# LADY IRON DEPOSIT & VMS POTENTIAL SUMMARY REPORT

#### **VICTORIA MINING DIVISION**

48 55' 20"N

123 56' 20"W

NTS 092B/13W

January 26, 2003

C. C. RENNIE, P. Eng.

## SUMMARY OF LADY IRON DEPOSIT 092B13W 12 KM UP BOULDER CREEK NORTH OF CHEMAINUS RIVER

#### INTRODUCTION

In conversation with Neil Hillhouse, Chester Millar who worked for Canadian Collieries after graduation in 1950, recalled that Canadian Collieries had drilled an iron deposit in the Chemainus area in the early 50's, but the deposit was mainly hematite and not developed. Chester was interested in researching the deposit as a possible near-tidewater source of hematite for use in portland cement production. Neil phoned the writer who contacted Chester and the writer then started a slow research and search for the showings.

Jacques Houle, district geologist with the BC Ministry of Energy and Mines supplied printouts of MINFILE Capsule Geology and Bibliography files for iron deposits in the Chemainus area and advised that the prospect in question was probably the Lady A, B and C deposits on Boulder Creek, a south flowing tributary of the Chemainus River. He also advised that the BCMEM Victoria library had some property reports. Copies of these reports were obtained from the library at a cost of \$60.

Jacques Houle also advised that Dani Alldrick, geologist with BCMEM had addressed the Vancouver Island Exploration group about VMS deposits and had made specific comments about the "iron formations" in the Chemainus area. Contact was made with Dani Alldrick and Nick Massey, geologist with BCMEM, who has mapped the Sicker group extensively and with Jan Peter, geologist with the GSC, whom Dani Alldrick had recommended as an export on exhalative iron formations relative to VMS deposits. All supplied extensive references, bibliographies, and copies of papers.

Once the correct access road was found, seven trips were made to the area before the overgrown drill sites on the Lady C showing were found. Since the mineral title to the showing area was open a 20-unit modified grid claim was staked and recorded on October 25, 2002 to cover the showings.

#### LOCATION AND ACCESS

Access along the north side of the Chemainus River uses Weyerhaeuser's Copper Canyon Main Haulage road from the main Island highway. Weyerhaeuser have a watchman and a gate at the start of the road that is open to the public on weekends from 7AM to 7 PM during the summer and shorter hours during the winter. Access is possible during the week after 5 PM but overnight stays require a special pass from the Weyerhaeuser engineer. The Mt. Brenton Forest Service road that mostly follows the power line turns north from the Copper Canyon road at a point 16km from the gate house. The Lady showings are 14 km up this powerline road. The Lady A and B showings on the west side of Boulder(Chipman) Creek are completely overgrown and the Lady C showings on the East side of Boulder Creek at 670 m (2200 ft) elevation are mostly overgrown with 50 year old trees. Previous access trails are no longer recognizable.

#### MINERAL CLAIMS

One twenty unit claim (5N X 4E) named Lady was staked by C. C. Rennie and recorded in the name of C. C. Rennie on October 25, 2002. The legal post for the Lady claim is on the east bank of Boulder Creek where the power line crosses the creek

Previous claims in this area covering the Lady A B and C showings, were the Ermelina claims, held by M. Willis, R. J. Mrus and A.M. Brown, which were all forfeited in June and July of 1994. This ground has apparently been open since then.

#### HISTORY AND PREVIOUS WORK

No early records of discovery have been found yet. The earliest report so far is the "Report on Exploration for Iron Ore on Property in Cowichan Lake District, V.I., Held by Ladysmith Development Ltd. under Agreement of May 14<sup>th</sup>, 1953 with the Esquimalt & Nanaimo Railway Company. December, 1953" by A. F. Buckham, Geologist, Ladysmith Development Ltd.

A more detailed report entitled "Report on the Lady-Ermelina Claim Group" is contained in a prospectus prepared by Carlsbad Ventures Ltd dated April 25 1988. There is no present evidence of Carslbad Ventures being active, The geology report dated February 5, 1988 covers the January-February, 1987 field program and was authored by Hugo Laanela, FGAC for Ashworth Explorations Limited.

