

SOUTHERN COPPER CORP/
Form 10-K
March 01, 2007

SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

2006 FORM 10-K

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

For the fiscal year ended December 31, 2006 Commission File Number: 1-14066

SOUTHERN COPPER CORPORATION

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation or organization)

13-3849074

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

**11811 North Tatum Blvd. Suite 2500,
Phoenix, AZ**

(Address of principal executive offices)

85028

(Zip code)

Registrant's telephone number, including area code: **(602) 494-5328**

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

Title of each class	Name of each exchange on which registered
Common Stock, par value \$0.01 per share	New York Stock Exchange Lima Stock Exchange

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 15d 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

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

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

Large accelerated filer

Accelerated filer

Non-accelerated filer

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

As of January 31, 2007, there were of record 294,461,250 shares of Common Stock, par value \$0.01 per share, outstanding, and the aggregate market value of the shares of Common Stock (based upon the closing price on such date as reported on the New York Stock Exchange - Composite Transactions) of Southern Copper Corporation held by non affiliates was approximately \$4,584.3 million.

PORTIONS OF THE FOLLOWING DOCUMENTS ARE INCORPORATED BY REFERENCE:

Part III: Proxy statement in connection with the 2007 Annual Meeting of Stockholders

Part IV: Exhibit index is on Page B1 through B2.

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PART I

Item 1. Business

THE COMPANY

We are a leading integrated producer of copper, molybdenum, zinc and silver. All of our mining, smelting and refining facilities are located in Peru and in Mexico and we conduct exploration activities in those countries and Chile. See *Review of Operations* for maps of our principal mines, smelting facilities and refineries. Our operations make us the largest mining company in Peru and also in Mexico. Based on the *October 2006, Copper Quarterly Industry and Market Outlook*, as published by CRU International, we are the fourth largest publicly traded copper mining company in the world based on 2005 mine output. We were incorporated in Delaware in 1952 and have conducted copper mining operations since 1960. Since 1996, our common stock has been listed on both the New York Stock Exchange and the Lima Stock Exchange.

Our Peruvian copper operations involve mining, milling and flotation of copper ore to produce copper concentrates and molybdenum concentrates; the smelting of copper concentrates to produce anode and blister copper; and the refining of blister /anode copper to produce copper cathodes. As part of this production process, we also produce significant amounts of molybdenum and silver. We also produce refined copper using SX/EW technology. We operate the Toquepala and Cuajone mines high in the Andes mountains, approximately 984 kilometers southeast of the city of Lima, Peru. We also operate a smelter and refinery west of the Toquepala and Cuajone mines in the coastal city of Ilo, Peru.

Our Mexican operations are conducted through our subsidiary, Minera Mexico S.A. de C.V. (*Minera Mexico*), which we acquired on April 1, 2005. Minera Mexico engages principally in the mining and processing of copper, zinc, silver, gold, lead and molybdenum. Minera Mexico operates through subsidiaries that are grouped into three separate units. Mexicana de Cobre S.A. de C.V. (together with its subsidiaries, the *Mexcobre Unit*) operates La Caridad, an open-pit copper mine, a copper ore concentrator, a SX/EW plant, a smelter, refinery and a rod plant. Mexicana de Cananea S.A. de C.V. (together with its subsidiaries, the *Cananea Unit*) operates Cananea, an open-pit copper mine, which is located at the site of one of the world's largest copper ore deposits, a copper concentrator and two SX/EW plants. Industrial Minera Mexico, S.A. de C.V. and Minerales Metálicos del Norte, S.A. (together with its subsidiaries, the *IMMSA Unit*) operate five underground mines that produce zinc, lead, copper, silver and gold, a coal and coke mine and several industrial processing facilities for zinc and copper.

We utilize many up-to-date mining and processing methods, including global positioning systems and computerized mining operations. Our operations have a high level of vertical integration that allows us to manage the entire production process, from the mining of the ore to the production of refined copper and other products and most related transport and logistics functions, using our own facilities, employees and equipment.

The sales prices for our products are largely determined by market forces outside of our control. For additional information on the pricing of the metals we produce, please see *Metal prices*. Our management, therefore, focuses on cost control and production enhancement to improve profitability. We achieve these goals through capital spending programs, exploration efforts and cost reduction programs. Our focus is on seeking to remain profitable during periods of low copper prices and maximizing results in periods of high copper prices.

Currency Information:

Unless stated otherwise, references herein to U.S. dollars, dollars, or \$ are to U.S. dollars; references to S/, nuevo sol or nuevos soles, are Peruvian Nuevos Soles; and references to peso, pesos, or Ps., are to Mexican pesos.

Unit Information:

Unless otherwise noted, all tonnages are in metric tons. To convert to short tons, multiply by 1.102. All ounces are troy ounces. All distances are in kilometers. To convert to miles, multiply by 0.621. To convert hectares to acres, multiply 2.47

ORGANIZATIONAL STRUCTURE

The following chart describes our organizational structure starting with our controlling stockholder. For clarity of presentation, the chart identifies only principal subsidiaries and eliminates intermediate holding companies.

We are a majority-owned, indirect subsidiary of Grupo Mexico S.A.B. de C.V. (Grupo Mexico). Through its wholly-owned subsidiaries, Grupo Mexico currently owns approximately 75.1% of our capital stock. Grupo Mexico 's principal business is to act as a holding company for shares of other corporations engaged in the mining, processing, purchase and sale of minerals and other products and railway and other related services.

We conduct our operations in Peru through a registered branch (the SPCC Peru Branch). The SPCC Peru Branch comprises substantially all of our assets and liabilities associated with our copper operations in Peru. The SPCC Peru Branch is not a corporation separate from us and, therefore, obligations of SPCC Peru Branch are direct obligations of SCC and vice-versa. It is, however, an establishment, registered pursuant to Peruvian law, through which we hold assets, incur liabilities and conduct operations in Peru. Although it has neither its own capital nor liability separate from us, it is deemed to have equity capital for purposes of determining the economic interests of holders of our investment shares.

On April 1, 2005, we acquired Minera Mexico, the largest mining company in Mexico on a stand-alone basis, from Americas Mining Corporation (AMC), a subsidiary of Grupo Mexico, our controlling stockholder. Minera Mexico is a holding company and all of its operations

are conducted through subsidiaries that are grouped into three units: (i) the Mexcobre unit (ii) the Cananea unit and (iii) the IMMSA unit. We now own 99.95% of Minera Mexico.

CAUTIONARY STATEMENT

Forward-looking statements in this report and in other Company statements include statements regarding expected commencement dates of mining or metal production operations, projected quantities of future metal production, anticipated production rates, operating efficiencies, costs and expenditures as well as projected demand or supply for the Company's products. Actual results could differ materially depending upon factors including the risks and uncertainties relating to general U.S. and international economic and political conditions, the cyclical and volatile prices of copper, other commodities and supplies, including fuel and electricity, availability of materials, insurance coverage, equipment, required permits or approvals and financing, the occurrence of unusual weather or operating conditions, lower than expected ore grades, water and geological problems, the failure of equipment or processes to operate in accordance with specifications, failure to obtain financial assurance to meet closure and remediation obligations, labor relations, litigation and environmental risks, as well as political and economic risk associated with foreign operations. Results of operations are directly affected by metals prices on commodity exchanges, which can be volatile.

Additional business information follows:

COPPER BUSINESS

Copper is the world's third most widely used metal and an important component in the world's infrastructure. Copper has unique chemical and physical properties, including high electrical conductivity and resistance to corrosion, as well as excellent malleability and ductility that has made it a superior material for use in the electrical energy, telecommunications, building construction, transportation and industrial machinery businesses. Copper is also an important metal in non-electrical applications such as plumbing, roofing and, when alloyed with zinc to form brass, in many industrial and consumer applications.

