

URUGUAY

By Gerald M. Ellis

The presence of the Vancouver mining firm, Crystallex International, continues to strengthen the mining sector of Uruguay as the activities of the company have added an exploration programme for diamonds, in addition to the gold mining and gold exploration projects underway since October 1998, when the San Gregorio gold mine was acquired.

At San Gregorio, Crystallex was able to reduce production costs during 2000, while increasing worker productivity at both the mine and the mill. Operating costs had been in the range of US\$245/oz when the mine was purchased, and this was brought down to US\$200/oz. During the period the mine was shut down for the purpose of improving operations. During the first quarter the company established an oxygenation unit designed to extend the life of the mine as well as to increase the capacity of the SAG mill. Recovery rates were increased from 92.5% to 94%, through the oxygenation circuit. This speeds up the dissolution of gold in cyanide by increasing the level of dissolved oxygen in the leach tanks. A second shutdown was carried out in order to change the motors and increase the capacity of the SAG mill. The company expects the operation to produce some 75,000 oz/y gold over the next four years. In addition, there are reserves of lower grade ore that were being processed, of which already some 50,000 t had been depleted.

At year end, Crystallex and Standard Bank were negotiating terms for a two-part US\$60 million credit. Of this a US\$35 million loan was for the refinancing of the debt incurred by Crystallex in its purchase of Minera San Gregorio in Uruguay and the assets of Bolivar Goldfields in Venezuela. This loan is to

mature in the year 2008. The other part of the loan is a US\$25 million gold trading facility.

During the year, Crystallex initiated a drilling programme for diamonds in its joint venture with SouthernEra Resources. This is a project to undertake 2,500 m of drilling in the properties of SouthernEra in northwest Uruguay, and is designed to test several kimberlitic diatremes, interpret the geology and investigate the potential for diamonds along with the presence of indicator minerals. In addition to this joint venture, Crystallex continued exploration on its own properties where the company has conducted stream sediment geochemical sampling, airborne magnetic and EM geophysical surveys. The diamond-bearing region is part of the down-dip extension of the San Gregorio shear zone, some 50 km northwest of the San Gregorio mine where kimberlite pipes were identified following a geological field programme.

Earlier this year, Rio Tinto informed its joint venture partner, Uruguay Goldfields, that it would be dropping its option on the Sobre Saliente prospect in northern Uruguay. Reverse circulation drilling at Sobre Saliente has defined a large mineralised zone about 2,450 m long and 25-100 m wide. Based on a cut-off grade of 0.1 g/t Au, the inferred resource works out to 47 Mt grading 0.3 g/t Au. At a higher cut-off grade of 0.3 g/t, the resource shrinks to 6.8 Mt grading 1 g/t Au. This was not large enough to meet Rio's criteria.

The presence of Crystallex, mining and exploring for gold, and exploring for diamonds with SouthernEra, is certain to attract new mining companies to Uruguay.