MINFILE NO.: 092K 076

NAME(S): LOIS CREEK LOWER, RED MTN., VERGO, VIRGO, JUPITER

MINING DIVISION: Vancouver

STATUS: N.T.S.: LATITUDE: LONGITUDE:

ELEVATION

COMMODITIES:

SIGNIFICANT MINERALS:

ASSOCIATED MINERALS:

ALTERATION MINERALS:

ALTERATION TYPE(S):

Showing 092K01E 50 00

124 05 31

0838 Metres Location from Figure 5. Assessment Report 11641.

COMMENTS: LOCATION ACCURACY: Within 1 KM

Copper

Silver Sphalerite

Pyrite

Chlorite Graphite Chloritic

AGE OF MINERALIZATION: Unknown DEPOSIT CHARACTER: Massive

DEPOSIT CLASS .:

Replacement

DOMINANT HOST ROCK: Metamorphic

IGNEOUS/METAMORPHIC/OTHER: Coast Plutonic Complex

LITHOLOGY:

GROUP: Gambier

Graphitic Argillite Chlorite Tuff Andesite Flow Andesite Sill Granodiorite

Diorite

TECTONIC BELT:

Coast Crystalline TERRANE: Gambier

PHYSIOGRAPHIC AREA:

Fiord Ranges (Southern)

METAMORPHIC TYPE: GRADE:

Regional Greenschist

RESERVES:

ZONE: LOIS CREEK LOWER ADIT

CLASSIFICATION: Best Assav

DATE: 1983

Copper

SAMPLE TYPE: Chip

COMMODITY

GRADE

0.2100 Per cent

UTM ZONE:

UTM NORTHING: UTM EASTING:

5539000 421750

Zinc

Galena

Arsenopyrite

Pyrrhotite

Limonite

STRIKE/DIP: 345 90E

Plutonic Rocks

Lead

Gold

Chalcopyrite

Podiform

STRATIGRAPHIC AGE: Lower Cretaceous

STRATIGRAPHIC AGE: Cretaceous

MINFILE NO.: 092K 076 CONTINUED... C S Ε

RUN DATE: 89/06/10 MINISTRY OF ENERGY. MINES AND PETROLEUM RESOURCES RUN TIME: 00:13:38 MINERAL RESOURCES DIVISION - GEOLOGICAL SURVEY BRANCH MINFILE - REPORT 0.3900 Per cent Lead 7inc 9.4600 Per cent Silver 86.1000 Grams per tonne Gold 1.3700 Grams per tonne COMMENTS: Average of chip samples over 2.5 metres. REFERENCE: Assessment Report 11641 GEOLOGY: The Lois Creek Lower Adit is located at the headwaters of Lois Creek at an elevation of 838 metres. The adit and surrounding trenches lie within the Cretaceous Coast Plutonic Complex near its western boundary with the Insular Belt. The complex consists of diorites and granodiorites enclosing a northwest trending belt of Lower Cretaceous Gambier volcanic rocks and sediments. The bedding strikes 345 degrees parallel to the borders of the belt and dips 100 H vertically to steeply eastward. Mineralization consists of pods and lenses of massive sphalerite. chalcopyrite, pyrrhotite and minor galena and arsenopyrite developed within steeply dipping shears which trend 330 to 005 degrees and 060 to 100 degrees. Shearing is believed to be continuous between the upper (north) and lower (south) adit area, a distance of over 700 metres. The shearing is also believed to cut graphitic argillites. chlorite-rich tuffs and andesite flows and/or sills. Overall, the massive shear-controlled mineralized pods appear to be spatially related to the argillite-chlorite tuff contact although some mineralization occurs within both of these units. From a 2.5 metre wide area in the adit. 5 chip samples assaved an average of 0.21 per cent copper, 0.39 per cent lead, 9.46 per cent Dois Ch prof. zinc, 86.1 grams per tonne silver and 1.37 grams per tonne gold (Assessment Report 11641). **BIBLIOGRAPHY:** EMPR AR 1916-368; 1920-352; 1923-268; 1927-365; 1928-388; 1931-173; 1950-172; 1965-224 EMPR GEM 1970-230; 1971-253 EMPR ASS RPT 2621, 3329, 8630, 9315, *11641 EMPR BULL *39 EMPR EXPL 1980-177; 1981-18 the 6- 100 Massix Po GSC OF 480 GSC MAP 1386A DATE CODED: 850724 CODED BY: GSB FIELD CHECK: NO DATE REVISED: 881118 REVISED BY: SED FIELD CHECK: NO

MINFILE NO.: 092K 076

BCSYS

RESOURCES DIVISION - GEOLOGICAL SURVEY MINFILE - REPORT

Sphalerite

Stratabound

Epidote

Plutonic Rocks

MINFILE NO.: 092K 077

LOIS CREEK UPPER, RED MTN., VERGO, VIRGO, JUPITER NAME(S):

STATUS: Showing 092K01E N.T.S.:

50 00 24 LATITUDE: 124 05 47

LONGITUDE: 1164 Metres ELEVATION Location from Assessment Report 11641, Figure 5.

