

MINFILE NUMBER: **103A 001**

NATIONAL MINERAL INVENTORY: 103A11 Lst1

NAME(S): **LAREDO LIMESTONE**, ARISTAZABAL ISLAND, PACIFIC RIM,
LORINA, LAREDO, NORTH PACIFIC

STATUS: Past Producer Open Pit
REGIONS: British Columbia

MINING DIVISION: Skeena

NTS MAP: 103A11E

UTM ZONE: 09 (NAD 83)

BC MAP:
LATITUDE: 52 41 15 N

NORTHING: 5837510

LONGITUDE: 129 03 01 W

EASTING: 496602

ELEVATION: 15 Metres

LOCATION ACCURACY: Within 500M

COMMENTS: Location centred on quarry (Geology, Exploration and Mining in
British Columbia 1969).

COMMODITIES: Limestone Marble Building Stone

MINERALS

SIGNIFICANT: Calcite
ASSOCIATED: Dolomite Pyrite Pyrrhotite Phlogopite Forsterite
Spinel Graphite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound Massive
CLASSIFICATION: Sedimentary Industrial Min.
TYPE: R09 Limestone
DIMENSION: 200 Metres STRIKE/DIP: 308/46W TREND/PLUNGE:
COMMENTS: Surface width of limestone. Attitude given for banding just north of
the quarry.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Unknown Unnamed/Unknown Group Unnamed/Unknown Formation Coast Plutonic Complex
Mesozoic-Cenozoic

LITHOLOGY: Limestone
Marble
Hornblende Diorite
Monzonite
Gneiss
Granodiorite Dike

HOSTROCK COMMENTS: Absolute ages and the relationship of sediments and intrusives are
uncertain (Geological Survey of Canada Map 1328A).

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline PHYSIOGRAPHIC AREA: Milbanke Strandflat
TERRANE: Alexander

INVENTORY

ORE ZONE: LAREDO REPORT ON: Y
CATEGORY: Probable YEAR: 1990
QUANTITY: 43250000 Tonnes
COMMODITY Limestone GRADE 100.0000 Per cent
COMMENTS: Probable reserves for Areas 1, 2, and 3 are 20.50 million tonnes
high calcium limestone and 22.75 million tonnes limestone.
REFERENCE: Assessment Report 22189.

ORE ZONE: LAREDO REPORT ON: Y
CATEGORY: Proven YEAR: 1990
QUANTITY: 28750000 Tonnes
COMMODITY Limestone GRADE 100.0000 Per cent
COMMENTS: After 1990 work, proven reserves were upgraded to 16.25 million
tonnes high calcium limestone and 12.50 million tonnes limestone for
Aris 1, 2 and 3 together.
REFERENCE: Assessment Report 22189.

INVENTORY

ORE ZONE: TOTAL REPORT ON: Y
CATEGORY: Combined YEAR: 1990
QUANTITY: 72000000 Tonnes
COMMODITY: Limestone GRADE: 100.0000 Per cent
COMMENTS: Total proven and probable reserves are 36.75 million tonnes high calcium limestone and 35.25 million tonnes limestone, for a total of 72 million tonnes.
REFERENCE: Assessment Report 22189.

CAPSULE GEOLOGY

A roof pendant of limestone is enclosed in hornblende diorite, monzonite and gneiss of the Tertiary to Jurassic Coast Plutonic Complex. It outcrops along the northeast coast of Aristazabal Island just north of Quarry Bay southeastward for 1.8 kilometres, and extends inland for 5 kilometres. The limestone is intruded by a few northwest trending, steeply dipping granodiorite dikes averaging a metre in width, and by a small stock of hornblende diorite along the shore at Quarry Bay. A northwest trending fault cuts the limestone along Quarry Bay. North of Quarry Bay, banding (bedding?) strikes north-northeast and dips 55 to 60 degrees west. To the south, the banding strikes northwest (308 degrees) and dips 35 to 65 degrees southwest.

The deposit is comprised mostly of snowy white, coarse-grained high-calcium limestone (marble) with some light to dark grey, fine-grained variably dolomitic bands 0.02 to 1.25 metres thick. A bed of dolomitic limestone outcrops on the western and southwestern portions of the deposit with a surface width of approximately 200 metres. The limestone is contaminated by variable amounts of pyrite, pyrrhotite, forsterite, serpentinite, spinel and graphite. A sample composed of chips taken at 0.15 metre intervals across a 12 metre thick band of coarse-grained white limestone in the quarry on the southeast corner of Lot 299 contained: 53.93 per cent CaO, 1.33 per cent MgO, 0.17 per cent insolubles, 0.09 per cent R2O3, 0.05 per cent Fe2O3, trace MnO, 0.01 per cent P2O5, 0.002 per cent sulphur and 43.75 per cent ignition loss (Geology, Exploration and Mining in British Columbia 1969).

Proven (measured geological) and probable (indicated) reserves have been determined for two zones within the deposit. Area 1 is estimated to contain 9.5 million tonnes of proven reserves and 10.0 million tonnes of probable reserves of calcium and high calcium limestone respectively; while Area 2 is estimated to contain 5.25 million tonnes of proven reserves and 36.0 million tonnes of probable reserves of calcium and high calcium limestone respectively (Property File - Rotzein, J.L., 1989).

In 1952, 10,886 tonnes of limestone averaging 98 per cent CaCO3 was quarried by Wood & McLay Limited. In 1969, Laredo Limestone Ltd. acquired 6 limestone leases and conducted stripping and quarrying. Reserves were estimated at 18,000,000 tonnes per 30 metres of depth. In August 1972 Kamad Silver Co. Ltd. acquired the property. In 1973 they drilled 25 holes totalling 38 metres. Laredo Limestone Ltd. had planned to commence quarrying in early 1990 at a rate of 8000 tonnes per day.

In December 1990 Laredo Limestone Ltd. drilled one hole and collected 24 surface samples in Area 3, between Areas 1 and 2, to confirm the continuity of limestone along strike and dip of the limestone beds, and upgrade the amount of reserves. The proven reserves were upgraded to 16.25 million tonnes high calcium limestone and 12.50 million tonnes limestone for the combined Areas 1, 2 and 3. Probable reserves were upgraded to 20.50 million tonnes high calcium limestone and 22.75 million tonnes limestone for the combined Areas 1, 2, and 3. The total proven and probable reserves are 36.75 million tonnes of high calcium limestone, and 35.25 million tonnes limestone, for a total of 72.00 million tonnes. In 1994, a new owner, North Pacific Stone, resampled the area to better define the specific areas of high calcium limestone on the property.

The Laredo 1, 2, and 4-6 claims are held in good standing until late in 1999 by North Pacific Stone Limited of Surrey. They drilled 28 holes totalling 760 metres in 1999. Orinda Investments and North Pacific Stone plan to develop the deposit as a source of high-brightness filter for the plastics, paper and paint industries.

BIBLIOGRAPHY

EM EXPL 1999-1-11; 2000-1-8
EM INF CIRC 2000-1, pp. 16, 19
EMPR AR 1952-A259; 1968-311

BIBLIOGRAPHY

EMPR ASS RPT 16188, 19595, *22189, 23723
EMPR EXPL 1989, pp. 17,39
EMPR GEM *1969-389-392; 1972-602,603; *1973-550
EMPR OF 1992-1; 1992-9; 1992-18, p. 58; 1994-1
EMPR PF (Fawley, A.P. (1968): Aristazabal Island Mineral Claims,
British Columbia, of Pacific Rim Mines Ltd., Report and Map,
May 1968; Prospectus, Laredo Limestone Ltd. 1988; Report on
Laredo Limestone claims by Rotzein, J.L. 1989; Report on Limestone
deposits of the Pacific Northwest, p. 5 (in 092L 279 file))
EMR MP CORPFILE (Laredo Limestone Ltd.; Kamad Silver Co. Ltd.)
GSC MAP 9-1966; *1328A; 1385A
GSC MEM 372
GSC P 66-25
CANMET RPT 811, Part V, p. 171
GCNL #39, 1969; #95, 1970; #145, 1979

DATE CODED: 1986/04/14
DATE REVISED: 1999/06/30

CODED BY: GRF
REVISED BY: JMR

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103A 002**

NATIONAL MINERAL INVENTORY: 103A9 Cu1

NAME(S): **HIDDEN LAKE**, H AND C, ROD,
POOLEY (JAMES) ISLAND, MOULT (L.1553), MARION 1,
MAR 7-14

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103A09W
BC MAP:
LATITUDE: 52 40 58 N
LONGITUDE: 128 16 46 W
ELEVATION: 250 Metres
LOCATION ACCURACY: Within 1 KM
COMMENTS: Occurrence on Geological Survey of Canada Map 1328A, east side of
Griffin Passage on Pooley Island.

