	8	—	
Open-ended mutual funds:					
Emerging markets equity	38	38	—	—	
Mutual funds:					
Emerging markets equity	25	25	—	—	
Fixed income:					
Government bonds	244	—	244	—	
Corporate bonds	148	—	148	—	
Private equity investments	39	—	—	39	
Other investments	35	—	35	—	
Total investments	<u>1,406</u>	<u>\$ 63</u>	<u>\$ 1,250</u>	<u>\$ 93</u>	
Cash and receivables	19				
Payables	(9)				
Total pension plan net assets	<u><u>\$ 1,416</u></u>				

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 net asset value per unit of the fund. For most of these funds, the majority of the underlying assets are actively traded securities; however, the unit level is considered to be at the fund level. These funds (except the real estate property funds) require less than a month's notice for redemptions and, as such, are classified within Level 2 of the fair value hierarchy. Real estate property funds are valued at net realizable value 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 funds are allowed once per quarter, subject to available cash and, as such, are classified within Level 3 of the fair value hierarchy.

Fixed income investments include government and corporate bonds held directly by the Master Trust or through commingled funds. 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.

Private equity investments are valued at net realizable value using information from general partners and are classified within Level 3 of the fair value hierarchy because of the inherent restrictions on redemptions that may affect the ability to sell the investments at their net asset value in the near term.

Open-ended mutual funds were managed by registered investment companies and were valued at the daily published net asset value of shares/units held. Because redemptions and purchases of shares/units occur at the net asset value without any adjustments to the published net asset value that was provided on an ongoing basis (active-market criteria are met), these investments were classified within Level 1 of the fair value hierarchy.

Mutual funds were valued at the closing price reported on the active market on which the individual securities were traded and, as such, are classified within Level 1 of the fair value hierarchy.

A summary of changes in the fair value of FCX's Level 3 pension plan assets for the years ended December 31 follows:

	Real Estate Property	Private Equity Investments	Total
Balance at January 1, 2014	\$ 47	\$ 43	\$ 90
Actual return on plan assets:			
Realized gains	2	—	2
Net unrealized gains (losses) related to assets still held at the end of the year	6	(1)	5
Purchases	—	1	1
Sales	(1)	—	(1)
Settlements, net	—	(4)	(4)
Balance at December 31, 2014	54	39	93
Actual return on plan assets:			
Realized gains	2	—	2
Net unrealized gains (losses) related to assets still held at the end of the year	11	(5)	6
Purchases	—	1	1
Sales	(1)	—	(1)
Settlements, net	—	(4)	(4)
Balance at December 31, 2015	\$ 66	\$ 31	\$ 97

A summary of the fair value hierarchy for pension plan assets associated with the PT-FI plan follows:

	Fair Value at December 31, 2015			
	Total	Level 1	Level 2	Level 3
Common stocks	\$ 43	\$ 43	\$ —	\$ —
Government bonds	41	41	—	—
Mutual funds	12	12	—	—
Total investments	96	\$ 96	\$ —	\$ —
Cash and receivables ^a	108			
Total pension plan net assets	\$ 204			

	Fair Value at December 31, 2014			
	Total	Level 1	Level 2	Level 3
Common stocks	\$ 43	\$ 43	\$ —	\$ —
Government bonds	27	27	—	—
Mutual funds	14	14	—	—
Total investments	84	<u>\$ 84</u>	<u>\$ —</u>	<u>\$ —</u>
Cash and receivables ^a	101			
Total pension plan net assets	<u>\$ 185</u>			

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 net realizable value or reflective of future fair values. Furthermore, while FCX believes its valuation techniques are appropriate and consistent with 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.

The expected benefit payments for FCX's and PT-FI's pension plans follow:

	FCX	PT-FI ^a
2016	\$ 155	\$ 20
2017	140	12
2018	110	22
2019	113	28
2020	115	37
2021 through 2025	610	264

a. Based on a December 31, 2015, exchange rate of 13,726 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 \$15 million (included in accounts payable and accrued liabilities) and a long-term portion of \$144 million (included in other liabilities) at December 31, 2015, and a current portion of \$17 million and a long-term portion of \$162 million at December 31, 2014. 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 4.10 percent at December 31, 2015, and 3.60 percent at December 31, 2014. Expected benefit payments for these plans total \$15 million for 2016, \$16 million for 2017, \$14 million for 2018, \$15 million for 2019, \$14 million for 2020 and \$59 million for 2021 through 2025.

The net periodic benefit cost charged to operations for FCX's postretirement benefits totaled \$6 million in 2015, \$7 million in 2014 and \$9 million in 2013 (primarily for interest costs). The discount rate used to determine net periodic benefit cost and the components of net periodic benefit cost for FCX's postretirement benefits was 3.60 percent in 2015, 4.30 percent in 2014 and 3.50 percent in 2013. The medical-care trend rates assumed the first year trend rate was 7.50 percent at December 31, 2015, 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 \$4 million (included in accounts payable and accrued liabilities) and a long-term portion of \$30 million (included in other liabilities) at December 31, 2015, and a current portion of \$6 million and a long-term portion of \$38 million at December 31, 2014. 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 \$78 million (\$35 million included in accounts payable and accrued liabilities and \$43 million included in other liabilities) at December 31, 2015, and \$69 million (included in other liabilities) at December 31, 2014.

The costs charged to operations for employee savings plans totaled \$98 million in 2015 (of which \$13 million was capitalized to oil and gas properties), \$79 million in 2014 (of which \$11 million was capitalized to oil and gas properties) and \$66 million in 2013 (of which \$5 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.

Restructuring Charges. Because of a decline in commodity prices, FCX made adjustments to its operating plans for its mining operations in the third and fourth quarters of 2015 (refer to Note 5 for further discussion). As a result of these revisions to its operating plans, FCX recorded restructuring charges to production costs in 2015 of \$46 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 1.85 billion shares, consisting of 1.8 billion shares of common stock and 50 million shares of preferred stock.

Common Stock. 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 206 million shares of its common stock at an average price of \$9.53 per share under these programs, which generated gross proceeds of approximately \$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 million shares of its common stock, which generated proceeds of \$29 million (after \$0.3 million of commissions and expenses). FCX used the net proceeds for general corporate purposes, including the repayment of amounts outstanding under its revolving credit facility and other borrowings, and the financing of working capital and capital expenditures.

The Board declared a supplemental cash dividend of \$1.00 per share, which was paid in July 2013, and a one-time special cash dividend of \$0.1105 per share related to the settlement of the shareholder derivative litigation (refer to Note 12 for further discussion), 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. 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.

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, 2013	\$ (507)	\$ (4)	\$ 5	\$ (506)
Amounts arising during the period ^{a,b}	67	(1)	—	66
Amounts reclassified ^c	30	—	5	35
Balance at December 31, 2013	(410)	(5)	10	(405)
Amounts arising during the period ^{a,b}	(162)	(1)	—	(163)
Amounts reclassified ^c	24	—	—	24
Balance at December 31, 2014	(548)	(6)	10	(544)
Amounts arising during the period ^{a,b}	3	—	—	3
Amounts reclassified ^c	38	—	—	38
Balance at December 31, 2015	\$ (507)	\$ (6)	\$ 10	\$ (503)

- a. Includes net actuarial gains (losses), net of noncontrolling interest, totaling \$126 million for 2013, \$(252) million for 2014 and \$(7) million for 2015. The year 2013 also included \$33 million for prior service costs.
- b. Includes tax (provision) benefits totaling \$(37) million for 2013, \$89 million for 2014 and \$2 million for 2015.
- c. Includes amortization primarily related to actuarial losses, net of taxes of \$17 million for 2013, \$14 million for 2014 and \$16 million for 2015.

Stock Award Plans. FCX currently has awards outstanding under various stock-based compensation plans. The stockholder-approved 2006 Stock Incentive Plan (the 2006 Plan) provides for the issuance of stock options, SARs, restricted stock, RSUs, PSUs and other stock-based awards for up to 74 million common shares. FCX's stockholders approved amendments to the 2006 Plan in 2007 primarily to increase the number of shares available for grants, and in 2010, to permit grants to outside directors. As of December 31, 2015, 12.2 million shares were available for grant under the 2006 Plan, and no shares were available under other plans.

In connection with the restructuring of an executive employment arrangement, a special retention award of one million RSUs was granted in December 2013. The RSUs are fully vested and the related shares of common stock will be delivered to the executive upon separation of service, along with a cash payment for accumulated dividends. With respect to stock options previously granted to this executive, such awards became fully vested. With respect to performance-based awards previously granted to this executive, the service requirements are considered to have been satisfied, and the vesting of any such awards shall continue to be contingent upon the achievement of all performance conditions set forth in the award agreements. In connection with the restructuring, FCX recorded a \$37 million charge to selling, general and administrative expenses in 2013.

Stock-Based Compensation Cost. Compensation cost charged against earnings for stock-based awards for the years ended December 31 follows:

	2015	2014	2013
Selling, general and administrative expenses	\$ 67	\$ 79	\$ 145
Production and delivery	18	28	28
Capitalized costs	11	23	13
Total stock-based compensation	96	130	186
Less capitalized costs	(11)	(23)	(13)
Tax benefit and noncontrolling interests' share	(32)	(42)	(66)
Impact on net (loss) income	\$ 53	\$ 65	\$ 107

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 after retirement. Therefore, on the date of grant, FCX accelerates one year of amortization for retirement-eligible employees. Stock options granted prior to February 2012 provide for accelerated vesting if there is a change of control (as defined in the award agreements). Stock options granted after that date 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.

A summary of options and SARs outstanding as of December 31, 2015, including 1,321,029 SARs, and activity during the year ended December 31, 2015, 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	45,929,739	\$ 35.65		
Granted	5,450,000	18.96		
Exercised	(195,326)	15.61		
Expired/Forfeited	(1,880,534)	30.15		
Balance at December 31	<u>49,303,879</u>	34.10	<u>4.8</u>	<u>\$ —^a</u>
Vested and exercisable at December 31	<u>40,235,301</u>	<u>\$ 35.78</u>	<u>4.0</u>	<u>\$ —^a</u>

a. At December 31, 2015, all outstanding stock options and SARs have exercise prices greater than the market price of FCX's common stock.

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:

	2015	2014	2013
Weighted-average assumptions used to value stock option awards:			
Expected volatility	37.9%	36.6%	48.9%
Expected life of options (in years)	5.17	4.92	4.66
Expected dividend rate	4.5%	3.5%	3.3%
Risk-free interest rate	1.7%	1.7%	0.7%
Weighted-average grant-date fair value (per share)	\$ 4.30	\$ 7.43	\$ 10.98
Intrinsic value of options exercised	\$ 1	\$ 17	\$ 10
Fair value of options vested	\$ 50	\$ 76	\$ 101

As of December 31, 2015, FCX had \$31 million of total unrecognized compensation cost related to unvested stock options expected to be recognized over a weighted-average period of approximately 1.8 years.

Stock-Settled PSUs and RSUs. Beginning in 2014, FCX's executive officers were granted PSUs that vest after three years. The final number of shares to be issued to the executive officers will be 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 344 thousand in 2014, of which the executive officers will earn from 0 percent to 200 percent.

Prior to 2014, the portion of each executive officer's annual bonus exceeding three times such officer's base salary was to be paid in performance-based RSUs. The performance-based RSUs were a component of an annual incentive award pool that was calculated as a percentage of FCX's consolidated operating cash flows adjusted for changes in working capital and other tax payments for the preceding year. The performance-based RSUs granted in 2013 as part of the 2012 annual bonus vest after three years, subject to FCX attaining a five-year average return on investment (a performance condition defined in the award agreement) of at least 6 percent and subject to a 20 percent reduction if FCX performs below a group of its peers as defined in the award agreement.

All of FCX's executive officers are retirement eligible, and for the 2015 awards, FCX charged the cost of the PSU awards to expense in the year of grant because they are non-forfeitable. For the performance-based RSUs, the cost was charged to expense in the year the related operating cash flows were generated, as performance of services was only required in the calendar year preceding the date of grant.

In February 2015 and 2014, FCX granted RSUs that vest over a period of three years to certain employees, and in February 2013, FCX granted RSUs that cliff vest at the end of three years to certain employees.

FCX also grants other RSUs that generally vest over a period of four years to its directors. The fair value of the RSUs is amortized over the four-year 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. In addition, for those awards granted prior to 2015, interest accrues on accumulated dividends and is paid if the stock-settled RSUs vest. A summary of outstanding stock-settled RSUs and PSUs as of December 31, 2015, and activity during the year ended December 31, 2015, follows:

	Number of Awards	Weighted- Average Grant- Date Fair Value Per Award	Aggregate Intrinsic Value
Balance at January 1	5,805,145	\$ 33.57	
Granted	2,729,750	16.77	
Vested	(1,150,589)	34.10	
Forfeited	(164,006)	34.35	
Balance at December 31	<u>7,220,300</u>	<u>27.12</u>	<u>\$ 49</u>

The total fair value of stock-settled RSUs and PSUs granted was \$46 million during 2015, \$67 million during 2014 and \$125 million during 2013. The total intrinsic value of stock-settled RSUs vested was \$22 million during 2015, \$15 million during 2014 and \$12 million during 2013. As of December 31, 2015, FCX had \$28 million of total unrecognized compensation cost related to unvested stock-settled RSUs expected to be recognized over approximately 1.4 years.

Cash-Settled PSUs and RSUs. Beginning in 2015, certain members of FM O&G's senior management were granted cash-settled PSUs that vest over three years. The cash-settled PSUs contain performance conditions linked to oil and gas production and FCX's total shareholder return compared to the total shareholder return of a peer group (each of which is weighted 50 percent). The total grant date target shares related to the 2015 cash-settled PSU grant were 582 thousand, of which FM O&G's senior management will earn from 50 percent to 200 percent.

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).

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. In addition, for those awards granted prior to 2015, interest accrues on accumulated dividends and is paid if the cash-settled RSUs vest. A summary of outstanding cash-settled RSUs and PSUs as of December 31, 2015, and activity during the year ended December 31, 2015, follows:

	Number of Awards	Weighted- Average Grant- Date Fair Value Per Award	Aggregate Intrinsic Value
Balance at January 1	3,587,564	\$ 30.99	
Granted	2,366,715	18.68	
Vested	(1,196,395)	30.99	
Forfeited	(145,348)	24.21	
Balance at December 31	<u><u>4,612,536</u></u>	24.89	<u><u>\$ 31</u></u>

The total grant-date fair value of cash-settled RSUs and PSUs granted was \$44 million during 2015, \$68 million during 2014 and \$70 million during 2013. The intrinsic value of cash-settled RSUs vested was \$24 million during 2015. The accrued liability associated with cash-settled RSUs and PSUs consisted of a current portion of \$10 million (included in accounts payable and accrued liabilities) and a long-term portion of \$8 million (included in other liabilities) at December 31, 2015, and a current portion of \$17 million and a long-term portion of \$19 million at December 31, 2014.

Other Information. The following table includes amounts related to exercises of stock options and vesting of RSUs during the years ended December 31:

	2015	2014	2013
FCX shares tendered to pay the exercise price and/or the minimum required taxes ^a	349,122	474,480	3,294,624
Cash received from stock option exercises	\$ 3	\$ 12	\$ 8
Actual tax benefit realized for tax deductions	\$ 11	\$ 16	\$ 8
Amounts FCX paid for employee taxes	\$ 7	\$ 8	\$ 105

- a. Under terms of the related plans, upon exercise of stock options and vesting of RSUs, employees may tender FCX shares to pay the exercise price and/or the minimum required taxes.

NOTE 11. INCOME TAXES

Geographic sources of (losses) income before income taxes and equity in affiliated companies' net (losses) earnings for the years ended December 31 consist of the following:

	2015	2014	2013
U.S.	\$ (14,617)	\$ (2,997)	\$ 1,104
Foreign	596	2,573	3,809
Total	<u><u>\$ (14,021)</u></u>	<u><u>\$ (424)</u></u>	<u><u>\$ 4,913</u></u>

With the exception of TFM, income taxes are provided on the earnings of FCX's material foreign subsidiaries under the assumption that these earnings will be distributed. FCX has determined that TFM's undistributed earnings are reinvested indefinitely and have been allocated toward specifically identifiable needs of the local operations, including, but not limited to, existing liabilities and sustaining capital requirements. In the absence of these specifically identifiable needs, FCX would reevaluate the need to provide income taxes on \$1.3 billion of undistributed earnings in TFM. 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.

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.

FCX's benefit from (provision for) income taxes for the years ended December 31 consists of the following:

	2015	2014	2013
Current income taxes:			
Federal	\$ 89	\$ (281)	\$ (203)
State	2	(35)	(9)
Foreign	(195)	(1,128)	(1,081)
Total current	<u>(104)</u>	<u>(1,444)</u>	<u>(1,293)</u>
Deferred income taxes:			
Federal	3,403	606	(234)
State	154	214	35
Foreign	(144)	(33)	(346)
Total deferred	<u>3,413</u>	<u>787</u>	<u>(545)</u>
Adjustments	(1,374) ^a	—	199 ^b
Federal operating loss carryforwards	—	333 ^c	164
Benefit from (provision for) income taxes	<u>\$ 1,935</u>	<u>\$ (324)</u>	<u>\$ (1,475)</u>

- a. 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 reflecting a \$1.5 billion reduction in deferred tax assets during the year, partially offset by a \$1.3 billion reduction in the beginning of the year valuation allowance.
- b. As a result of the oil and gas acquisitions, FCX recognized a net benefit of \$199 million, consisting of \$190 million associated with net reductions in the beginning of the year valuation allowances, \$69 million related to the release of the deferred tax liability on PXP's investment in MMR common stock and \$16 million associated with the revaluation of state deferred tax liabilities, partially offset by income tax expense of \$76 million associated with the write off of deferred tax assets related to environmental liabilities.
- c. Benefit from the use of federal operating loss carryforwards acquired as part of the oil and gas acquisitions.