COMMENTS:

LOCATION ACCURACY: Within 500 M

COMMODITIES: Silver

Pyrrhotite SIGNIFICANT MINERALS:

Arsenopyrite ASSOCIATED MINERALS:

ALTERATION MINERALS: Quartz

ALTERATION TYPE(S): Propylitic AGE OF MINERALIZATION: Unknown

DEPOSIT CHARACTER:

DEPOSIT CLASS .:

DIMENSIONS: DOMINANT HOST ROCK: Copper

Chalcopyrite

Chlorite

Lead

Silicific'n

Podiform Massive Replacement

Hydrothermal 120 30 (METRES) STRIKE/DIP: 345

Metasedimentary

GROUP: Gambier

IGNEOUS/METAMORPHIC/OTHER: Coast Plutonic Complex LITHOLOGY:

Argillite Flow Rock S111 Diorite

Granodiorite

TECTONIC BELT: TERRANE:

Coast Crystalline Gambier

Fiord Ranges (Southern)

PHYSIOGRAPHIC AREA: METAMORPHIC TYPE: GRADE:

Regional Greenschist

RESERVES:

ZONE: LOIS CREEK UPPER ADIT

CLASSIFICATION: Best Assay

DATE: 1984

SAMPLE TYPE: Drill Core

COMMODITY

Silver Lead

GRADE

359.5000 Grams per tonne

7.9000 Per cent

MINING DIVISION: Vancouver

UTM ZONE:

10

UTM NORTHING: UTM EASTING:

5539720 421440

Zinc

Galena

Tetrahedrite

Garnet

Breccia

STRATIGRAPHIC AGE: Lower Cretaceous

STRATIGRAPHIC AGE: Cretaceous

MINFILE NO.: 092K 077 CONTINUED...

RUN DATE: 89/06/10 RUN TIME: 00:13:38

MINISTRY OF ENERGY, MINES AND PETROLEUM RESOURCES MINERAL RESOURCES DIVISION - GEOLOGICAL SURVEY BRANCH MITRIETIE - DEPORT

PAGE:

156

RUN DATE: 89/06/10 RUN TIME: 00:13:38

MINISTRY OF ENERGY, MINES AND PETROLEUM RESOURCES MINERAL RESOURCES DIVISION - GEOLOGICAL SURVEY BRANCH MINFILE - REPORT

PAGE:

158

7inc Copper COMMENTS: REFERENCE:

2.5000 Per cent 2.1000 Per cent Drill core assay over 4 metres.

Assessment Report 13814

GEOLOGY:

The Lois Creek Upper is located at the headwaters of Lois Creek at an elevation of 1164 metres. The adit and surrounding trenches lie within the Cretaceous Coast Plutonic Complex near its western boundary with the Insular Belt. The complex consists of diorites and granodiorites enclosing a northwest trending belt of Lower Cretaceous Gambier volcanic rocks and sediments. The bedding strikes 345 degrees parallel to the borders of the belt and dips vertically to steeply eastward.

Sulphide mineralization observed in drill core consists of stringers, veinlets, blebs, pods and minor disseminations of pyrrhotite, chalcopyrite, sphalerite, galena, minor tetrahedrite and trace arsenopyrite within brecciated, quartz-chlorite-epidoteplus or minus garnet altered portions of a predominantly argillite unit. Mineralization is found at or near contacts with intercalated chloritic flows and sills. Four main mineral assemblages are recognized:

- a) pyrrhotite-sphalerite;
- b) pyrrhotite-sphalerite-galena;
- c) pyrrhotite-chalcopyrite, plus or minus tetrahedrite; and

d) pyrrhotite-sphalerite-chalcopyrite-galena.

Three en echelon, stratabound stringer sulphide zones up to 30 metres wide and aggregating 120 metres in length occur in the vicinity of the upper adit. The sulphide zones consist of high grade polymetallic pods enveloped by low grade, silver poor, zinc and/or copper mineralization. Best intercepts assayed 135 grams per tonne silver, 2.74 per cent lead, 1.61 per cent zinc and 0.79 per cent copper over 12 metres including 359.5 grams per tonne silver, 7.9 per cent lead, 2.5 per cent zinc and 2.1 per cent copper over 4 metres (Assessment Report 13814).