MINING DIVISION: Skeena
UTM ZONE: 09 (NAD 83)
NORTHING: 5837227
EASTING: 548710

COMMODITIES: Copper Silver Gold Molybdenum

MINERALS

SIGNIFICANT: Chalcopyrite Bornite Molybdenite Pyrite Arsenopyrite
ASSOCIATED: Quartz
ALTERATION: Garnet
ALTERATION TYPE: Skarn Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated Vein
CLASSIFICATION: Skarn Replacement Epithermal
TYPE: K01 Cu skarn
DIMENSION: Metres STRIKE/DIP: 120/60S TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Triassic Undefined Group Unnamed/Unknown Formation Unnamed/Unknown Informal
Unknown

LITHOLOGY: Altered Limestone
Schist
Quartz Diorite
Banded Limestone
Garnet Schist

HOSTROCK COMMENTS: Stratigraphic ages uncertain (Geological Survey of Canada Map 1328A).

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)
TERRANE: Alexander
METAMORPHIC TYPE: Contact Regional RELATIONSHIP: Syn-mineralization GRADE: Greenschist

INVENTORY

ORE ZONE: DRILLHOLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1995
SAMPLE TYPE: Drill Core
COMMODITY GRADE
Copper 0.7000 Per cent
Gold 0.3020 Grams per tonne
COMMENTS: Average over 7 metres.
REFERENCE: Assessment Report 24020.

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1971
SAMPLE TYPE: Grab
COMMODITY GRADE
Silver 99.4300 Grams per tonne
Copper 2.9000 Per cent
COMMENTS: Sample of the copper mineralization.
REFERENCE: National Mineral Inventory Card 103A9 Cu1.

CAPSULE GEOLOGY

The occurrence is associated with a skarn zone consisting of altered intercalated limestone and garnet schist in contact with quartz diorite. Mineralization consisting of chalcopyrite, pyrite, arsenopyrite, some bornite and an occasional speck of molybdenite

CAPSULE GEOLOGY

occurs in quartz stringers and as disseminations in the skarn. The mineralized zone strikes 120 degrees and dips 60 degrees south. Quartz diorite occupies the footwall while on the hangingwall the zone grades into banded limestone and garnetiferous schist carrying sparser mineralization.

In 1929 assays gave the following values of 1.37 grams per tonne gold, 13.71 grams per tonne silver and 1.6 per cent copper. In 1971 a sample of the mineralization assayed 99.43 grams per tonne silver and 2.9 per cent copper (National Mineral Inventory Card 103A9 Cu1).

Minor surface work was done on the Hidden Lake property by the Granby Consolidated Mining and Smelting Company in 1928. The owner, W.H. Mault carried out open cutting totaling 335 metres in 1929. Rainbow Mines conducted 60 metres of trenching and 185 metres of diamond drilling in 1963. In 1966 further trenching and 1200 metres of drilling were done. In 1971, Rainbow Mines changed its name to Greenfields Development Corporation Ltd.

In 1995, Verdstone Gold Corporation and Amcorp Industries conducted rock, silt and soil sampling, and trench and drill sampling (2 holes) on the property, which was renamed the Marion claims (including the MAR 7-14 claims). The results indicate the favourable skarn horizon extends to 300 metres in length. An induced polarization survey was recommended to evaluate the down-dip and strike extensions of the mineralized skarn zone.

BIBLIOGRAPHY

EMPR AR 1928-C67; *1929-C67; 1963-21; 1966-54
EMPR ASS RPT 24020
EMR MP CORPFILE (Greenfields Development Corporation Ltd.)
GSC MAP 9-1966; *1328A; 1385A
GSC MEM 372, p. 99
GSC P 66-25

DATE CODED: 1986/04/21
DATE REVISED: 1999/06/29

CODED BY: GRF
REVISED BY: JMR

FIELD CHECK: N
FIELD CHECK: N

CAPSULE GEOLOGY

In 1952 the area surrounding the Hebrew Crown Grant was staked as the Neekas 1 to 12 claims (see Neekas, 103A 004). Workings on the Neekas consisted of a series of open cuts which exposed the mineralized zones about 1200 metres to the northwest and 250 metres to the southwest of the adit. Kennco Explorations Canada Limited and American Smelting and Refining examined the property in 1953.

In 1987 the area was staked as the Neekas claim by Lac Minerals, who conducted an exploration program of soil and stream sediment sampling and geological mapping. A 2.5-metre chip across the adit mouth on the old Hebrew Crown grant assayed 2.12 per cent zinc and 0.15 per cent copper (Assessment Report 16148). In 1991, Cascadia Prospecting Syndicate staked the area including the Hebrew and Neekas showings and conducted rock, silt and soil sampling, hoping to find evidence of volcanogenic massive sulphide mineralization. The work confirmed that the showings are skarns. The best grab sample returned an a value of 10.72 per cent zinc (Assessment Report 22139).

The Hebrew claim is held in good standing until July 2002 by Brian Hall of Bowen Island.

BIBLIOGRAPHY

EMPR AR 1896-562; *1931-A34; 1953-A166
EMPR ASS RPT *16148, 22139
GSC MAP 9-1966; 1328A; 1385A
GSC MEM 372
GSC P 66-25

DATE CODED: 1986/04/22
DATE REVISED: 1999/08/03

CODED BY: GRF
REVISED BY: JMR

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103A 004**

NATIONAL MINERAL INVENTORY: 103A8 Au1

NAME(S): **NEEKAS, HEBREW**

STATUS: Showing
 REGIONS: British Columbia
 NTS MAP: 103A08E
 BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 52 28 19 N
 LONGITUDE: 128 10 26 W
 ELEVATION: 140 Metres

NORTHING: 5813852
 EASTING: 556114

LOCATION ACCURACY: Within 500M

COMMENTS: Showing No. 2 from figure 3 (Assessment Report 16148). Located 800 metres west of north end of Neekas Cove. See also Hebrew (103A 003).

COMMODITIES: Zinc Copper Silver

MINERALS

SIGNIFICANT: Sphalerite Pyrite Chalcopyrite Galena Covellite
 Pyrrhotite
 ASSOCIATED: Calcite Quartz Garnet Pyroxene Phlogopite
 Epidote
 ALTERATION TYPE: Pyrite
 MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Massive Disseminated
 CLASSIFICATION: Igneous-contact Skarn
 TYPE: K02 Pb-Zn skarn
 DIMENSION: Metres STRIKE/DIP: 310/90S TREND/PLUNGE:
 COMMENTS: Bedding strikes approximately 310 degrees and dips near vertically.

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Triassic	Undefined Group	Unnamed/Unknown Formation	Unnamed/Unknown Informal
Unknown			

LITHOLOGY: Volcanic Rock
 Gneissic Diorite
 Coarse Grained Marble
 Amphibolite
 Mafic Volcanic
 Foliated Tonalite
 Tonalite
 Mafic Dike

HOSTROCK COMMENTS: Stratigraphic ages uncertain (Geological Survey of Canada Map 1328A).

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)
 TERRANE: Alexander
 METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE:

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
 CATEGORY: Assay/analysis YEAR: 1987
 SAMPLE TYPE: Chip
 COMMODITY GRADE
 Silver 10.3000 Grams per tonne
 Copper 0.4400 Per cent
 Zinc 9.9900 Per cent
 COMMENTS: The sample width is 2.0 metres.
 REFERENCE: Assessment Report 16148.