A reconciliation of the U.S. federal statutory tax rate to FCX's effective income tax rate for the years ended December 31 follows:

	2015		2014		2013	
	Amount	Percent	Amount	Percent	Amount	Percent
U.S. federal statutory tax rate	\$ 4,907	(35)%	\$ 149	(35)%	\$ (1,720)	(35)%
Valuation allowance, net	(2,964) ^a	21	—	—	190	4
Foreign tax credit limitation	(228)	1	(167) ^b	39	(117)	(2)
Percentage depletion	186	(1)	263	(62)	223	5
Withholding and other impacts on foreign earnings	(193)	1	(161)	38	(306)	(7)
Effect of foreign rates different than the U.S.						
federal statutory rate	56	—	135	(32)	223	5
Goodwill impairment	—	—	(601)	142	—	—
Goodwill transferred to full cost pool	—	—	(77)	18	—	—
State income taxes	105 ^a	(1)	115	(27)	43	—
Other items, net	66	—	20	(5)	(11)	—
Benefit from (provision for) income taxes	<u>\$ 1,935</u>	<u>(14)%</u>	<u>\$ (324)</u>	<u>76 %^{c,d}</u>	<u>\$ (1,475)</u>	<u>(30)%^e</u>

- a. As a result of the impairment to U.S. oil and gas properties, FCX recorded tax charges totaling \$3.3 billion to establish valuation allowances against U.S. federal and state deferred tax assets for which a future benefit is not expected to be realized.
- b. Includes a net charge of \$16 million in 2014 related to a change in U.S. federal income tax law.
- c. Includes charges related to changes in Chilean and Peruvian tax rules of \$54 million and \$24 million, respectively.
- d. Includes a net charge of \$221 million related to the sale of the Candelaria and Ojos del Salado mines.
- e. Includes a net tax benefit of \$199 million as a result of the oil and gas acquisitions.

FCX paid federal, state, local and foreign income taxes totaling \$0.9 billion in 2015, \$1.5 billion in 2014 and \$1.3 billion in 2013. FCX received refunds of federal, state, local and foreign income taxes of \$334 million in 2015, \$257 million in 2014 and \$270 million in 2013.

The components of deferred taxes follow:

	December 31,	
	2015	2014
Deferred tax assets:		
Foreign tax credits	\$ 1,552	\$ 2,306
Accrued expenses	1,184	1,047
Oil and gas properties	1,422	—
Minimum tax credits	569	737
Net operating loss carryforwards	621	590
Employee benefit plans	521	422
Other	509	734
Deferred tax assets	<u>6,378</u>	<u>5,836</u>
Valuation allowances	(4,183)	(2,434)
Net deferred tax assets	<u>2,195</u>	<u>3,402</u>
Deferred tax liabilities:		
Property, plant, equipment and mining development costs	(5,567)	(5,331)
Oil and gas properties	—	(3,392)
Undistributed earnings	(855)	(807)
Other	(58)	(185)
Total deferred tax liabilities	<u>(6,480)</u>	<u>(9,715)</u>
Net deferred tax liabilities	<u>\$ (4,285)</u>	<u>\$ (6,313)</u>

At December 31, 2015, FCX had U.S. foreign tax credit carryforwards of \$1.6 billion that will expire between 2016 and 2025, and U.S. minimum tax credit carryforwards of \$569 million that can be carried forward indefinitely, but may be used only to the extent that regular tax exceeds the alternative minimum tax in any given year.

At December 31, 2015, FCX had (i) U.S. state net operating loss carryforwards of \$3.9 billion that expire between 2016 and 2035, (ii) U.S. federal net operating loss carryforwards of \$740 million that expire between 2030 and 2034, and (iii) Spanish net operating loss carryforwards of \$549 million that can be carried forward indefinitely.

On the basis of available information at December 31, 2015, 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 \$4.2 billion at December 31, 2015, covering U.S. federal and state deferred tax assets, including all of FCX's U.S. foreign tax credit carryforwards, U.S. minimum tax credit carryforwards, foreign net operating loss carryforwards, and a portion of FCX's U.S. federal and state net operating loss carryforwards. Valuation allowances totaled \$2.4 billion at December 31, 2014, and covered a portion of FCX's U.S. foreign tax credit carryforwards, foreign net operating loss carryforwards, U.S. state net operating loss carryforwards and U.S. state deferred tax assets.

The valuation allowance related to FCX's U.S. foreign tax credits totaled \$1.6 billion at December 31, 2015. FCX has operations in tax jurisdictions where statutory income taxes and withholding taxes combine to create effective tax rates in excess of the U.S. federal income tax liability that is due upon repatriation of foreign earnings. As a result, FCX continues to generate foreign tax credits for which no benefit is expected to be realized. In addition, any foreign income taxes currently accrued or paid on unremitted foreign earnings may result in additional future foreign tax credits for which no benefit is expected to be realized upon repatriation of the related earnings. A full valuation allowance will continue to be carried on these excess U.S. foreign tax credit carryforwards until such time that FCX believes it has a prudent and feasible means of securing the benefit of U.S. foreign tax credit carryforwards that can be implemented.

The valuation allowance related to FCX's U.S. federal and state deferred tax assets totaled \$1.4 billion at December 31, 2015. Deferred tax assets represent future deductions for which a benefit will only be realized to the extent future tax liability is generated in the same tax period during which the future tax deduction occurs. FCX

develops an estimate of which future tax deductions will be realized within a tax period generating sufficient tax liability. A valuation allowance is provided to the extent that sufficient tax liability does not exist in any given tax period. As of December 31, 2015, sufficient positive evidence was not available to support realization of all benefits related to future tax deductible amounts.

The valuation allowance related to FCX's U.S. federal minimum tax credit carryforwards totaled \$569 million at December 31, 2015. U.S. minimum tax credit carryforwards can be carried forward indefinitely, but can only be used to the extent that U.S. regular tax liability exceeds U.S. alternative minimum tax liability in any given year. FCX does not currently expect to generate U.S. regular tax liability in excess of U.S. alternative minimum tax liability.

The valuation allowance related to FCX's U.S. federal, state and foreign net operating loss carryforwards totaled \$525 million at December 31, 2015. The valuation allowance is primarily related to mining, and oil and gas operations that are not currently expected to generate taxable income in an amount sufficient to utilize existing net operating losses prior to their expiration dates.

Valuation allowances will continue to be carried on U.S. federal and state deferred tax assets, U.S. federal minimum tax credit carryforwards and U.S. federal, state and foreign net operating losses until such time that FCX generates taxable income against which any of the assets or carryforwards can be used, forecasts of future income provide sufficient positive evidence to support reversal of the valuation allowances or FCX identifies a prudent and feasible means of securing the benefit of the assets or carryforwards that can be implemented.

The \$1.7 billion net increase in the valuation allowances during 2015 primarily included a \$3.3 billion increase to the valuation allowances mainly related to impairments of U.S. oil and gas properties, partially offset by a \$1.5 billion decrease in the valuation allowance against tax credit carryforwards that will no longer be available for use because of the termination of PT-FI's Delaware domestication.

World market prices for commodities have fluctuated historically. At December 31, 2015, market prices for copper, gold, molybdenum and oil were below their twelve-month historical averages. Future market prices at or below 2015 year-end prices may result in valuation allowances provided on additional deferred tax assets.

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 are 4 percent for the years 2013 through 2017. Beginning in 2018 and through 2023, rates will move to a sliding scale of 5 to 14 percent (depending on a defined operational margin).

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 December 2014, the Peruvian parliament passed tax legislation intended to stimulate the economy. Under the legislation, the corporate income tax rate progressively decreases from 30 percent in 2014 to 26 percent in 2019 and thereafter. In addition, the dividend tax rate on distributions progressively increases from 4.1 percent in 2014 to 9.3 percent in 2019 and thereafter. 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.

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 expenses 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:

	2015	2014	2013
Balance at beginning of year	\$ 104	\$ 110	\$ 138
Additions:			
Prior year tax positions	7	4	18
Current year tax positions	11	11	14
Acquisition of PXP	—	—	5
Decreases:			
Prior year tax positions	(6)	(12)	(37)
Settlements with taxing authorities	—	(9)	—
Lapse of statute of limitations	(6)	—	(28)
Balance at end of year	<u>\$ 110</u>	<u>\$ 104</u>	<u>\$ 110</u>

The total amount of accrued interest associated with unrecognized tax benefits included in the consolidated balance sheets was \$16 million at December 31, 2015, \$15 million at December 31, 2014, and \$21 million at December 31, 2013. There were no penalties associated with unrecognized tax benefits for the three years ended December 31, 2015.

The reserve for unrecognized tax benefits of \$110 million at December 31, 2015, included \$107 million (\$101 million net of income tax benefits) that, if recognized, would reduce FCX's provision for income taxes. Changes to the reserve for unrecognized tax benefits associated with current and prior year tax positions were primarily related to uncertainties associated with FCX's cost recovery methods and deductibility of social welfare payments.

Additionally, changes in prior year tax positions were related to uncertainties associated with FCX's deductibility of expenses allocated to subsidiaries. Changes to the reserve for unrecognized tax benefits associated with the lapse of statute of limitations were primarily related to the deductibility of worthless stock. There continues to be uncertainty related to the timing of settlements with taxing authorities, but if additional settlements are agreed upon during the year 2016, 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	2007-2013	2014-2015
Indonesia	2007-2008, 2011-2012, 2014	2013, 2015
Peru	2011	2012-2015
Chile	2013-2014	2015
DRC	None	2013-2015

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, 2015, 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:

	2015	2014	2013
Balance at beginning of year	\$ 1,174	\$ 1,167	\$ 1,222
Accretion expense ^a	78	77	79
Additions	33	16	73
Reductions ^b	(3)	(6)	(77)
Spending	(67)	(80)	(130)
Balance at end of year	1,215	1,174	1,167
Less current portion	(100)	(105)	(121)
Long-term portion	<u>\$ 1,115</u>	<u>\$ 1,069</u>	<u>\$ 1,046</u>

- a. 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.
- b. 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 \$100 million in 2016, \$127 million in 2017, \$104 million in 2018, \$92 million in 2019, \$85 million in 2020 and \$1.8 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, 2015, FCX's environmental obligations totaled \$1.2 billion, including \$1.1 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 \$2.3 billion. FCX estimates it is reasonably possible that these obligations could range between \$2.1 billion and \$2.7 billion on an undiscounted and unescalated basis.

At December 31, 2015, 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, Kansas, New Jersey, Oklahoma and Pennsylvania; and uranium mining sites in the western U.S. The recorded environmental obligations for these sites totaled \$1.0 billion at December 31, 2015. 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.

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 (PCG), consisting of FMC 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 consisting of both capping (earthwork) and 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; the RI is expected to be completed in late 2016, with the FS approved by EPA in 2019, and remedial action could possibly begin in 2022. 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 and significantly exceed the amount currently reserved for this contingency.

Historical Smelter Sites. FCX subsidiaries and their predecessors at various times owned or operated copper, zinc and lead smelters in states including Arizona, Kansas, Missouri, New Jersey, Oklahoma and Pennsylvania. For some of these smelter 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 the smelters. 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 smelters. The historical smelter 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.

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, and EPA and local authorities are currently evaluating the need for significant cleanup activities in the region. To date, FCX has undertaken remediation work at a limited number of sites associated with these predecessor entities. During 2014, FCX initiated reconnaissance work at a limited number of historic mining sites on federal lands, which continued in 2015; approximately 20 percent of FCX's known federal sites have been initially evaluated. FCX expects to increase those activities over the next several years in order to identify sites for possible future investigation and remediation. During 2014, FCX also initiated discussions with federal and tribal representatives regarding a potential phased program to investigate and remediate historic uranium sites on tribal lands in the Four Corners region. Those discussions continued in 2015, when FCX also initiated discussions with the Department of Justice regarding the possible federal government's share of the liability on tribal lands.

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:

	2015	2014	2013
Balance at beginning of year	\$ 2,769	\$ 2,328	\$ 1,146
Liabilities assumed in the acquisitions of PXP and MMR ^a	—	—	1,028
Liabilities incurred	98	430 ^b	45
Settlements and revisions to cash flow estimates, net	(66)	65	123
Accretion expense	131	117	95
Dispositions	—	(61)	—
Spending	(133)	(99)	(107)
Other	(3)	(11)	(2)
Balance at end of year	<u>2,796</u>	<u>2,769</u>	<u>2,328</u>
Less current portion	<u>(172)</u>	<u>(191)</u>	<u>(115)</u>
Long-term portion	<u>\$ 2,624</u>	<u>\$ 2,578</u>	<u>\$ 2,213</u>

a. The fair value of AROs assumed in the acquisitions of PXP and MMR (\$741 million and \$287 million, respectively) were estimated based on projected cash flows, an estimated long-term annual inflation rate of 2.5 percent and discount rates based on FCX's estimated credit-adjusted, risk-free interest rates ranging from 1.3 percent to 6.3 percent.

b. Primarily reflects updates to the closure approach to reclaim an overburden stockpile in Indonesia.

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, changes in drilling 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.

New Mexico, Arizona, Colorado and other states 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, 2015, FCX's financial assurance obligations associated with these closure and reclamation/restoration costs totaled \$994 million, of which \$617 million was in the form of guarantees issued by FCX and financial capability demonstrations of FCX. At December 31, 2015, FCX had trust assets totaling \$169 million (included in other assets), which 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 \$1.5 billion. 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, 2015, FCX had accrued reclamation and closure costs of \$451 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 aquifer protection permits 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 will occur in the normal course as modifications to aquifer protection permits, 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 2015, amendments to

aquifer protection permits were submitted to ADEQ for Safford and Sierrita, which will result in increased closure costs. FCX may be required to begin updating its closure cost estimates at other Arizona sites in 2016.

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. 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, 2015, FCX had accrued reclamation and closure costs of \$298 million for its Arizona operations.

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 2015, the Colorado Division of Reclamation Mining & Safety (DRMS) approved an increase in Henderson's closure costs, principally to address long-term water management. As of December 31, 2015, FCX had accrued reclamation and closure costs of \$66 million for its Colorado operations.

Chilean Reclamation and Closure Programs. In July 2011, the Chilean senate passed legislation regulating mine closure, which establishes new requirements for closure plans and became effective in November 2012. FCX's El Abra operation submitted updated closure cost estimates based on the existing approved closure plan in November 2014. At December 31, 2015, FCX had accrued reclamation and closure costs of \$51 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. At December 31, 2015, Cerro Verde had accrued reclamation and closure costs of \$106 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 25 years. During 2014, PT-FI updated its closure approach for an overburden stockpile, which resulted in an increase in the estimated closure costs of \$403 million. At December 31, 2015, PT-FI had accrued reclamation and closure costs of \$674 million.

In 1996, PT-FI began contributing to a cash fund (\$21 million balance at December 31, 2015, which is included in other assets) designed to accumulate at least \$100 million (including interest) by the end of its Indonesia mining activities. PT-FI plans to use this fund, including accrued interest, to pay mine closure and reclamation costs or satisfy a portion of Indonesian financial requirements under recently issued regulations. Any costs in excess of the \$100 million fund would be funded by operational cash flow or other sources.

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 is working with the Department of Energy and Mineral Resources to review these requirements, including discussion of other options for the mine closure guarantee.

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. FM O&G operating areas include the GOM, offshore and onshore California, the Gulf Coast and the Rocky Mountain area.

FM O&G AROs cover more than 6,400 wells and more than 180 platforms and other structures. During 2015, liabilities incurred for FM O&G totaled \$79 million for new wells primarily in the GOM area. At December 31, 2015, FM O&G had accrued \$1.1 billion associated with its AROs.

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 other reviews, investigations and proceedings by 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 reported below 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.

Shareholder Litigation. On January 15, 2015, a Stipulation and Agreement of Settlement, Compromise and Release (Stipulation) was entered into with respect to the consolidated stockholder derivative litigation captioned In Re Freeport-McMoRan Copper & Gold Inc. Derivative Litigation, No. 8145-VCN. This settlement resolved all derivative claims against directors and officers of FCX challenging FCX's 2013 acquisitions of PXP and MMR. During 2015, insurers under FCX's directors and officers liability insurance policies and other third parties funded the \$125 million settlement amount that, net of plaintiffs' legal fees and expenses, resulted in the recognition of a gain of \$92 million (included in other income (expense)). In accordance with the approved settlement terms, FCX's Board declared a special dividend that was paid on August 3, 2015.

Pursuant to the settlement, FCX's Board also approved and agreed to keep in effect for at least three years corporate governance enhancements specified in the Stipulation. These corporate governance enhancements include agreements by FCX to maintain and/or establish (i) a lead independent director position, (ii) an independent executive committee, (iii) solely independent directors on each of the executive, corporate responsibility, audit, compensation, and nominating and governance committees, and (iv) certain procedures or policies relating to the selection of members of special committees, approval of related-party transactions and executive compensation.

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 Peruvian national tax authority, has assessed mining royalties on ore processed by the Cerro Verde concentrator, which commenced operations in late 2006. These assessments cover the period December 2006 to December 2007 and the years 2008 and 2009.

In July 2013, the Peruvian Tax Tribunal issued two decisions affirming SUNAT's assessments for the period December 2006 through December 2008. In September 2013, Cerro Verde filed judiciary appeals related to the 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. With respect to the judiciary appeal related to assessments for the year 2008, on December 17, 2014, Peru's Eighteenth Contentious Administrative Court, which specializes in taxation matters, rendered its decision upholding Cerro Verde's position and declaring the Tax Tribunal's resolution invalid. On December 31, 2014, SUNAT and the Tax Tribunal appealed this decision. On January 29, 2016, Peru's Sixth Contentious Administrative Chamber of the Appellate Court

nullified the decision of the Eighteenth Contentious Administrative Court. Cerro Verde will appeal the decision to the Peruvian Supreme Court. Although FCX believes Cerro Verde's interpretation of the stability agreement is correct, if Cerro Verde is ultimately found responsible for these assessments, it may also be liable for penalties and interest, which accrues at rates that range from approximately 7 percent to 18 percent based on the year accrued and the currency in which the amounts would be payable.

In October 2013, SUNAT served Cerro Verde with a demand for payment based on the Peruvian Tax Tribunal's decisions for the period December 2006 through December 2008. The aggregate amount of these assessments totals \$179 million (based on the exchange rate as of December 31, 2015), including estimated accumulated interest and penalties. As permitted by law, Cerro Verde requested and was granted an installment payment program that deferred payment for six months and thereafter required 66 equal monthly payments. Through December 31, 2015, Cerro Verde has made payments totaling \$64 million (based on exchange rates as of the dates of payment) under the installment program, which are included in other assets in the consolidated balance sheet. In July 2013, a hearing on SUNAT's assessment for 2009 was held, but no decision has been issued by the Tax Tribunal for that year.

The aggregate amount of the assessment for 2009 totals \$72 million (based on the exchange rate as of December 31, 2015), including estimated accumulated interest and penalties.