BIBLIOGRAPHY:

EMPR AR 1916-368: 1920-352: 1923-268: 1927-365: 1928-388: 1931-173:

1950-172: 1965-224

EMPR ASS RPT 2621, 3329, 8630, *11641, *13814

EMPR BULL 39

EMPR GEM 1970-230: 1971-253 EMPR EXPL 1980-177; 1981-18

GSC OF 480

GSC MAP 1386A

DATE CODED: 881121

DATE REVISED: 881121

CODED BY: SED REVISED BY: SED

FIELD CHECK: NO FIELD CHECK: NO

39.4 grading 3.803 to Ag 2.74% Pb 1.61% Zn 0,79% Cu

B C

5

RUN DATE: 89/06/10 MINISTRY OF ENERGY, MINES AND PETROLEUM RESOURCES RUN TIME: 00:13:38 MINERAL RESOURCES DIVISION - GEOLOGICAL SURVEY BRANCH

MINFILE - REPORT

MINFILE NO.: 092K 082

NATIONAL MINERAL INVENTORY NO.: 092K1 F16.Cu1

421230

MINING DIVISION: Vancouver

Lead

PAGE:

166

NAME(S):

LOIS CREEK TRENCH

STATUS: N.T.S.: LATITUDE: Showing 092K01E

50 00 47 124 05 58 1433 Metres

LONGITUDE: **ELEVATION** COMMENTS:

COMMODITIES:

UTM ZONE: 10 UTM NORTHING: 5540430

Chalcopyrite

UTM EASTING: Located above the headwaters of Lois Creek, 1100 metres south of

Skwim Lake (Assessment Report 11641).

LOCATION ACCURACY:

Within 500 M

Gold Zinc Silver Copper

Plutonic Rocks

SIGNIFICANT MINERALS: Galena

AGE OF MINERALIZATION: Unknown DEPOSIT CHARACTER:

Vein

Sphalerite Disseminated

Unknown

STRIKE/DIP: 345 90E

DOMINANT HOST ROCK:

Volcanic

GROUP: Gambier

DEPOSIT CLASS.:

STRATIGRAPHIC AGE: Lower Cretaceous

STRATIGRAPHIC AGE: Cretaceous

IGNEOUS/METAMORPHIC/OTHER: Coast Plutonic Complex

LITHOLOGY:

Andesite Andesite Flow Diorite Argillite Granodiorite

COMMENTS:

Host rock lithology is ambiguous.

TECTONIC BELT:

Coast Crystalline

TERRANE: PHYSIOGRAPHIC AREA: Gambier

Fiord Ranges (Southern)

METAMORPHIC TYPE: GRADE:

Regional Greenschist

RESERVES:

ZONE: LOIS CREEK TRENCH

CLASSIFICATION: Best Assay

DATE: 1983

SAMPLE TYPE: Chip

COMMODITY

GRADE

Gold

0.8630 Grams per tonne 134,0000 Grams per tonne

Silver Lead

1.0000 Per cent

MINFILE NO.: 092K 082 CONTINUED... 5 Y S

PAGE:

167

Zinc

1.0000 Per cent

COMMENTS:

Average of 3 chip samples over 3 metres. Trace copper.

Assessment Report 11641

GEOLOGY:

The Lois Creek Trench is located above the headwaters of Lois Creek 1100 metres south of Skwim Lake, at an elevation of 1433 metres. The trench lies within the Cretaceous Coast Plutonic Complex near its western boundary with the Insular Belt. The complex consists of diorites and granodiorites enclosing a northwest trending belt of Lower Cretaceous Gambier volcanic rocks and sediments. The bedding strikes 345 degrees parallel to the borders of the belt and dips vertically to steeply eastward. In the area of the trench, massive andesite flows and intrusive rocks form prominent cliff exposures, in many places with well-developed volcanic features such as flow top breccias and vesicles.

In a zone of strong cross-fracturing, mineralization occurs irregularly in seams of 10 to 30 centimetres in width, over a total width of 3.7 metres. Galena with minor sphalerite and chalcopyrite is exposed in two small trenches. An average of 3 chip samples over 3 metres within the larger of the two trenches assayed an average of 0.863 grams per tonne gold, greater than 134 grams per tonne silver, greater than 1 per cent lead, greater than 1 per cent zinc and minor copper (Assessment Report 11641). Another sample from just south of this trench assayed 2.25 grams per tonne gold, 560 grams per tonne silver, greater than 1 per cent lead, greater than 1 per cent zinc and 0.14 per cent copper over 8 centimetres (Assessment Report 11641).