Copper industry fundamentals, including copper demand, price levels and stocks, strengthened in late 2003 and copper prices have continued to improve through 2006 from the 15-year price lows set during 2002.

BUSINESS REPORTING SEGMENTS:

Our Company operates in a single industry, the copper industry. With the acquisition of Minera Mexico in April 2005, we determined that to effectively manage our business we needed to focus on three operating components or segments. These segments are our Peruvian operations, our Mexican open-pit operations and our Mexican underground operations, known as our IMMSA unit. Our Peruvian operations include the Toquepala and Cuajone mine complexes and the smelting and refining plants, industrial railroad and port facilities which service both facilities. Our Mexican open-pit operations combined two units of Minera Mexico, Mexcobre and Mexcananea, which includes La Caridad and Cananea mine complexes, smelting and refining plants and support facilities which service both complexes. Our IMMSA unit includes five underground mines that produce zinc, lead, copper, silver and gold, a coal and coke mine, and several industrial processing facilities for copper, zinc and silver. Segment information is included under the captions "Overview-Metal production" and "Ore reserves", as well as in Note 20 of our Consolidated Combined Financial Statements.

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REVIEW OF OPERATIONS

The following maps set forth the locations of our principal mines, smelting facilities and refineries. We operate open-pit copper mines in the southern part of Peru at Toquepala and Cuajone and in Mexico, principally at La Caridad and Cananea. We also operate five underground mines that produce zinc, copper, silver and gold, as well as a coal mine and a coke oven.

COPPER AND MOLYBDENUM EXTRACTION PROCESSES

Our operations include open-pit and underground mining, concentrating, copper smelting, copper refining, copper rod production, solvent extraction/electrowinning (SX/EW), zinc refining, sulfuric acid production, molybdenum concentrate production and silver and gold refining. The copper and molybdenum extraction process is summarized below.

OPEN-PIT MINING

In an open-pit mine, the production process begins at the mine pit, where waste rock, leaching ore and copper ore are drilled and blasted and then loaded onto diesel-electric trucks by electric shovels. Waste is hauled to dump areas and leaching ore is hauled to leaching dumps. The ore to be milled is transported to the primary crushers.

UNDERGROUND MINING

In an underground mine, the production process begins at the stopes, where copper, zinc and lead veins are drilled and blasted and the ore is hauled to the underground crusher station. The crushed ore is then hoisted to the surface for processing.

CONCENTRATING

The copper ore with a copper grade over 0.4% from the primary crusher or the copper, zinc and lead-bearing ore from the underground mines is transported to a concentrator plant where gyratory crushers break the ore into sizes no larger than three-quarters of an inch. The ore is then sent to a mill section where it is ground to the consistency of fine powder. The finely ground ore is mixed with water and chemical reagents and pumped as a slurry to the flotation separator where it is mixed with certain chemicals. In the flotation separator, reagents solution and air pumped into the flotation cells cause the minerals to separate from the waste rock and bubble to the surface where they are collected and dried.

If the bulk concentrated copper contains molybdenum it is first processed in a molybdenum plant as described below under Molybdenum Production.

COPPER SMELTING

Copper concentrates are transported to a smelter, where they are smelted using a furnace, converter and anode furnace to produce either copper blister (which is in the form of cakes with air pockets) or copper anodes (which are cleaned of air pockets). At the smelter, the concentrates are mixed with flux (a chemical substance intentionally included for high temperature processing) and then sent to reverberatory furnaces producing copper matte and slag (a mixture of iron and other impurities). Copper matte contains approximately 65% copper. Copper matte is then sent to the converters, where the material is oxidized in two steps: (i) the iron sulfides in the matte are oxidized with silica, producing slag that is returned to the reverberatory furnaces; and (ii) the copper contained in the matte sulfides is then oxidized to produce copper that, after casting, is called blister copper, containing approximately 98% to 99% copper, or anodes, containing approximately 99.7% copper. Some of the blister production is sold to customers and the remainder is sent to the refinery.

COPPER REFINING

Anodes are suspended in tanks containing sulfuric acid and copper sulfate. A weak electrical current is passed through the anodes and chemical solution and the dissolved copper is deposited on very thin starting sheets to produce copper cathodes containing approximately 99.99% copper. During this process, silver, gold and other metals (for example, palladium, platinum and selenium), along with other impurities, settle on the bottom of the tank (anodic slime). This anodic slime is processed at a precious metal plant where selenium, silver and gold are recovered.

COPPER ROD PLANT

To produce copper rods, copper cathodes are first melted in a furnace and then dosified in a casting machine. The dosified copper is then extruded and passed through a cooling system that begins solidification of copper into a 60×50 millimeter copper bar. The resulting copper bar is gradually stretched in a rolling mill to achieve the desired diameter. The rolled bar is then cooled and sprayed with wax as a preservation agent and collected into a rod coil that is compacted and sent to market.

SOLVENT EXTRACTION/ELECTROWINNING (SX/EW)

An alternative to the conventional concentrator/smelter/refinery process is the leaching and SX/EW process. During the SX/EW process, certain types of low-grade ore with a copper grade under 0.4% are leached with sulfuric acid to allow copper content recovery. The acid and copper solution is then agitated with a solvent that contains chemical additives that attract copper ions. As the solvent is lighter than water, it floats to the surface carrying with it the copper content. The solvent is then separated using an acid solution, freeing the copper. The acid solution containing the copper is then moved to electrolytic extraction tanks to produce copper cathodes. Refined copper can be produced

more economically (though over a longer period) and from lower grade ore using the SX/EW process instead of the traditional concentrating, smelting and refining process.

MOLYBDENUM PRODUCTION

Molybdenum is recovered from copper-molybdenum concentrates produced at the concentrator. The copper-molybdenum concentrate is first treated with a thickener until it becomes slurry with 60% solids. The slurry is then agitated in a chemical and water solution and pumped to the flotation separator. The separator creates a froth that carries molybdenum to the surface but not the copper mineral (which is later filtered to produce copper concentrates containing approximately 27% copper). The molybdenum froth is skimmed off, filtered and dried to produce molybdenum concentrates of approximately 58% contained molybdenum.

ZINC REFINING

Metallic zinc is produced through electrolysis using zinc concentrates and zinc oxides. Sulfur is eliminated from the concentrates by roasting and the zinc oxide is dissolved in sulfuric acid solution to eliminate solid impurities. The purified zinc sulfide solution is treated by electrolysis to produce refined zinc and to separate silver and gold, which are recovered as concentrates.

SULFURIC ACID PRODUCTION

Sulfur dioxide gases are produced in the copper smelting and zinc roasting processes. As a part of our environmental preservation program, we treat the sulfur dioxide emissions at two of our Mexican plants and at Peruvian processing facilities to produce sulfuric acid, some of which is, in turn, used for the copper leaching process, with the rest sold to mining and fertilizer companies located in Mexico, Peru, the United States, Chile, Australia and other countries.

SILVER AND GOLD REFINING

Silver and gold are recovered from copper, zinc and lead concentrates in the smelters and refineries, and from slimes through electrolytic refining.