SUNAT may make additional assessments for mining royalties and associated penalties and interest for the years 2010 through 2013, which Cerro Verde will contest. FCX estimates the total exposure associated with the assessments for mining royalties discussed above for the period from December 2006 through December 2009, and for the years 2010 through 2013 approximates \$500 million (based on the exchange rate as of December 31, 2015), including estimated accumulated interest and penalties. No amounts have been accrued for these assessments or the installment payment program as of December 31, 2015, because Cerro Verde believes its 1998 stability agreement exempts it from these royalties and believes any payments will be recoverable.

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
2002 to 2005	\$ 16	\$ 53	\$ 69
2006	7	47	54
2007	12	18	30
2008	21	13	34
2009	56	48	104
2010	66	89	155
2014	5	—	5
2015	4	—	4
	\$ 187	\$ 268	\$ 455

As of December 31, 2015, Cerro Verde had paid \$181 million (included in other assets) on these disputed tax assessments, which it believes is collectible. No amounts have been accrued for these assessments.

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. A summary of these assessments follows:

Tax Year	Tax Assessment	Interest Assessment	Total
2005	\$ 103	\$ 49	\$ 152
2006	22	10	32
2007	91	44	135
2008	62	52	114
2011	56	13	69
2012	137	—	137
	\$ 471	\$ 168	\$ 639

Required estimated income tax payments for 2011 significantly exceeded PT-FI's 2011 reported income tax liability, which resulted in a \$313 million overpayment. During 2013, the Indonesian tax authorities agreed to refund \$291 million associated with income tax overpayments made by PT-FI for 2011, and PT-FI filed objections for the remaining \$22 million that it believes it is due. PT-FI received a cash refund of \$165 million in July 2013, and the Indonesian tax authorities withheld \$126 million of the 2011 overpayment for unrelated assessments from 2005 and 2007, which PT-FI is disputing.

Required estimated income tax payments for 2012 significantly exceeded PT-FI's 2012 reported income tax liability, which resulted in a \$303 million overpayment. During second-quarter 2014, the Indonesian tax authorities issued tax assessments for 2012 of \$137 million and other offsets of \$15 million, and refunded the balance of \$151 million (before foreign exchange adjustments). PT-FI filed objections and will use other means available under Indonesian tax laws and regulations to recover all overpayments that remain in dispute.

As of December 31, 2015, PT-FI had paid \$259 million (of which \$209 million was included in other assets) on disputed tax assessments, which it believes are collectible. In addition, PT-FI has \$285 million (included in income and other tax receivables) for overpayments of 2014 income taxes and \$106 million (included in other assets) for overpayments of 2015 income taxes.

In December 2009, PT-FI was notified by Indonesian tax authorities that PT-FI 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 2009 and sought a refund. In January 2016, PT-FI received audit findings confirming the refund amount, which based on the exchange rate as of December 31, 2015, is expected to be \$215 million (included in income and other tax receivables in the consolidated balance sheet at December 31, 2015).

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 2015. PT-FI has filed or will file objections to these assessments. The local government of Papua rejected PT-FI's objections to the assessments related to the period from January 2011 through July 2015, and PT-FI filed appeals with the Indonesian tax court for these periods. The aggregate amount of all assessments received through February 19, 2016, including penalties, was 2.7 trillion Indonesian rupiah (\$197 million based on the exchange rate as of December 31, 2015). Additional penalties, which could be significant, may be assessed depending on the outcome of the appeals process. No amounts have been accrued for these assessments as of December 31, 2015, because PT-FI believes its COW exempts it from these payments and that it has the right to contest these assessments in the tax court and ultimately the Indonesian Supreme Court.

Letters of Credit, Bank Guarantees and Surety Bonds. Letters of credit and bank guarantees totaled \$300 million at December 31, 2015, primarily for the Cerro Verde royalty dispute (refer to discussion above), environmental and asset retirement obligations, workers' compensation insurance programs, tax and customs obligations, and other commercial obligations. In addition, FCX had surety bonds totaling \$276 million at December 31, 2015, associated with environmental and asset retirement obligations (\$217 million), self-insurance bonds primarily for workers' compensation (\$21 million) and other bonds (\$38 million).

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, 2015, expected losses under these insurance programs totaled \$66 million, which consisted of a current portion of \$7 million (included in accounts payable and accrued liabilities) and a long-term portion of \$59 million (included in other liabilities).

FCX's oil and gas operations are subject to all of the risks normally incident to the exploration for and 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. Although FCX maintains insurance coverage considered to be customary in the oil and gas industry, FCX is not fully insured against all risks either because insurance is not available or because of high premium costs. FCX is self-insured for named windstorms in the GOM. FCX's insurance policies provide limited coverage for losses or liabilities relating to pollution, with broader coverage for sudden and accidental occurrences.

NOTE 13. COMMITMENTS AND GUARANTEES

Operating Leases. FCX leases various types of properties, including offices, aircraft and equipment. Future minimum rentals under non-cancelable leases at December 31, 2015, total \$54 million in 2016, \$49 million in 2017, \$40 million in 2018, \$25 million in 2019, \$23 million in 2020 and \$146 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 \$89 million in 2015 and \$96 million in both 2014 and 2013.

Contractual Obligations. Based on applicable prices at December 31, 2015, FCX has unconditional purchase obligations of \$3.9 billion, primarily comprising minimum commitments for deepwater drillships (\$1.2 billion), the procurement of copper concentrate (\$854 million), transportation services (\$671 million) and electricity (\$601 million). 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. Drillship obligations provide for an operating rate over the contractual term. Transportation obligations are primarily for South America contracted ocean freight and FM O&G contracted rates for natural gas and crude oil gathering systems. Obligations for copper concentrate provide for deliveries of specified volumes to Atlantic Copper at market-based prices. Electricity obligations are primarily for contractual minimum demand at the South America mines.

FCX's future commitments associated with unconditional purchase obligations total \$2.2 billion in 2016, \$0.9 billion in 2017, \$184 million in 2018, \$93 million in 2019, \$73 million in 2020 and \$482 million thereafter. During the three-year period ended December 31, 2015, 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 that among other things imposed a progressive export duty on copper concentrate and restricts concentrate exports 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. Execution of the MOU enabled the resumption of concentrate exports in August 2014, which had been suspended since January 2014.

Under the MOU, PT-FI provided a \$115 million assurance bond to support its commitment for smelter development, agreed to increase royalty rates to 4.0 percent for copper and 3.75 percent for gold from the previous rates of 3.5 percent for copper and 1.0 percent for gold, and agreed to pay export duties as set forth in a new regulation. The Indonesian government revised its January 2014 regulations regarding export duties, which were set at 7.5 percent, declining to 5.0 percent when smelter development progress exceeds 7.5 percent and are eliminated when development progress exceeds 30 percent. The MOU also anticipated an amendment of the COW within six months to address other matters; however, no terms of the COW other than those relating to the smelter bond, increased royalties and export duties were changed. In January 2015, the MOU was extended to July 25, 2015, and it expired on that date. The increased royalty rates, export duties and smelter assurance bond remain in effect. PT-FI's royalties totaled \$114 million in 2015, \$115 million in 2014 and \$109 million in 2013, and export duties totaled \$109 million in 2015 and \$77 million in 2014.

PT-FI is required to apply for renewal of export permits at six-month intervals. On July 29, 2015, PT-FI's export permit was renewed through January 28, 2016. In connection with the renewal, export duties were reduced to 5.0 percent as a result of smelter development progress. On February 9, 2016, PT-FI's export permit was renewed through August 8, 2016. PT-FI will continue to pay a five percent export duty on concentrate while it reviews its smelter progress with the Indonesian government.

PT-FI continues to engage in discussion with the Indonesian government regarding its COW and long-term operating rights. In October 2015, the Indonesian government provided a letter of assurance to PT-FI indicating that it will approve the extension of operations beyond 2021, and provide the same rights and the same level of legal and fiscal certainty provided under its current COW although that approval has not yet been received.

In connection with its COW negotiations and subject to concluding the agreement to extend PT-FI's operations beyond 2021 on acceptable terms, PT-FI has agreed to construct new smelter capacity in Indonesia and to divest an additional 20.64 percent interest in PT-FI at fair market value. PT-FI continues to advance plans for the smelter in parallel with completing its COW negotiations.

Mining Contracts — Africa. FCX is entitled to mine in the DRC under an Amended and Restated Mining Convention (ARMC) between TFM and the Government of the DRC. The original Mining Convention entered into in 1996 was replaced with the ARMC in 2005 and was further amended in 2010 (approved in 2011). The current ARMC will remain in effect for as long as the Tenke concessions are exploitable. The royalty rate payable by TFM under the ARMC is two percent of net revenue. These mining royalties totaled \$25 million in 2015 and \$29 million in both 2014 and 2013.

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.

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 area of health, education and economic development of the area. PT-FI has committed through 2016 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 \$27 million in 2015, \$31 million in 2014 and \$41 million in 2013 to cost of sales for this commitment.

TFM has committed to assist the communities living within its concession areas in the Southeast region of the DRC. TFM will contribute 0.3 percent of net sales revenue from production to a community development fund to assist the local communities with development of local infrastructure and related services, including health, education and agriculture. TFM charged \$4 million in each of the years 2015, 2014 and 2013 to cost of sales for this commitment.

Guarantees. FCX provides certain financial guarantees (including indirect guarantees of the indebtedness of others) and indemnities.

At December 31, 2015, FCX's venture agreement with Sumitomo at its Morenci mine in Arizona (refer to Note 3 for further discussion) includes a put and call option guarantee clause. FCX holds an 85 percent undivided interest in the Morenci complex. Under certain conditions defined in the venture agreement, Sumitomo has the right to sell its 15 percent share to FCX. Likewise, under certain conditions, FCX has the right to purchase Sumitomo's share of the venture. At December 31, 2015, the maximum potential payment FCX is obligated to make to Sumitomo upon exercise of the put option (or FCX's exercise of its call option) totaled approximately \$347 million based on calculations defined in the venture agreement. At December 31, 2015, FCX had not recorded any liability in its consolidated financial statements in connection with this guarantee as FCX does not believe, based on information available, that it is probable that any amounts will be paid under this guarantee as the fair value of Sumitomo's 15 percent share is in excess of the exercise price.

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 derivatives contracts to hedge the market risk associated with fluctuations in the prices of commodities it purchases and sells. 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. Derivative financial instruments used by FCX to manage its risks do not contain credit risk-related contingent provisions. As of December 31, 2015 and 2014, 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, 2015, resulting from hedge ineffectiveness. At December 31,

2015, FCX held copper futures and swap contracts that qualified for hedge accounting for 64 million pounds at an average contract price of \$2.29 per pound, with maturities through September 2017.

A summary of (losses) gains 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:

	2015	2014	2013
Copper futures and swap contracts:			
Unrealized (losses) gains:			
Derivative financial instruments	\$ (3)	\$ (12)	\$ 1
Hedged item – firm sales commitments	3	12	(1)
Realized losses:			
Matured derivative financial instruments	(34)	(9)	(17)

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 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, 2015, follows:

	Open Positions	Average Price Per Unit		Maturities Through
		Contract	Market	
Embedded derivatives in provisional sales contracts:				
Copper (millions of pounds)	738	\$ 2.22	\$ 2.13	July 2016
Gold (thousands of ounces)	215	1,071	1,062	March 2016
Embedded derivatives in provisional purchase contracts:				
Copper (millions of pounds)	99	2.16	2.14	April 2016

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 contacts matured in 2015, and FCX had no outstanding crude oil or natural gas derivative contracts as of December 31, 2015.

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, 2015, Atlantic Copper held net copper forward purchase contracts for six million pounds at an average contract price of \$2.10 per pound, with maturities through February 2016.

Summary of (Losses) Gains. A summary of the realized and unrealized (losses) gains recognized in (loss) income before income taxes and equity in affiliated companies' net (losses) earnings for commodity contracts that do not qualify as hedge transactions, including embedded derivatives, for the years ended December 31 follows:

	2015	2014	2013
Embedded derivatives in provisional copper and gold sales contracts ^a	\$ (439)	\$ (289)	\$ (136)
Crude oil options and swaps ^a	87	513	(344)
Natural gas swaps ^a	—	(8)	10
Copper forward contracts ^b	(15)	(4)	3

- 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,	
	2015	2014
Commodity Derivative Assets:		
<u>Derivatives designated as hedging instruments:</u>		
Copper futures and swap contracts ^a	\$ 1	\$ —
<u>Derivatives not designated as hedging instruments:</u>		
Embedded derivatives in provisional copper and gold sales/purchase contracts	21	15
Crude oil options ^b	—	316
Total derivative assets	<u>\$ 22</u>	<u>\$ 331</u>

Commodity Derivative Liabilities:

	2015	2014
<u>Derivatives designated as hedging instruments:</u>		
Copper futures and swap contracts ^a		
Derivatives not designated as hedging instruments:		
Embedded derivatives in provisional copper and gold sales/purchase contracts	\$ 11	\$ 7
Total derivative liabilities	<u>\$ 93</u>	<u>\$ 100</u>

- a. FCX had paid \$10 million to brokers at December 31, 2015 and 2014, for margin requirements (recorded in other current assets).
- b. Includes \$210 million at December 31, 2014, for deferred premiums and accrued interest.

FCX's commodity contracts have netting arrangements with counterparties with which the right of offset exists, and it is FCX's policy to offset balances by counterparty on the balance sheet. FCX's embedded derivatives on provisional sales/purchases are netted with the corresponding outstanding receivable/payable balances. A summary of these unsettled commodity contracts that are offset in the balance sheet follows:

	Assets at December 31,		Liabilities at December 31,	
	2015	2014	2015	2014
Gross amounts recognized:				
Commodity contracts:				
Embedded derivatives in provisional sales/purchase contracts	\$ 21	\$ 15	\$ 82	\$ 93
Crude oil derivatives	—	316	—	—
Copper derivatives	1	—	11	7
	22	331	93	100
Less gross amounts of offset:				
Commodity contracts:				
Embedded derivatives in provisional sales/purchase contracts	6	1	6	1
Crude oil derivatives	—	—	—	—
Copper derivatives	1	—	1	—
	7	1	7	1
Net amounts presented in balance sheet:				
Commodity contracts:				
Embedded derivatives in provisional sales/purchase contracts	15	14	76	92
Crude oil derivatives	—	316	—	—
Copper derivatives	—	—	10	7
	\$ 15	\$ 330	\$ 86	\$ 99
Balance sheet classification:				
Trade accounts receivable	\$ 10	\$ 5	\$ 52	\$ 56
Other current assets	—	316	—	—
Accounts payable and accrued liabilities	5	9	34	43
	\$ 15	\$ 330	\$ 86	\$ 99

Credit Risk. FCX is exposed to credit loss when financial institutions with which FCX 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, 2015, the maximum amount of credit exposure associated with derivative transactions was \$45 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, dividends payable and long-term debt. The carrying value for cash and cash equivalents (which included time deposits of \$34 million at December 31, 2015, and \$48 million at December 31, 2014), accounts receivable, restricted cash, accounts payable and accrued liabilities, and dividends payable 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).

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 inputs) and the lowest priority to unobservable inputs (Level 3 inputs).

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 2015. A summary of the carrying amount and fair value of FCX's financial instruments, other than cash and cash equivalents, accounts receivable, restricted cash, accounts payable and accrued liabilities, and dividends payable follows:

	Carrying Amount	At December 31, 2015			
		Fair Value			
		Total	Level 1	Level 2	Level 3
Assets					
Investment securities: ^{a,b}					
U.S. core fixed income fund	\$ 23	\$ 23	\$ —	\$ 23	\$ —
Money market funds	21	21	21	—	—
Equity securities	3	3	3	—	—
Total	<u>47</u>	<u>47</u>	<u>24</u>	<u>23</u>	<u>—</u>
Legally restricted funds: ^{a,b,c,d}					
U.S. core fixed income fund	52	52	—	52	—
Government bonds and notes	37	37	—	37	—
Government mortgage-backed securities	28	28	—	28	—
Corporate bonds	26	26	—	26	—
Asset-backed securities	13	13	—	13	—
Collateralized mortgage-backed securities	7	7	—	7	—
Money market funds	7	7	7	—	—
Municipal bonds	1	1	—	1	—
Total	<u>171</u>	<u>171</u>	<u>7</u>	<u>164</u>	<u>—</u>
Derivatives: ^{a,e}					
Embedded derivatives in provisional sales/purchase contracts in a gross asset position	21	21	—	21	—
Copper futures and swap contracts	1	1	1	—	—
Total	<u>22</u>	<u>22</u>	<u>1</u>	<u>21</u>	<u>—</u>
Total assets		<u>\$ 240</u>	<u>\$ 32</u>	<u>\$ 208</u>	<u>\$ —</u>
Liabilities					
Derivatives: ^{a,e}					
Embedded derivatives in provisional sales/purchase contracts in a gross liability position	\$ 82	\$ 82	\$ —	\$ 82	\$ —
Copper futures and swap contracts	11	11	7	4	—
Total	<u>93</u>	<u>93</u>	<u>7</u>	<u>86</u>	<u>—</u>
Long-term debt, including current portion ^f	<u>20,428</u>	<u>13,987</u>	<u>—</u>	<u>13,987</u>	<u>—</u>
Total liabilities		<u>\$ 14,080</u>	<u>\$ 7</u>	<u>\$ 14,073</u>	<u>\$ —</u>

	At December 31, 2014					
	Carrying Amount	Fair Value				
		Total	Level 1	Level 2	Level 3	
Assets						
Investment securities: ^{a,b}						
U.S. core fixed income fund	\$ 23	\$ 23	\$ —	\$ 23	\$ —	
Money market funds	20	20	20	—	—	
Equity securities	3	3	3	—	—	
Total	46	46	23	23	—	
Legally restricted funds: ^{a,b,c,d}						
U.S. core fixed income fund	52	52	—	52	—	
Government bonds and notes	39	39	—	39	—	
Corporate bonds	27	27	—	27	—	
Government mortgage-backed securities	19	19	—	19	—	
Asset-backed securities	17	17	—	17	—	
Money market funds	11	11	11	—	—	
Collateralized mortgage-backed securities	6	6	—	6	—	
Municipal bonds	1	1	—	1	—	
Total	172	172	11	161	—	
Derivatives: ^{a,e}						
Embedded derivatives in provisional sales/purchase contracts in a gross asset position	15	15	—	15	—	
Crude oil options	316	316	—	—	316	
Total	331	331	—	15	316	
Total assets		\$ 549	\$ 34	\$ 199	\$ 316	
Liabilities						
Derivatives: ^{a,e}						
Embedded derivatives in provisional sales/purchase contracts in a gross liability position	\$ 93	\$ 93	\$ —	\$ 93	\$ —	
Copper futures and swap contracts	7	7	6	1	—	
Total	100	100	6	94	—	
Long-term debt, including current portion ^f	18,849	18,735	—	18,735	—	
Total liabilities		\$ 18,835	\$ 6	\$ 18,829	\$ —	

- a. Recorded at fair value.
- b. Current portion included in other current assets and long-term portion included in other assets.
- c. Excludes time deposits (which approximated fair value) included in other assets of \$118 million at December 31, 2015, and \$115 million at December 31, 2014, associated with an assurance bond to support PT-FI's commitment for smelter development in Indonesia (refer to Note 13 for further discussion).
- d. Excludes time deposits (which approximated fair value) included in other current assets of \$28 million at December 31, 2015 and \$17 million at December 31, 2014.
- e. Refer to Note 14 for further discussion and balance sheet classifications. Crude oil options are net of \$210 million at December 31, 2014, for deferred premiums and accrued interest.
- f. Recorded at cost except for debt assumed in acquisitions, which are recorded at fair value at the respective acquisition dates.