CAPSULE GEOLOGY

The stratigraphy in the Neekas-Hebrew area consists of a central zone of mixed sedimentary rocks, volcanics, and limestone, surrounded by gneissic diorites. The stratified rocks strike northwesterly from the mouth of the Neekas Creek to Salmon Bay, and is on average 150 metres wide. The enclosing diorites appear to be younger, suggesting that the stratified rocks are a roof pendant. Ages of both units are unknown. It is most likely that the diorites are part of the Mesozoic Coast Plutonic Complex. The stratified rocks may be as old as Devonian and may

CAPSULE GEOLOGY

be correlative with the Sicker Group. The stratified rocks face steeply to the southwest. The structurally lowest (so presumably the oldest) rocks on the property are, dark green, melanocratic, foliated, medium-grained massive mafic volcanics, which are locally metamorphosed to amphibolite. Immediately to the south and enclosing other units of mafic volcanics is a mixed package of banded metasediments and volcanics, including calcareous bands. Metamorphic biotite, chlorite, garnet and albite are present. This mixed unit is roughly 300 metres thick. Two or more bands of white, coarse-grained marble averaging 25 metres in thickness, are interbedded with the stratified rocks. The marble bands host or are in close proximity to the mineralization on this property. Spatially associated with the marble are two phases of skarn, the first has marble as a protolith, the second has the mixed stratified unit as a protolith. Garnet, pyroxene, phlogopite, sulphides, plus quartz and calcite are present. Bordering the upper contact of the stratified rocks along the southern margin are a series of foliated tonalites. A series of unfoliated porphyritic tonalites outcrop north of the stratified rocks. Unfoliated mafic dikes crosscut all of the aforementioned units.

Mineralization consists of sulphide veins (sphalerite, pyrite, pyrrhotite, galena and chalcopyrite), and of blebs, pods and disseminations of the above minerals, and covellite, in the mafic volcanics. Skarn minerals; garnet, pyroxene, phlogopite and epidote, are associated with the veins.

In 1952 the area surrounding the Hebrew Crown Grant (103A 003) was staked as the Neekas 1 to 12 claims. Workings on the Neekas consisted of a series of open cuts which exposed the mineralized zones about 1200 metres to the northwest and 250 metres to the southwest of the adit. Kennco Explorations Canada Limited and American Smelting and Refining examined the property in 1953.

In 1987 the area was staked as the Neekas claim by Lac Minerals, who conducted an exploration program of soil and stream sediment sampling and geological mapping. The geochemistry indicated anomalously high zinc values along the volcanic zone. A 2-metre chip sample of massive sulphide on the outer Neekas claim assayed 9.99 per cent zinc, 0.44 per cent copper, and 10.3 grams per tonne silver. A 2.5-metre chip across the adit mouth on the old Hebrew Crown grant assayed 2.12 per cent zinc and 0.15 per cent copper (Assessment Report 16148). In 1991, Cascadia Prospecting Syndicate staked the area including the Hebrew and Neekas showings and conducted rock, silt and soil sampling, hoping to find evidence of volcanogenic massive sulphide mineralization. The work confirmed that the showings are skarns. The best grab sample returned a value of 10.72 per cent zinc (Assessment Report 22139).

BIBLIOGRAPHY

EMPR ASS RPT *16148, 22139
GSC MAP 9-1966; 1328A; 1385A
GSC MEM 372
GSC P 66-25

DATE CODED: 1987/11/10
DATE REVISED: 1999/08/03

CODED BY: LDJ
REVISED BY: JMR

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103A 005**

NATIONAL MINERAL INVENTORY:

NAME(S): **DENNY ISLAND**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103A01E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 52 09 35 N
LONGITUDE: 128 06 48 W
ELEVATION: Metres

NORTHING: 5779174
EASTING: 560653

LOCATION ACCURACY: Within 1 KM
COMMENTS: Located near Bella Bella.

COMMODITIES: Perlite

MINERALS

SIGNIFICANT: Perlite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Magmatic Industrial Min.
DIMENSION: STRIKE/DIP: 160/90S
COMMENTS: Dykes strike between 145 and 175 degrees and have near vertical dips.

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Triassic			Unnamed/Unknown Informal
Tertiary			Unnamed/Unknown Informal

LITHOLOGY: Glass Dike
Intrusive

HOSTROCK COMMENTS: Amorphous dykes most likely associated with andesitic rocks of the Bella Bella Formation.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Alexander

PHYSIOGRAPHIC AREA: Milbanke Strandflat

CAPSULE GEOLOGY

Black, highly fractured, amorphous glass dykes are part of a group of numerous dykes in the area that cut batholithic rocks. The dykes strike 145 degrees to 175 degrees and have a vertical dip.

BIBLIOGRAPHY

GSC SUM RPT 1921, Part A, p. 27A
GSC MEM 372, p. 79
GSC MAP 9-1966; 1328A; 1385A
GSC P 66-25

DATE CODED: 1986/04/14
DATE REVISED: 1988/11/25

CODED BY: GRF
REVISED BY: JNR

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103A 006**

NATIONAL MINERAL INVENTORY:

NAME(S): **SUZETTE BAY**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103A08W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 52 24 11 N
LONGITUDE: 128 26 51 W
ELEVATION: 5 Metres

NORTHING: 5806012
EASTING: 537588

LOCATION ACCURACY: Within 1 KM

COMMENTS: Location centered on limestone outcrop on south shore of Suzette Bay as shown on GSC map 1328A.

COMMODITIES: Limestone

MINERALS

SIGNIFICANT: Calcite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratiform Massive
CLASSIFICATION: Sedimentary Industrial Min.
TYPE: R09 Limestone
COMMENTS: Limestone trends west.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Cretaceous-Tertiary			Coast Plutonic Complex

LITHOLOGY: Limestone
Quartz Diorite

HOSTROCK COMMENTS: Absolute age uncertain (Geological Survey of Canada Map 1328A).

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Alexander

PHYSIOGRAPHIC AREA: Teslin Plateau

CAPSULE GEOLOGY

A narrow mass of limestone extends for a kilometre along the south side of Suzette Bay on the west coast of Dowager Island. The limestone is bounded to the south by foliated quartz diorite of the Coast Plutonic Complex.

BIBLIOGRAPHY

GSC MAP 9-1966; 1328A; 1385A
GSC MEM 372
GSC P 66-25

DATE CODED: 1986/04/14
DATE REVISED: 1989/07/28

CODED BY: GRF
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103A 007**

NATIONAL MINERAL INVENTORY:

NAME(S): **PRINCESS ROYAL ISLAND**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 103A15E
BC MAP:

Open Pit

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 52 54 07 N
LONGITUDE: 128 31 33 W
ELEVATION: 58 Metres

NORTHING: 5861468
EASTING: 531893

LOCATION ACCURACY: Within 500M

COMMENTS: Location centered on Lots 146 and 147 as shown on NTS topographic map 103A/15.

COMMODITIES: Limestone Marble

MINERALS

SIGNIFICANT: Calcite
ASSOCIATED: Quartz Pyrite Mica
ALTERATION TYPE: Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratiform Massive
CLASSIFICATION: Sedimentary Industrial Min.
TYPE: R09 Limestone
DIMENSION: 300 x 15 Metres
COMMENTS: Dips gently westward.

STRIKE/DIP: TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Cretaceous-Tertiary			Coast Plutonic Complex

LITHOLOGY: Limestone
Schist
Granite
Quartzite

HOSTROCK COMMENTS: Absolute age uncertain (Geological Survey of Canada Map 1328A). Situated in a metasedimentary roof pendant of the Coast Plutonic Complex.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Alexander

PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)

INVENTORY

ORE ZONE: QUARRY

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1944

SAMPLE TYPE: Grab

COMMODITY

GRADE

Limestone

96.1600 Per cent

COMMENTS: Equivalent to 53.88 per cent CaO.

REFERENCE: Canmet Report 811, Part 5, pages 171,176.

CAPSULE GEOLOGY

A band of limestone 12 to 15 metres thick is exposed for a length of 300 metres. The white limestone is coarse-grained, contains many siliceous impurities and is cut by numerous dykes.

A gently westward dipping 12 to 15 metre thick bed of limestone is exposed for 300 metres along the east shore of Princess Royal Island on Lots 146 and 147, 11 kilometres south of the village of Swanson Bay. The bed is overlain by schist in contact with granite of the Coast Plutonic Complex. Dykes frequently intrude the limestone.