SLOPE STABILITY:

Peruvian Operations

Both the Toquepala and Cuajone pits are approximately 700 meters deep and under the present mine plan configuration will reach a depth of 1,200 meters. The deepening pit presents us with a number of geotechnical challenges. Perhaps the foremost concern is the possibility of slope failure, a possibility that all open pit mines face. In order to maintain slope stability, in the past we have decreased pit slope angles, installed additional or duplicate haul road access, and increased stripping requirements. We have also responded to hydrological conditions and removed material displaced by a slope failure. There is no assurance that we will not have to take these or other actions in the future, any of which may negatively affect our results of operations and financial condition, as well as have the effect of diminishing our stated ore reserves. To meet the geotechnical challenges relating to slope stability of the open pit mines, we have taken the following steps:

In the late 1990 s we hosted round table meetings in Vancouver, B.C. with a group of recognized slope stability and open pit mining specialists. The agenda for these meetings was principally a review of pit design for mines with greater than 700 meter depth. The discussions included practices for monitoring, data collection and blasting processes.

Based on the concepts defined at the Vancouver meetings, we initiated slope stability studies to define the mining of reserves by optimum design. These studies were

performed by outside consultants and included slope stability appraisals, evaluation of the numerical modeling, slope performance and inter-ramp angle design and evaluation of hydrological conditions.

The studies were completed in 2000 and we believe we implemented the study recommendations. One of the major changes implemented was slope angle reduction at both mines, Toquepala by five degrees average and Cuajone by seven degrees average. Although this increased the waste included in the mineable reserve calculation, it also improved the stability of the pits.

Since 1998, a wall depressurization program has been in place in both pits. This consists of a horizontal drilling program, which improves drainage thereby reducing saturation and increasing wall stability. Additionally, a new blasting control program was put in place, implementing vibration monitoring and blasting designs of low punctual energy. Also a new slope monitoring system was implemented using reflection prisms, deformation inclinometers and piezometers for water level control, as well as real-time robotic monitoring equipment.

To increase the possibility of mining in the event of a slide, we have provided for two ramps of extraction for each open pit mine.

While these measures cannot guarantee that a slope failure will not occur, we believe that our mining practices are sound and that the steps taken and the ongoing reviews performed are a prudent methodology for open pit mining.

Mexican operations

In 2004, our 15-year mine plan study for the La Caridad mine was given to an independent consulting firm for geotechnical evaluation. The purpose of the plan was to develop a program of optimum bench design and inter-ramp slope angles for the mine. A number of recommendations and observations were presented by the consultants, these included a recommendation that 72 degrees be the maximum average bench face angle, additionally, single benching was recommended for the upper sections of the west, south and east walls of the main pit. Also, double benching was recommended for the lower levels of the main pit and single benching recommended for the upper slope segments that are composed of either alluvial material, mine waste dumps or mineralized stockpile material. Alternatively, slopes composed of these materials may be designed at a continuous 37-degree inclination. We are reviewing these recommendations, but as final pit limits have not been established at La Caridad, all current pit walls are effectively working slopes. **Structure data and geomechanical data collected by the Company from cell-mapping and oriented-core databases provided the basis for the geotechnical evaluation.**

A geotechnical evaluation, of the Cananea 15-year pit slope design, was prepared by an independent mine consulting firm. Recommendations included slope design angles as well as recommendations related to slope stability. Currently the mine is in the second phase of a geohydrological study. This is a follow-up study of a phase 1 study completed by independent water management consultants in 2004. A third phase of the study, which addresses pit dewatering design, will follow and is expected to be completed in 2008. The recommendations of the consulting firm are being implemented.

OVERVIEW METAL PRODUCTION

The table below sets forth 2006, 2005 and 2004 mine production data by metal.

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(million pounds)	2006	2005	2004
Copper contained in concentrates	1,116	1,268	1,331
Copper in SX/EW cathodes	219	253	252
Total copper	1,335	1,521	1,583
Zinc contained in concentrate	301	317	295
Molybdenum contained in concentrate	26	33	32
Silver contained in concentrate (million ounces)	16	18	19
Gold contained in concentrate (thousands ounces)	28	32	34

METAL PRODUCTION BY SEGMENTS

Set forth below are descriptions of the operations and other information relating to the operations included in each of our three segments.

PERUVIAN OPERATIONS

Our Peruvian segment operations include the Cuajone and Toquepala mine complexes and the smelting and refining plants, industrial railroad which links Ilo, Toquepala and Cuajone and port facilities.

Following is a map indicating the approximate location of, and access to, our Cuajone and Toquepala mine complexes as well as our Ilo processing facilities:

Cuajone

Our Cuajone operations consist of an open-pit copper mine and a concentrator located in southern Peru, 30 kilometers from the city of Moquegua and 840 kilometers from Lima. Access to the Cuajone property is by plane from Lima to Tacna (1:20 hours) and then by highway to Moquegua and Cuajone (3:30 hours). The concentrator has a milling capacity of 87,000 tons per day. Overburden removal commenced in 1970 and ore production commenced in 1976. Our Cuajone operations utilize a conventional open-pit mining method to collect copper ore for further

processing in our concentrator.

The table below sets forth 2006, 2005 and 2004 production information for our Cuajone operations:

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		2006	2005	2004
Mine annual operating days	(days)	365	365	366
Total material mined	(kt)	112,410	109,855	101,265
Total ore mined	(kt)	28,299	29,544	29,380
Copper grade	(%)	0.703	0.643	0.792
Molybdenum grade	(%)	0.020	0.026	0.025
Leach material mined (1)	(kt)	41.6	-	-
Leach material grade	(%)	0.655	-	-
Stripping ratio	(x)	2.97	2.72	2.45
Total material milled	(kt)	28,228	29,621	29,319
Copper recovery	(%)	87.87	85.96	83.64
Molybdenum recovery	(%)	62.6	69.7	64.5
Copper concentrate	(kt)	666.7	619.2	752.9
Molybdenum concentrate	(kt)	6.4	9.5	8.7
Copper concentrates average grade	(%)	26.16	26.43	25.82
Molybdenum concentrate average grade	(%)	55.18	55.58	53.74
Copper in concentrate	(kt)	174.4	163.7	194.4
Molybdenum in concentrate	(kt)	3.5	5.3	4.7

Key: kt = thousand tons

x = ratio obtained dividing waste plus leachable material by ore mined

Copper and molybdenum grades are referred to as total copper grade and total molybdenum grade, respectively.

(1) In 2006, 41.6 kt of copper oxides were extracted from the Cuajone mine. No oxide material was mined in 2005 and 2004.

Major Cuajone mine equipment include six trucks with a 290-ton capacity, twenty trucks with a 218-ton capacity and eight trucks with a 231-ton capacity, three shovels with a 56-cubic yard capacity, one shovel with a 42-cubic yard capacity, one front end loader with a 33-cubic yard capacity, four electric drills, seven track dozer, seven rubber track dozer, three front end loader CAT 988 and 966 and three motorgraders. We continuously improve and renovate our equipment.

Geology

The Cuajone porphyry copper deposit is located on the western slopes of Cordillera Occidental, in the southern-most Andes Mountains of Peru. The deposit is part of a mineral district that contains two additional known deposits, Toquepala and Quellaveco. The copper mineralization at Cuajone is typical of porphyry copper deposits.

The Cuajone deposit is located approximately 28 kilometers from the Toquepala deposit and is part of the Toquepala Group dated 60 to 100 million years (Upper Cretaceous to Lower Tertiary). The Cuajone lithology includes volcanic rocks from Cretaceous to Quaternary. There are 32 rock types including, pre-mineral rocks, basaltic andesite, porphyritic rhyolite, Toquepala dolerite and intrusive rocks, including diorite, porphyritic latite, breccias and dikes. In addition, the following post-mineral rocks are present, the Huaylillas formation which appears in the south-southeast side of the deposit and has been formed by conglomerates, tuffs, traquites and agglomerates. These formations date 17 to 23 million years and are found in the Toquepala Group as discordance. The Chuntacala formation which dates 9 to 14 million years and is formed by conglomerates, flows, tuffs and agglomerates placed gradually in some cases and in discordance in others. Also Quaternary deposits are found in the rivers, creeks and hills. The mineralogy is simple with regular grade distribution and vertically funnel-shaped. Ore minerals include chalcopyrite (CuFeS₂), chalcocite (Cu₂S) and molybdenite (MoS₂) with occasional galena, tetradrite and enargite as non economical ore.