Valuation Techniques

Money market funds are classified within Level 1 of the fair value hierarchy because they are valued using quoted market prices in active markets.

The U.S. core fixed income fund is valued at net asset value. 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 (usually within one business day of notice) and, as such, this fund is classified within Level 2 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.

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.

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 derivative financial instruments for crude oil options were valued using an option pricing model, which used various inputs including Intercontinental Exchange Holdings, Inc. crude oil prices, volatilities, interest rates and contract terms. Valuations were adjusted for credit quality, using the counterparties' credit quality for asset balances and FCX's credit quality for liability balances (which considers the impact of netting agreements on counterparty credit risk, including whether the position with the counterparty is a net asset or net liability). For asset balances, FCX used the credit default swap value for counterparties when available or the spread between the risk-free interest rate and the yield rate on the counterparties' publicly traded debt for similar instruments. The crude oil options were classified within Level 3 of the fair value hierarchy because the inputs used in the valuation models were not observable for the full term of the instruments. Refer to Note 14 for further discussion of these derivative financial instruments.

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.

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.

The techniques described above may produce a fair value calculation that may not be indicative of net realizable value or reflective of future fair values. Furthermore, while FCX believes its valuation techniques are appropriate and consistent with 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, 2015.

A summary of the changes in the fair value of FCX's Level 3 instruments, crude oil options, for the years ended December 31 follows:

	2015	2014	2013
	\$ 316	\$ (309)	\$ —
Balance at beginning of year	\$ 316	\$ (309)	\$ —
Crude oil options assumed in the PXP acquisition	—	—	(83)
Net realized gains (losses) ^a	86	(42)	(38)
Net unrealized gains (losses) related to assets and liabilities still held at the end of the year ^b	—	430	(230)
Net settlements ^c	(402)	237	42
Balance at the end of the year	<u>\$ —</u>	<u>\$ 316</u>	<u>\$ (309)</u>

- a. Includes net realized gains (losses) of \$87 million recorded in revenues in 2015, \$(41) million in 2014 and \$(37) million in 2013, and \$(1) million of interest expense associated with deferred premiums in 2015, 2014 and 2013.
- b. Includes unrealized gains (losses) recorded in revenues of \$432 million in 2014 and \$(228) million in 2013, and \$(2) million of interest expense associated with deferred premiums in 2014 and 2013.
- c. Includes interest payments of \$4 million in 2015, \$5 million in 2014 and \$1 million in 2013.

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 based on inputs not observable in the market and thus represent Level 3 measurements. Refer to Note 2 for the levels within the fair value hierarchy associated with other assets acquired, liabilities assumed and redeemable noncontrolling interest related to PXP and MMR acquisitions, and the goodwill impairment.

NOTE 16. BUSINESS SEGMENT INFORMATION

Product Revenue. FCX revenues attributable to the products it produced for the years ended December 31 follow:

	2015	2014	2013
	\$ 7,790	\$ 9,451	\$ 9,178
Refined copper products	\$ 7,790	\$ 9,451	\$ 9,178
Copper in concentrate ^a	2,869	3,366	5,328
Gold	1,538	1,584	1,656
Molybdenum	783	1,207	1,110
Oil	1,694	4,233	2,310
Other	1,203	1,597	1,339
Total	<u>\$ 15,877</u>	<u>\$ 21,438</u>	<u>\$ 20,921</u>

- a. Amounts are net of treatment and refining charges totaling \$485 million in 2015, \$374 million in 2014 and \$400 million in 2013.

Geographic Area. Information concerning financial data by geographic area follows:

	December 31,		
	2015	2014	2013
Long-lived assets:^a			
U.S.	\$ 16,569 ^b	\$ 29,468	\$ 32,969
Indonesia	7,701	6,961	5,799
Peru	8,432	6,848	5,181
DRC	4,196	4,071	3,994
Chile	1,387	1,542 ^c	2,699
Other	510	522	562
Total	<u>\$ 38,795</u>	<u>\$ 49,412</u>	<u>\$ 51,204</u>

- a. Long-lived assets exclude deferred tax assets, intangible assets and goodwill.
- b. Decreased from 2014 primarily because of impairment charges related to oil and gas properties (refer to Note 1 for further discussion).
- c. Decreased from 2013 primarily because of the sale of the Candelaria and Ojos del Salado mines.

	Years Ended December 31,		
	2015	2014	2013
Revenues: ^a			
U.S.	\$ 6,842	\$ 10,311	\$ 9,331
Japan	1,246	1,573	2,125
Indonesia	1,054	1,792	1,651
Switzerland	1,026	973	1,307
Spain	960	1,020	1,056
China	760	892	1,048
India	532	292	431
Singapore	432	562	119
Chile	397	687	754
Turkey	345	484	334
Egypt	272	365	296
Korea	207	241	198
Other	1,804	2,246	2,271
Total	<u>\$ 15,877</u>	<u>\$ 21,438</u>	<u>\$ 20,921</u>

a. Revenues are attributed to countries based on the location of the customer.

Major Customers and Affiliated Companies. Oil and gas sales to Phillips 66 Company totaled \$1.1 billion (7 percent of FCX's consolidated revenues) in 2015 and \$2.5 billion (12 percent of FCX's consolidated revenues) in 2014. No other customer accounted for 10 percent or more of FCX's consolidated revenues during the three years ended December 31, 2015.

Consolidated revenues include sales to the noncontrolling interest owners of FCX's South America mining operations totaling \$1.0 billion in 2015, \$1.6 billion in 2014 and \$2.0 billion in 2013, and PT-FI's sales to PT Smelting totaling \$1.1 billion in 2015, \$1.8 billion in 2014 and \$1.7 billion in 2013.

Labor Matters. As of December 31, 2015, 48 percent of FCX's labor force was covered by collective bargaining agreements, and 4 percent of FCX's labor force is 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 five primary divisions – North America copper mines, South America mining, Indonesia mining, Africa mining and Molybdenum mines, and operating segments that meet certain thresholds are reportable segments. For oil and gas operations, FCX determines its operating segments on a country-by-country basis. Separately disclosed in the following tables are FCX's reportable segments, which include the Morenci, Cerro Verde, Grasberg and Tenke Fungurume copper mines, the Rod & Refining operations and the U.S. Oil & Gas operations. FCX's U.S. Oil & Gas operations reflect the results of FM O&G beginning June 1, 2013.

Intersegment sales between FCX's mining operations are based on similar arm's-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.

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.

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 and 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 has seven operating copper mines in North America – Morenci, Bagdad, Safford, Sierrita and Miami in Arizona, and Tyrone and Chino 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 operations. In addition to copper, certain of FCX's North America copper mines also produce molybdenum concentrate 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 46 percent of FCX's North America copper during 2015.

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.

On November 3, 2014, FCX completed the sale of its 80 percent ownership interests in the Candelaria mine and the Ojos del Salado mine, both reported as components of other South America mines. South America mining includes the results of the Candelaria and Ojos del Salado mines through the sale date. Refer to Note 2 for further discussion.

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 63 percent of FCX's South America copper during 2015.

Indonesia Mining. Indonesia mining includes PT-FI's Grasberg minerals district that produces copper concentrate, which contains significant quantities of gold and silver.

Africa Mining. Africa mining includes the Tenke minerals district. The Tenke operation includes surface mining, leaching and SX/EW operations and produces copper cathode. In addition to copper, the Tenke operation produces cobalt hydroxide.

Molybdenum Mines. Molybdenum mines include the wholly owned Henderson underground mine and Climax open-pit mine 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 2015, Atlantic Copper purchased approximately 23 percent of its concentrate requirements from the North America copper mines, approximately 3 percent from the South America mining operations and approximately 3 percent from the Indonesia mining operations at market prices, with the remainder purchased from third parties.

Other Mining & Eliminations. 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, four non-operating copper mines in North America (Ajo, Bisbee and Tohono in Arizona, and Cobre in New Mexico) and other mining support entities.

U.S. Oil & Gas Operations. FCX's U.S. Oil & Gas operations include oil and natural gas assets in the Deepwater GOM, onshore and offshore California, the Haynesville shale in Louisiana, the Madden area in central Wyoming and a position in the Inboard Lower Tertiary/Cretaceous natural gas trend onshore in South Louisiana. All of the U.S. operations are considered one operating and reportable segment.

Financial Information by Business Segment

	Mining Operations																		Corporate, Other & Elimina- tions	FCX Total				
	North America Copper Mines				South America				Indonesia		Africa		Molyb- denum Mines				Atlantic Copper Smelting & Refining		Other Mining & Elimi- nations		U.S. Oil & Gas Operations ^b			
	Morenci	Other Mines	Total	Cerro Verde	Other Mines ^a	Total	Grasberg	Tenke	—	—	\$ 4,125	\$ 1,955	\$ 1,133 ^c	\$ 13,882	\$ 1,994 ^d	1	\$ 15,877							
Year Ended December 31, 2015																								
Revenues:																								
Unaffiliated customers	\$ 558	\$ 351	\$ 909	\$ 1,065	\$ 808	\$ 1,873	\$ 2,617	\$ 1,270	\$ —	\$ 4,125	\$ 1,955	\$ 1,133 ^c	\$ 13,882	\$ 1,994 ^d	1	\$ 15,877								
Intersegment	1,646	2,571	4,217	68	(7) ^e	61	36	114	348	29	15	(4,820)	—	—	—	—	—	—						
Production and delivery ^{f,g}	1,523	2,276	3,799	815	623	1,438	1,808	860	312	4,129	1,848	(3,859)	10,335	1,211	(1)	11,545								
Depreciation, depletion and amortization	217	343	560	219	133	352	293	257	97	9	39	72	1,679	1,804	14	3,497								
Impairment of oil and gas properties	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12,980	164 ^h	13,144							
Copper and molybdenum inventory adjustments	—	142	142	—	73	73	—	—	11	—	—	112	338	—	—	—	338							
Selling, general and administrative expenses	3	3	6	3	1	4	103	11	—	—	16	20	160	188	221	221	569							
Mining exploration and research expenses	—	7	7	—	—	—	—	—	—	—	—	120	127	—	—	—	127							
Environmental obligations and shutdown costs	—	3	3	—	—	—	—	—	—	—	—	74	77	—	1	78								
Net gain on sales of assets	—	(39)	(39)	—	—	—	—	—	—	—	—	—	(39)	—	—	—	(39)							
Operating income (loss)	461	187	648	96	(29)	67	449	256	(72)	16	67	(226)	1,205	(14,189)	(398)	(13,382)								
Interest expense, net	2	2	4	16	—	16	—	—	—	—	10	75	105	186	354	645								
Provision for (benefit from) income taxes	—	—	—	13	(9)	4	195	48	—	—	—	—	247	—	(2,182)	(1,935)								
Total assets at December 31, 2015	3,567	4,878	8,445	9,445	1,661	11,106	9,402	5,079	1,999	219	612	1,293	38,155	8,141 ⁱ	281	46,577								
Capital expenditures	253	102	355	1,674	48	1,722	913	229	13	4	23	47	3,306	2,948 ⁱ	99	6,353								
Year Ended December 31, 2014																								
Revenues:																								
Unaffiliated customers	\$ 364	\$ 336	\$ 700	\$ 1,282	\$ 1,740	\$ 3,022	\$ 2,848	\$ 1,437	\$ —	\$ 4,626	\$ 2,391	\$ 1,704 ^c	\$ 16,728	\$ 4,710 ^d	—	\$ 21,438								
Intersegment	1,752	3,164	4,916	206	304	510	223	121	587	29	21	(6,407)	—	—	—	—	—	—						
Production and delivery	1,287	2,153	3,440	741	1,198	1,939	1,988	770	328	4,633	2,356	(4,795)	10,659	1,237	2	11,898								
Depreciation, depletion and amortization	168	316	484	159	208	367	266	228	92	10	41	70	1,558	2,291	14	3,863								
Impairment of oil and gas properties	—	—	—	—	—	—	—	—	—	—	—	—	—	3,737	—	3,737								
Copper and molybdenum inventory adjustments	—	—	—	—	—	—	—	—	—	—	—	6	6	—	—	6								
Selling, general and administrative expenses	2	3	5	3	3	6	98	12	—	—	17	25	163	207	222	592								
Mining exploration and research expenses	—	8	8	—	—	—	—	—	—	—	—	118	126	—	—	126								
Environmental obligations and shutdown costs	—	(5)	(5)	—	—	—	—	—	—	—	—	123	118	—	1	119								
Goodwill impairment	—	—	—	—	—	—	—	—	—	—	—	—	—	1,717	—	1,717								
Net gain on sales of assets	—	(14)	(14)	—	—	—	—	—	—	—	(703) ^j	(717)	—	—	—	(717)								
Operating income (loss)	659	1,039	1,698	585	635	1,220	719	548	167	12	(2)	453	4,815	(4,479)	(239)	97								
Interest expense, net	3	1	4	1	—	1	—	—	—	—	13	84	102	241	287	630								
Provision for (benefit from) income taxes	—	—	—	265	266	531	293	116	—	—	—	221 ^j	1,161	—	(837)	324								
Total assets at December 31, 2014	3,780	5,611	9,391	7,490	1,993	9,483	8,626	5,073	2,095	235	898	1,319	37,120	20,834	720	58,674								
Capital expenditures	826	143	969	1,691	94	1,785	948	159	54	4	17	52	3,988	3,205 ⁱ	22	7,215								

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

b. Includes the results of Eagle Ford prior to its sale in June 2014.

c. Includes revenues from FCX's molybdenum sales company, which includes sales of molybdenum produced by the Molybdenum mines and by certain of the North and South America copper mines.

d. Includes net mark-to-market gains associated with crude oil and natural gas derivative contracts totaling \$87 million in 2015 and \$505 million in 2014.

e. Reflects net reductions for provisional pricing adjustments to prior period open sales.

f. Includes impairment, restructuring and other net charges for mining operations totaling \$156 million, including \$99 million at North America copper mines, \$13 million at South America mines, \$11 million at Tenke, \$7 million at Molybdenum mines, \$3 million at Rod & Refining, \$20 million at other mining & eliminations and \$3 million for restructuring at corporate, other & eliminations.

g. Includes charges at U.S. Oil & Gas operations totaling \$188 million in 2015 primarily for other asset impairments and inventory write-downs, idle/terminated rig costs, and prior year non-income tax assessments at the California properties and \$46 million in 2014 primarily for idle/terminated rig costs and inventory write-downs.

h. Reflects impairment charges for international oil and gas properties primarily related to Morocco.

i. Excludes international oil and gas capital expenditures totaling \$100 million in 2015 and \$19 million in 2014, primarily related to the Morocco oil and gas properties, which are included in corporate, other & eliminations.

j. Includes the gain and related income tax provision associated with the sale of the Candelaria and Ojos del Salado mines.

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	Mining Operations																			Corporate, Other & Elimina- tions	FCX Total		
	North America Copper Mines				South America				Indonesia		Africa		Molyb- denum				Atlantic		Other				
	Other			Morenci	Cerro Verde	Other	Mines	Total	Grasberg	Tenke	Mines	Rod & Refining	Copper Smelting & Refining	& Elimini- nations	Total	Mining	Oil & Gas	Operations					
	Mines	Total																					
Year Ended December 31, 2013																							
Revenues:																							
Unaffiliated customers	\$ 244	\$ 326	\$ 570	\$ 1,473	\$ 2,379	\$ 3,852	\$ 3,751	\$ 1,590	\$ —	\$ 4,995	\$ 2,027	\$ 1,516 ^a	\$ 18,301	\$ 2,616 ^b	\$ 4	\$ 20,921							
Intersegment	1,673	2,940	4,613	360	273	633	336	47	522	27	14	(6,192)	—	—	—	—	—	—	—				
Production and delivery	1,233	2,033	3,266	781	1,288	2,069	2,309	754	317	4,990	2,054	(4,611)	11,148	682	7	11,837							
Depreciation, depletion and amortization	133	269	402	152	194	346	247	246	82	9	42	48	1,422	1,364	11	2,797							
Copper and molybdenum inventory adjustments	—	—	—	—	—	—	—	—	—	—	—	3	3	—	—	—	—	—	—	3			
Selling, general and administrative expenses	2	3	5	3	4	7	110	12	—	—	20	29	183	120	354	657							
Mining exploration and research expenses	—	5	5	—	—	—	1	—	—	—	—	193	199	—	11	210							
Environmental obligations and shutdown costs	—	(1)	(1)	—	—	—	—	—	—	—	67	66	—	—	—	66							
Operating income (loss)	549	957	1,506	897	1,166	2,063	1,420	625	123	23	(75) ^c	(405)	5,280	450	(379)	5,351							
Interest expense, net	3	1	4	2	1	3	12	2	—	—	16	80	117	181	220	518							
Provision for income taxes	—	—	—	316	404	720	603	131	—	—	—	—	1,454	—	21	1,475							
Total assets at December 31, 2013	3,110	5,810	8,920	6,584	3,996	10,580	7,437	4,849	2,107	239	1,039	1,003	36,174	26,252	959	63,385							
Capital expenditures	737	329	1,066	960	185	1,145	1,030	205	164	4	67	113	3,794	1,436	56	5,286							

a. Includes revenues from FCX's molybdenum sales company, which included sales of molybdenum produced by the Molybdenum mines and by certain of the North and South America copper mines.

b. Includes net mark-to-market losses associated with crude oil and natural gas derivative contracts totaling \$334 million for the period from June 1, 2013, to December 31, 2013.

c. Includes \$50 million for shutdown costs associated with Atlantic Copper's scheduled 68-day maintenance turnaround, which was completed in fourth-quarter 2013.

d. Includes \$199 million of net benefits resulting from oil and gas acquisitions.