The 1953 report contains the drill logs for twenty AX core holes totalling 2280.5 feet (695 m), of which 12 were on the Lady A, 4 on the Lady B and 4 on the Lady C showing. The drill logs are very brief and contain no geological descriptions and only estimates of iron grade for the most part. A mineral reserve was calculated by Buckham from cross sections drawn from the drill hole data. Buckham calculated the Lady A deposit to contain360,000 long tons of 25% iron and the Lady C deposit to contain 2,367,000 long tons of 18% iron, and the Lady B deposit to be insignificant. The reserve cross sections drawn for the Lady A deposit show the iron formation to be pinching out downward at 1550 ft. elevation, but there is no drill hole data to substantiate this pinching (ie, it could pinch, swell or remain the same width to greater depth) Similarly there is no drill hole data to justify the pinching of the Lady A zone to the east as shown on the cross sections. The cross sections for the Lady C deposit project the deposit down to 1900 ft only and show a dip to the west instead of to the east. There is no drill data to substantiate this westward dip. There are iron assays on only three of the 20 drill logs in the Lady A area but the assays correspond fairly well with the iron estimates. There are no iron assays for the 4 Lady C drill holes. There is no distinction in the logs between magnetite and hematite.

The 1988 report contains geologic mapping, rock sample geochemistry, soil sample geochemistry and magnetic and electromagnetic data. The report recommends additional rock and soil sampling, and more geophysical surveys to be followed by backhoe trenching and diamond drilling. There is no evidence that this program was carried out. The geologic mapping and rock and soil sampling should be useful in future programs, particularly if the analyses will provide a vector toward VMS mineralization.

Massive sulphide copper ore was produced from Mt Sicker deposits, 13km SE of the Lady deposit, between 1898 and 1907 when two copper smelters were in operation at Ladysmith and Crofton and again between 1944-45. Total production was 253,000 tons grading 0.14 oz/T Au, 2.92 oz/T Ag, 3.77% Cu and an estimated unrecovered 7% Zn and 1% Pb.

Laramide Resources discovered the Coronation zone in 1984 approximately 5 km SE of the Lady deposit and drilled over 200 holes to estimate a reserve of 529,000 tonnes averaging 1.01% Cu, 1.22% Pb, 5.87% Zn, 100gm/T Ag and 4.73 gm/T Au. They also discovered the Randy North Zone 1.5Km SE of the Lady zone and apparently on strike with the Lady C zone but did not explore it extensively.

#### **GENERAL AND LOCAL GEOLOGY**

The 1988 report for Carlsbad Ventures Inc prospectus, prepared by Hugo Laanela, FGAC consulting geologist for Ashworth Explorations Limited contains a detailed description of the general and local geology that will be summarized here.

Regional mapping by GSC (Muller, 1980) shows the block to be underlain by Paleozoic Sicker Group which is intruded to the NE by the dioritic Ladysmith Stock of Jurassic Intrusions. The main rock unit is the sediment-sill unit of Pennsylvanian to Mississipian age consisting of argillite, greywacke and chert, intruded by diabase sills. The southern part of the block is reported to be underlain by the Lower Devonian or older Myra Formation consisting of felsic tuff and breccias, argillite, rhyodacite flows and phyllite.

The so-called iron formation drilled by the subsidiary of Canadian Collieries in 1953 appears to be a NW striking, 45 to 60 degree East dipping, continuous band ranging from 30 feet (10m) thick in the Lady A section to up to 160feet (50m) thick in the Lady C section as indicated by a horizontal drill hole.(see geological plan by Ashworth Explorations Limited) There has been no drilling or trenching between the Lady A and Lady C showings or south of the Lady C to prove this continuity. The "iron formation" consists of lenses of extremely fine grained magnetite with minor specular hematite in grey chert and red jasperoid rock. Some pyrite is present in talus south of the Lady C. The drill logs for the 1953 drilling contain iron assays for only three of the drill holes and the remainder are estimates but where assays were included they correlate well with the estimates. There was no estimate of the magnetite versus hematite content in the drill logs, and no assays for gold or silver.