Exploration in the mine

Exploration activities during the drill campaign in 2006 are as follows:

Studies	Meters	Holes	Notes
Infill Drilling	2,996.95	35	Evaluated the 2007 Mine Plan
Geotechnical Holes	1,681.85	12	Piezometric holes
Total	4,678.80	47	

Concentrator

Our Cuajone operations use state-of-the-art computer monitoring systems at the concentrator, the crushing plant and the flotation circuit in order to coordinate inflows and optimize operations. Material with a copper grade over 0.40% is loaded onto rail cars and sent to the milling circuit, where giant rotating crushers reduce the size of the rocks to approximately one-half of an inch. The ore is then sent to the ball mills, which grind it to the consistency of fine powder. The finely ground powder is agitated in a water and reagents solution and is then transported to flotation cells. Air is pumped into the cells producing a froth that carries the copper mineral to the surface but not the waste rock, or tailings. Recovered copper, with the consistency of froth, is filtered and dried to produce copper concentrates with an average copper content of approximately 26.2%. Concentrates are then shipped by rail to the smelter at Ilo. Sulfides under 0.40% copper are considered waste.

Tailings are sent to thickeners where water is recovered. The remaining tailings are sent to the Quebrada Honda dam, our principal tailings storage facility.

Major Cuajone concentrator plant equipment includes: one primary crusher, three secondary crushers, seven tertiary crushers, 10 primary ball mills, four ball mills for re-grinding rougher concentrate; one vertical mill for re-grinding rougher concentrate; thirty 100ft³ cells for rougher flotation; four 160ft³ cells for rougher flotation; five 60ft³ cells for cleaner scavenger; six 1350ft³ cells for cleaner scavenger; fourteen 300ft³ cells for cleaner scavenger; eight column cells; one Larox filter press; two thickeners for Cu-Mo and Cu concentrates; three tailings thickeners; one High-Rate tailings thickener and six pumps for recycling reclaimed water.

Since the 1999 mill expansion, only some minor changes have been made to the plant. The plant's equipment is in good physical condition and currently in operation. In 2003 and 2004, two additional column cells and four additional flotation cells were installed to increase resident time and copper recovery.

During 2005 and 2006, eight ball mill shells were replaced after operating at Cuajone for 26 years.

Toquepala

Our Toquepala operations consist of an open-pit copper mine and a concentrator. We also refine copper at the SX/EW facility through a leaching process. Toquepala is located in southern Peru, 30 kilometers from Cuajone and 870 kilometers from Lima. Access is by plane from Lima to the city of Tacna (1:20 hours) and then by the Pan-American highway to Camiara (1:20 hours) and by trail road to Toquepala (1 hour). The concentrator has a milling capacity of 60,000 tons per day. The SX/EW facility has a refining capacity of 56,000 tons per year. Overburden removal commenced in 1957 and ore production commenced in 1960. Our Toquepala operations utilize a conventional open-pit mining method to collect copper ore for further processing in our concentrator.

The table below sets forth 2006, 2005 and 2004 production information for our Toquepala operations:

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		2006	2005	2004
Mine annual operating days	(days)	365	365	366
Total material mined	(kt)	131,607	134,505	115,120
Total ore mined	(kt)	20,813	21,224	21,820
Copper grade	(%)	0.797	0.812	0.817
Molybdenum grade	(%)	0.043	0.039	0.044
Leach material mined	(kt)	42,827	16,693	9,708
Leach material grade	(%)	0.221	0.222	0.268
Estimated leach recovery	(%)	28.44	28.24	26.87
SX/EW cathode production	(kt)	35.8	36.5	42.1
Stripping ratio	(x)	5.32	5.34	4.28
Total material milled	(kt)	20,628	21,225	21,807
Copper recovery	(%)	91.43	91.47	90.28
Molybdenum recovery	(%)	65.0	64.6	62.2
Copper concentrate	(kt)	557.5	576.4	580.1
Molybdenum concentrate	(kt)	10.7	9.7	11.2
Copper concentrate average grade	(%)	27.22	27.32	27.73
Molybdenum concentrate average grade	(%)	54.08	54.67	53.71
Copper in concentrate	(kt)	151.8	157.5	160.9
Molybdenum in concentrate	(kt)	5.8	5.3	6.0

Key: kt = thousand tons

x = ratio obtained dividing waste plus leachable material by ore mined.

Copper and molybdenum grades are referred to as total copper grade and total molybdenum grade, respectively.

Major mine equipment at Toquepala includes thirteen 290-ton capacity trucks, five 231-ton capacity trucks, eighteen 218-ton capacity trucks, six 181-ton capacity trucks, one 78-ton capacity shovel, three 73-ton capacity shovels, three 20-ton capacity shovels, five electric rotary drills, one Down the Hole (DTH) drill for pre-split and one front-end loader with a capacity of 37 tons.

We continuously improve and renovate our equipment. In 2003, we started a project to install a crushing, conveying and spreading system at the Toquepala mine to improve cost containment and production efficiency. The new system is expected to improve recovery at our leaching facilities and will largely eliminate costly truck haulage in the process. The primary crusher was placed in operation in August 2005. The overland conveyors 1, 2 and 3, and the grasshoppers 30 and 31 were put in the production line. The conveying reached its rated capacity of 6,500 ton/hr. in September 2005. The construction of the ramp will continue until final completion expected in the first quarter of 2007. After reaching level 2875 we will begin the spreading process in order to leach this material with a higher level of copper recovery. Additionally in 2006 we put into operation five new Komatsu 930E3 trucks improving hauling efficiency and cost effectiveness. In 2006, we have also placed in operation a new pre-splitting drill to fit better with the slope stability requirements.

Geology

The Toquepala porphyry copper deposit is located on the western slopes of Cordillera Occidental, in the southern-most Andes Mountains of Peru. The deposit is part of a mineral district that contains two additional known deposits, Cuajone and Quellaveco.

The Toquepala deposit is in the southern region of Peru, located on the western slope of the Andes mountain range, approximately 120 kilometers from the border with Chile. This region extends into Chile and is home to many of the worlds most significant known copper deposits. The deposit is in a territory with intrusive and eruptive activities of rhyolitic and andesitic rocks which are 70 million years old (Cretaceous-Tertiary) and which created a series of volcanic lava. The lava is composed of rhyolites, andesites and volcanic agglomerates with a western dip and at an altitude of 1,500 meters. These series are known as the Toquepala Group. Subsequently, different intrusive activities occurred

which broke and smelted the rocks of the Toquepala Group. These intrusive activities resulted in diorites, granodiorites and dikes of porphyric dacite. Toquepala has a simple mineralogy with regular copper grade distribution. Economic ore is found as disseminated sulfurs throughout the deposit as veinlets, replenishing empty places or as small aggregates. Ore minerals include chalcopyrite (CuFeS₂), chalcosine (Cu₂S) and molybdenite (MoS₂). A secondary enrichment zone is also found with thicknesses between 0 and 150 meters.