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 the 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 revolver, the Term Loan or any other senior debt.

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, 2015 and 2014, and the related condensed consolidating statements of comprehensive (loss) income and the condensed consolidating statements of cash flows for the years ended December 31, 2015, 2014 and 2013, which should be read in conjunction with FCX's notes to the consolidated financial statements:

CONDENSED CONSOLIDATING BALANCE SHEET
December 31, 2015

	FCX Issuer	FM O&G LLC Guarantor	Non-guarantor Subsidiaries	Eliminations	Consolidated FCX
ASSETS					
Current assets	\$ 181	\$ 3,831	\$ 10,982	\$ (7,532)	\$ 7,462
Property, plant, equipment and mining development costs, net	26	57	27,426	—	27,509
Oil and gas properties, net - full cost method:					
Subject to amortization, less accumulated amortization	—	710	1,552	—	2,262
Not subject to amortization	—	1,393	3,432	6	4,831
Investments in consolidated subsidiaries	24,311	—	—	(24,311)	—
Other assets	5,038	1,826	4,447	(6,798)	4,513
Total assets	\$ 29,556	\$ 7,817	\$ 47,839	\$ (38,635)	\$ 46,577
LIABILITIES AND EQUITY					
Current liabilities	\$ 6,012	\$ 666	\$ 5,155	\$ (7,526)	\$ 4,307
Long-term debt, less current portion	14,735	5,883	11,594	(12,433)	19,779
Deferred income taxes	941 ^a	—	3,347	—	4,288
Environmental and asset retirement obligations, less current portion	—	305	3,434	—	3,739
Investment in consolidated subsidiary	—	—	2,397	(2,397)	—
Other liabilities	40	3,360	1,747	(3,491)	1,656
Total liabilities	21,728	10,214	27,674	(25,847)	33,769
Redeemable noncontrolling interest	—	—	764	—	764
Equity:					
Stockholders' equity	7,828	(2,397)	15,725	(13,328)	7,828
Noncontrolling interests	—	—	3,676	540	4,216
Total equity	7,828	(2,397)	19,401	(12,788)	12,044
Total liabilities and equity	\$ 29,556	\$ 7,817	\$ 47,839	\$ (38,635)	\$ 46,577

a. All U.S. related deferred income taxes are recorded at the parent company.

CONDENSED CONSOLIDATING BALANCE SHEET
December 31, 2014

	FCX Issuer	FM O&G LLC Guarantor	Non-guarantor Subsidiaries	Eliminations	Consolidated FCX
ASSETS					
Current assets	\$ 323	\$ 2,635	\$ 8,659	\$ (2,572)	\$ 9,045
Property, plant, equipment and mining development costs, net	22	46	26,152	—	26,220
Oil and gas properties, net - full cost method:					
Subject to amortization, less accumulated amortization	—	3,296	5,907	(16)	9,187
Not subject to amortization	—	2,447	7,640	—	10,087
Investments in consolidated subsidiaries	28,765	6,460	10,246	(45,471)	—
Other assets	8,914	3,947	4,061	(12,787)	4,135
Total assets	\$ 38,024	\$ 18,831	\$ 62,665	\$ (60,846)	\$ 58,674
LIABILITIES AND EQUITY					
Current liabilities	\$ 1,592	\$ 560	\$ 5,592	\$ (2,572)	\$ 5,172
Long-term debt, less current portion	14,930	3,874	8,879	(9,312)	18,371
Deferred income taxes	3,161 ^a	—	3,237	—	6,398
Environmental and asset retirement obligations, less current portion	—	302	3,345	—	3,647
Other liabilities	54	3,372	1,910	(3,475)	1,861
Total liabilities	19,737	8,108	22,963	(15,359)	35,449
Redeemable noncontrolling interest	—	—	751	—	751
Equity:					
Stockholders' equity	18,287	10,723	35,268	(45,991)	18,287
Noncontrolling interests	—	—	3,683	504	4,187
Total equity	18,287	10,723	38,951	(45,487)	22,474
Total liabilities and equity	\$ 38,024	\$ 18,831	\$ 62,665	\$ (60,846)	\$ 58,674

a. All U.S. related deferred income taxes are recorded at the parent company.

CONDENSED CONSOLIDATING STATEMENT OF COMPREHENSIVE (LOSS) INCOME

Year Ended December 31, 2015

	FCX Issuer	FM O&G LLC Guarantor	Non-guarantor Subsidiaries	Eliminations	Consolidated FCX
Revenues					
Revenues	\$ —	\$ 613	\$ 15,264	\$ —	\$ 15,877
Total costs and expenses	60	5,150 ^a	24,060	(11)	29,259
Operating (loss) income	(60)	(4,537)	(8,796)	11	(13,382)
Interest expense, net	(489)	(8)	(300)	152	(645)
Other income (expense), net	225	1	(81)	(139)	6
(Loss) income before income taxes and equity in affiliated companies' net (losses) earnings	(324)	(4,544)	(9,177)	24	(14,021)
(Provision for) benefit from income taxes	(3,227)	1,718	3,453	(9)	1,935
Equity in affiliated companies' net (losses) earnings	(8,685)	(9,976)	(12,838)	31,496	(3)
Net (loss) income	(12,236)	(12,802)	(18,562)	31,511	(12,089)
Net income and preferred dividends attributable to noncontrolling interests	—	—	(114)	(33)	(147)
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)

a. Includes charges totaling \$4.2 billion at the FM O&G LLC guarantor and \$8.9 billion at the non-guarantor subsidiaries related to impairment of FCX's oil and gas properties pursuant to full cost accounting rules.

CONDENSED CONSOLIDATING STATEMENTS OF COMPREHENSIVE (LOSS) INCOME

Year Ended December 31, 2014

	FCX Issuer	FM O&G LLC Guarantor	Non-guarantor Subsidiaries	Eliminations	Consolidated FCX
Revenues	\$ —	\$ 2,356	\$ 19,082	\$ —	\$ 21,438
Total costs and expenses	59	3,498 ^a	17,762 ^a	22	21,341
Operating (loss) income	(59)	(1,142)	1,320	(22)	97
Interest expense, net	(382)	(139)	(189)	80	(630)
Net (loss) gain on early extinguishment of debt	(5)	78	—	—	73
Other income (expense), net	72	3	41	(80)	36
(Loss) income before income taxes and equity in affiliated companies' net (losses) earnings	(374)	(1,200)	1,172	(22)	(424)
Benefit from (provision for) income taxes	73	281	(686)	8	(324)
Equity in affiliated companies' net (losses) earnings	(1,007)	(3,429)	(4,633)	9,072	3
Net (loss) income	(1,308)	(4,348)	(4,147)	9,058	(745)
Net income and preferred dividends attributable to noncontrolling interests	—	—	(519)	(44)	(563)
Net (loss) income attributable to common stockholders	<u>\$ (1,308)</u>	<u>\$ (4,348)</u>	<u>\$ (4,666)</u>	<u>\$ 9,014</u>	<u>\$ (1,308)</u>
Other comprehensive (loss) income	(139)	—	(139)	139	(139)
Total comprehensive (loss) income	<u>\$ (1,447)</u>	<u>\$ (4,348)</u>	<u>\$ (4,805)</u>	<u>\$ 9,153</u>	<u>\$ (1,447)</u>

a. Includes impairment charges totaling \$1.9 billion at the FM O&G LLC Guarantor and \$3.5 billion at the 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.

Year Ended December 31, 2013

	FCX Issuer	FM O&G LLC Guarantor	Non-guarantor Subsidiaries	Eliminations	Consolidated FCX
Revenues	\$ —	\$ 1,177	\$ 19,744	\$ —	\$ 20,921
Total costs and expenses	134	1,065	14,371	—	15,570
Operating (loss) income	(134)	112	5,373	—	5,351
Interest expense, net	(319)	(129)	(129)	59	(518)
Net (loss) gain on early extinguishment of debt	(45)	—	10	—	(35)
Gain on investment in MMR	128	—	—	—	128
Other income (expense), net	61	—	(15)	(59)	(13)
(Loss) income before income taxes and equity in affiliated companies' net earnings (losses)	(309)	(17)	5,239	—	4,913
Benefit from (provision for) income taxes	81	17	(1,573)	—	(1,475)
Equity in affiliated companies' net earnings (losses)	2,886	281	268	(3,432)	3
Net income (loss)	2,658	281	3,934	(3,432)	3,441
Net income and preferred dividends attributable to noncontrolling interests	—	—	(706)	(77)	(783)
Net income (loss) attributable to common stockholders	<u>\$ 2,658</u>	<u>\$ 281</u>	<u>\$ 3,228</u>	<u>\$ (3,509)</u>	<u>\$ 2,658</u>
Other comprehensive income (loss)	101	—	101	(101)	101
Total comprehensive income (loss)	<u>\$ 2,759</u>	<u>\$ 281</u>	<u>\$ 3,329</u>	<u>\$ (3,610)</u>	<u>\$ 2,759</u>

CONDENSED CONSOLIDATING STATEMENT OF CASH FLOWS
Year Ended December 31, 2015

	FCX Issuer	FM O&G LLC Guarantor	Non-guarantor Subsidiaries	Eliminations	Consolidated FCX
Cash flow from operating activities:					
Net (loss) income	\$ (12,236)	\$ (12,802)	\$ (18,562)	\$ 31,511	\$ (12,089)
Adjustments to reconcile net (loss) income to net cash (used in) provided by operating activities:					
Depreciation, depletion and amortization	5	370	3,195	(73)	3,497
Impairment of oil and gas properties	—	4,220	8,862	62	13,144
Copper and molybdenum inventory adjustments	—	—	338	—	338
Other asset impairments, inventory write-downs, restructuring and other	—	11	245	—	256
Net gains on crude oil gas derivative contracts	—	(87)	—	—	(87)
Equity in losses (earnings) of consolidated subsidiaries	8,685	9,976	12,838	(31,496)	3
Other, net	(2,127)	2	(90)	—	(2,215)
Changes in working capital and other tax payments	5,506	(1,428)	(3,714)	9	373
Net cash (used in) provided by operating activities	<u>(167)</u>	<u>262</u>	<u>3,112</u>	<u>13</u>	<u>3,220</u>
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)
Other, net	(21)	(2)	111	21	109
Net cash (used in) provided by investing activities	<u>(988)</u>	<u>(2,230)</u>	<u>(5,245)</u>	<u>2,217</u>	<u>(6,246)</u>
Cash flow from financing activities:					
Proceeds from debt	4,503	—	3,769	—	8,272
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	(20)
Net cash provided by (used in) financing activities	<u>1,155</u>	<u>1,967</u>	<u>1,894</u>	<u>(2,230)</u>	<u>2,786</u>
Net decrease in cash and cash equivalents	—	(1)	(239)	—	(240)
Cash and cash equivalents at beginning of year	—	1	463	—	464
Cash and cash equivalents at end of year	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 224</u>	<u>\$ —</u>	<u>\$ 224</u>

CONDENSED CONSOLIDATING STATEMENT OF CASH FLOWS
Year Ended December 31, 2014

	FCX Issuer	FM O&G LLC Guarantor	Non-guarantor Subsidiaries	Eliminations	Consolidated FCX
Cash flow from operating activities:					
Net (loss) income	\$ (1,308)	\$ (4,348)	\$ (4,147)	\$ 9,058	\$ (745)
Adjustments to reconcile net (loss) income to net cash (used in) provided by operating activities:					
Depreciation, depletion and amortization	4	806	3,077	(24)	3,863
Impairment of oil and gas properties and goodwill	—	1,922	3,486	46	5,454
Net gains on crude oil and natural gas derivative contracts	—	(504)	—	—	(504)
Equity in losses (earnings) of consolidated subsidiaries	1,007	3,429	4,633	(9,072)	(3)
Other, net	(882)	(113)	(807)	—	(1,802)
Changes in working capital and other tax payments, excluding amounts from dispositions	723	(1,750)	395	—	(632)
Net cash (used in) provided by operating activities	<u>(456)</u>	<u>(558)</u>	<u>6,637</u>	<u>8</u>	<u>5,631</u>
Cash flow from investing activities:					
Capital expenditures	—	(2,143)	(5,072)	—	(7,215)
Acquisition of Deepwater GOM interests	—	—	(1,426)	—	(1,426)
Intercompany loans	(1,328)	704	—	624	—
Dividends from (investments in) consolidated subsidiaries	1,221	(130)	(2,408)	1,317	—
Net proceeds from sale of Candelaria and Ojos del Salado	—	—	1,709	—	1,709
Net proceeds from sale of Eagle Ford shale assets	—	2,910	—	—	2,910
Other, net	—	41	180	—	221
Net cash (used in) provided by investing activities	<u>(107)</u>	<u>1,382</u>	<u>(7,017)</u>	<u>1,941</u>	<u>(3,801)</u>
Cash flow from financing activities:					
Proceeds from debt	7,464	—	1,246	—	8,710
Repayments of debt	(5,575)	(3,994)	(737)	—	(10,306)
Intercompany loans	—	810	(186)	(624)	—
Cash dividends and distributions paid, and contributions received	(1,305)	2,364	(1,463)	(1,325)	(1,729)
Other, net	(21)	(3)	(2)	—	(26)
Net cash provided by (used in) financing activities	<u>563</u>	<u>(823)</u>	<u>(1,142)</u>	<u>(1,949)</u>	<u>(3,351)</u>
Net increase (decrease) in cash and cash equivalents	—	1	(1,522)	—	(1,521)
Cash and cash equivalents at beginning of year	—	—	1,985	—	1,985
Cash and cash equivalents at end of year	<u>\$ —</u>	<u>\$ 1</u>	<u>\$ 463</u>	<u>\$ —</u>	<u>\$ 464</u>

CONDENSED CONSOLIDATING STATEMENT OF CASH FLOWS
Year Ended December 31, 2013

	FCX Issuer	FM O&G LLC Guarantor	Non-guarantor Subsidiaries	Eliminations	Consolidated FCX
Cash flow from operating activities:					
Net income (loss)	\$ 2,658	\$ 281	\$ 3,934	\$ (3,432)	\$ 3,441
Adjustments to reconcile net income (loss) to net cash (used in) provided by operating activities:					
Depreciation, depletion and amortization	4	616	2,177	—	2,797
Net losses on crude oil and natural gas derivative contracts	—	334	—	—	334
Gain on investment in MMR	(128)	—	—	—	(128)
Equity in (earnings) losses of consolidated subsidiaries	(2,886)	(281)	(265)	3,432	—
Other, net	8	(14)	78	—	72
Changes in working capital and other tax payments, excluding amounts from acquisitions and dispositions	272	735	(1,384)	—	(377)
Net cash (used in) provided by operating activities	(72)	1,671	4,540	—	6,139
Cash flow from investing activities:					
Capital expenditures	—	(894)	(4,392)	—	(5,286)
Acquisitions, net of cash acquired	(5,437)	—	(4)	—	(5,441)
Intercompany loans	834	—	(162)	(672)	—
Dividends from (investments in) consolidated subsidiaries	629	—	—	(629)	—
Other, net	15	30	(226)	—	(181)
Net cash used in investing activities	(3,959)	(864)	(4,784)	(1,301)	(10,908)
Cash flow from financing activities:					
Proceeds from debt	11,260	—	241	—	11,501
Repayments of debt and redemption of MMR preferred stock	(4,737)	(416)	(551)	—	(5,704)
Intercompany loans	—	(391)	(281)	672	—
Cash dividends and distributions paid	(2,281)	—	(885)	629	(2,537)
Other, net	(211)	—	—	—	(211)
Net cash provided by (used in) financing activities	4,031	(807)	(1,476)	1,301	3,049
Net decrease in cash and cash equivalents	—	—	(1,720)	—	(1,720)
Cash and cash equivalents at beginning of year	—	—	3,705	—	3,705
Cash and cash equivalents at end of year	\$ —	\$ —	\$ 1,985	\$ —	\$ 1,985

NOTE 18. SUBSEQUENT EVENTS

As a result of the downgrade of the credit ratings of FCX debt below investment grade, FCX may be required to provide additional or alternative forms of financial assurance, such as letters of credit, surety bonds or collateral, related to its ARO and environmental obligations (refer to Note 12 for further discussion).

On February 15, 2016, FCX announced it had entered into a definitive agreement to sell a 13 percent undivided interest in its Morenci unincorporated joint venture to SMM for \$1.0 billion in cash. The transaction is subject to customary closing conditions, including regulatory approvals, and is expected to close in mid-2016. FCX expects to record an approximate \$550 million gain on the transaction and use losses to offset cash taxes on the transaction. Proceeds from the transaction will be used to repay borrowings under FCX's Term Loan and revolving credit facility.

The Morenci unincorporated joint venture is currently owned 85 percent by FCX and 15 percent by Sumitomo. Following completion of the transaction, the unincorporated joint venture will be owned 72 percent by FCX, 15 percent by Sumitomo and 13 percent by an affiliate that is wholly owned by SMM.

On February 26, 2016, FCX reached an agreement to further amend its revolving credit facility and Term Loan. The amendments to FCX's revolving credit facility and Term Loan include (i) modification of the maximum leverage ratio from 5.90x to 8.00x for the quarters ending March 31, 2016, and June 30, 2016, from 5.75x to 8.00x for the quarter ending September 30, 2016, and from 5.00x to 6.00x for the quarter ending December 31, 2016; and no changes to 2017 (remains 4.25x) or thereafter (reverts to 3.75x) and (ii) modification to the minimum interest expense coverage ratio (ratio of consolidated EBITDAX, as defined in the amended agreements, to consolidated cash interest expense) from 2.50x to 2.25x.

The commitment under FCX's revolving credit facility has been reduced from \$4.0 billion to \$3.5 billion.

A springing collateral and guarantee trigger was also added to the revolving credit facility and Term Loan. Under this provision, if FCX has not entered into definitive agreements for asset sales totaling \$3.0 billion in aggregate by June 30, 2016, that are reasonably expected to close by December 31, 2016, FCX will be required to secure the revolving credit facility and Term Loan with a mutually acceptable collateral and guarantee package. The springing collateral and guarantee trigger will also go into effect if such asset sales totaling \$3.0 billion in aggregate have not occurred by December 31, 2016.

In addition, the mandatory prepayment provision was modified to provide that 100 percent (rather than the 50 percent under the December 2015 amendment) of the net proceeds received on or prior to December 31, 2016, in excess of the first \$1.0 billion from asset sales, subject to certain exceptions, must be applied to repay the Term Loan if the lenders are unsecured and the leverage ratio (as defined in the amended agreement) is equal to or greater than 6.00x.