BIBLIOGRAPHY:

EMPR AR 1916-368; 1920-352; 1923-268; 1927-365; 1928-388; 1929-364;

1931-173; 1950-172; 1965-224 EMPR ASS RPT 2621, *3329, *11641

EMPR BULL 39

EMPR GEM 1970-230: 1971-253

GSC OF 480 GSC MAP 1386A

DATE CODED: 881118 DATE REVISED: 881118 CODED BY: SED REVISED BY: SED

FIELD CHECK: NO FIELD CHECK: NO

MINFILE NO.: 092K 082

B C S Y S T E

MINING DIVISION: Vancouver

10

5540540

STRATIGRAPHIC AGE: Lower Cretaceous

STRATIGRAPHIC AGE: Juro-Cretaceous

422100

UTM ZONE:

UTM NORTHING:

Copper

Gold

UTM EASTING:

166

168

RUN DATE: 89/06/10 RUN TIME: 00:13:38

MINISTRY OF ENERGY. MINES AND PETROLEUM RESOURCES MINERAL RESOURCES DIVISION - GEOLOGICAL SURVEY BRANCH

Arsenopyrite

MINFILE - REPORT

PAGE :

MINFILE NO.: 092K 083

NAME(S):

NO MAN'S CREEK

STATUS: N.T.S.: LATITUDE:

Showing 092K01F 50 00 51 14

LONGITUDE: 124 05 ELEVATION 1097 Metres

COMMENTS:

Location from Figure 6, Assessment Report 11641.

Chalcopyrite

Pyrite

LOCATION ACCURACY:

Within 500 M

COMMODITIES:

Gold

Silver Sphalerite

SIGNIFICANT MINERALS: ASSOCIATED MINERALS: Quartz AGE OF MINERALIZATION: Unknown

DEPOSIT CHARACTER: DEPOSIT CLASS .:

Vein

Hydrothermal

Disseminated Epigenetic

STRIKE/DIP: 40 90E

Zinc

COMMENTS:

Length of quartz vein.

DOMINANT HOST ROCK:

Volcanic

GROUP: Gambier

IGNEOUS/METAMORPHIC/OTHER: Coast Plutonic Complex

LITHOLOGY:

Mafic Flow Rock Tuff

Diorite Granodiorite

TECTONIC BELT:

Coast Crystalline

TERRANE:

PHYSIOGRAPHIC AREA:

Gambier Fiord Ranges (Southern)

METAMORPHIC TYPE: GRADE:

Regional Greenschist

RESERVES:

ZONE: NO MAN'S CREEK

CLASSIFICATION: Best Assay

DATE: 1983

SAMPLE TYPE: Chip

COMMODITY

Gold

GRADE

24.3000 Grams per tonne

Zinc 1.0000 Per cent Copper 0.0680 Per cent

Silver 23.0000 Grams per tonne

MINFILE NO.: 092K 083 CONTINUED... C 5 S

E

MINERAL RESOURCES DIVISION - GEOLOGICAL SURVEY BRANCH MINFILE - REPORT

REFERENCE:

Chip sample over a 0.16 metre width. Assessment Report 11641

GEOLOGY:

The showing lies within the Juro-Cretaceous Coast Plutonic Complex near its western boundary with the Insular belt. The complex consists of diorites and granodiorites enclosing a northwest trending belt of Lower Cretaceous Gambier volcanic rocks and sediments. Only in the eastern and possibly basal part of the belt are mafic flows and interbedded tuff evident.

A narrow shear containing a quartz vein has a vertical dip and can be traced along strike, 040 degrees, for over 244 metres. For the greater part of this distance the vein traverses various members of the volcanic assemblage, but at its northeastern end it persists into the plutonic rocks for over 30 metres. Mineralization is sparse, consisting of pyrite, arsenopyrite, sphalerite, chalcopyrite and a few rare specks of gold. The vein averages 11 centimetres in width and does not exceed 23 centimetres.

A 1983 chip sample across a width of 0.16 metres assayed 24.3 grams per tonne gold, 1.0 per cent zinc, 0.068 per cent copper and 23 grams per tonne silver (Assessment Report 11641). A sample in 1950, over a width of 2.54 centimetres, assayed as much as 179.79 grams per tonne gold (Minister of Mines Annual Report 1950,

page 177).