The deposit is composed of white coarse grained limestone (marble) containing inclusions of schist and quartzite that parallel the bedding. Quartz veins and streaks of mica and pyrite are common. A sample of the purest limestone exposed in a quarry contained 53.88 per cent CaO, 0.72 per cent MgO, 1.56 per cent SiO₂, 0.25 per cent Al₂O₃, 0.18 per cent Fe₂O₃ and 0.02 per cent sulphur (Canmet Report 811, p. 176).

Limestone was produced here from two quarries earlier this century for the pulp mill at Swanson Bay.

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 13
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR OF 1992-18, p. 62
GSC MAP 9-1966; *1328A; 1385A
GSC MEM 372
GSC P 66-25
CANMET RPT *811, Part 5, p. 171,176

DATE CODED: 1986/04/15
DATE REVISED: 1989/07/28

CODED BY: GRF
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103A 008**

NATIONAL MINERAL INVENTORY:

NAME(S): **MUSSEL INLET**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103A16E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 52 54 59 N
LONGITUDE: 128 01 06 W
ELEVATION: Metres

NORTHING: 5863421
EASTING: 566006

LOCATION ACCURACY: Within 1 KM

COMMENTS: Located at the northeast end of Mussel Inlet in Poison Cove (GSC Summary Report 1921, Part A, page 25).

COMMODITIES: Graphite

MINERALS

SIGNIFICANT: Graphite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Industrial Min.
TYPE: P03 Microcrystalline graphite

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Upper Paleozoic	Undefined Group	Unnamed/Unknown Formation	

LITHOLOGY: Graphitic Schist
Schist
Biotite Hornblende Schist
Limestone

HOSTROCK COMMENTS: Absolute age uncertain (Geological Survey of Canada Map 1328A).

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Undivided Metamorphic Assembl.
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Kitimat Ranges

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

Finely disseminated graphite occurs in schists at the northeast end of Mussel Inlet.

The schists occur within a metasedimentary belt about 8 kilometres wide that extends northwest from Cascade Inlet to the head of Mussel Inlet and farther north into the Douglas Channel area. Typically, this Upper Paleozoic(?) package is comprised of biotite-hornblende schist, quartzite and limestone.

BIBLIOGRAPHY

GSC SUM RPT *1921, Part A, p. 25A
EMPR AR 1929-C67
GSC MAP 9-1966; *1328A; 1385A; 1424A
GSC MEM 372
GSC P 66-25

DATE CODED: 1986/04/22
DATE REVISED: 1999/03/17

CODED BY: GRF
REVISED BY: GJP

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103A 009**

NATIONAL MINERAL INVENTORY:

NAME(S): **WANDA**, MOLLY 1-6, LM 22

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103A07E 103A10E
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 52 29 49 N
LONGITUDE: 128 44 06 W
ELEVATION: Metres

NORTHING: 5816345
EASTING: 517990

LOCATION ACCURACY: Within 500M

COMMENTS: Located on the north side of Higgins Passage, on the east side of Kitasu Hill within an old quarry.

COMMODITIES: Molybdenum Gold

MINERALS

SIGNIFICANT: Pyrite Molybdenite
ASSOCIATED: Quartz Calcite
ALTERATION: Limonite
ALTERATION TYPE: Oxidation Pyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated Vein
CLASSIFICATION: Hydrothermal

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

STRATIGRAPHIC AGE

Triassic

GROUP

Undefined Group

FORMATION

Unnamed/Unknown Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Meta Volcanic
Meta Sediment/Sedimentary

HOSTROCK COMMENTS: Triassic (?) metasediments and metavolcanics.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Alexander
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)

RELATIONSHIP:

GRADE:

INVENTORY

ORE ZONE: VEIN

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1981

SAMPLE TYPE: Chip

COMMODITY

GRADE

Gold

0.0690

Grams per tonne

COMMENTS: 0.3 metre chip sample taken across a quartz vein.

REFERENCE: Property File - Heard, R.T., 1981.

CAPSULE GEOLOGY

Rocks in the area of the Wanda claims are Triassic (?) metasediments and metavolcanics in contact or overlain by basaltic flows of the Lake Island Formation to the northeast and by Permian (?) gneissic diorites to the north and west.

A molybdenite showing was reported on the Molly 1-6 claims in 1973 by a Mr. C.L.M. Giggey. The showing occurs on the claims in the vicinity of an old rock quarry which was excavated during the construction of the Kitasu radio tower.

The Wanda claims cover the area around this old quarry site. The quarry is within metavolcanics which host abundant pyrite and subsequent limonite staining. The volcanics are cut by quartz and quartz-calcite veins which range up to 10 metres in width.

In 1981, a 0.3 metre chip sample taken across a quartz vein along a faulted zone within the quarry assayed less than 0.069 grams per tonne gold, 0.02 grams per tonne silver and less than 0.01 per cent lead and zinc. The molybdenite showing reported was not located.

BIBLIOGRAPHY

GSC MEM 372
GSC MAP 9-1966; 1385A
GSC P 66-25
EMPR PF (Heard, R.T., (1981): *Preliminary Report on the Wanda Mineral Prospect, Higgins Passage, Skeena Mining District,

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 16
REPORT: RGEN0100

BIBLIOGRAPHY

British Columbia, May 1981, in Prospectus for Interstate Energy Corp., Mar. 10, 1983; Interstate Energy Corp., Statement of Material Facts #59/88, dated Jun. 30, 1988)

DATE CODED: 1988/02/23
DATE REVISED: / /

CODED BY: LLD
REVISED BY:

FIELD CHECK: N
FIELD CHECK:

MINFILE NUMBER: **103A 010**

NATIONAL MINERAL INVENTORY:

NAME(S): **BLACK LEAD**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103A16E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 52 47 30 N
LONGITUDE: 128 00 07 W
ELEVATION: 50 Metres

NORTHING: 5849562
EASTING: 567301

LOCATION ACCURACY: Within 500M

COMMENTS: The location is for the Black Lead claim located at the mouth of the creek that drains into Desbrisay Inlet (a small inlet on the north side of Kynoch Inlet). A sketch map shows the Black Lead and Black Lead 1 to 5 claims attached in line and extending west from the creek. The above location conflicts with the written location that describes the claims extending west from Kainet ("River") Creek (Prospectus, Western Canada Graphite (Property File). Kainet Creek actually empties into a smaller bay several kilometres east of Desbrisay Inlet (Prospectus, Western Canada Graphite (Property File)). See Gem (093D 019) for further details.

COMMODITIES: Graphite

MINERALS

SIGNIFICANT: Graphite
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Industrial Min.
TYPE: P05 Vein graphite

COMMENTS: The character of the graphite occurrence is suspect due to the poor documentation. An early GSC Summary Report documents a disseminated graphite showing on Mussel Inlet (see 103A 008).

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Upper Paleozoic	Undefined Group	Unnamed/Unknown Formation	

LITHOLOGY: Biotite Hornblende Schist
Quartzite
Limestone

HOSTROCK COMMENTS: Age uncertain.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Undivided Metamorphic Assembl.
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Kitimat Ranges

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

Graphite is reported to occur at the Black Lead occurrence on Kynoch Inlet, about 70 kilometres north of Bella Bella.

The mineralized rocks occur within a metasedimentary belt about 8 kilometres wide that extends northwest from Cascade Inlet to the head of Mussel Inlet and farther north into the Douglas Channel area. Typically, this Upper Paleozoic(?) package is comprised of biotite-hornblende schist, quartzite and limestone.

Several graphite occurrences, staked in the 1920s, were held by Western Canada Graphite Limited of Vancouver, of which the Black Lead was one. In a highly promotional prospectus (in Property File) published in 1929, the company described several graphite occurrences along Kynoch Inlet and one near Mussel Inlet to the north. The report states that graphite "has been found running through all these claims in such masses as to make the working of it practically a stopping or quarrying proposition. The veins containing it vary from 4 feet (1.2 metres) to 300 feet (91 metres); and the assays of samples taken show from 15% to 100% pure graphite."

Besides the Black Lead, the other graphite properties were Giant (103A 011), Green Giant (093D 018), Gem (093D 019), Grey Giant (093D 020) and Zenith (093D 021). No record of development exists for these properties.