The Term Loan and revolving credit facility contain 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; or sell assets. Many of the exceptions to the subsidiary indebtedness restrictions and the lien restrictions have been narrowed significantly through March 31, 2017. In addition, on or prior to March 31, 2017, FCX is not permitted to pay dividends on its common stock or make other restricted payments. The pricing under the amended Term Loan and revolving credit facility also changed. If the total leverage ratio is greater than 6.00x, then the existing interest rate will be increased by 0.50 percent, with an additional increase of 0.50 percent if the total leverage ratio is greater than 7.00x.

FCX evaluated events after December 31, 2015, 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
2015					
Revenues ^a	\$ 4,153	\$ 4,248	\$ 3,681	\$ 3,795	\$ 15,877
Operating loss ^{b,c,d}	(2,963)	(2,374)	(3,945)	(4,100)	(13,382)
Net loss	(2,406)	(1,799)	(3,790)	(4,094)	(12,089)
Net (income) loss and preferred dividends attributable to noncontrolling interests	(68)	(52) ^e	(40)	13	(147) ^e
Net loss attributable to common stockholders ^{a,b,c,d}	(2,474)	(1,851) ^e	(3,830)	(4,081)	(12,236)
Basic net loss per share attributable to common stockholders	(2.38)	(1.78)	(3.58)	(3.47)	(11.31)
Diluted net loss per share attributable to common stockholders ^{a,b,c,d}	(2.38)	(1.78) ^e	(3.58)	(3.47)	(11.31) ^e
2014					
Revenues ^f	\$ 4,985	\$ 5,522	\$ 5,696	\$ 5,235	\$ 21,438
Operating income (loss)	1,111	1,153 ^{i,j}	1,132 ^{g,h,i,j}	(3,299) ^{i,j}	97 ^{g,h,i,j}
Net income (loss)	626	660	704	(2,735)	(745)
Net income and preferred dividends attributable to noncontrolling interests	116	178	152	117	563
Net income (loss) attributable to common stockholders ^f	510	482 ^{i,j}	552 ^{g,h,i,j}	(2,852) ^{g,h,i,j}	(1,308) ^{g,h,i,j}
Basic net income (loss) per share attributable to common stockholders	0.49	0.46	0.53	(2.75)	(1.26)
Diluted net income (loss) per share attributable to common stockholders ^f	0.49	0.46 ^{i,j}	0.53 ^{g,h,i,j}	(2.75) ^{g,h,i,j}	(1.26) ^{g,h,i,j}

- a. Includes charges of \$48 million (\$30 million to net loss attributable to common stockholders or \$0.03 per share) in the first quarter, \$95 million (\$59 million to net loss attributable to common stockholders or \$0.06 per share) in the second quarter, \$74 million (\$46 million to net loss attributable to common stockholders or \$0.04 per share) in the third quarter, \$102 million (\$63 million to net loss attributable to common stockholders or \$0.05 per share) in the fourth quarter and \$319 million (\$198 million to net loss attributable to common stockholders or \$0.18 per share) for the year for net noncash mark-to-market losses on crude oil derivative contracts.
- b. Includes charges of \$3.1 billion (\$2.4 billion to net loss attributable to common stockholders or \$2.31 per share) in the first quarter, \$2.7 billion (\$2.0 billion to net loss attributable to common stockholders or \$1.90 per share) in the second quarter, \$3.7 billion (\$3.5 billion to net loss attributable to common stockholders or \$3.25 per share) in the third quarter, \$3.7 billion (\$3.7 billion to net loss attributable to common stockholders or \$3.18 per share) in the fourth quarter and \$13.1 billion (\$11.6 billion to net loss attributable to common stockholders or \$10.72 per share) for the year to reduce the carrying value of oil and gas properties pursuant to full cost accounting rules. Additionally, after-tax impacts to net loss include net tax charges of \$458 million (\$0.44 per share) in the first quarter, \$305 million (\$0.29 per share) in the second quarter, \$1.1 billion (\$1.07 per share) in the third quarter, \$1.4 billion (\$1.21 per share) in the fourth quarter and \$3.3 billion (\$3.09 per share) for the year to establish a valuation allowance primarily against U.S. federal alternative minimum tax credits and foreign tax credits, partly offset by a tax benefit related to the impairment of the Morocco oil and gas properties in the third quarter.
- c. Includes charges at oil and gas operations of \$17 million (\$10 million to net loss attributable to common stockholders or \$0.01 per share) in the first quarter, \$22 million (\$14 million to net loss attributable to common stockholders or \$0.01 per share) in the second quarter, \$21 million (\$13 million to net loss attributable to common stockholders or \$0.01 per share) in the third quarter, \$129 million (\$81 million to net loss attributable to common stockholders or \$0.07 per share) in the fourth quarter and \$188 million (\$117 million to net loss attributable to common stockholders or \$0.11 per share) for the year for other asset impairments and inventory write-downs, idle/terminated rig costs and prior year non-income tax assessments related to the California properties.
- d. Includes charges of \$4 million (\$3 million to net loss attributable to common stockholders) in the first quarter, \$59 million (\$38 million to net loss attributable to common stockholders or \$0.04 per share) in the second quarter, \$91 million (\$58 million to net loss attributable to common stockholders or \$0.05 per share) in the third quarter, \$184 million (\$118 million to net loss attributable to common stockholders or \$0.10 per share) in the fourth quarter and \$338 million (\$217 million to net loss attributable to common stockholders or \$0.20 per share) for the year associated with inventory adjustments to copper and molybdenum inventories. Additionally, includes charges at mining operations of \$95 million (\$58 million to net loss attributable to common stockholders or \$0.05 per share) in the third quarter, \$64 million (\$38 million to net loss attributable to common stockholders or \$0.03 per share) in the fourth quarter and \$156 million (\$94 million to net loss attributable to common stockholders or \$0.09 per share) for the year associated with impairments, restructuring and other net charges.
- e. Includes a gain of \$92 million (\$0.09 per share) in the second quarter and for the year associated with the net proceeds received from insurance carriers and other third parties related to the shareholder derivative litigation settlement.

- f. Includes credits (charges) of \$15 million (\$9 million to net income attributable to common stockholders or \$0.01 per share) in the first quarter, \$(7) million (\$4 million to net income attributable to common stockholders) in the second quarter, \$122 million (\$76 million to net income attributable to common stockholders or \$0.07 per share) in the third quarter, \$497 million (\$309 million to net loss attributable to common stockholders or \$0.30 per share) in the fourth quarter and \$627 million (\$389 million to net loss attributable to common stockholders or \$0.37 per share) for the year for net noncash mark-to-market gains (losses) on crude oil and natural gas derivative contracts.
- g. Includes charges of \$308 million (\$192 million to net income attributable to common stockholders or \$0.18 per share) in the third quarter, \$3.4 billion (\$2.1 billion to net loss attributable to common stockholders or \$2.05 per share) in the fourth quarter and \$3.7 billion (\$2.3 billion to net loss attributable to common stockholders or \$2.24 per share) for the year to reduce the carrying value of oil and gas properties pursuant to full cost accounting rules. Additionally, includes charges at the oil and gas operations in the fourth quarter and for the year of (i) \$1.7 billion (\$1.7 billion to net loss attributable to common stockholders or \$1.65 per share) for the impairment of the full carrying value of goodwill and (ii) \$46 million (\$29 million to net loss attributable to common stockholders or \$0.03 per share) for idle/terminated rig costs and inventory write-downs.
- h. Includes net gains of \$46 million (\$31 million to net income attributable to common stockholders or \$0.03 per share) in the third quarter, \$671 million (\$450 million to net loss attributable to common stockholders or \$0.43 per share) in the fourth quarter and \$717 million (\$481 million to net loss attributable to common stockholders or \$0.46 per share) for the year primarily from the sale of the Candelaria and Ojos del Salado copper mining operations in the fourth quarter (refer to Note 2 for further discussion) and the sale of a metals injection molding plant in the third quarter.
- i. Includes tax charges of \$57 million (\$0.06 per share) in the second quarter, \$5 million in the third quarter, \$22 million (\$0.02 per share) in the fourth quarter and \$84 million (\$0.08 per share) for the year associated with deferred taxes recorded in connection with the allocation of goodwill to the sale of the Eagle Ford shale assets. Additionally, includes net tax charges (benefit) of \$54 million (\$7 million attributable to noncontrolling interests and \$47 million to net income attributable to common stockholders or \$0.04 per share) in the third quarter, \$(17) million (\$11 million attributable to noncontrolling interests and \$(28) million to net loss attributable to common stockholders or \$(0.03) per share) in the fourth quarter and \$37 million (\$18 million attributable to noncontrolling interests and \$19 million to net loss attributable to common stockholders or \$0.02 per share) for the year associated with changes in Chilean tax rules, U.S. federal income tax law and Peruvian tax rules, partially offset by a tax benefit related to changes in U.S. state income tax filing positions.
- j. Includes net gains (losses) on early extinguishment of debt totaling \$4 million in the second quarter, \$17 million (\$0.02 per share) in the third quarter, \$(18) million (\$0.02 per share) in the fourth quarter and \$3 million for the year. Refer to Note 8 for further discussion.

NOTE 20. SUPPLEMENTARY MINERAL RESERVE INFORMATION (UNAUDITED)

Recoverable proven and probable reserves have been calculated as of December 31, 2015, 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, 2015, were determined using long-term average prices of \$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, 2015, LME spot copper prices averaged \$2.97 per pound, London PM gold prices averaged \$1,276 per ounce and the weekly average price for molybdenum quoted by *Metals Week* averaged \$9.45 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, 2015**

	Copper^a (billion pounds)	Gold (million ounces)	Molybdenum (billion pounds)
North America	33.5	0.3	2.38
South America	30.8	—	0.67
Indonesia ^b	28.0	26.8	—
Africa	7.2	—	—
Consolidated ^c	99.5	27.1	3.05
Net equity interest ^d	79.3	24.6	2.73

- a. Consolidated recoverable copper reserves included 3.8 billion pounds in leach stockpiles and 1.0 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 Notes 3 and 18 for further discussion of FCX's joint ventures). Excluded from the table above were FCX's estimated recoverable proven and probable reserves of 0.87 billion pounds of cobalt at Tenke and 271.2 million ounces of silver in Indonesia, South America and North America, which were determined using long-term average prices of \$10 per pound for cobalt and \$15 per ounce for silver.
- 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 0.49 billion pounds of cobalt at Tenke and 221.6 million ounces of silver in Indonesia, South America and North America.

Recoverable Proven and Probable Mineral Reserves Estimated at December 31, 2015							
	Average Ore Grade Per Metric Ton ^a			Recoverable Proven and Probable Reserves ^b			
	Ore ^a (million metric tons)	Copper (%)	Gold (grams)	Molybdenum (%)	Copper (billion pounds)	Gold (million ounces)	Molybdenum (billion pounds)
North America							
Developed and producing:							
Morenci	3,574	0.27	—	— ^c	14.1	—	0.17
Bagdad	1,253	0.33	— ^c	0.02	7.6	0.1	0.38
Safford	84	0.43	—	—	0.8	—	—
Sierrita	2,319	0.23	— ^c	0.03	10.2	0.1	1.04
Miami	—	—	—	—	0.1	—	—
Chino	237	0.45	0.02	— ^c	2.2	0.1	0.01
Tyrone	13	0.42	—	—	0.3	—	—
Henderson	81	—	—	0.17	—	—	0.25
Climax	178	—	—	0.15	—	—	0.55
Undeveloped:							
Cobre	79	0.35	—	—	0.3	—	—
South America							
Developed and producing:							
Cerro Verde	3,856	0.37	—	0.01	28.2	—	0.67
El Abra	399	0.44	—	—	2.6	—	—
Indonesia^d							
Developed and producing:							
Deep Mill Level Zone	460	0.89	0.74	—	7.9	8.7	—
Grasberg open pit	129	1.08	1.29	—	2.7	4.5	—
Deep Ore Zone	116	0.56	0.69	—	1.2	2.0	—
Big Gossan	54	2.26	0.99	—	2.5	1.1	—
Undeveloped:							
Grasberg Block Cave	962	1.03	0.78	—	18.4	15.6	—
Kucing Liar	395	1.27	1.09	—	9.4	6.4	—
Africa							
Developed and producing:							
Tenke Fungurume	99	3.19	—	—	7.2	—	—
Total 100% basis	14,288				115.7	38.6	3.07
Consolidated^e					99.5	27.1	3.05
FCX's equity share^f					79.3	24.6	2.73

- a. Excludes material contained in stockpiles.
- b. Includes estimated recoverable metals contained in stockpiles.
- c. Amounts not shown because of rounding.
- d. 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).
- e. 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 Notes 3 and 18 for further discussion of FCX's joint ventures.
- f. 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.

NOTE 21. SUPPLEMENTARY OIL AND GAS INFORMATION (UNAUDITED)

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 follows:

	2015	2014	2013 ^a
Property acquisition costs:			
Proved properties	\$ —	\$ 463	\$ 12,205 ^b
Unproved properties	61	1,460	11,259 ^c
Exploration costs	1,250	1,482	502
Development costs	1,442	1,270	854
	<u>\$ 2,753</u>	<u>\$ 4,675</u>	<u>\$ 24,820</u>

a. Includes the results of FM O&G beginning June 1, 2013.

b. Includes \$12.2 billion from the acquisitions of PXP and MMR.

c. Includes \$11.1 billion from the acquisitions of PXP and MMR.

These amounts included (decreases) increases in AROs of \$(80) million in 2015, \$(27) million in 2014 and \$1.1 billion in 2013 (including \$1.0 billion assumed in the acquisitions of PXP and MMR), capitalized general and administrative expenses of \$124 million in 2015, \$143 million in 2014 and \$67 million in 2013, and capitalized interest of \$58 million in 2015, \$88 million in 2014 and \$69 million in 2013.

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:

	2015	2014	2013
Properties subject to amortization	\$ 24,538	\$ 16,547	\$ 13,829
Accumulated amortization	(22,276) ^a	(7,360) ^a	(1,357)
	<u>\$ 2,262</u>	<u>\$ 9,187</u>	<u>\$ 12,472</u>

a. Includes charges of \$13.1 billion in 2015 and \$3.7 billion in 2014 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 \$33.46 in 2015, \$39.74 in 2014 and \$35.54 for the period from June 1, 2013, to December 31, 2013.

Costs Not Subject to Amortization. A summary of the categories of costs comprising the amount of unproved properties not subject to amortization by the year in which such costs were incurred follows:

	Total	Years Ended December 31,		
		2015	2014	2013 ^a
U.S.:				
Onshore				
Acquisition costs	\$ 389	\$ 6	\$ —	\$ 383
Exploration costs	8	7	1	—
Capitalized interest	2	2	—	—
Offshore				
Acquisition costs	4,048	57	1,304	2,687
Exploration costs	331	201	130	—
Capitalized interest	37	25	11	1
International:				
Offshore				
Acquisition costs	7	—	—	7
Exploration costs	7	2	5	—
Capitalized interest	2	1	1	—
	<u>\$ 4,831</u>	<u>\$ 301</u>	<u>\$ 1,452</u>	<u>\$ 3,078</u>

a. Includes the results of FM O&G beginning June 1, 2013.

FCX expects that 40 percent of the costs not subject to amortization at December 31, 2015, will be transferred to the amortization base over the next five years and the majority of the remainder in the next seven to ten years.

Of the total U.S. net undeveloped acres, 24 percent is covered by leases that expire from 2016 to 2018. As a result of declining crude oil prices, FCX's current plans anticipate that the majority of the expiring acreage will not be retained by drilling operations or other means. Currently, FM O&G has a commitment to drill a second well in Morocco in 2016. However, FM O&G is actively negotiating with its partners to modify its work program, which, if successful, would result in changes in the timing, amount or type of future commitment. The exploration permits covering FM O&G's Morocco acreage expire at the end of 2016; however, FM O&G has the ability, under certain circumstances, to extend the exploration permits through 2019. Over 95 percent of the acreage in the Haynesville shale in Louisiana is currently held by production or held by operations.

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, 2015 and 2014, and the period from June 1, 2013, to December 31, 2014, presented below exclude non-oil and gas revenues, general and administrative expenses, goodwill impairment, interest expense and interest income. Income tax benefit (expense) was determined by applying the statutory rates to pre-tax operating results:

	Years Ended December 31,		June 1, 2013, to
	2015	2014	December 31, 2013
Revenues from oil and gas producing activities	\$ 1,994	\$ 4,710	\$ 2,616
Production and delivery costs	(1,215)	(1,237)	(682)
Depreciation, depletion and amortization	(1,772)	(2,265)	(1,358)
Impairment of oil and gas properties	(13,144)	(3,737)	—
Income tax benefit (expense) (based on FCX's statutory tax rate)	5,368	958	(219)
Results of operations from oil and gas producing activities	<u>\$ (8,769)</u>	<u>\$ (1,571)</u>	<u>\$ 357</u>

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. 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 reflect 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.

Decreases in the prices of crude oil and natural gas could have an adverse effect on the carrying value of the proved reserves, reserve volumes and FCX's revenues, profitability and cash flows. FCX's reference prices for reserve determination are the WTI spot price for crude oil and the Henry Hub price for natural gas. As of February 2016, the twelve-month average of the first-day-of-the-month historical reference price for crude oil has decreased from \$50.28 per barrel at December 31, 2015, to \$47.54 per barrel, while the comparable price for natural gas has decreased from \$2.59 per MMBtu at December 31, 2015, to \$2.50 per MMBtu.

The market price for California crude oil differs from the established market indices in the U.S. primarily because of the higher transportation and refining costs associated with heavy oil, which can vary based on global supply and demand, refinery utilization and inventory levels. Approximately 33 percent of FCX's oil and natural gas reserve volumes are attributable to properties in California where differentials to the reference prices have been volatile as a result of these factors.

The market price for GOM crude oil differs from WTI as a result of a large portion of FCX's production being sold under a Heavy Louisiana Sweet based pricing. Approximately 59 percent of FCX's December 31, 2015, oil and natural gas reserve volumes are attributable to properties in the GOM where oil price realizations are generally higher because of these marketing contracts.

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, 2015 and 2014, and the period from June 1, 2013, to December 31, 2013.