BIBLIOGRAPHY:

EMPR ASS RPT *11641 EMPR BULL *39, pp. 38,39 EMPR AR *1950, pp. 172-177 GSC MAP 1386A

GSC OF 480

DATE CODED: 850724 DATE REVISED: 881116

CODED BY: **GSB** REVISED BY: SED FIELD CHECK: NO FIELD CHECK: NO - 200m vein - 240 m. lung. - 249/ Aw = .705/Am

~ 800 1

MINFILE NO.: 092K 083

PAGE: MINISTRY OF ENERGY, MINES AND PETROLEUM RESOURCES RUN DATE: 89/06/10

MINERAL RESOURCES DIVISION - GEOLOGICAL SURVEY BRANCH DEDOOT

RUN DATE: 89/06/10 MINISTRY OF ENERGY, MINES AND PETROLEUM RESOURCES PAGE: 170 RUN TIME: 00:13:38 MINERAL RESOURCES DIVISION - GEOLOGICAL SURVEY BRANCH

MINFILE - REPORT

MINFILE NO.: 092K 084 NATIONAL MINERAL INVENTORY NO .: 092K1 F16, Cu1

NAME(S): MT. DIADEM

STATUS: Showing MINING DIVISION: Vancouver N.T.S.: 092K01E

LATITUDE: 50 00 13 UTM ZONE: 124 04 LONGITUDE: 51 UTM NORTHING: 5539360 ELEVATION 0900 Metres UTM EASTING: 422540

COMMENTS: Location from Figure 6, Assessment Report 11641.

LOCATION ACCURACY: Within 500 M

COMMODITIES: Gold Silver Lead

GRADE

Zinc Copper

SIGNIFICANT MINERALS: Ga 1 ena Sphalerite Chalcopyrite ASSOCIATED MINERALS: Pyrite

ALTERATION MINERALS: Quartz ALTERATION TYPE(S): Silicific'n

AGE OF MINERALIZATION: Unknown DEPOSIT CHARACTER: **Podiform** Massive

DEPOSIT CLASS.: Unknown

STRIKE/DIP: 110 65N

DOMINANT HOST ROCK: Volcanic

GROUP: Gambier

STRATIGRAPHIC AGE: Lower Cretaceous

IGNEOUS/METAMORPHIC/OTHER: Coast Plutonic Complex

STRATIGRAPHIC AGE: Cretaceous LITHOLOGY: Mafic Flow Tuff

Granodiorite Diorite

TECTONIC BELT: Coast Crystalline **TERRANE:** Gambier

Plutonic Rocks PHYSIOGRAPHIC AREA: Fiord Ranges (Southern)

METAMORPHIC TYPE: Regional GRADE: Greenschist

RESERVES:

ZONE: MT. DIADEM ADIT

+THE. 00-12-38

CLASSIFICATION: Best Assav

DATE: 1983

SAMPLE TYPE: Grab COMMODITY

Gold 4.9000 Grams per tonne

Silver 264.0000 Grams per tonne Lead 8.8900 Per cent

MINFILE ND.: 092K 084 CONTINUED...

168

В С 5 Y 5

MINFILE - REPORT

Zinc Copper COMMENTS:

8.6200 Per cent 0.0200 Per cent Grab sample from Mt. Diadem adit.

REFERENCE:

Assessment Report 11641

GEOLOGY:

Immediately above the head of No Man's Creek on the northern slopes of Mt. Diadem an old adit is located at an elevation of 900 metres. The adit lies within the Cretaceous Coast Plutonic Complex near its western boundary with the Insular Belt. The complex consists of diorites and granodiorites enclosing a northwest trending belt of Lower Cretaceous Gambier volcanie rocks and sediments. Only in the eastern and possibly basal part of the belt are mafic flows and interbedded tuff evident.

The adit is collared at the contact of the volcanic rocks with the intrusive rocks. The adit penetrates the silicified, recrystallized volcanics for 12 metres, at which distance a 0.61 metre shear is intersected. Pods consisting of galena, sphalerite, pyrite and small amounts of chalcopyrite are exposed in the shear.

A 0.25 metre wide sample of the shear southeast of the adit assaved 0.017 per cent copper, greater than 1 per cent lead. greater than 1 per cent zinc, greater than 200 grams per tonne silver and 0.18 grams per tone gold (Assessment Report 11641). A grab sample from the adit assayed 4.9 grams per tonne gold. 264 grams per tonne silver, 8.89 per cent lead, 8.62 per cent zinc and 0.02 per cent copper (Assessment Report 11641).

BIBLIOGRAPHY:

EMPR AR 1920-219; 1928-388; 1929-394; *1950-A175

EMPR BULL *39, p. 36 EMPR ASS RPT *11641 GSC MAP 1386A

GSC OF 480

DATE CODED: 850724 DATE REVISED: 881117

CODED BY: GSB REVISED BY: SED FIELD CHECK: NO FIELD CHECK: NO

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