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 18
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR AR *1929-C67
EMPR PF (*Prospectus, Western Canada Graphite Limited, 1929 (with
sketch map of claim locations; Letter by Joseph T. Mandy
(resident government mining engineer) disputing prospectus
information)
GSC MAP 9-1966; 1328A; 1385A; 1424A
GSC MEM 372
GSC P 66-25
GSC SUM RPT 1921, Part A, p. 25A

DATE CODED: 1999/03/10
DATE REVISED: 1999/03/10

CODED BY: GRF
REVISED BY: GJP

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103A 011**

NATIONAL MINERAL INVENTORY:

NAME(S): **GIANT**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103A16E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 52 55 48 N
LONGITUDE: 128 08 04 W
ELEVATION: 50 Metres

NORTHING: 5864834
EASTING: 558181

LOCATION ACCURACY: Within 500M

COMMENTS: The Giant 1-4 claim were located (in 1929) west of Feeder Creek which empties into Oatswish Bay at the bend in Mussel Inlet. The Giant claims are shown to run from the shore in a northwest line (Sketch Map - Property File).

COMMODITIES: Graphite

MINERALS

SIGNIFICANT: Graphite

MINERALIZATION AGE:

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Industrial Min.
TYPE: P05 Vein graphite

COMMENTS: The character of the graphite occurrence is suspect due to the poor documentation. An early GSC Summary Report documents a disseminated graphite showing on Mussel Inlet (see 103A 008).

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Upper Paleozoic	Undefined Group	Unnamed/Unknown Formation	

LITHOLOGY: Biotite Hornblende Schist
Quartzite
Limestone

HOSTROCK COMMENTS: Age uncertain.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Undivided Metamorphic Assembl.
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Kitimat Ranges

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

Graphite is reported to occur at the Giant occurrence on Mussel Inlet, about 70 kilometres north of Bella Bella.

The mineralized rocks occur within a metasedimentary belt about 8 kilometres wide that extends northwest from Cascade Inlet to the head of Mussel Inlet and farther north into the Douglas Channel area. Typically, this Upper Paleozoic(?) package is comprised of biotite-hornblende schist, quartzite and limestone.

Several graphite occurrences, staked in the 1920s, were held by Western Canada Graphite Limited of Vancouver, of which the Giant was one. In a highly promotional prospectus (in Property File) published in 1929, the company described several graphite occurrences along Kynoch Inlet and one near Mussel Inlet to the north. The report states that graphite "has been found running through all these claims in such masses as to make the working of it practically a stoping or quarrying proposition. The veins containing it vary from 4 feet (1.2 metres) to 300 feet (91 metres); and the assays of samples taken show from 15% to 100% pure graphite."

Besides the Giant, the other graphite properties were called Black Lead (103A 010), Green Giant (093D 018), Gem (093D 019), Grey Giant (093D 020) and Zenith (093D 021). No record of development exists for these properties.

BIBLIOGRAPHY

EMPR AR *1929-C67
EMPR PF (*Prospectus, Western Canada Graphite Limited, 1929 (with sketch map of claim locations (in 103A 010 (Black Lead) file); Letter by Joseph T. Mandy (resident government mining engineer) discussing prospectus information (in 103A 010 (Black Lead) file).
GSC MAP 9-1966; 1328A; 1385A; 1424A

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 20
REPORT: RGEN0100

BIBLIOGRAPHY

GSC MEM 372
GSC P 66-25
GSC SUM RPT 1921, Part A, p. 25A

DATE CODED: 1999/03/10
DATE REVISED: 1999/03/10

CODED BY: GRF
REVISED BY: GJP

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103A 012**

NATIONAL MINERAL INVENTORY:

NAME(S): **DANNY**, DAN 1-4

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103A07E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 52 24 33 N
LONGITUDE: 128 37 36 W
ELEVATION: 0 Metres

NORTHING: 5806614
EASTING: 525395

LOCATION ACCURACY: Within 500M

COMMENTS: Location of southern boundary of claim block at the shoreline.

COMMODITIES: Molybdenum

MINERALS

SIGNIFICANT: Molybdenite Quartz
ASSOCIATED: Pyrite Marcasite
ALTERATION: Chlorite Epidote

MINERALIZATION AGE:

DEPOSIT

CHARACTER: Vein Discordant
CLASSIFICATION: Hydrothermal Skarn Epigenetic
TYPE: K07 Mo skarn

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Mesozoic			Coast Plutonic Complex
Tertiary			Coast Plutonic Complex

LITHOLOGY: Gneissic Diorite
Amphibolite Dike
Skarn
Chert

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Plutonic Rocks

PHYSIOGRAPHIC AREA: Milbanke Strandflat

CAPSULE GEOLOGY

The Danny property is located on the east shore of Price Island. Two molybdenite showings are located on the claim. The showings were first discovered by a trapper in the 1930s. In the 1950s a fisher noted that crabs caught in the area had black shells, searched for the cause, and found the showings again. Four claims were located in 1980 by M.S. Elson to cover the main showing. They were sold to V.L. Paulger and Associates in March 1981. Mr Paulger had twenty additional claim units located in March 1981, and then turned the claims over to Brinks Energy Corporation. That same year Brinks Energy Corporation established an 8-kilometre grid over the property and conducted a geochemical sampling program. Several weakly anomalous zones having a northeast orientation were indicated by the results.

The regional map shows that most of the Danny claim is underlain by gneissic diorite of the Coast Plutonic Complex, which contain inclusions of metasedimentary rocks and amphibolitic dikes. These rocks are intruded in the north part of the claim block by Late Tertiary syenite.

Two skarn zones are developed over an areal extent of several hundred square feet around the showings. The skarn is dark green to medium brown on weathered surface. It is very calcareous to pure calcite in part with quartz stringers and chert nodules as an echelon inclusions. The whole area appears to have been affected by thrusting from the east.

Molybdenite occurs as blebs and rosettes to two centimetres in diameter and as continuous streaks to twenty centimetres in length. These mineralized streaks have a preferred orientation of 070 degrees. The host is a white aphanitic quartz. Two showings exist. The primary one displays molybdenite mineralization in a quartz vein or bed having dimension of one by three metres. The mineralization cuts across the layering at right angles to the strike. The showing proper is in an outcrop about seven by three metres in size. Footwall rocks are skarn and very basic chloritized and epidotized dike rocks, while hanging wall rocks are granitic.

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 22
REPORT: RGEN0100

CAPSULE GEOLOGY

The second showing is about 15 metres away from the first. It contains blebs of molybdenite in a quartz vein system in the skarn.

Pyrite and marcasite occur in the area but are not associated with the molybdenite.

The two main showings are on the beach and are covered or surrounded by the sea at high tide.

BIBLIOGRAPHY

EMPR ASS RPT 10646
GSC MAP 1327A
GSC MEM 372

DATE CODED: 1999/08/26
DATE REVISED: / /

CODED BY: JMR
REVISED BY:

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103B 001**

NATIONAL MINERAL INVENTORY: 103B13 Fe1

NAME(S): **IRON DUKE**

STATUS: Developed Prospect
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103B13E
BC MAP:

Underground

MINING DIVISION: Skeena

LATITUDE: 52 59 29 N
LONGITUDE: 131 43 16 W
ELEVATION: 335 Metres

UTM ZONE: 09 (NAD 83)

NORTHING: 5874586
EASTING: 317474

LOCATION ACCURACY: Within 500M

COMMENTS: Adit, located north of Waste Creek approximately 4 kilometres west of Girard Point on northeastern Louise Island (Bulletin 54).

COMMODITIES: Iron Magnetite

MINERALS

SIGNIFICANT: Magnetite Pyrite Chalcopyrite

COMMENTS: Rare chalcopyrite

ALTERATION: Magnetite

ALTERATION TYPE: Skarn

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Massive
CLASSIFICATION: Skarn Replacement Industrial Min.