	Oil (MMBbls) ^{a,b}	Gas (Bcf) ^a	Total (MMBOE) ^a
<u>2015</u>			
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	<u>207</u>	<u>274</u>	<u>252</u>
Proved developed reserves at December 31, 2015	<u>129</u>	<u>245</u>	<u>169</u>
Proved undeveloped reserves at December 31, 2015	<u>78</u>	<u>29</u>	<u>83</u>
<u>2014</u>			
Proved reserves:			
Balance at beginning of year	370	562	464
Extensions and discoveries	10	35	16
Acquisitions of reserves in-place	14	9	16
Revisions of previous estimates	(10)	140	13
Sale of reserves in-place	(53)	(54)	(62)
Production	(43)	(82)	(57)
Balance at end of year	<u>288</u>	<u>610</u>	<u>390</u>
Proved developed reserves at December 31, 2014	<u>184</u>	<u>369</u>	<u>246</u>
Proved undeveloped reserves at December 31, 2014	<u>104</u>	<u>241</u>	<u>144</u>
<u>2013</u>			
Proved reserves:			
Balance at beginning of year	—	—	—
Acquisitions of PXP and MMR	368	626	472
Extensions and discoveries	20	20	24
Revisions of previous estimates	11	(26)	7
Sale of reserves in-place	—	(3)	(1)
Production	(29)	(55)	(38)
Balance at end of year	<u>370</u>	<u>562</u>	<u>464</u>
Proved developed reserves at December 31, 2013	<u>236</u>	<u>423</u>	<u>307</u>
Proved undeveloped reserves at December 31, 2013	<u>134</u>	<u>139</u>	<u>157</u>

a. MMBbls = million barrels; Bcf = billion cubic feet; MMBOE = million BOE

b. Includes 9 MMBbls of NGL proved reserves (6 MMBbls of developed and 3 MMBbls of undeveloped) at December 31, 2015, 10 MMBbls of NGL proved reserves (7 MMBbls of developed and 3 MMBbls of undeveloped) at December 31, 2014, and 20 MMBbls of NGL proved reserves (14 MMBbls of developed and 6 MMBbls of undeveloped) at December 31, 2013.

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 continued successful development of Horn Mountain and 3 MMBOE in the Haynesville shale resulting from continued successful drilling that extended and developed FCX's proved acreage. For the year ended December 31, 2014, FCX had a total of 16 MMBOE of extensions and discoveries, including 8 MMBOE in the Deepwater GOM, primarily associated with the continued successful development at Horn Mountain and 5 MMBOE in the Haynesville shale resulting from continued successful drilling that extended and developed FCX's proved acreage. From June 1, 2013, to December 31, 2013, FCX had a total of 24 MMBOE of extensions and discoveries, including 16 MMBOE in the Eagle Ford shale resulting from continued successful drilling that extended and developed FCX's proved acreage and 5 MMBOE in the Deepwater GOM, primarily associated with the previously drilled Holstein Deep development acquired during 2013.

For the year ended December 31, 2015, FCX had net negative revisions of 102 MMBOE primarily related to lower oil and gas price realizations. For the year ended December 31, 2014, FCX had net positive revisions of 13 MMBOE primarily related to improved gas price realizations in both the Haynesville shale and Madden field, as well as continued improved performance in the Eagle Ford shale prior to the disposition, partially offset by the downward revisions of certain proved undeveloped reserves resulting from deferred development plans, as well as lower oil price realizations and higher steam-related operating expenses resulting from higher natural gas prices at certain onshore California properties. From June 1, 2013, to December 31, 2013, FCX had net positive revisions of 7 MMBOE primarily related to improved performance at certain onshore California and Deepwater GOM properties, partially offset by performance reductions primarily related to certain other Deepwater GOM properties and the Haynesville shale.

Excluding the impact of crude oil derivative contracts, the average realized sales prices used in FCX's reserve reports as of December 31, 2015, were \$47.80 per barrel of crude oil and \$2.55 per one thousand cubic feet (Mcf) of natural gas. As of December 31, 2014, the average realized sales prices used in FCX's reserve report were \$93.20 per barrel of crude oil and \$4.35 per Mcf.

For the year ended December 31, 2014, FCX acquired reserves in-place totaling 16 MMBOE from the acquisition of interests in the Deepwater GOM, including interests in the Lucius and Heidelberg oil fields.

For the year ended December 31, 2014, FCX sold reserves in-place totaling 62 MMBOE primarily related to its Eagle Ford shale assets. From June 1, 2013, to December 31, 2013, FCX sold reserves in-place totaling 1 MMBOE related to its Panhandle properties.

Standardized Measure. The Standardized Measure (discounted at 10 percent) from production of proved oil and natural gas reserves has been developed as of December 31, 2015, 2014 and 2013, in accordance with SEC guidelines. FCX estimated the quantity of proved oil and natural gas reserves and the future periods in which they are 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 are 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, 2015, 2014 and 2013, 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 follows:

	2015	2014	2013
Future cash inflows	\$ 10,536	\$ 29,504	\$ 38,901
Future production expense	(4,768)	(10,991)	(12,774)
Future development costs ^a	(4,130)	(6,448)	(6,480)
Future income tax expense	—	(2,487)	(4,935)
Future net cash flows	1,638	9,578	14,712
Discounted at 10% per year	(246)	(3,157)	(5,295)
Standardized Measure	\$ 1,392	\$ 6,421	\$ 9,417

a. Includes estimated asset retirement costs of \$1.9 billion at December 31, 2015, and \$1.8 billion at December 31, 2014 and 2013.

A summary of the principal sources of changes in the Standardized Measure for the years ended December 31 follows:

	2015	2014	2013 ^a
Balance at beginning of year	\$ 6,421	\$ 9,417	\$ —
Changes during the year:			
Reserves acquired in the acquisitions of PXP and MMR	—	—	14,467
Sales, net of production expenses	(928)	(3,062)	(2,296)
Net changes in sales and transfer prices, net of production expenses	(7,766)	(2,875)	(459)
Extensions, discoveries and improved recoveries	45	194	752
Changes in estimated future development costs	1,287	(498)	(1,190)
Previously estimated development costs incurred during the year	985	982	578
Sales of reserves in-place	—	(1,323)	(12)
Other purchases of reserves in-place	—	487	—
Revisions of quantity estimates	(1,170)	399	102
Accretion of discount	797	1,195	701
Net change in income taxes	1,721	1,505	(3,226)
Total changes	(5,029)	(2,996)	9,417
Balance at end of year	\$ 1,392	\$ 6,421	\$ 9,417

a. Includes the results of FM O&G beginning June 1, 2013.

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. There has been no change in our internal control over financial reporting that occurred during the quarter ended December 31, 2015, 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.**Amended and Restated Term Loan**

On February 26, 2016, Freeport-McMoRan Inc. (FCX) and Freeport-McMoRan Oil & Gas LLC (FM O&G LLC), as borrowers, JPMorgan Chase Bank, N.A., as administrative agent and collateral agent, Bank of America, N.A., as syndication agent, and each of the lenders party thereto entered into an agreement to amend and restate the Term Loan Agreement dated as of February 14, 2013, as amended by the First Amendment dated as of February 27, 2015, and the Second Amendment dated as of December 9, 2015, among the borrowers, the administrative agent, the syndication agent, and each of the lenders party thereto (Amended and Restated Term Loan).

The changes made pursuant to the Amended and Restated Term Loan include modification of the maximum total leverage ratio from 5.90x to 8.00x for the quarters ending March 31, 2016, and June 30, 2016, from 5.75x to 8.00x for the quarter ending September 30, 2016, and from 5.00x to 6.00x for the quarter ending December 31, 2016. There was no change to the maximum total leverage ratio for 2017 (remains 4.25x) or thereafter (reverts to 3.75x). The minimum interest expense coverage ratio (ratio of consolidated EBITDAX, as defined in the Amended and Restated Term Loan, to consolidated cash interest expense) was also decreased from 2.50x to 2.25x.

In addition, the mandatory prepayment provision was modified to provide that 100 percent (rather than the current 50 percent) of the net proceeds received on or prior to December 31, 2016, in excess of the first \$1.0 billion from asset sales, subject to certain exceptions, must be applied to repay the term loan if the lenders are unsecured and the total leverage ratio is equal to or greater than 6.00x. A springing collateral and guarantee trigger was also added to provide that if FCX has not entered into definitive agreements for asset sales totaling \$3.0 billion in aggregate by June 30, 2016, that are reasonably expected to close by December 31, 2016, FCX will be required to guarantee and secure the term loan with a mutually acceptable collateral and guarantee package. The springing collateral and guarantee trigger will also go into effect if such asset sales totaling \$3.0 billion in aggregate have not been consummated by December 31, 2016.

The term loan contains 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; or sell assets. Many of the exceptions to the subsidiary indebtedness restrictions and the lien restrictions have been narrowed significantly through March 31, 2017. In addition, on or prior to March 31, 2017, FCX is not permitted to pay dividends on its common stock or make other restricted payments. The pricing under the amended term loan is also changed. If the total leverage ratio is greater than 6.0x, then the existing interest rate will be increased by 0.50 percent, with an additional increase of 0.50 percent (i.e., a total increase of 1.0 percent above the existing interest rate) if the total leverage ratio is greater than 7.0x.

Amended and Restated Revolving Credit Facility

On February 26, 2016, FCX, PT Freeport Indonesia (PT-FI), and FM O&G LLC, as borrowers, JPMorgan Chase Bank, N.A. as administrative agent, collateral agent and swingline lender, Bank of America, N.A., as syndication agent and each of the lenders party thereto entered into an agreement to amend and restate the Revolving Credit Agreement dated as of February 14, 2013, as amended by the First Amendment dated as of May 30, 2014, the Second Amendment dated as of February 27, 2015, and the Third Amendment dated as of December 9, 2015, among the borrowers, the administrative agent, the syndication agent, and each of the lenders party thereto (Amended and Restated Revolving Credit Facility).

The changes pursuant to the Amended and Restated Revolving Credit Facility include modification of the maximum total leverage ratio, the minimum interest expense coverage ratio, the addition of the springing collateral and guarantee trigger, the addition of certain temporary negative covenants and certain existing negative covenants have been temporarily narrowed significantly, and pricing changes, all of which are consistent with the changes to the Amended and Restated Term Loan described above.

The commitments under the Amended and Restated Revolving Credit Facility have been reduced by \$500 million from \$4.0 billion to \$3.5 billion. As of February 26, 2016, outstanding borrowings totaled \$515 million and \$38 million of letters of credit were issued under the revolving credit facility, resulting in current availability of approximately \$2.9 billion, of which approximately \$1.5 billion could be used for additional letters of credit.

JPMorgan Chase Bank, N.A. and Bank of America, N.A. and their respective affiliates have in the past engaged, and may in the future engage, in transactions with and perform services, including commercial banking, financial advisory and investment banking services, for FCX and its affiliates in the ordinary course of business for which JPMorgan Chase Bank, N.A. and Bank of America, N.A. have received or will receive customary fees and expenses.

Refer to Note 8 for additional information about the term loan and the revolving credit facility.

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 2016 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 2016 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 2016 annual meeting of stockholders, is incorporated herein by reference.

Item 13. Certain Relationships and Related Transactions, and Director Independence.

The information set forth under the caption "Certain Transactions" of our definitive proxy statement to be filed with the SEC, relating to our 2016 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 2016 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 (loss) income, cash flows and equity, and the consolidated balance sheets are included as part of Item 8. "Financial Statements and Supplementary Data."

(a)(2). Financial Statement Schedules.

Reference is made to the Index to Financial Statements appearing on page F-1 hereof.

(a)(3). Exhibits.

Reference is made to the Exhibit Index beginning on page E-1 hereof.

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.

Agitation-leach plant. A processing plant that recovers copper and other metals by passing a slurry of finely ground ores mixed with acidic solutions through a series of continuously stirred tanks.

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, the anode 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.

Carrollite. A cubic sulfide of cobalt with small amounts of copper, iron and nickel.

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.

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.

Heterogenite. A cobalt mineral containing up to 4 percent copper oxide.

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.

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.

Stoping. 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

Seismic data. The data associated with sending energy waves or sound waves into the earth and recording the wave reflections to indicate the type, size, shape and depth of subsurface rock formations.

API gravity. A system of classifying oil based on its specific gravity, whereby the greater the gravity, the lighter the oil.

Barrel or Bbl. One stock tank barrel, or 42 U.S. gallons liquid volume (used in reference to crude oil or other liquid hydrocarbons).

Block. A block depicted on the Outer Continental Shelf Leasing and Official Protraction Diagrams issued by BOEM or a similar depiction on official protraction or similar diagrams issued by a state bordering on the Gulf of Mexico.

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.

Deterministic method. The method of estimating reserves or resources is called deterministic when a single value for each parameter (from the geoscience, engineering, or economic data) in the reserves calculation is used in the reserves estimation procedure.

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.

Exploratory well. A well drilled to find a new field or to find a new reservoir in a field previously found to be productive of oil or gas in another reservoir.

Field. An area consisting of a single reservoir or multiple reservoirs all grouped on or related to the same individual geological structural feature and/or stratigraphic condition. There may be two or more reservoirs in a field that are separated vertically by intervening impervious, strata, or laterally by local geologic barriers, or by both. Reservoirs that are associated by being in overlapping or adjacent fields may be treated as a single or common operational field. The geological terms "structural feature" and "stratigraphic condition" are intended to identify localized geological features as opposed to the broader terms of basins, trends, provinces, areas-of-interest, etc.

Gross well or gross acre. A well or acre in which the registrant owns a working interest. The numbers of gross wells is the total number of wells in which the registrant owns a working interest.

Net well or net acre. Deemed to exist when the sum of the fractional ownership working interests in gross wells or acres equals one. The number of net wells or acres is the sum of the fractional working interests owned in gross wells or acres expressed as whole numbers and fractions of whole numbers.

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.

Net revenue interest. An interest in a revenue stream net of all other interests burdening that stream, such as a lessor's royalty and any overriding royalties. For example, if a lessor executes a lease with a one-eighth royalty, the lessor's net revenue interest is 12.5 percent and the lessee's net revenue interest is 87.5 percent.

Pay. Reservoir rock containing crude oil or natural gas.

Possible reserves. Possible reserves are those additional reserves that are less certain to be recovered than probable reserves.

Reasonable certainty. If deterministic methods are used, reasonable certainty means a high degree of confidence that the quantities will be recovered. If probabilistic methods are used, there should be at least a 90% probability that the quantities actually recovered will equal or exceed the estimate. A high degree of confidence exists if the quantity is much more likely to be achieved than not, and, as changes due to increased availability of geoscience (geological, geophysical and geochemical), engineering and economic data are made to estimated ultimate recovery with time, reasonably certain estimated ultimate recovery is much more likely to increase or remain constant than to decrease.

Reserve life. A measure of the productive life of an oil and gas property or a group of properties, expressed in years. Reserve life is calculated by dividing proved reserve volumes at year end by production volumes. In our calculation of reserve life, production volumes are based on annualized fourth-quarter production and are adjusted, if necessary, to reflect property acquisitions and dispositions.

Reservoir. A porous and permeable underground formation containing a natural accumulation of producible oil and/or gas that is confined by impermeable rock or water barriers and is individual and separate from other reservoirs.

Resources. Resources are quantities of oil and gas estimated to exist in naturally occurring accumulations. A portion of the resources may be estimated to be recoverable, and another portion may be considered to be unrecoverable. Resources include both discovered and undiscovered accumulations.

Royalty interest. An interest in an oil and gas lease that gives the owner of the interest the right to receive a portion of the production from the leased acreage (or of the proceeds of the sale thereof), but generally does not require the owner to pay any portion of the costs of drilling or operating the wells on the leased acreage. Royalties may be either landowner's royalties, which are reserved by the owner of the leased acreage at the time the lease is granted, or overriding royalties, which are usually reserved by an owner of the leasehold in connection with a transfer to a subsequent owner.

Sands. Sandstone or other sedimentary rocks.

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.

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 26, 2016.

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 26, 2016.

<u>/s/ Richard C. Adkerson</u>	Vice Chairman of the Board, President and Chief Executive Officer
Richard C. Adkerson	(Principal Executive Officer)
<u>/s/ Kathleen L. Quirk</u>	Executive Vice President, Chief Financial Officer and Treasurer
Kathleen L. Quirk	(Principal Financial Officer)
<u>*</u> C. Donald Whitmire, Jr.	Vice President and Controller - Financial Reporting (Principal Accounting Officer)
<u>*</u> Gerald J. Ford	Chairman of the Board
<u>*</u> Robert A. Day	Director
<u>*</u> Lydia H. Kennard	Director
<u>*</u> Andrew Langham	Director
<u>*</u> Jon C. Madonna	Director
<u>*</u> Courtney Mather	Director
<u>*</u> Dustan E. McCoy	Director
<u>*</u> Frances Fragos Townsend	Director
* By: <u>/s/ Richard C. Adkerson</u>	
Richard C. Adkerson	
Attorney-in-Fact	

**FREEPORT-McMoRan INC.
INDEX TO FINANCIAL STATEMENTS**

Our financial statements and the notes thereto, and the report of Ernst & Young LLP included in our 2015 annual report are incorporated herein by reference.

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Report of Independent Registered Public Accounting Firm	F-1
Schedule II-Valuation and Qualifying Accounts	F-2

Schedules other than the one listed above 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.**

We have audited the consolidated financial statements of Freeport-McMoRan Inc. as of December 31, 2015 and 2014, and for each of the three years in the period ended December 31, 2015, and have issued our report thereon dated February 26, 2016 (included elsewhere in this Form 10-K). Our audits also included the financial statement schedule listed in the Index to Financial Statements of this Form 10-K. This schedule is the responsibility of the Company's management. Our responsibility is to express an opinion on this schedule based on our audits.

In our opinion, the financial statement schedule referred to above, when considered in relation to the basic consolidated financial statements taken as a whole, presents fairly in all material respects the information set forth therein.

/s/ Ernst & Young LLP

Phoenix, Arizona
February 26, 2016

FREEPORT-McMoRAN INC.
SCHEDULE II - VALUATION AND QUALIFYING ACCOUNTS
(In millions)

	Balance at Beginning of Year	Additions			Other Additions (Deductions)	Balance at End of Year			
		Charged to Costs and Expense	Charged to Other Accounts						
Reserves and allowances deducted from asset accounts:									
<i>Valuation allowance for deferred tax assets</i>									
Year Ended December 31, 2015	\$ 2,434	\$ 1,749	\$ —	\$ —	\$ 4,183				
Year Ended December 31, 2014	2,487	(53)	—	—	—	2,434			
Year Ended December 31, 2013	2,443	44	—	—	—	2,487			
Reserves for non-income taxes:									
Year Ended December 31, 2015	\$ 93	\$ 9	\$ —	\$ (19) ^a	\$ 83				
Year Ended December 31, 2014	78	16	—	(1) ^a	—	93			
Year Ended December 31, 2013	80	35	(1)	(36) ^a	—	78			

a. Represents amounts paid or adjustments to reserves based on revised estimates.

