ASSESSMENT REPORT

TITLE: 1980 GEOCHEMICAL (Cu, Pb, Zn) SOIL SURVEY PROGRAM ON JENNY AND LOUPY CLAIMS PORT ALBERNI, BRITISH COLUMBIA

CLAIMS INVOLVED

: JENNY (636(11)) AND LOUPY (637(11))

TOTAL UNITS

: 26

LOCATION

: 49° 9.0' LATITUDE 124° 39.3' LONGITUDE 92 F/2E N.T.S. MAP NO.

OWNER AND OPERATOR OF CLAIMS: WESTERN MINES LIMITED

REPORT BY

: G. BENVENUTO

WORK PERIOD

: JUNE 26 TO JULY 14, 1980

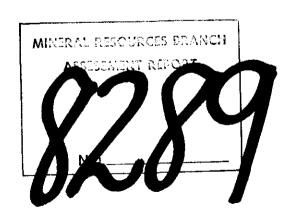


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SUMMARY

The <u>Jenny</u> and <u>Loupy</u> claims, containing 20 and 6 units respectively, were staked by Western Mines Limited on November 11 and 12, 1978, 14.5 km southeast of Port Alberni, British Columbia. They form the two southernmost claims of the McLaughlin Ridge property (217 units) held by Western Mines. <u>Jenny</u> and <u>Loupy</u> are underlain by volcanic rocks of the Late Paleozoic Sicker Group.

517 soil (and 24 silt) samples were collected along a 50m by 200m grid pattern on Jenny and Loupy between June 26 and July 14, 1980, and analyzed for copper, lead and zinc. Near the northwest corner of the Jenny claim, a north-northwest-trending area, 700m long and up to 150m wide, contains six samples with higher to anomalously high (greater than 200 ppm) concentrations of copper and/or zinc. A second area is indicated by two soil samples containing anomalous concentrations of zinc in the southwest corner of the Jenny claim, and a third sample with anomalous zinc 700m' to the north of, and in line with, the other two samples. Only one other sample collected contains an anomalously high concentration of copper and one other with anomalous zinc; these are from the southeastern part of the Jenny claim and are 900m apart.

Only 6.4% of the soil samples collected from the remainder of the claims in the McLaughlin Ridge property to the north of the <u>Jenny</u> and <u>Loupy</u> claims, contain higher concentrations of lead (greater than 25 ppm), whereas in the <u>Jenny</u> and <u>Loupy</u> claims 30% of the samples contain higher concentrations of lead. Apparently, the background concentration level of lead in the soils of the <u>Jenny</u> and <u>Loupy</u> claims is significantly higher than to the north. There is no clear relationship between higher concentrations of lead in the soils and physiography or lithology of the bedrock. Only two soil samples contain anomalously high concentrations of lead, one in southwest <u>Jenny</u> and the other in southwest <u>Loupy</u>.

I. INTRODUCTION

A. LOCATION (92 F/2E N.T.S. Map No.)

The <u>Jenny</u> and <u>Loupy</u> claims are located on southeastern Vancouver Island, British Columbia, about 14.5 air-kilometres southeast of Port Alberni, B.C. (Figure 1). The two claims comprise 26 units that extend from just north of China Creek in the north to just north of Douglas Peak in the south and are bounded by Williams Creek to the west. They extend between 49° 10.0' and 49° 7.9' latitude, and 124° 40.0' and 124° 38.3' longitude.

The area bounded by <u>Jenny</u> and <u>Loupy</u> is underlain by Upper Paleozoic metavolcaniclastic rocks and pillowed basalts and andesites of the Sicker Group.

B. ACCESS

The <u>Jenny</u> and <u>Loupy</u> claims are easily accessible from Port Alberni via the China Creek logging road. Most of <u>Jenny</u> and the north half of <u>Loupy</u> is accessible by the Duck Main logging road and the numerous roads that branch off it.

C. PHYSIOGRAPHY

The north flank of Douglas Peak, on which the <u>Jenny</u> and <u>Loupy</u> claims lie, slopes northerly and drops some 825m to China Creek. The two claims are bounded to the east and west by two relatively small creeks that drain northwards into China Creek. Most of gentler sloping portions of the area have been logged off; logging "slash" covers approximately one third of claims. The steeper sloping portions are densely forested with either immature or mature growths of Douglas Fir. A narrow band of mature Alder trees follows China Creek in the north part of <u>Jenny</u>.