TYPE: K03 Fe skarn

SHAPE: Tabular

MODIFIER: Faulted

DIMENSION: 290 x 60 x 40 Metres STRIKE/DIP: 045/30N

TREND/PLUNGE:

COMMENTS: Wedge-like magnetite ore zone with digitated margins.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Upper Triassic	Kunga	Sadler	
Upper Triassic	Vancouver	Karmutsen	
Tertiary			Kano Plutonic Suite

ISOTOPIC AGE: 34.3 +/- 0.6 Ma

DATING METHOD: Uranium/Lead

MATERIAL DATED: Zircon

LITHOLOGY: Limestone
Basaltic Greenstone
Greenstone
Diorite
Granodiorite
Diorite Porphyry
Dacite Porphyry
Skarn

HOSTROCK COMMENTS: Age date from the Geological Survey of Canada Paper 90-10, page 64, Figure 3.

GEOLOGICAL SETTING

TECTONIC BELT: Insular

TERRANE: Wrangell

METAMORPHIC TYPE: Regional Contact

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

RELATIONSHIP:

GRADE: Greenschist
Hornfels

INVENTORY

ORE ZONE: IRON DUKE

REPORT ON: Y

CATEGORY: Combined
QUANTITY: 495276 Tonnes

YEAR: 1962

COMMODITY: Iron GRADE: 46.0000 Per cent

COMMENTS: Proven and probable ore. Grade is 46% iron as magnetite; sulphur may average 2%. An additional possible 32,655 tonnes may be present.

REFERENCE: Bulletin 54, page 182.

CAPSULE GEOLOGY

The property is on the slope north of Waste Creek about 4 kilometres west of Girard Point on the northeast coast of Louise Island.

The showings were discovered and staked in 1911 and subsequently

CAPSULE GEOLOGY

optioned to the Western Steel Co., of Irondale, Washington. The property was owned in 1913 by H.K. Owen, of Seattle. Most of the early development work was done in 1918 by the owners, Messrs. Rogers, Benson, and Larson. An adit was driven for 23 metres and at a point 15 metres from the portal a crosscut was driven across a 4-metre wide dike. The 10 claim property, Lots 2331-2340, was Crown-granted in 1921. A small amount of additional work was reported in 1922.

By the late 1950's the property had been acquired by Campbell M. Robertson and associates, of New Westminster. Work began with an examination and magnetometer survey by Silver Standard Mines Limited in 1959. During 1961 exploration initiated by Campbell Robertson included a geological examination and an attempt to build a road to the property from the shore near Mathers Creek. In the autumn the property was optioned by Magnum Consolidated Mining Co. Ltd., who made a magnetometer survey of the property and a geological map of the vicinity. Two diamond drills were moved to the Iron Duke late in 1961, and in January and February 1962, 15 AX holes were drilled totalling 931 metres. Later in the year Silver Standard optioned the property and drilled 33 FX holes totalling 1465 metres. Most of the known magnetite and the magnetic anomaly are on Iron Duke No. 2 claim (Lot 2333), but both extend uphill onto the southwest corner of Iron Duke No. 1 (Lot 2332).

In the Iron Duke occurrence area, a thick grey limestone bed of the Upper Triassic Sadler Formation (Lower Jurassic to Upper Triassic Kunga Group) overlies chloritized basaltic (greenstone) rocks of the Upper Triassic Karmutsen Formation (Vancouver Group). The limestones strike north to northeast and dip gently west. The rocks are intruded by altered diorite to granodiorite and some diorite to dacite porphyries related to the Tertiary Kano Plutonic Suite. The limestones and greenstones are extensively skarned and replaced by magnetite and minor iron sulphides.

The magnetite ore occurs in a dislocated northeast trending zone along the limestone-greenstone contact. The ore zone and host rocks are cut by three steep post-ore faults trending about 120 degrees with 15 to 90 metre left-hand offsets. The ore zone is wedge-shaped with highly digitized margins. It strikes 045 degrees, dips 30 degrees north and measures 260 by 60 by 40 metres. Mineralization consists principally of magnetite and pyrite and rare chalcopyrite. Skarn minerals are disseminated and intercalated within the ore zone and also form an envelope around the ore zone. Combined (proven and probable) reserves are 495,276 tonnes of 46 per cent iron as magnetite; sulphur may average 2 per cent; an additional possible 32,655 tonnes may be present (Bulletin 54, page 182).

BIBLIOGRAPHY

- EMPR BULL *54, pp. 180-182
EMPR AR 1911-77; 1913-104; 1918-40,41; 1921-39; 1922-386; 1927-481; 1961-17; 1962-13
EMPR PF (Dunn, W. (1960): Report on Investigation of Aeromagnetic Anomalies, Louise Island and Tasu Sound, Mar.9, 1960 for Silver Standard Mines Ltd.; *Campbell, D.D. (1962): Report on the Iron Duke Property for Silver Standard Mines Ltd., Oct. 1962; Sketch Maps by P.R. Wilson, 1962)
EMPR OF *1988-28, pp. 79,80; 1992-1; 1992-9
GSC P 86-20; 88-1E, pp. 213-216,221-227; 89-1H, pp. 7-11, 95-116; 90-10, pp. 59-87
GSC MAP 278A; 1385A; 2-1990
GSC EC GEOL 3, *Vol.1, 1926, pp. 27-30
EMR MP CORPFILE (Magnum Consolidated Mining Co. Ltd.; Silver Standard Mines Limited)
EMR MP RESFILE (Iron Duke)
MIN REV March/April 1988, pp. 19-24

DATE CODED: 1986/06/25
DATE REVISED: 1999/10/30

CODED BY: LDJ
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103B 002**

NATIONAL MINERAL INVENTORY: 103B6 Cu18

NAME(S): **GEORGE ISLAND**, COPPER ISLANDS

STATUS: Past Producer
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103B06E
BC MAP:

Underground

MINING DIVISION: Skeena

LATITUDE: 52 20 59 N
LONGITUDE: 131 12 36 W
ELEVATION: 30 Metres

UTM ZONE: 09 (NAD 83)

NORTHING: 5802235
EASTING: 349477

LOCATION ACCURACY: Within 500M

COMMENTS: Centre of George Island, off the southeastern corner of Burnaby Island. See also Skincuttle Island (103B 021) and East Copper Island (103B 022).

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite Magnetite Pyrite Bornite Tennantite

Cuprite

ASSOCIATED: Quartz

ALTERATION: Garnet

ALTERATION TYPE: Skarn

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated Vein
CLASSIFICATION: Skarn Replacement
TYPE: K08 Garnet skarn

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Upper Triassic
Upper Triassic

GROUP

Kunga
Vancouver

FORMATION

Sadler
Karmutsen

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Amygdaloidal Andesite
Amygdaloidal Basalt
Skarn
Garnet Skarn
Limestone

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Wrangell

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

CAPSULE GEOLOGY

The Copper Islands showings are located off the south-eastern corner of Burnaby Island, on three small islands, Skincuttle, George, and East Copper.

These showings were discovered by Francis Poole while prospecting for Queen Charlotte Mining Company in 1862-3. There is no record of this company as a Canadian incorporation.

In 1900 the showings were rediscovered by A. Heino who staked three mineral claims, the Skincuttle Entrance, Golden Gate, and Trust, on East Copper Island. Mr. Heino worked the claims until about 1930. Development consisted of a 30-metre shaft with a 55-metre crosscut, a 12-metre shaft, and a 46-metre adit. In 1907 Abe Johnson restaked the Red Raven claim on the south side of East Copper Island. He drove a 11-metre adit and a 3-metre crosscut on the property. In 1917 the East Copper Island showings (103B 022), held as the Quintitsa claim, produced 36.2 tonnes of copper ore which was shipped to the Granby smelter.

The Skincuttle Island showings (103B 021) were held in 1902-07 by Messrs. Law, Hamilton and Raper. Development work on the three claims, Skincuttle, Poole, and Margaret, included 6.7-metre and 9.1-metre shafts, two crosscut adits, 6 open cuts, and some trenching. The showings were later staked by A. Heino.

The George Island showing was owned by W. Campbell in 1910.

In the mid 1960's the Copper Islands showings were held as follows: Skincuttle Island, part of Jib "B" group; George Island, Sandy Nos. 1 to 4; East Copper Island, Elma group - five claims. Work done at this time included a minor amount of packsack drilling on East Copper Island, and a magnetometer survey at sea off the island by Burnaby Iron Mines Limited in 1964.