FREEPORT-MCMORAN INC.
EXHIBIT INDEX

Exhibit Number	Exhibit Title	Filed with this Form 10-K	Incorporated by Reference		
			Form	File No.	Date Filed
2.1	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	
2.2	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	
2.3	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	
2.4	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	
2.5	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 Freeport-McMoRan Inc.	8-K	001-11307-01	2/16/2016	
3.1	Composite Certificate of Incorporation of FCX.	10-Q	001-11307-01	8/8/2014	
3.2	FCX Amended and Restated By-Laws, as amended effective December 8, 2015.	8-K	001-11307-01	12/9/2015	
4.1	Indenture dated as of February 13, 2012, between FCX and U.S. Bank National Association, as Trustee (relating to the 2.15% Senior Notes due 2017, the 3.55% Senior Notes due 2022, the 2.30% Senior Notes due 2017, 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	
4.2	Second Supplemental Indenture dated as of February 13, 2012, between FCX and U.S. Bank National Association, as Trustee (relating to the 2.15% Senior Notes due 2017).	8-K	001-11307-01	2/13/2012	
4.3	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	
4.4	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 2.15% Senior Notes due 2017, the 3.55% Senior Notes due 2022, the 2.30% Senior Notes due 2017, 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	
4.5	Fifth 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 2.30% Senior Notes due 2017).	8-K	001-11307-01	11/14/2014	
4.6	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	
4.7	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	
4.8	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	

FREEPORT-MCMORAN INC.
EXHIBIT INDEX

Exhibit Number	Exhibit Title	Filed with this Form 10-K	Incorporated by Reference		
			Form	File No.	Date Filed
4.9	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	
4.10	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	
4.11	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 6.625% Senior Notes due 2021, the 6.75% Senior Notes due 2022, the 6.125% Senior Notes due 2019, the 6.5% Senior Notes due 2020, and the 6.875% Senior Notes due 2023).	8-K	001-31470	3/13/2007	
4.12	Twelfth Supplemental Indenture dated as of March 29, 2011 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 6.625% Senior Notes due 2021).	8-K	001-31470	3/29/2011	
4.13	Thirteenth Supplemental Indenture dated as of November 21, 2011 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 6.75% Senior Notes due 2022).	8-K	001-31470	11/22/2011	
4.14	Fourteenth Supplemental Indenture dated as of April 27, 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 6.125% Senior Notes due 2019).	8-K	001-31470	4/27/2012	
4.15	Sixteenth 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 6.5% Senior Notes due 2020).	8-K	001-31470	10/26/2012	
4.16	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	
4.17	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 6.625% Senior Notes due 2021, the 6.75% Senior Notes due 2022, the 6.125% Senior Notes due 2019, the 6.5% Senior Notes due 2020, and the 6.875% Senior Notes due 2023).	8-K	001-11307-01	6/3/2013	
4.18	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	

FREEPORT-McMoRan INC.
EXHIBIT INDEX

Exhibit Number	Exhibit Title	Filed with this Form 10-K	Incorporated by Reference		
			Form	File No.	Date Filed
4.19	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 and The Chase Manhattan Bank, as Trustee (relating to the 7.125% Senior Notes due 2027).		8-K	001-00082	11/3/1997
4.20	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
4.21	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
4.22	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).	X			
10.1	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
10.2	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
10.3	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
10.4	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
10.5	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
10.6	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
10.7	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 Number	Exhibit Title	Filed with this Form 10-K	Incorporated by Reference		
			Form	File No.	Date Filed
10.8	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	
10.9	Concentrate Purchase and Sales Agreement dated effective December 11, 1996, between PT Freeport Indonesia and PT Smelting.	S-3	333-72760	11/5/2001	
10.10	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	
10.11	Distribution Agreement, dated as of August 10, 2015, by and between FCX and J.P. Morgan Securities LLC.	8-K	001-11307-01	8/10/2015	
10.12	Distribution Agreement, dated as of September 18, 2015, by and among FCX, J.P. Morgan Securities LLC, Merrill Lynch, Pierce, Fenner & Smith Incorporated, BNP Paribas Securities Corp., Citigroup Global Markets Inc., HSBC Securities (USA) Inc., Mizuho Securities USA Inc. and Scotia Capital (USA) Inc.	8-K	001-11307-01	9/18/2015	
10.13	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	
10.14	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	
10.15	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	
10.16	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 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	3/22/2005	

FREEPORT-MCMORAN INC.
EXHIBIT INDEX

Exhibit Number	Exhibit Title	Filed with this Form 10-K	Incorporated by Reference		
			Form	File No.	Date Filed
10.17	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
10.18	Amended and Restated Mining Convention dated as of September 28, 2005, among the Democratic Republic of Congo, La Générale des Carrières et des Mines, Lundin Holdings Ltd. (now TF Holdings Limited) and Tenke Fungurume Mining S.A.R.L.		8-K	001-11307-01	9/2/2008
10.19	Addendum No.1 to the Amended and Restated Mining Convention dated as of September 28, 2005, among the Democratic Republic of Congo, La Générale des Carrières et des Mines, TF Holdings Limited and Tenke Fungurume Mining S.A.R.L., dated as of December 11, 2010		10-Q	001-11307-01	5/6/2011
10.20	Amended and Restated Shareholders Agreement dated as of September 28, 2005, by and between La Générale des Carrières et des Mines and Lundin Holdings Ltd. (now TF Holdings Limited) and its subsidiaries.		8-K	001-11307-01	9/2/2008
10.21	Addendum No.1 to the Amended and Restated Shareholders Agreement dated as of September 28, 2005, among La Générale des Carrières et des Mines and TF Holdings Limited, Chui Ltd., Faru Ltd., Mboko Ltd., Tembo Ltd., and Tenke Fungurume Mining S.A.R.L., dated as of December 11, 2010.		10-Q	001-11307-01	5/6/2011
10.22	Term Loan Agreement dated as of February 14, 2013, among FCX, And Freeport-McMoRan Oil & Gas LLC, as borroweres, JPMorgan Chase Bank, N.A., as administrative agent, Bank of America, N.A., as syndication agent, HSBC Bank USA, National Association, Mizuho Corporate Bank, Ltd., Sumitomo Mitsui Banking Corporation, The Bank of Nova Scotia and The Bank of Tokyo-Mitsubishi UFJ, Ltd., as co-documentation agents, and each of the lenders party thereto.		8-K	001-11307-01	2/19/2013
10.23	First Amendment dated as of February 27, 2015, to Term Loan Agreement dated as of February 14, 2013, among FCX and Freeport-McMoRan Oil & Gas LLC, as borrowers, JPMorgan Chase Bank, N.A., as administrative agent, Bank of America, N.A., as syndication agent, HSBC Bank USA, National Association, Mizuho Corporate Bank, Ltd., Sumitomo Mitsui Banking Corporation, The Bank of Nova Scotia and The Bank of Tokyo-Mitsubishi UFJ, Ltd., as co-documentation agents, and each of the lenders party thereto.		10-K	001-00082	2/27/2015
10.24	Second Amendment dated as of December 9, 2015 to the Term Loan Agreement dated as of February 14, 2013, as amended by the First Amendment dated as of February 27, 2015, among FCX and Freeport-McMoRan Oil & Gas LLC, as borrowers, JPMorgan Chase Bank, N.A., as administrative agent, Bank of America, N.A., as syndication agent, HSBC Bank USA, National Association, Mizuho Corporate Bank, Ltd., Sumitomo Mitsui Banking Corporation, The Bank of Nova Scotia and The Bank of Tokyo-Mitsubishi UFJ, Ltd., as co-documentation agents, and each of the lenders party thereto.		8-K	001-11307-01	12/9/2015

FREEPOR-T-McMoRan INC.
EXHIBIT INDEX

Exhibit Number	Exhibit Title	Filed with this Form 10-K	Incorporated by Reference		
			Form	File No.	Date Filed
10.25	Amendment and Restatement Agreement dated as of February 26, 2016, relating to the Term Loan Agreement dated as of February 14, 2013, as amended, among FCX and Freeport-McMoRan Oil & Gas LLC, as borrowers, JPMorgan Chase Bank, N.A., as administrative agent and each of the lenders from time to time party thereto.	X			
10.26	Revolving Credit Agreement dated as of February 14, 2013, among FCX, PT Freeport Indonesia, and Freeport-McMoRan Oil & Gas LLC, as borrowers, JPMorgan Chase Bank, N.A., as administrative agent and the swingline lender, Bank of America, N.A., as syndication agent, BNP Paribas, Citibank, N.A., HSBC Bank USA, National Association, Mizuho Corporate Bank, Ltd., Sumitomo Mitsui Banking Corporation, The Bank of Nova Scotia and The Bank of Tokyo-Mitsubishi UFJ, Ltd., as co-documentation agents, and each of the lenders and issuing banks party thereto.	8-K	001-11307-01	2/19/2013	
10.27	First Amendment dated as of May 30, 2014, to the Revolving Credit Agreement dated as of February 14, 2013, among FCX, PT Freeport Indonesia and Freeport-McMoRan Oil & Gas LLC, as borrowers, JPMorgan Chase Bank, N.A., as administrative agent and the swingline lender, Bank of America, N.A., as syndication agent, BNP Paribas, Citibank, N.A., HSBC Bank USA, National Association, Mizuho Bank, Ltd., Sumitomo Mitsui Banking Corporation, The Bank of Nova Scotia and The Bank of Tokyo-Mitsubishi UFJ, Ltd., as co-documentation agents, and each of the lenders and issuing banks party thereto.	8-K	001-11307-01	6/2/2014	
10.28	Second Amendment dated as of February 27, 2015, to the Revolving Credit Agreement dated as of February 14, 2013, as amended by the First Amendment dated as of May 30, 2014, among FCX, PT Freeport Indonesia and Freeport-McMoRan Oil & Gas LLC, as borrowers, JPMorgan Chase Bank, N.A., as administrative agent and the swingline lender, Bank of America, N.A., as syndication agent, BNP Paribas, Citibank, N.A., HSBC Bank USA, National Association, Mizuho Bank, Ltd., Sumitomo Mitsui Banking Corporation, The Bank of Nova Scotia and The Bank of Tokyo-Mitsubishi UFJ, Ltd., as co-documentation agents, and each of the lenders and issuing banks party thereto.	10-K	001-00082	2/27/2015	
10.29	Third Amendment dated as of December 9, 2015 to the Revolving Credit Agreement dated as of February 14, 2013, as amended by the First Amendment dated as of May 30, 2014 and the Second Amendment dated as of February 27, 2015, among FCX, PT Freeport Indonesia and Freeport-McMoRan Oil & Gas LLC, as borrowers, JPMorgan Chase Bank, N.A., as administrative agent and the swingline lender, Bank of America, N.A., as syndication agent, BNP Paribas, Citibank, N.A., HSBC Bank USA, National Association, Mizuho Corporate Bank, Ltd., Sumitomo Mitsui Banking Corporation, The Bank of Nova Scotia and The Bank of Tokyo-Mitsubishi UFJ, Ltd., as co-documentation agents, and each of the lenders and issuing banks party thereto.	8-K	001-11307-01	12/9/2015	

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EXHIBIT INDEX

Exhibit Number	Exhibit Title	Filed with this Form 10-K	Incorporated by Reference		
			Form	File No.	Date Filed
10.30	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.	X			
10.31#	Crude Oil Purchase Agreement dated January 1, 2012, between Plains Exploration & Production Company and ConocoPhillips Company.	10-Q/A	001-31470	9/22/2011	
10.32#	First Amendment, dated January 1, 2014, to the Crude Oil Purchase Agreement dated January 1, 2012, between Freeport-McMoRan Oil & Gas LLC (formerly Plains Exploration & Production Company) and ConocoPhillips Company.	10-K	001-00082	2/27/2015	
10.33#	Second Amendment, dated July 1, 2014, to the Crude Oil Purchase Agreement dated January 1, 2012, between Freeport-McMoRan Oil & Gas LLC and ConocoPhillips Company.	10-K	001-00082	2/27/2015	
10.34*	Letter Agreement, dated as of December 5, 2012, by and among James C. Flores, Plains Exploration & Production Company and FCX	8-K	001-11307-01	12/6/2012	
10.35*	Amended and Restated Employment Agreement dated February 27, 2014, between FCX and James C. Flores.	8-K	001-11307-01	3/3/2014	
10.36*	Letter Agreement dated as of December 19, 2013, by and between FCX and Richard C. Adkerson.	8-K	001-11307-01	12/23/2013	
10.37*	FCX Director Compensation.	X			
10.38*	Amended and Restated Executive Employment Agreement dated effective as of December 2, 2008, between FCX and James R. Moffett.	10-K	001-11307-01	2/26/2009	
10.39*	Letter Agreement dated February 27, 2014, between FCX and James R. Moffett.	8-K	001-11307-01	3/3/2014	
10.40*	Letter Agreement dated December 24, 2015, between FCX and James R. Moffett	8-K	001-11307-01	12/28/2015	
10.41*	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	
10.42*	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	
10.43*	FCX Executive Services Program	10-K	001-11307-01	2/27/2012	
10.44*	FCX Supplemental Executive Retirement Plan, as amended and restated.	8-K	001-11307-01	2/5/2007	
10.45*	FCX Supplemental Executive Capital Accumulation Plan.	10-Q	001-11307-01	5/12/2008	
10.46*	FCX Supplemental Executive Capital Accumulation Plan Amendment One.	10-Q	001-11307-01	5/12/2008	
10.47*	FCX Supplemental Executive Capital Accumulation Plan Amendment Two.	10-K	001-11307-01	2/26/2009	
10.48*	FCX Supplemental Executive Capital Accumulation Plan Amendment Three.	10-K	001-00082	2/27/2015	

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Exhibit Number	Exhibit Title	Filed with this Form 10-K	Incorporated by Reference		
			Form	File No.	Date Filed
10.49*	FCX Supplemental Executive Capital Accumulation Plan Amendment Four.	10-K	001-00082	2/27/2015	
10.50*	FCX 2005 Supplemental Executive Capital Accumulation Plan, as amended and restated effective January 1, 2015.	10-K	001-00082	2/27/2015	
10.51*	FCX 1995 Stock Option Plan for Non-Employee Directors, as amended and restated.	10-Q	001-11307-01	5/10/2007	
10.52*	FCX Amended and Restated 1999 Stock Incentive Plan, as amended and restated.	10-Q	001-11307-01	5/10/2007	
10.53*	FCX 2003 Stock Incentive Plan, as amended and restated.	10-Q	001-11307-01	5/10/2007	
10.54*	Form of Amendment No. 1 to Notice of Grant of Nonqualified Stock Options and Stock Appreciation Rights under the 2004 Director Compensation Plan.	8-K	001-11307-01	5/5/2006	
10.55*	FCX 2004 Director Compensation Plan, as amended and restated.	10-Q	001-11307-01	8/6/2010	
10.56*	FCX Amended and Restated 2006 Stock Incentive Plan.	10-K	001-11307-01	2/27/2014	
10.57*	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	
10.58*	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	
10.59*	FCX 2009 Annual Incentive Plan	8-K	001-11307-01	6/17/2009	
10.60*	Form of Nonqualified Stock Options Grant Agreement (effective February 2012).	10-K	001-11307-01	2/27/2012	
10.61*	Form of Restricted Stock Unit Agreement (effective February 2012).	10-K	001-11307-01	2/27/2012	
10.62*	Form of Performance-Based Restricted Stock Unit Agreement (effective February 2012).	10-K	001-11307-01	2/27/2012	
10.63*	Form of Nonqualified Stock Options Grant Agreement under the FCX stock incentive plans (effective February 2014).	10-K	001-11307-01	2/27/2014	
10.64*	Form of Restricted Stock Unit Agreement under the FCX stock incentive plans (effective February 2014).	10-K	001-11307-01	2/27/2014	
10.65*	Form of Performance Share Unit Agreement (effective February 2014).	8-K	001-11307-01	3/3/2014	
10.66*	FCX Annual Incentive Plan (For Fiscal Years Ending 2014 - 2018).	8-K	001-11307-01	6/18/2014	
10.67*	Form of Notice of Grant of Restricted Stock Units under the 2006 Stock Incentive Plan (for grants made to non-management directors).	10-Q	001-11307-01	8/11/2014	
10.68*	Form of Restricted Stock Unit Agreement under the FCX stock incentive plans (effective February 2015).	10-K	001-00082	2/27/2015	
12.1	FCX Computation of Ratio of Earnings to Fixed Charges.	X			
14.1	FCX Principles of Business Conduct.		10-K	001-11307-01	2/29/2008
21.1	Subsidiaries of FCX.	X			
23.1	Consent of Ernst & Young LLP.	X			
23.2	Consent of Netherland, Sewell & Associates, Inc.	X			
23.3	Consent of Ryder Scott Company, L.P.	X			

FREEPORT-McMoRan INC.
EXHIBIT INDEX

Exhibit Number	Exhibit Title	Filed with this Form 10-K	Incorporated by Reference		
			Form	File No.	Date Filed
24.1	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			
24.2	Powers of Attorney pursuant to which this report has been signed on behalf of certain officers and directors of FCX.	X			
31.1	Certification of Principal Executive Officer pursuant to Rule 13a-14(a)/15d – 14(a).	X			
31.2	Certification of Principal Financial Officer pursuant to Rule 13a-14(a)/15d – 14(a).	X			
32.1	Certification of Principal Executive Officer pursuant to 18 U.S.C. Section 1350.	X			
32.2	Certification of Principal Financial Officer pursuant to 18 U.S.C Section 1350.	X			
95.1	Mine Safety Disclosure.	X			
99.1	Asset and Stock Purchase Agreement among OMG Harjavalta Chemicals Holding BV, OMG Americas, Inc., OM Group, Inc., Koboltti Chemicals Holdings Limited and solely for purposes of Section 10.13 and Exhibit A, Freeport-McMoRan Corporation, dated as of January 21, 2013.		10-K	001-11307-01	2/22/2013
99.2	Report of Netherland, Sewell & Associates, Inc.	X			
99.3	Report of Ryder Scott Company, L.P.	X			
101.INS	XBRL Instance Document.	X			
101.SCH	XBRL Taxonomy Extension Schema.	X			
101.CAL	XBRL Taxonomy Extension Calculation Linkbase.	X			
101.DEF	XBRL Taxonomy Extension Definition Linkbase.	X			
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 SEC.