Exploration in the mine

Exploration activities during the drill campaign in 2006 are as follows:

Studies	Meters	Holes	Notes
Leach Material Confirmation	4,738.02	33	Phase III exploration on East side of pit to confirm leach material indicated in the long-term model.
Geotechnical Drilling	413.16	1	Inclinometers relocation and information about inside rock from the east side using oriented drills.
Total	5,151.18	34	

Concentrator

Our Toquepala concentrator operations use state-of-the-art computer monitoring systems in order to coordinate inflows and optimize operations. Material with a copper grade over 0.40% is loaded onto rail cars and sent to the crushing circuit, where giant rotating crushers reduce the size of the rocks to approximately one-half of an inch. The ore is then sent to the ball and bar mills, which grind it in a mix with water to the consistency of fine powder. The finely ground powder mixed with water is then transported to flotation cells. Air is pumped into the cells producing a froth, which carries the copper mineral to the surface but not the waste rock, or tailings. Recovered copper, with the consistency of froth, is filtered and dried to produce copper concentrates with an average copper content of approximately 27.5%. Concentrates are then shipped by rail to the smelter at Ilo.

Tailings are sent to thickeners where water is recovered. The remaining tailings are sent to the Quebrada Honda dam, our principal tailings storage facility.

Major concentrator plant equipment at Toquepala include one primary crusher, three secondary crushers, six tertiary crushers, eight bar mills, thirty-three ball mills, one distributed control system (DCS), one optimizing control system (OCS), forty-two flotation cells, fifteen column cells, seventy-two Agitair 1.13 m³ cells, two Larox pressure filters, five middling thickeners, two tailings thickeners, three high-rate tailings thickeners, one tripper car, one track tractor and a recycled water pipe line.

In order to reduce operating and maintenance costs and to comply with environmental requirements, we replaced the disc filters at the Toquepala concentrator with a new vertical press filter in 2005.

SX/EW Plant

The SX/EW facility at Toquepala produces refined copper from solutions obtained by leaching low-grade ore stored at the Toquepala and Cuajone mines. The leach plant commenced operations in October 1995 with a design capacity of 35,629 tons per year of copper cathodes. In August 1999 the capacity was expanded to 56,000 tons per year.

Copper oxides from Cuajone with a copper grade higher than 0.359%, with an acid solubility index higher than 20% and a cyanide solubility index higher than 50% are leached. In

Toquepala, the leach material cutoff grade is 0.095% and therefore material with a total copper grade between 0.095% and 0.40% are leached.

Major equipment at the Cuajone SX plant include one primary jaw crusher and one secondary cone crusher with a capacity of 390 tons per hour, to process Cuajone's oxides. In addition the plant has one agglomeration mill, one front end loader and three trucks each with a capacity of 109 tons for agglomerated ore hauling to the leach dumps. Copper in solution produced in Cuajone is sent to Toquepala through an eight-inch pipe laid alongside the Cuajone - Toquepala railroad track.

Major equipment at the Toquepala plant include two spray systems, one for the south dump and one for the northwest dump and four pregnant solution (PLS) ponds, each with its own pumping system to send the solution to the SX/EW Plant. The plant also has three lines of SX, each with a nominal capacity of 1,068 m³/hr of pregnant solution and 162 electrowinning cells arranged in two lines, one with 122 cells and the other with 40 cells.

Equipment and main facilities are supported by a SX/EW maintenance plan and a SX/EW quality management system to assure good physical condition and high availability. The SX/EW plant has maintained its ISO 9000 certification since 2002.

Processing Facilities - Ilo

Our Ilo smelter and refinery complex is located in the southern part of Peru, 17 kilometers north of the city of Ilo, 121 kilometers from Toquepala, 147 kilometers from Cuajone, and 1,240 kilometers from the city of Lima. Access is by plane from Lima to Tacna (1:20 hours) and then by highway to the city of Ilo (two hours). Additionally, we maintain a port facility in Ilo, from which we ship our product and receive supplies. Product shipped and supplies received move between Toquepala, Cuajone and Ilo on our industrial railroad.

Smelter

Our Ilo smelter provides copper for the refinery we operate as part of the same facility. Copper produced by the smelter exceeds the refinery's capacity and the excess is sold to other refineries around the world. The nominal installed capacity of the smelter is 1,131,500 tons per year.

In January 2007, the Company finalized the smelter modernization project, with the completion of this project we fulfilled our commitments under the Environmental Compliance and Management Program (known by its Spanish acronym, PAMA), which was executed with the Peruvian government on January 31, 1997. With the modernization of the smelter, we increased sulfur recapture over the 92% requirement established by the PAMA. The new smelter is expected to maintain production at current levels and use advanced technology to reduce sulfur emissions, in order to achieve the main goal of the project.

The new copper smelter uses a technology used in many smelters throughout the world. For the fusion process, it utilizes an Isasmelt technology furnace, a stationary vertical furnace 17 meters high, with a treatment capacity of 165 tons of copper concentrates per hour. The smelter also uses two rotary holding furnaces (RHF) to separate the matte, with 62% copper content, from the slag. The smelter also has a new oxygen plant, with a production capacity of 1,000 tons per day. In the conversion process, four Pierce Smith converter furnaces are used to produce copper with 99.3% purity. This copper product is then sent to the new anodes plant, which has two rotary furnaces of 400 tons capacity each and two casting wheels that produce anodes with 99.7% purity. The anode plant was completed in January 2006 and blister production was mostly replaced with anode production, enabling us to eliminate a costly re-melting step in our production process.

In addition, we have built a new sulfuric acid plant to recapture sulfur dioxide in excess of the 92% recapture requirement established in the PAMA. The new acid plant

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has a production capacity of 800,000 tons of acid per year. Also, we have built two storage tanks and an effluents plant. The new smelter also includes a new seawater intake system, two desalinization plants to provide water for the process, an electric substation and a new system of centralized controls using advanced computer technology.

The table below sets forth 2006, 2005 and 2004 production and sales information for our Ilo smelter plant:

	2006	2005	2004
Concentrate smelted (kt)	1,107	1,206	1,213
Average copper recovery	97.29	% 97.57	% 97.23 %
Blister production (kt)	30.8	325.6	320.7
Average blister grade (%)	99.349	% 99.349	% 99.349 %
Anode production (kt)	298.4		
Average anode grade (%)	99.708	%	
Sulfuric acid produced (kt)	376	370	390
Blister sales (kt)	3.0	41.3	29.7
Anode sales (kt)	13.5		
Average blister sales price (\$/lb)	3.10	1.87	1.35
Average anode sales price (\$/lb)	3.17		

Key: kt = thousand tons

As of December 31, 2006, major equipment at our Ilo smelter include two reverberatory furnaces, seven Pierce Smith converters, one El Teniente converter, two anode furnaces and a twin wheel casting system, a sulfuric acid plant with a capacity of 300,000 tons per year and an oxygen plant with a capacity of 100,000 tons per year. This equipment does not include the additional equipment from the smelter modernization.

Refinery

The refinery consists of an anode plant, an electrolytic plant, a precious metal plant and a number of ancillary installations. The refinery is producing grade A copper cathode of 99.998% purity. The nominal capacity is 280,000 tons per year. Anodic slimes are recovered from the refining process and then sent to the precious metals facility to produce refined silver, refined gold and commercial grade selenium.

The table below sets forth 2006, 2005 and 2004 production and sales information for our Ilo refinery and precious metals plants:

	2006	2005	2004
Cathodes produced (kt)	273.3	285.2	280.7
Average copper grade (%)	99.998	% 99.998	% 99.998 %
Refined silver produced (000 Kg)	119.2	109.9	118.9
Refined gold produced (kg)	260.9	183.7	174.4
Commercial grade selenium produced (tons)	49.8	48.7	48.5
Average cathodes sales price (\$/lb)	3.20	1.79	1.35
Average silver sales price (\$/Ounce)	11.46	7.26	6.54
Average gold sales price (\$/Ounce)	589.76	447.33	407.85

Key: kt= thousands tons

Major anode casting equipment at the Ilo refinery includes two tilting furnaces, each with a nominal capacity of 400 tons, one casting wheel with a casting capacity of 70 tons/hr., this equipment is on a stand-by basis, since the completion of the anode casting at the smelter.