The Copper Islands are underlain by grey limestone of the

CAPSULE GEOLOGY

Upper Triassic Sadler Formation (Kunga Group) and intrusive sills of amygdaloidal andesite to basalt of the probable Upper Triassic Vancouver Group, Karmutsen Formation. The strata strikes east, dips 10 to 30 degrees north, and is cut by small steep block faults oriented north-northwest and west.

The showings are mainly in garnet-rich skarns, which replace the volcanics for several hundred metres along strike, but are rarely over 3 metres thick. Mineralization occurs as disseminated chalcopyrite and minor magnetite, pyrite, bornite, tennantite and cuprite. Chalcopyrite also occurs disseminated in adjacent unskarned limestone as veinlets transecting the bedding in and near skarns and in quartz veins associated with the block faults.

The George Island showings were worked from 1903 to 1912, producing a very minor amount of copper ore (Production records are not available).

BIBLIOGRAPHY

EMPR AR *1903-211; 1909-71; *1910-84; 1911-76; *1912-110
EMPR BULL *54, pp. 197,198
GSC MAP 1385A
GSC P 86-20; *88-1E, pp. 221-227; 89-1H; 91-1A, pp. 383-391
MIN REV March/April 1988, pp. 19-24

DATE CODED: 1986/07/16
DATE REVISED: 1999/08/30

CODED BY: LDJ
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103B 003**

NATIONAL MINERAL INVENTORY: 103B12 Cu2

NAME(S): **LAST CHANCE** JONES, MERRY K,
D, SWEDE

STATUS: Prospect
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103B12W
BC MAP:

MINING DIVISION: Skeena

LATITUDE: 52 41 54 N
LONGITUDE: 131 48 46 W
ELEVATION: 60 Metres

UTM ZONE: 09 (NAD 83)

NORTHING: 5842426
EASTING: 309941

LOCATION ACCURACY: Within 500M
COMMENTS: Adits, map 30 (Assessment Report 6005); main horizon is 500 metres to Northwest. Location is just south of McEchran Cove, near Darwin Sound.

COMMODITIES: Copper Silver Gold

MINERALS

SIGNIFICANT: Chalcopyrite Chalcocite Copper Bornite
ASSOCIATED: Quartz
ALTERATION: Epidote Chlorite
ALTERATION TYPE: Epidote Chloritic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated Vein
CLASSIFICATION: Volcanogenic
TYPE: D03 Volcanic redbed Cu
SHAPE: Irregular

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Upper Triassic	Vancouver	Karmutsen	
Triassic-Jurassic	Kunga	Undefined Formation	

LITHOLOGY: Amygdaloidal Andesite
Tuff
Limestone
Diabase Dike

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Wrangell
METAMORPHIC TYPE: Regional
PHYSIOGRAPHIC AREA: Queen Charlotte Ranges
RELATIONSHIP: Syn-mineralization
Post-mineralization
GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1976
SAMPLE TYPE: Chip
COMMODITY
Silver 0.0800 Grams per tonne
Copper 0.5500 Per cent
COMMENTS: 3.3 metre chip sample.
REFERENCE: Assessment Report 6005, Figure 3.

CAPSULE GEOLOGY

The property is located south of McEchran Cove. A work history of the area is included with the Swede (103B 009).

The dominant rock type in the area is a Vancouver Group, amygdaloidal andesite of the Upper Triassic Karmutsen Formation which has undergone greenschist grade regional metamorphism. The volcanics contain interbedded tuffs and limestones, overlain by minor Jurassic to Triassic Kunga limestone and are cut by diabase dikes.

Copper mineralization occurs in several locations, however two main horizons, 500 metres apart, have been tested by adits and drilling. Mineralization consists of disseminated and fracture and vesicle filled chalcopyrite, commonly associated with epidote, chlorite and quartz within the volcanics. Chalcocite, native copper and bornite are usually present in the more intensely mineralized zones. A 3.3-metre chip sample assayed 0.55 per cent copper and 0.08 gram per tonne silver (Assessment Report 6005).

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1918-40; 1928-65; 1967-58
EMPR ASS RPT *662, *6005, 11603, 12760, 13991, 17719
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EMPR PF (Selnes, W.E., (1970): Ana Lake Mining Ltd., Copper Minera-
lization Potentialities and Proposed Future Development Program,
Brandy Mineral Claims Group, Queen Charlotte Islands; Ana Lake
Mining Ltd., Prospectus dated September 14, 1971 and Prospectus
dated May 15, 1973 - refer to Swede - 103B 009)
EMR MP CORPFILE (*Ana Lake Mining Ltd.)
GSC MAP 278A; 1385A
GSC P 86-20; 88-1E, pp. 221-227; 89-1H
MIN REV March/April 1988, pp. 19-24

DATE CODED: 1986/07/10
DATE REVISED: 1989/03/08

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

CAPSULE GEOLOGY

related to the Eocene to Oligocene Kano Plutonic Suite. The volcanics are cut by diorite dikes and calcite-quartz-epidote veinlets.

Minor amounts of sphalerite, chalcopyrite and pyrrhotite occur disseminated in the volcanics and diorite dikes. A sample from a dike returned 2.0 grams per tonne gold (Assessment Report 8902).

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EMPR PF (Selnes, W.E., (1970): Ana Lake Mining Ltd., Copper Mineralization Potentialities and Proposed Future Development Program, Brandy Mineral Claims Group, Queen Charlotte Islands; Ana Lake Mining Ltd., Prospectus dated September 14, 1971 and Prospectus dated May 15, 1973 - refer to Swede - 103B 009)
EMR MP CORPFILE (*Ana Lake Mining Ltd.)
GSC MAP 278A; 1385A
GSC P 86-20; 88-1E, pp. 213-216,221-227; 89-1H, pp. 95-112, 117-120; 90-10, pp. 59-87, 465-487; 92-1A, pp. 351-360

DATE CODED: 1986/06/26
DATE REVISED: 1999/08/30

CODED BY: LDJ
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103B 005**

NATIONAL MINERAL INVENTORY:

NAME(S): **RAMSAY ISLAND**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103B11W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 52 35 09 N
LONGITUDE: 131 22 26 W
ELEVATION: 5 Metres

NORTHING: 5828846
EASTING: 339179

LOCATION ACCURACY: Within 5 KM
COMMENTS: North end of Ramsay Island.

COMMODITIES: Bitumen

MINERALS

SIGNIFICANT: Bitumen
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Fossil Fuel Industrial Min.
TYPE: T MISCELLANEOUS

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Tertiary Unknown	Undefined Group	Masset	Unnamed/Unknown Informal

ISOTOPIC AGE: 35.9 +/- 1.4 Ma
DATING METHOD: Potassium/Argon

LITHOLOGY: Agglomerate

HOSTROCK COMMENTS: Age date from basalt on east shore of Ramsay Island (GSC Paper 88-1E, page 271; Figure 4, page 273; Table 1).

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Wrangell

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

CAPSULE GEOLOGY

Bitumen occurs in fissures within agglomerate rocks of the Tertiary Masset Formation on the northern and eastern shores of Ramsay Island, on House Island, on Agglomerate Island and on the Tar Islands.

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GSC MAP 1385A
GSC P 86-20; *88-1E, pp. 221-227, 269-274; 89-1H; 91-1A, pp. 383-391

DATE CODED: 1986/06/25
DATE REVISED: 1999/08/31

CODED BY: LDJ
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103B 006**

NATIONAL MINERAL INVENTORY:

NAME(S): **HUXLEY ISLAND**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103B06W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 52 27 24 N
LONGITUDE: 131 23 06 W

NORTHING: 5814507
EASTING: 337952

ELEVATION: 5 Metres

LOCATION ACCURACY: Within 500M

COMMENTS: Showings, Figures 16, 8, 3 (Assessment Report 8251) on Huxley Island, located just northwest of Burnaby Island.

COMMODITIES: Copper Zinc Gold Silver

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Sphalerite

ASSOCIATED: Quartz

ALTERATION: Silica

ALTERATION TYPE: Silicific'n

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Massive Podiform
CLASSIFICATION: Hydrothermal Epigenetic

TYPE: K SKARN

E03 Carbonate-hosted disseminated Au-Ag

SHAPE: Irregular

MODIFIER: Faulted

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Upper Triassic

Kunga

Sadler

Upper Triassic

Kunga

Peril

Eocene

Kano Plutonic Suite

ISOTOPIC AGE: 43.7 +/- 1.1 Ma

DATING METHOD: Potassium/Argon

MATERIAL DATED: Hornblende

LITHOLOGY: Siliceous Limestone
Limestone
Black Limestone
Andesitic Dike

HOSTROCK COMMENTS: Age date from andesite dike of the Carpenter Bay dike swarm (GSC Paper 90-10, page 71, Table 2).