D. PROPERTY DEFINITION

Western Mines Limited of 1103-595 Burrard Street, Vancouver, B.C. is the current owner and operator of the Jenny and Loupy claims, which contain 20 and 6 units respectively. Loupy was originally staked as a 16 unit (4 by 4) claim, but the western 8 and southeastern 2 units were dropped from the claim because those units overlapped surrounding claims not held by Western Mines. The recording information for the two claims is given in Table 1 below.

TABLE I: CLAIM INFORMATION

CLAIM	UNITS	RECORD NO.	RECORD DATE	EXPIRY DATE
JENNY	20	636(11)	NOV. 13, 1979	NOV. 13, 1980
LOUPY	6	637(11)	NOV. 13, 1979	NOV. 13, 1980

The Jenny claim, to the north, abuts Linda 2 also held by Western Mines and slightly overlaps the Yellow claim beld by Silver Cloud Mines Ltd. To the west, Jenny abuts the Diplodocus claim held by Union Miniere Exploration and Mining Corp. Ltd. The Loupy claim, to the west, abuts the Lizard claim, also held by UMEX, and to the south, abuts the Levi claim held by Glen E. White. The southwest corner of Jenny overlaps most of Lot 55G which is held by Alexander Rowan, c/o Island Mining and Exploration Co. Ltd.

E. PROPERTY HISTORY

Small-scale placer mining and production from gold-quartz veins along several of the tributaries of China Creek are recorded for infrequent intervals between 1862 and 1936. Just north of <u>Jenny</u>, along Mineral Creek in the <u>Yellow</u> claim, Vancouver Island Gold Mines Ltd., between 1933 and 1936, produced from quartz veins in sheared andesitic flows and tuffs, 403 tons of ore containing 303 Oz. of gold and 52 Oz. of silver (Stevenson, 1944).

Lot 55G, just east of Williams Creek, which is overlapped by the southwest corner of Jenny, formed No. 2 of the old Regina group. The Alberni Gold Development Syndicate, in the late 1890's, drove several adits into silicified and leached andesite with considerable disseminated pyrite. A bulk sample from the "Big Showing" of silicified andesite assayed 0.64 Oz. per ton gold and a trace of silver. Several 5 to 10cm thick quartz veins within silicified andesite contain "considerable pyrite, chalcopyrite and galena". One sample of a quartz vein assayed 0.66 Oz. per ton gold and 14.0 Oz. per ton silver (Stevenson, 1944). No production has been reported from the property.

Western Mines Limited first became involved in mineral exploration in the area in February, 1973, when G.H. Scott staked the Amy claim of 12 units on McLaughlin Ridge 3.5 km north of Jenny. In August, 1976, G. Crooker re-staked the Amy claim and enlarged Western's holdings to include the Sultan, Rupert and Dog claims which covered the north, northeast and southwest flanks of McLaughlin Ridge with approximately 90 units.

Geochemical soil and geologic mapping surveys were conducted at a reconnaissance scale by Western Mines in 1973 and 1976 on their claims (Assessment Reports #4875, 5594 and 6153). These early surveys outlined several areas of high concentrations of copper and zinc. Re-evaluation of these results led Western Mines to re-stake an area of 217 units across the northwestern portion of McLaughlin Ridge (the McLaughlin Ridge property: Oets, Oets 1, Debbie 1,2,3, Lucy 1,2,3, Linda 1,2, Lily 1,2, Cam, Jenny and Loupy claims; partially covered in Assessment Reports filed in May, July and August, 1980).

F. SUMMARY OF WORK DONE

GEOCHEMICAL SOIL SAMPLE SURVEY

517 soil (and 24 silt samples) were collected on the <u>Jenny</u> and <u>Loupy</u> claims with a mattock from the "B"-soil horizon, between June 26 and July 14, 1980. The soil samples were taken at 50m intervals along grid lines spaced 200m apart. The grid lines are parallel to a bearing of 058° which is at right angles to the regional northwesterly strike of schistosity and layering in the Sicker Group volcanic rocks. The soil sampling was conducted between the ground position of claim lines.

The soil and silt samples were analyzed at Min-En Labs Limited, 705 West 15th Street, North Vancouver, B.C. At their labs the samples were dried at 95° C and screened by an 80 mesh sieve. 1.0 gm of the sample

was digested in a nitric and perchloric acid solution for 6 hours, then analyzed by an Atomic Absorption Spectrophotometer using a CH₂H₂ - air flame, for copper, lead and zinc (results reported in parts per million - ppm, in Figure 2).

