

means of this contract Homestake leased a 1.0 x 1.5 kilometer square area from Codelco for a 10-year period.

This is an open pit exploitation developed initially in the Pajonales and Maricunga pits, which currently form one single pit as a consequence of the discovery of new reserves connecting both pits.

For reasons of selectivity which is of prime importance, it was decided to work in benches 5 meters high. The final slope's angle which was determined on the basis of preliminary geotechnical studies, is 45°. At present a new geotechnical study is being analyzed.

Removing a total of 26,000 tons of rock, Homestake carries 6,000 tons of mineral per year to the heap leaching plant. Production amounts to 3,300 kilos of fine gold.

At this rate of exploitation, reserves are being depleted; therefore, Homestake is exploring other nearby areas and finding some evidence of gold. In September, 1991 the company signed a new contract with Codelco to expand the exploration area into adjacent land, an area of more than 700 hectares. The agreement with Codelco stipulates that Homestake will be responsible for all exploration costs and that Codelco will have a share of the profits obtained from the new activities up to a maximum of 50%.

El Hueso's geological remainder reserves (August, 1989) are 18.6 million tons with a grade of 0.94 g Au/t, 8.1 million of which have a grade of 1.44 g Au/t.

### II.3.6.- La Coipa - Compañía Minera Mantos de Oro - Placer Dome

La Coipa mine is located in Chile's III Region, 140 km northeast of the city of Copiapó and 800 km. north of Santiago. The presence of gold and silver in the area was known for a long time, but modern exploration started with the discovery of auriferous breccias by small miners in 1980.

Sierra Morena, a Chilean subsidiary of Goldfields Mining Corporation, carried out intense exploration of the area between 1982 and 1985 and discovered the deposits. Because of legal problems affecting the property, it sold its rights to Compañía Nacional de Minería, later called Compañía Minera Mantos de Oro.

The deposit is located more than 4,000 m. above sea level, and is divided into three mineralized areas: Ladera, Farellón and Coipa Norte. The first two are next to each other, and are exploited as one deposit. Proven reserves in Ladera and Farellón amount to 52.1 million tons of ore with an average grade of 1.58 g/t gold and 60.36 g/t silver. Reserves in the Coipa Norte area are 9.2 million tons with an average grade of 0.19 g/t gold and 171.72 g/t silver. The cut-off grade is 1.0 g/t. At the end of 1990 total reserves in La Coipa had increased to 67.5 million tons with a grade of 1.24 grams per ton. With these reserves the mine would have a 13- year life. Some reports also indicate the presence of 27 g/t of mercury, which proves the epithermal nature of these minerals that are found in veins and strata disseminated in porous material.

The deposit has a prominent silica layer with siliceous sintering and breccia, under which the mineralogy includes native gold mixed with sulfate salts rich in silver, including tetrahedrite, in siliceous and alunitized rock,

Placer Dome and Consolidated TVX Mining joined forces to exploit the La Coipa deposit in equal shares. The cost Placer paid for this 50% share was US\$ 63 million plus certain financial commitments amounting to US\$ 18 million. Both companies formed Compañía Minera Mantos de Oro in Chile to exploit the mineral.

Sierra Morena will receive royalties for 10 years, as of April 30, 1991, which consist of 2.5% of the "net smelter" income, up to a maximum of US\$ 2 million per year.

Construction started in mid 1988, using a 1100 tpd ore second hand plant which cost US\$ 34 million and started operating in July 1989.

It operated until mid 1991, when the 16,500 ton/day plant was inaugurated. Production in 1990 was 840 kilos of fine gold and 146,000 kilos of silver.

A small open pit of approximately 2 million tons has been exploited in the Ladera sector since May, 1989. The initial plant was supplied with approximately 600 thousand tons of ore from this deposit with an average grade of 8 g/t.

Initially, gold and silver were recovered as precipitates, but with the 16,500 tpd plant gold and silver are recovered as metal doré. This plant includes the following stages: crushing, semi-autogenous mill working, cyanidation with decantation in countercurrent, gold and silver recovery by means of zinc precipitation (Merrill Crowe process) and production of doré. A production cost of approximately US\$ 160 per ounce of gold is expected. Water is obtained from the wells in the Salar de Maricunga, 50 kilometers from the deposit. Total investment amounted to approximately US\$ 250 million.