#### ROCK AND SOIL GEOCHEMISTRY

The 1988 report contains an incomplete soil sampling grid and analyses of 871 soil samples collected at 25 and 50 meter intervals on lines 100 meters apart in a NE-SW orientation. 52 rock samples were also collected and all samples were analyzed by Acme Laboratories using 30 element ICP. In general the soil sampling shows moderately anomalous gold ,silver copper, lead, zinc and arsenic in the vicinity of the "iron formation" with a gap in the sampling where the topography in the vicinity of the Lady C showing was too steep. Both soil and rock samples from the iron formation area were anomalous in molybdenum. The 1988 report recommends additional soil sampling to fill in the gap but since the results of the 1987 survey already indicate that the area surrounding the "iron formation" is anomalous this may be sufficient geochemistry.

#### **GEOPHYSICS**

A VLF-EM survey was run over a southern grid with conductors appearing both NE and SW of the "iron formation". In-phase readings only were recorded and the power line through the property had a disruptive effect.

The magnetometer survey was run using a proton magnetometer but no base readings were taken. The magnetic profiles show strong peaks over the iron formation but again readings could not be taken within 200 meters of the power lines.

#### PROPOSED WORK PROGRAM

In the opinion of the writer there is sufficient evidence of an exhalative mineral system on hand to justify a drill program to provide core samples for detailed analysis on iron content and for checking the amount of magnetite and hematite present, and for detailed analysis that might vector into volcanogenic massive sulphide mineralization. Drill holes should be designed to penetrate well into the hangingwall of the "iron formation" as the literature on the New Brunswick camp suggests that the VMS deposits occur in the hangingwall of the ubiquitous "iron formations".

The initial program should comprise two two-hole sections, one beneath the northernmost section on the Lady C showing, but collared lower comprising a 500ft (150m) -45 hole and an 800ft (245m) -60 hole and a section between the Lady A and Lady C showings, comprising a 400ft (122m) -45 hole and a 600ft (183m) -60 hole. A backhoe track would be required to access the Lady C area and to expose bedrock if possible at a lower elevation.

Additional work would be dependent on results from initial drilling. There is a possibility that a joint program could be arranged whereby government geologists would be involved in data collection and interpretation. The GSC have collected a ot of data in the New Brunswick camp on ehalative iron formation relative to VMS deposits and this knowledge could help vector the search for VMS mineralization at the Lady deposit.

### Expected cost:

Access improvements and drill sites	\$!0,000
Drill 2200ft (700m) @ \$100/m	70,000
Geological supervision and core logging	10,000
Analyses 450 samples @ \$20/sample	9,000
Magnetite-hematite determinations allow	6,000
Report preparation	5,000
Reclamation provision	5,000
Subtotal	\$ 115,000
Contingencies	15,000
Total initial program	\$130,000

Clifford C. Rennie, P. Eng.

January 26, 2003

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Rennie, Clifford C. File # A205238 2118 Carmen Road, Nanaimo EC V9S 5N6 Submitted by: Clifford C. Rennie

SAMPLE#	Mo				Ag maa			Mn ppm	Fe %					Sr Co				Ca %	12.2		Cr ppm	Mg %	Ba ppm	Ti	B	Al %	Na %	K %	W	· Au*	
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GROUP 1D - 0.50 GM SAMPLE LEACHED WITH 3 ML 2-2-2 HCL-HN03-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 10 ML, ANALYSED BY ICP-ES. UPPER LIMITS - AG, AU, HG, W = 100 PPM; MO, CO, CD, SB, BI, TH, U & B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM. ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB - SAMPLE TYPE: ROCK R150 60C AU\* IGNITED, ACID LEACHED, ANALYZED BY ICP-MS. (10 gm)

DATE REPORT MAILED: Del 6/02 SIGNED BY.C. ................... TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

LADY GRAB SAMPLES LADY GRAB SAMINANDLI - Ledy C morth drill site - jesperitic

LI - Ledy C morth drill site - jesperitic

LZ " south drill site - magnetic

LZ Josper-y tolus - south of south drill site

LA Pyritic tolus - south of south drill site