

REPRINTED FROM

The Northern Miner

Vol. 89 No. 50 Since 1915

THE GLOBAL MINING NEWSPAPER

JAN. 30-FEB. 5, 2004

Anglo eyes Cardero ground in Mexico

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VANCOUVER — **Cardero Resources** (CDU-V) and its joint-venture partner, **Anglo American** (AAUK-Q), have identified several anomalies following an airborne geophysical survey over their 50,000-sq.-km Alisitos property in Baja California, Mexico.

The partners are targeting iron-oxide copper-gold (IOCG) mineralization, examples of which include the Olympic Dam and Ernest Henry deposits in Australia, the Kiruna-Aitik operation in Sweden, and the Salobo mine in Brazil. The sheer size of these finds — up to 2 billion tonnes grading better than 1.5% copper and 0.5 gram gold per tonne — makes them highly attractive targets. Characteristics of IOCG deposits typically include Early to Middle Proterozoic cratonic settings with extensional rifting evolving from collisional tectonics. Typically, mineralization occurs along major structural lineaments in the aureoles of a distinctive suite of anorogenic potassium-rich “A-type” granite intrusions. Although hosted by diverse lithologies, deposits are characterized by several other diagnostic regional and deposit-scale features, which can be recognized in property-scale geophysical surveys. The most promising prospects have coincidental potassium, uranium, magnetic, resistivity, chargeability, and gravity anomalies.

Anglo American is testing the newly identified anomalies in an effort to determine drill targets.

Cardero acquired the project in 2002 from a private local company. Anglo American entered the scene in 2003 by inking a deal to earn a 70% stake in the ground by spending

US\$2.5 million. Late in 2003, the partners amended the agreement by increasing Anglo's expenditures to US\$3.7 million. In return, Cardero added 49.5 sq. km to the joint venture.

With Anglo American running the Mexican IOGC program, Cardero has been busy advancing its other projects.

Adjacent to the Alisitos land package, the junior is working the Ludavina epithermal gold project, near San Quintin. Early-stage mapping has defined a broad zone of alteration and veining along a northeast-striking zone measuring 7 by 2 km. Five gold-bearing targets hosted in Cretaceous-aged mafic-to-intermediate volcanic rocks have been identified close to a 12-km-wide inferred caldera structure. At the South zone, pervasive silica alteration has been outlined over an area measuring 700 by 100 metres. Chip samples returned up to 7.3 grams gold per tonne over 35 metres.

Some 1.5 km northwest of the South zone, the company collected 28 chip samples over a 1-sq.-km area dubbed the Discovery Ridge zone. Values ranged from 50 parts per billion gold to 31 grams gold per tonne.

Also prospective is the Basin zone, a 700-by-200-metre area with hot-spring and sinter deposits, adjacent to the northwestern perimeter of the Discovery Ridge zone.

In San Luis Potosi state, Cardero has teamed with **Newport Exploration** (NWX-V) on the Franco gold project. The 9.8-sq.-km concession hosts a series of antimony-arsenic geochemical anomalies coincidental with hydrothermally altered rocks covering a 2-sq.-km area. A 9-hole, 2,000-metre program of drilling is in progress.

Newport can earn a half-stake in the property by paying \$70,000 by March 3 and spending \$250,000 by Aug. 3. Newport must also pay \$60,000 by Sept. 30.

In the state of Sonora, Cardero recently picked up the Gachupines gold property by agreeing to spend \$85,000, pay US\$320,000, and issue 255,000 shares to a private Mexican company. Sampling, mapping and trenching are planned.

Late last year, Cardero expanded its property portfolio by acquiring an IOCG target in the Marcona district of Peru's Pacific coastal belt. The junior believes the area is part of a major belt that begins in Chile and ends in Mexico.

From a private company, Cardero tied up 300 sq. km, about a third of which is subject to an underlying agreement with **Rio Tinto** (RTP-N). The private company can acquire Rio's interest by spending \$450,000 over three years and paying US\$500,000 in cash. Cardero can acquire the entire package by issuing 650,000 shares to Rio over two years and paying US\$120,000 in the first year.

Copper mineralization on the properties is defined by a broad, northwest-trending belt. Grab samples collected over the area yielded up to 18% copper and 6 grams gold per tonne.

In Argentina, Cardero is gearing up for another bout of drilling over the Providencia and Chingolo silver projects in Jujuy province.

Previous exploration at Providencia defined a large silver-and-copper-mineralized structure 750 metres long, 150-250 metres wide, and at least 75 metres deep. Native copper and silver,

chalcocite and enargite were identified as a part of the mineral suite.

In the surface-pits, Cardero carried out chip sampling over a 350-by-750-metre area to vertical depths of 75 metres.

The mineralizing system is not just confined to this one area. Exploration 5 km to the north has identified an anomalous zone of copper-silver mineralization at the Romona prospect.

Last year, Cardero drilled a series of holes into the Providencia target, but the results failed to replicate the high-grade surface samples. Holes 1, 2, 3 and 7 tested the main silver-bearing conglomerate underlying the South Benches area south of the South Pit. The best result came in hole 7: 100.3 grams silver over 24 metres. Hole 10 targeted the eastern extensions of the South and Central pit area and returned 31 grams silver over 6 metres.

Undeterred by the initial results, Cardero drilled another six holes into the target. Most promising was hole

28, which hit multiple zones, including a 4-metre section running 293.7 grams silver. Collared at the southern end of the North block, immediately north of the Providencia target, the hole expanded the exploration target over a 2-km strike length. In total, the favourable stratigraphy has been traced for 9 km with mineralization lying in the matrix of a conglomerate package and in coarse sandstone.

According to the company, the disappointing drill values could be the result of core loss, most notably in the mineralized matrix of the conglomerate. To combat this problem, Cardero will subject the project to 2,000 metres of reverse-circulation drilling.

Cardero can acquire the 80-sq. km property by paying US\$375,000 over four years.

Meanwhile, the junior has acquired the Chingolo silver property, 15 km northwest of Providencia, by agreeing to pay US\$10,000 and issue 250,000 shares over four years. Five samples of altered conglomerate collected in

1996 returned an average of 747 grams silver. The Cardero team collected nine chip samples of weathered conglomerate and jasperoid rocks with values yielding 20-391 grams silver. The samples also returned up to 112 parts per million copper, 1.03% lead and 159 ppm zinc.

Once again, the initial drill results failed to live up to expectations, with only three of the six holes drilled cutting mineralization. The best values came in hole 8: 138.3 grams silver over 2.2 metres.

So far, the mineralized zone has been traced on surface for 250 metres along strike with widths hitting 125 metres. Mineralization is hosted in a combination of open fractures, voids and veinlets in volcanic flow breccias and terrigenous sediments. Another round of drilling is planned for later this year.

Cardero has 31.8 million shares outstanding and \$10 million in its kitty. The company recently traded at \$2.45 in a 52-week range of 55¢-\$3.48.