The refinery also includes one electrolytic plant, with 926 commercial cells, fifty-two starting sheets cells, sixteen primary liberator cells, sixteen secondary liberator cells, an anodic slime treatment circuit (includes leaching and centrifugation), and a

crude NiSO₄ production circuit.

Main equipment at the precious metals plant includes one selenium reactor, one Copella furnace, twenty-four silver refining cells including an induction furnace for shots and silver ingots production and one hydrometallurgical system for gold recovery that also includes an induction furnace.

The refinery also includes these facilities:

- **Laboratory:** Provides sample analysis services to many areas of the Company, including the analysis of final products like copper cathodes, electrowon cathodes, copper concentrates and oil analysis.
- **Maintenance:** Is responsible for maintenance of all equipment involved in the process.
- **Auxiliary facilities:** Includes one desalinization plant to produce fresh water and a Gonella boiler to produce steam used in the refinery and two stand-by KMH boilers.

Other facilities in Ilo are a coquina plant with a production capacity of 200,000 tons per year of seashells and a lime plant with a capacity of 80,000 tons per year. We also operate an industrial railroad to haul production and supplies between Toquepala, Cujone and Ilo.

The industrial railroad's main equipment includes fourteen locomotives of different types including 4000HP EMD's SD70, 3000HP EMD's GP40-3, 2250HP GE U23B and others. Main rollingstock has approximately 490 cars of different types and capacities, including ore concentrate cars, gondolas, flat cars, dump cars, boxcars, tank cars and others. The track runs in a single 214 km standard gauge line. The total length of the track system is around 257 kilometers including main yards and sidings lengths.

The infrastructure includes 27 kilometers of track under tunnels, maintained by company personnel. The industrial railroad includes a car repair shop which is responsible for maintenance and repair of the car fleet. During the last eight years an upgrade program has been completed which upgraded the main line (into 115 and 133 pound rail). Also a program to upgrade the ore concentrate cars to improve its net capacity from 70 to 100 net tons is well advanced. Traffic is around 24 hours a day in order to guarantee production requirements. Annual tonnage transported is approximately 5.5 millions of metric tons.

MEXICAN OPERATIONS

Following is a map indicating the approximate location of our Mexican mines and processing facilities:

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MEXICAN OPEN PIT SEGMENT

Our Mexican open-pit segment operations combines two units of Minera Mexico, Mexcobre and Mexcananea, which includes La Caridad and Cananea mine complexes and smelting and refining plants and support facilities which service both complexes.

Following is a map indicating the approximate location of, and access to, our Mexican open pit mine complexes as well as our processing facilities:

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Cananea

We operate an open-pit copper mine, a concentrator and two SX/EW plants at our Cananea mining complex, located 71 kilometers from La Caridad, Mexico and 61 kilometers south of the Arizona border on the outskirts of the town of Cananea. Cananea is connected by paved

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highways to the city of Agua Prieta in the northeast, to the town of Nacozari in the southeast, and to the town of Imuris in the west. Cananea is also connected by railway to Agua Prieta and Nogales. A municipal airport is located approximately 20 km to the northeast of Cananea.

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The concentrator has a milling capacity of 76,700 tons per day. The SX/EW facility has a refining capacity of 54,750 tons per year. The Cananea ore deposit is one of the world's largest porphyry copper deposits. Cananea is the oldest continuously operated copper mine in North America, with operations tracing back to 1899. The mine was acquired by the Anaconda Company in 1917 and mined exclusively for underground metals until the early 1940s when the first open pit was developed. Anaconda sold 51% of the Compañía Minera de Cananea, S.A. (Cominca) to Nacional Financiera (Nafin), a development bank from the Mexican government, in 1971 and transferred its remaining interest to Nafin in 1982. Two attempts to sell the company in 1988 failed, and a strike in 1989 precipitated Cominca's bankruptcy proceedings. In 1990 through a public auction procedure, Mexcobre acquired from the receivership 100% of the assets at approximately \$475 million. Cananea uses a conventional open-pit mining method to collect copper ore for further processing in our concentrator. Crushed leachable material is transported by conveyor belts and as run-of-mine by trucks to leach heaps.

The table below sets forth 2006, 2005 and 2004 production information for Cananea:

		2006	2005	2004
Mine annual operating days	(days)(1)	331	365	359
Total material mined	(kt)	114,595	102,508	93,160
Total ore mined	(kt)	22,896	25,638	26,258
Copper grade	(%)	0.588	0.572	0.583
Leach material mined	(kt)	59,678	52,112	39,048
Leach material grade	(%)	0.292	0.301	0.284
Estimated leach recovery	(%)	62.50	50.00	50.00
SX/EW cathode production	(kt)	52.5	56.4	50.2
Stripping ratio	(x)	4.01	3.00	2.55
Total material milled	(kt)	22,915	25,622	26,256
Copper concentrate	(kt)	386.0	436.5	469.3
Copper concentrate average grade	(%)	28.83	27.21	26.26
Copper in concentrate	(kt)	111.3	118.7	123.2
Copper recovery	(%)	82.56	81.03	80.53

Key: kt = thousand tons

x = ratio obtained dividing waste plus leachable material by ore mined.

The copper grade is total grade.

(1) While there were 47 days of strikes in 2006, only 34 production days were lost as 13 days of production were maintained with the support of management personnel.

Major Cananea mine equipment include 45 trucks for ore hauling with capacities that range from 240 to 360 tons, eight shovels with capacities that range from 39 to 70 tons, and mine auxiliary equipment including, eight drillers, five front loaders, five motor graders and twenty-four tractors.

Geology

The Cananea porphyry copper deposit is unusual in that the ore explored and sampled at the mine has been of consistent quality, unlike most copper deposits which evidence a decline in grades at deeper zones explored.

Cananea is in the Southern Cordilleran Orogen, which extends to the northwest of the lower 48 states of the United States. The geological and structural features of the region are representative of large copper deposits of the disseminated porphyry type. The mining district lies within a metallogenetic Basin and Range province. The geology is complex and consists of a series of Paleozoic age calcareous rocks, from Cambrian to Carboniferous, correlated to a type section in southeastern Arizona, that unconformably overlie a Precambrian granitic basement. A prominent deep-seated igneous activity occurred during various epochs. Volcanic rocks, grading in composition from rhyolites to andesites and tuffs, were intruded, by shallow, quartz monzonite porphyries of Laramide age, along structural weak zones, thus closing the geologic history of the region.

Intense and pervasive hydrothermal phyllic-argillic alteration and sulfide mineralization also occurred in several episodes. An initial early pegmatitic stage, associated with chalcopyrite, bornite, pyrite and molybdenite in breccia chimneys, followed by an extensive flooding of hydrothermal solutions, widely accompanied with mineralization of quartz, pyrite and chalcopyrite. A subsequent stage of quartz-pyrite comprises and closes the primary sequence.

An extensive and economically important zone of supergene enrichment, principally with disseminations and veinlets of chalcocite (Cu₂S), formed below the iron oxide capping. This zone coincides with the topography and has an average thickness of 300 meters. In the hypogene zone, the predominant sulfide mineral is chalcopyrite (CuFeS₂). Likewise, it has been documented that molybdenite (MoS₂) content in the deposit increases with depth.