II. DETAILED TECHNICAL DATA AND INTERPRETATION

GEOCHEMICAL SURVEY

The purpose of the geochemical soil survey is to delineate areas within the <u>Jenny</u> and <u>Loupy</u> claims which might contain anomalously high concentrations of copper, lead and zinc in the bedrock and thereby provide a preliminary basis for possible detailed geochemical and geologic surveys in the future.

RESULTS (Figure 2)

The results of the analyses of soil samples show that the concentrations of copper in the soil range from 2 ppm to 300 ppm, that of lead from 3 to 61 ppm, and that of zinc from 12 to 464 ppm. A visual inspection of logarithmic probability plots for the concentrations of copper, lead and zinc in 2413 soil samples collected by Western Mines in 1979 and 1980 from claims of the McLaughlin Ridge property, suggest the following significant levels of concentration (Table 2).

TABLE 2					
COPPER			LEAD	, z	INC
	CUMULATIVE		CUMULATIVE		CUMULATIVE
PPM	%	PPM	%	PPM	%
0-149	96.2	0-24	93.6	0-139	94.7
150-199	98.4	25-49	99.4	140-199	98.4
≥ 200		≥ 50		≥ 200	
	PPM 0-149 150-199	COPPER CUMULATIVE PPM	COPPER CUMULATIVE PPM	COPPER LEAD CUMULATIVE CUMULATIVE PPM % PPM % 0-149 96.2 0-24 93.6 150-199 98.4 25-49 99.4	COPPER LEAD Z CUMULATIVE CUMULATIVE CUMULATIVE PPM % PPM % PPM 0-149 96.2 0-24 93.6 0-139 150-199 98.4 25-49 99.4 140-199

Figure 2 shows the concentrations of copper, lead and zinc at each soil sample site on a geographic map of the <u>Jenny</u> and <u>Loupy</u> claims which was prepared by tracing geographic and cultural features from an aerial photograph enlarged to a scale of approximately 1 to 5,000. Also shown in Figure 2 are the contour lines that enclose those sample sites from which soil samples were collected that contain anomalous concentrations of copper and zinc, that is, greater than 200 ppm.

Nine soil samples with higher concentrations of copper (greater than 150 ppm) and three samples with highly anomalous concentrations of copper were collected within the Jenny claim. Four of the samples with higher concentrations of copper and two of those with anomalous concentrations were collected near the northwest corner of Jenny. Two of the samples with higher concentrations of copper and two with anomalous concentrations delineate a narrow northerly trending zone that spans three sample grid lines. The third sample, with an anomalous concentration of copper was collected in the southeast quarter of Jenny. In a general way, all the samples with high and anomalous concentrations of copper are scattered along a zone that stretches from the southeast corner to the northwest corner of Jenny. Within this very weakly defined zone, only that area near the northwest corner of Jenny defined by two samples with higher concentrations of copper and two with anomalous concentrations of copper, appears to warrant any follow-up exploration work.

Three of the six soil samples containing higher concentrations of zinc (greater than 140 ppm) and nine of the ten samples with anomalous concentrations of zinc, were collected from the westernmost part of Jenny. Five of the samples with anomalous concentrations of zinc define a small zone near the northwest corner of Jenny that spans three sample grid lines. This zone is not associated with any samples that contain higher concentrations of zinc (between 140 and 199 ppm), but is coincident with the area containing higher to highly anomalous concentrations of copper. Only one sample with an anomalous concentration of zinc within this area does not contain higher to highly anomalous concentrations of copper. This is the only portion of the area surveyed where there exists a strong association between anomalous concentrations of zinc and copper in the soils. southwest and south of this zone, near the southwest corner of Jenny, four samples with anomalous concentrations of zinc and three with higher concentrations, were collected. In a general manner, they outline a northtrending zone. The north end of this zone is defined by one sample with an anomalous concentration of zinc and one sample 100m to the northeast with a higher concentration. The south part of this zone is defined by three samples with anomalous zinc that were collected along two neighbouring grid lines and one sample 100m to the northeast and one sample 150m to the southwest that contain higher concentrations of zinc. Samples in this zone at higher to anomalous concentrations of zinc do not contain and are not associated with higher to anomalous concentrations of copper. remaining soil sample with an anomalous concentration of zinc was collected on the boundary between Jenny and Loupy. The three remaining samples with higher concentrations of zinc were taken from western Loupy along grid lines separated by 300 and 500m.

155 soil samples (30% of the total) collected contain higher concentrations of lead (25 to 44 ppm). By comparison, of the 2013 soil samples previously collected on other claims in the McLaughlin Ridge property, only 6.4% of the samples contain concentrations of lead greater than 25 ppm. Apparently, the background concentration level for lead is significantly higher in Jenny and Loupy than the other portions of the McLaughlin Ridge property sampled. Most of the samples with higher concentrations of lead were collected in Jenny (16 were collected in Loupy). There does not appear to be any consistent spacial relationship between these sample sites and recent logging slash, immature forest, or mature forest, nor do they outline areas or zones that would suggest they are derived from a particular rock unit within the Sicker Group. Despite the presence of high background concentrations of lead in the soils, only two soil samples contain anomalous concentrations of lead (greater than 50 ppm). One of the samples was taken in the southwest corner of Jenny and contains 58 ppm lead as well as a higher concentration of zinc (140 ppm). This sample is located 100m northeast and 200m north of three samples containing anomalously high concentrations of zinc but only background to "higher" concentrations of lead. The second soil sample is located near the southwest corner of Loupy and contains 61 ppm lead. Neither this sample nor those surrounding it contain higher or anomalous concentrations of either copper or zinc.

REFERENCE

STEVENSON, J.S., 1944, GEOLOGY AND ORE DEPOSITS OF THE CHINA CREEK AREA,

VANCOUVER ISLAND, BRITISH COLUMBIA, REPORT OF MINISTER OF

MINES, 1944, p. A 142-G161.