The Cananea copper porphyry deposit is considered unique since the deepest exploration conducted to date in the core of the deposit has confirmed a significant increase in copper grades. It is unlike other deposits of similar type, which commonly display relative lower grades at depth. The district is also unique for the occurrence of high grade breccia pipes, usually in the form of clusters that follow the mineralized trend. The current aerial dimensions of the mineralized ore body are 5 X 3 kilometers and projects to more than one kilometer at depth. Considering the potential that the ore deposit in Cananea presents, it is expected that the operation can support a sizeable increase in the capacity of copper production.

Mine Exploration

The exploration program to define and quantify the molybdenum mineral resources and reserves started in the third quarter of 2005. We conducted a geo-statistic analysis to define the interpolation parameters, modeling and quantification of molybdenum associated with copper reserves in the deposit. In the first quarter of 2006, we started a diamond drilling program. We expect to finish this exploration program in the first quarter of 2007 which will in-fill molybdenum grade information and will validate the data base in the model. Recent molybdenum exploration results, in the Cananea porphyry deposit continue to show a close correlation with copper mineralization.

In 2005, we started an exploration drilling program near the porphyric copper ground. The main objective of this exploration is to define the areas where leach and barren material will be placed. The first drilling stage was carried out through the inverse circulation method reaching a depth close to 300 meters. The second exploration stage started in the third quarter of 2006 with core drilling rigs with the objective of exploring at greater depths.

Preliminary results of the exploration program being conducted in the peripheral zones of the deposit, confirm the mineralization and alteration patterns evidenced throughout the Cananea mining district.

Concentrator

Cananea uses state-of-the-art computer monitoring systems at the concentrator, the crushing plant and the flotation circuit in order to coordinate inflows and optimize operations. Material with a copper grade over 0.38% is loaded onto trucks and sent to the milling circuit, where giant rotating crushers reduce the size of the rocks to approximately one-half of an inch. The ore is then sent to the ball and bar mills, which grind it to the consistency of fine powder. The finely ground powder is agitated in a water and reagents solution and is then transported to flotation cells. Air is pumped into the cells producing a froth, which carries the copper mineral to the surface but not the waste rock, or tailings. Recovered copper, with the consistency of froth, is filtered and dried to produce copper concentrates with an average copper content of 28.83%. Concentrates are then shipped by rail to the smelter at La Caridad.

The Cananea concentrator plant, with a milling capacity of 76,700 tons per day, consists of two primary crushers, four secondary crushers, ten tertiary crushers, ten primary

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mills, a distributed control system, five mills for re-grinding, 103 primary flotation cells, ten column cells, 70 exhaustion flotation cells, seven thickeners and three ceramic filters.

SX/EW Plant

The Cananea unit operates a leaching facility and two SX/EW plants. All copper ore with a grade lower than the mill cut-off grade 0.38%, but higher than 0.25% copper, is delivered to the leaching dumps. A cycle of leaching and resting occurs for approximately five years to achieve a 62.5% recovery in the run-of-mine dumps and three years for the crushed leach material to achieve a 73% recovery.

The Cananea unit currently maintains 18.2 million cubic meters of pregnant leach solution in inventory with a concentration of approximately 1.82 grams of copper per liter.

Major equipment at the two SX-EW plants of Cananea include two crushing systems (No. 1 and No. 2). Crushing system No. 1 has a capacity of 32,000 tons per day, 10 million tons per year, and includes an apron feeder, a conveyor belt feeder, seven conveyor belts system and a distributor car. Crushing system No. 2 has a capacity of 48,000 tons per day, 15 million tons per year, and includes one crusher, a conveyor belt feeder, three conveyor belts and a distributing car. There are four irrigation systems for the dumps and 6 dams for Pregnant Leach Solution (PLS). Plant I has three solvent extraction tanks with a nominal capacity of 960 m³/hr of PLS and 46 electrowinning cells. Plant I has a daily production capacity of 30 tons of copper cathodes with 99.999% purity. Plant II has five trains of solvent extraction with a nominal capacity of 55,000 lt./min of PLS and 216 cells distributed in two bays. Plant II has a daily production capacity of 120 tons of copper cathodes with 99.999% purity.

We intend to increase our Cananea unit's production of copper cathodes by building a new SX/EW plant, (SXEW III). The plant will produce copper cathodes of ASTM grade 1 or LME grade A. The project includes the installation of storage for deliverables required for operation of the plant and the installation of an emergency power plant and a fire protection system. The project is currently underway and when completed in 2009, we expect to produce 33,000 tons per year of electrowon cathodes.

La Caridad

The La Caridad complex includes an open-pit mine concentrator, smelter, copper refinery, precious metals refinery, rod plant, SX/EW plant, lime plant and two sulfuric acid plants. La Caridad mine and mill are located about 23 km southeast of the town of Nacozari de Garcia in northeastern Sonora. Nacozari is about 264 km northeast of the Sonora state capital of Hermosillo and 121 km south of the US-Mexico border. Nacozari is connected by paved highway with Hermosillo and Agua Prieta and by rail with the international port of Guaymas, and the Mexican and United States rail systems. An airstrip with a reported runway length of 2,500 meters is located 36 km north of Nacozari, less than one kilometer away from the La Caridad copper smelter and refinery. The smelter and the sulfuric acid plants, as well as the refineries and rod plant, are located approximately 24 km from the mine, and the lime plant is situated 18 km from the U.S. border. Access is by paved highway and by railroad.

The concentrator began operations in June 1979, the molybdenum plant in June 1982, the smelter in June 1986, the first sulfuric acid plant in July 1988, the SX/EW plant in July 1995, the second sulfuric acid plant in January 1997, the copper refinery in July 1997, the rod plant in April 1998 and the precious metals refinery in July 1999.

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The table below sets forth 2006, 2005 and 2004 production information for La Caridad:

		2006	2005	2004
Mine annual operating days	(days)(1)	229	364	365
Total material mined	(kt)	46,606	75,465	72,430
Total ore mined	(kt)	16,872	31,551	27,574
Copper grade	(%)	0.449	0.483	0.504
Molybdenum grade	(%)	0.0348	0.0324	0.0341
Leach material mined	(kt)	19,109	29,969	22,450
Leach material grade	(%)	0.252	0.260	0.274
Estimated leach recovery	(%)	34.39	38.54	36.68
SX/EW cathode production	(kt)	11.2	22.0	21.8
Total material milled	(kt)	16,637	31,644	27,488
Stripping ratio	(x)	1.76	1.39	1.63
Copper concentrate	(kt)	227.8	449.6	401.6
Molybdenum concentrate	(kt)	4.5	7.4	6.5
Copper concentrate average grade	(%)	25.49	27.20	27.49
Molybdenum concentrate average grade	(%)	55.92	56.88	56.69
Copper in concentrate	(kt)	58.1	122.3	110.4
Molybdenum in concentrate	(kt)	2.5	4.2	3.7
Copper recovery	(%)	77.69	79.95	79.62

Key: kt = thousand tons

x = ratio obtained dividing waste plus leachable material by ore mined

(1) In 2006 there were 125 days of strikes.

The copper and molybdenum grade are total grade. The molybdenum grade value corresponds to molybdenum disulfide (molybdenite); molybdenum recovery is presently about 43.2%.

Major mine equipment include thirty-two trucks for ore hauling with capacity that range 170 to 240 tons, eight shovels with individual capacities that range 16 to 43 tons. Loading and auxiliary equipment include six drillers, four front loaders, four motor graders and twenty-one tractors.

Geology

The La Caridad deposit is a porphyry copper deposit typical of those in the southern basin and range province in the southwestern United States. The La Caridad mine uses a conventional open-pit mining method. The ore body is situated within a mountain top, which gives La Caridad the advantage of a relatively low waste-stripping ratio, natural pit drainage and relatively short haul distances for both ore and waste. The mining method involves drilling, blasting, loading and haulage of waste, leach and ore to waste and leaching dumps and to the primary crushers.