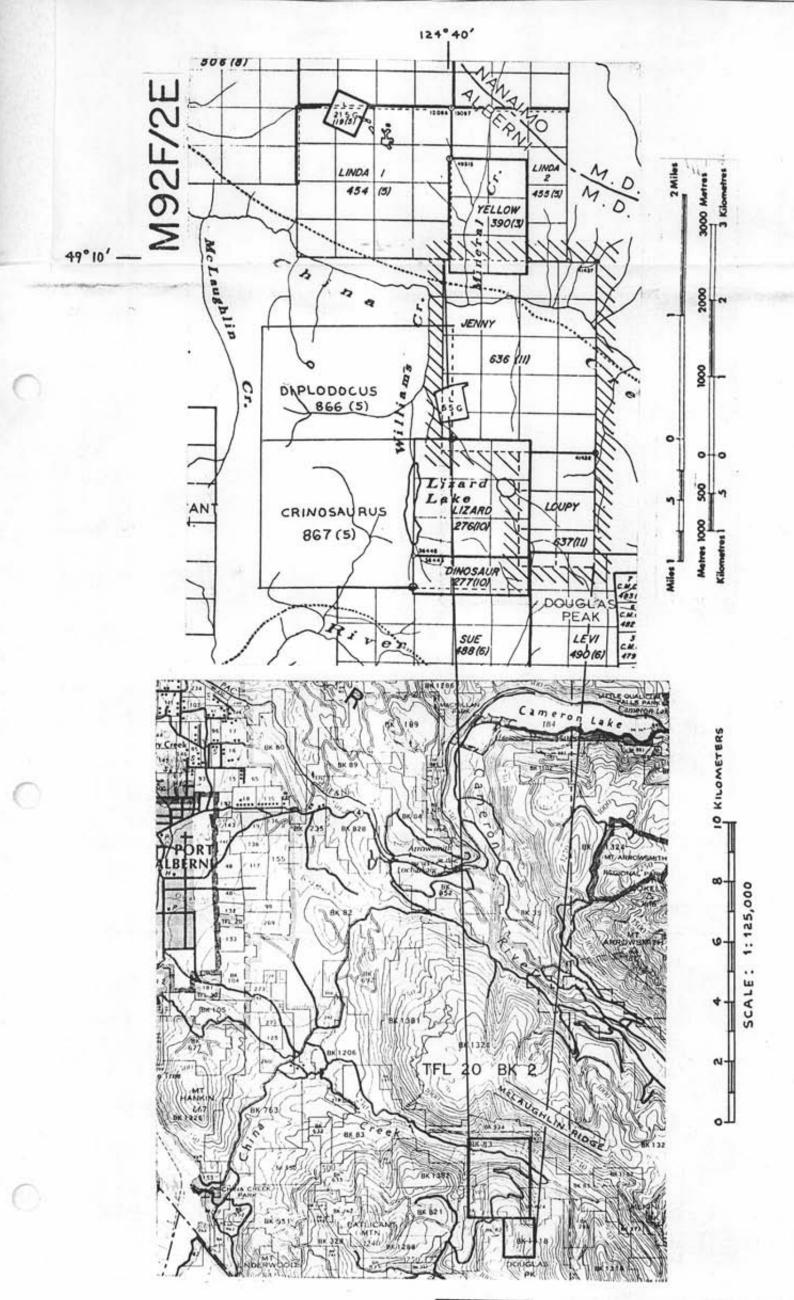


FIGURE 1: INDEX AND CLAIMS MAPS

APPENDIX A

DETAILED EXPENDITURE LIST FOR GEOCHEMICAL SOIL SURVEY

ON JENNY AND LOUPY CLAIMS

WORK PERIOD: JUNE 26 TO JULY 14, 1980

I. WAGES AND TYPE OF WORK

- A. Gary Benvenuto: Senior Geologist; 2 days supervision and orientation; 1 day @ \$89.00/day: TOTAL WAGES: \$ 178.00
- B. Thomas Mauer: Geological Assistant; 1 day orientation, 15 days soil sampling; 16 days @ \$52.00/day; TOTAL WAGES: \$ 832.00
- C. Philip Bégin: Geological Assistant; 1 day orientation, 15 days soil sampling: 16 days @ \$49.00/day: TOTAL WAGES: \$ 784.00

TOTAL WAGES: \$1,794.00

II. ACCOMMODATION AND MEALS

- A. Accommodation: \$12.00/man-day x 34 man-days: \$408.00
- B. Food: \$15.14/man-day x 34 man-days: \$514.76 TOTAL COST: \$ 922.76

III. TRANSPORTATION

\$24.29/day truck rental, gasoline and minor repairs for one truck for transportation to and from and within claims x 16 days:

TOTAL COST: \$ 388.64

IV. GEOCHEMICAL SOIL SAMPLE SURVEY ANALYSES

- A. 541 soil and silt samples analyzed for Cu, Pb and Zn @ \$3.85/sample (includes \$0.60/sample for sample preparation): \$2,082.85 SUBTOTAL COST
- B. Freight charges from Port Alberni to Vancouver:

\$ 19.60 SUBTOTAL COST

TOTAL COST : \$2,102.45

V. FIELD EQUIPMENT

Sample bags, thread, flagging, field books, miscellaneous:

TOTAL COST : \$ 100.00

APPENDIX A - 2

VI. REPORT PREPARATION

A. Drafting of geochemical soil survey map (Figure 2): 3 days @ \$89.00/day (wages): \$267.00 SUBTOTAL COST

B. Preparation of assessment report:

4 days @ \$89.00/day : \$356.00 SUBTOTAL COST: \$ 623.00

VII. TOTAL COST OF GEOCHEMICAL SOIL SURVEY AND ASSESSMENT REPORT:

\$5,931.00

Cost per soil sample: \$5,931/541 samples: \$10.96

VIII: APPORTIONMENT OF ASSESSMENT WORK COSTS AND P.A.C. WITHDRAWALS

CLAIM	UNITS	ASSESSMENT	VALUE OF ASSESSMENT	P.A.C.	YEARS
GROUP		WORK REQUIRED	WORK DONE	WITHDRAWAL	APPLIED
LOU-JEN	26	\$2,600/Yr.	\$5,931.00	\$1,869.00	3

APPENDIX B

WESTERN MINES LIMITED

EXPLORATION

VANCOUVER ISLAND REGION

STATEMENT OF QUALIFICATIONS

- I, Gary Louis Benvenuto, of the Town of Campbell River, British Columbia, hereby certify that:
- 1. I am a geologist, residing at 4125 Discovery Drive, #7, in Campbell River, B.C. with a business address of Western Mines Limited, P.O. Box 8000, Campbell River, B.C.
- 2. I graduated with a B.Sc. degree in geology from California State University at Los Angeles in 1972 and with a Ph.D. degree in geology from Queen's University, Kingston, Ontario in 1978.
- 3. I am an associate member of the Geological Association of Canada.
- 4. I have practiced exploration geology with Cominco Ltd. from May to October, 1979 and with Western Mines Limited from January, 1980 to present.

Dated: November 12, 1980

Signed: Jug Bunusto

Gary Benvenuto Project Geologist Western Mines Limited