La Caridad deposit is located in northeastern Sonora, Mexico. The deposit is situated near the crest of the Sierra Juriquipa, about 15 kilometers southeast of the town of Nacoziari, Sonora, Mexico. The Sierra Juriquipa rises to elevations of around 2,000 meters in the vicinity of La Caridad and is one of the many north-trending mountain ranges in Sonora that form a southern extension of the Basin and Range province.

The La Caridad porphyry copper deposit occurs exclusively in felsic to intermediate intrusive igneous rocks and associated breccias. Host rocks include diorite and granodiorite. These rocks are intruded by a quartz monzonite porphyry stock and by numerous breccia masses, which contain fragments of all the older rock types.

Supergene enrichment, consisting of complete to partial chalcocite (Cu₂S) replacement of chalcopyrite (CuFeS₂). The zone of supergene enrichment occurs as a flat and tabular blanket with an average diameter of 1,700 meters and thickness generally between 0 and 90 meters.

Economic ore is found as disseminated sulfurs within the central part of the deposit. Sulfide-filled breccias cavities are most abundant in the intrusive breccias. This breccias-cavity mineralization occurs as sulfide aggregates which have crystallized in the spaces separating breccias clast. Near the margins of the deposit, mineralization occurs almost exclusively in veinlets. Ore minerals include chalcopyrite (CuFeS_2), chalcocite (Cu_2S) and molybdenite (MoS_2).

Mine Exploration

We have been mining the La Caridad orebody for over 25 years. The extent of the model area is approximately 6,000 meters by 4,000 meters with elevation ranging from 750 to 1,800 meters.

Fourteen drilling campaigns have been conducted on the property since 1968. These campaigns drilled a total of 3,182 drill holes. There are 2,055 reverse circulation drill holes. The rest are diamond drill holes, and some hammer drilling. A total of 521,406 meters have been drilled through January 2007.

Currently, La Caridad is drilling a new exploration program, the budget is for 25,000 meters. The target is to get down to the 900 level in order to reduce the drilling space and to define the copper and molybdenum mineralization continuity and also carry out metallurgical testing for the flotation and leaching processes.

Concentrator

La Caridad uses state-of-the-art computer monitoring systems at the concentrator, the crushing plant and the flotation circuit in order to coordinate inflows and optimize operations. The concentrator has a current capacity of 90,000 tons of ore per day.

Ore extracted from the mine with a copper grade over 0.30% is processed at the concentrator and is processed into copper concentrates and molybdenum concentrates. The copper concentrates are sent to the smelter and the molybdenum concentrate is exported. The molybdenum recovery plant has a capacity of 2,000 tons per day of copper-molybdenum concentrates. The lime plant has a capacity of 340 tons of finished product per day.

La Caridad concentrator plant has a milling capacity of 90,000 tons per day and consists of two primary crushers, six secondary crushers, twelve tertiary crushers, twelve ball mills, a master milling control system, 100 primary flotation cells, four re-grinding mills, 96 cleaning flotation cells, twelve thickeners and six drum filters.

In 2004, we improved our concentrator with the acquisition of an allied primary crusher. In addition, in 2003 we improved our La Francisca leach dam with a pumping and instrumentation system.

SX/EW Plant

Approximately 481.4 million tons of leaching ore with an average grade of approximately 0.25% copper have been extracted from the La Caridad open-pit mine and deposited in leaching dumps from May 1995 to December 31, 2006. All copper ore with a grade lower than the mill cut-off grade 0.30%, but higher than 0.15% copper, is delivered to the leaching dumps. In 1995, we completed the construction of a new SX/EW facility at La Caridad that has allowed processing of this ore and certain leach ore reserves that are not mined and has resulted in a reduction in our production costs of copper. The SX/EW facility has a total capacity of 21,900 tons of copper cathodes per year.

The La Caridad SX-EW plant has nine irrigation systems for the dumps and two PLS dams, a container of heads that permits the combination of the solutions of both dams and feeds the SX/EW plant with a more homogenous concentration. The plant has three trains of solvent extraction with a nominal capacity of 2,070 m³/hr and 94 electrowinning cells

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distributed in one single electrolytic bay. The plant has a daily production capacity of 62 copper cathodes tons with 99.999% purity.

Processing Facilities La Caridad

Our La Caridad complex includes a smelter, an electrolytic copper refinery, a precious metal refinery and a copper rod plant. The distance between this complex and the La Caridad mine is approximately 24 kilometers.

Smelter

Copper concentrates are carried to the La Caridad smelter where they are processed and cast into copper anodes of 99.2% purity. Sulfur dioxide off-gases collected from the flash furnaces and converters are processed into sulfuric acid, at two sulfuric acid plants. This acid is used by our SX/EW plants and the remaining volumes are sold to third parties.

Almost all of the anodes produced in the smelter are sent to the La Caridad copper refinery. The actual installed capacity of the smelter is 1,000,000 tons per year, a capacity that is sufficient to treat all the concentrates of the La Caridad and Cananea mining complexes. The smelter includes a flash type concentrates drier, a steam drier, a flash furnace, one El Teniente modified converted furnace, two electric furnaces for the cleaning of slag, three Pierce Smith converters, three raffinate furnaces and two casting wheels. The anode production capacity is 300,000 tons per year.

Refinery

Mexcobre includes an electrolytic copper refinery at La Caridad that uses permanent cathode technology. The actual installed capacity of the refinery is 300,000 tons per year. The refinery consists of an anode plant with a preparation area, an electrolytic plant with an electrolytic cell house with 1,115 cells and 32 releaser cells, two cathode stripping machines, an anode washing machine, a slime treatment plant and a number of ancillary installations. The refinery is producing grade A copper cathode of 99.99% purity. Anodic slimes are recovered from the refining process and sent to the slimes treatment plant where additional copper is extracted. The slimes are then filtered, packed and shipped to the La Caridad precious metals refinery to produce silver and gold.

The operations of the precious metal refinery are divided into two stages: (i) the antimony is eliminated from the slime; and (ii) the slime is dried in a steam dryer. After this the dried slime is smelted and a gold and silver alloy is obtained, which is known as dore. The precious metal refinery plant has a hydrometallurgic stage and a pyrometallurgic stage, besides a steam drier, dore molding system Kaldo furnace, 20 electrolytic cells in the silver refinery, one induction furnace for silver, one silver ingot molding system, two reactors for obtaining fine gold. The process ends with the refining of the gold and silver alloy.

Copper Rod Plant

A rod plant at the Mexcobre complex was completed in April 1998 and reached its full annual operating capacity of 150,000 tons in May 1999. The plant is producing eight millimeter copper rods with a purity of 99.99%. The rod plant includes a vertical furnace, one retention furnace, one molding machine, one laminating machine, one coiling machine and one coil compacter.

Other facilities include a lime plant with a capacity of 132,000 tons per year and located near the city of Agua Prieta in the State of Sonora; two sulfuric acid plants, one with an annual capacity of 2,625 tons and the second with an annual capacity of 2,135 tons; three oxygen plants, two with a production capacity of 200,000 tons per year and the third, with a capacity of 100,000 tons per year

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and two power turbogenerators that use the kiln residual heat from the furnace, the first with a 11.5 Mw capacity and the second with a 25 Mw capacity.

The table below sets forth 2006, 2005 and 2004 production information for the La Caridad processing facilities:

		2006	2005	2004
Smelter				
Total copper concentrate smelted	(kt)	724.0	894.7	820.5
Anode copper production	(kt)	242.4		