GEOLOGICAL SETTING

TECTONIC BELT: Insular

TERRANE: Wrangell

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1980

SAMPLE TYPE: Rock

COMMODITY

GRADE

Gold

0.8000

Grams per tonne

COMMENTS: Grab sample.

REFERENCE: Assessment Report 8251.

CAPSULE GEOLOGY

The northwest part of Huxley Island is underlain by massive grey limestone and thin bedded black limestone of the Late Triassic Sadler and Peril Formations (Kunga Group), which are cut by andesitic dikes of the Eocene-Oligocene Kano Plutonic Complex (Burnaby Island Dike Swarm). The rocks are also cut by north-northwest trending faults related to the Louscoone Inlet-Rennell Sound fault zone.

Pods of massive pyrite, chalcopyrite and sphalerite occur in silicified grey limestone adjacent to andesite dikes. A sample taken about 500 metres northeast of these showings assayed 0.8 gram per tonne of gold (Assessment Report 8251). In 1979, a 2.0-metre chip sample taken from silicified limestone assayed 0.14 gram per tonne gold, 450.0 grams per tonne silver and traces of antimony (Assessment Report 8094).

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

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GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 33
REPORT: RGEN0100

BIBLIOGRAPHY

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EMPR EXPL 1979-240; 1980-364
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GSC P 86-20; 88-1E, pp. 221-227; 89-1H, pp. 95-112, 117-120;
90-10, pp. 59-87, 163-172, 465-487; 91-1A, pp. 383-391

DATE CODED: 1986/07/08
DATE REVISED: 1999/08/31

CODED BY: LDJ
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103B 007**

NATIONAL MINERAL INVENTORY:

NAME(S): **ALDER GOLD**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103B06W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 52 26 49 N
LONGITUDE: 131 19 31 W
ELEVATION: 1 Metres

NORTHING: 5813293
EASTING: 341974

LOCATION ACCURACY: Within 500M

COMMENTS: Gold showing, Figures, 5, 7, 14 (Assessment Report 8251). Location on Alder Island, just north of Burnaby Island.

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold Sphalerite

COMMENTS: Free Gold.

ASSOCIATED: Quartz Calcite

ALTERATION: Silica

ALTERATION TYPE: Silicific'n

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Breccia
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: E03 Carbonate-hosted disseminated Au-Ag

H EPITHERMAL

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Upper Triassic	Kunga	Peril	

LITHOLOGY: Siliceous Limestone
Black Limestone
Limestone
Andesitic Dike
Granitic Intrusive
Volcanic Rock

GEOLOGICAL SETTING

TECTONIC BELT: Insular

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

TERRANE: Wrangell

METAMORPHIC TYPE: Contact Regional

RELATIONSHIP: Syn-mineralization
Post-mineralization

GRADE: Greenschist
Hornfels

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1980

SAMPLE TYPE: Rock

COMMODITY

GRADE

Gold

10.9000

Grams per tonne

COMMENTS: Grab sample from Alder Zone.

REFERENCE: Assessment Report 8251.

CAPSULE GEOLOGY

Alder Island is underlain by complex geology, including folded limestone and argillite of the Jurassic to Triassic Kunga Group, Middle Jurassic Yakoun Group volcanics, Lower Cretaceous Longarm Formation sandstones and Tertiary Masset Formation basalts. Granitoid intrusives related to the Middle to Late Jurassic Burnaby Island plutonic suite intrude both Kunga and Yakoun Group rocks.

Visible gold with minor sphalerite occurs in brecciated, silicified, thin-bedded, black limestone of the Peril Formation of the Kunga Group. The best assay obtained was 10.9 grams per tonne gold over 15 centimetres (Assessment Report 8251).

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EMPR EXPL 1979-240; *1980-364
GSC MAP 1385A
GSC P 86-20; 88-1E, pp. 213-216,221-227; 89-1H, pp. 95-112; 90-10,

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

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GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 35
REPORT: RGEN0100

BIBLIOGRAPHY

pp. 163-172; 91-1A, pp. 383-391

DATE CODED: 1986/07/08
DATE REVISED: 1999/08/31

CODED BY: LDJ
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103B 008**

NATIONAL MINERAL INVENTORY: 103B12 Cu1

NAME(S): **APEX**, STAR, ALPINE

STATUS: Developed Prospect
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103B12W
BC MAP:

Underground

MINING DIVISION: Skeena

LATITUDE: 52 41 44 N
LONGITUDE: 131 53 36 W
ELEVATION: 800 Metres

UTM ZONE: 09 (NAD 83)

NORTHING: 5842333
EASTING: 304486

LOCATION ACCURACY: Within 500M

COMMENTS: Ore zone, located between Botany Inlet and Anna Lake (McDougall, 1964).

COMMODITIES: Iron Magnetite Copper Silver

MINERALS

SIGNIFICANT: Magnetite Chalcopyrite Pyrite Pyrrhotite
ASSOCIATED: Garnet Epidote Calcite
ALTERATION TYPE: Skarn
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated Massive
CLASSIFICATION: Skarn Replacement Industrial Min.
TYPE: K03 Fe skarn
DIMENSION: 100 x 35 x 15 Metres STRIKE/DIP: TREND/PLUNGE: 345/15
COMMENTS: Ore zone

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Upper Triassic	Kunga	Sadler	
Upper Jurassic			San Christoval Plutonic Suite

ISOTOPIC AGE: 170-175 +/- 5 Ma
DATING METHOD: Uranium/Lead
MATERIAL DATED: Zircon

LITHOLOGY: Limestone
Volcanic Rock
Hornblende Diorite
Basalt Dike
Feldspar Porphyry Dike
Skarn

HOSTROCK COMMENTS: Age date from the Geological Survey of Canada (R.G. Anderson, personal communication, 1989).

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Wrangell

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

INVENTORY

ORE ZONE: APEX REPORT ON: Y
CATEGORY: Inferred YEAR: 1963
QUANTITY: 181420 Tonnes
COMMODITY GRADE
Copper 0.9000 Per cent
Iron 34.0000 Per cent
Silver 24.6000 Grams per tonne

COMMENTS: Assuming continuity between 2 exposures and 3 packsack holes.
REFERENCE: Property File - McDougall, 1964.

CAPSULE GEOLOGY

The showings are on the ridge between Botany Inlet of Tasu Sound and Anna Lake at an elevation of 823 to 853 metres.
The showings were discovered by Messrs. Davies, Bell, and Harris in 1907 and staked as the Apex group. Annual assessment work was carried out for several years. In 1912 the property was optioned to E.M. Morgan and associates. A crosscut adit 15 metres below the surface workings was driven 61 metres and drifts run in a westerly direction. The claims subsequently lapsed. In 1926 the property was held as the Star group of 6 claims, owned by R. Morrison, Rand McDonald and W.H. Watson, of Lockeport. The old workings at that time were reported to consist of a 91 metre on the Star claim and a

CAPSULE GEOLOGY

30 metre adit on the Nellie L claim. The claims apparently lapsed in the 1930's.

In the 1960's the property consisted of two located claims, Alpine No. 1 and No. 2 held by Wesfrob Mines Limited. Exploration work included sampling, and in 1963 three packsack holes totalling 98 metres drilled to confirm the continuity between the two exposures. "Assuming this continuity, Young and Uglow calculated the reserves as about 300,000 tons of ore. Calculations based on the drilling indicate somewhat less ore with a grade of close to 50 per cent iron and possibly 1 per cent copper" (BCDM Bulletin 54, page 192).

The Apex ore zone consists of a chalcopyrite-bearing magnetite skarn at the base of a small roof pendant near the eastern margin of a hornblende diorite pluton of the Late Jurassic San Christoval Plutonic Suite. The pendant consists of grey limestone of the Upper Triassic Sadler Formation (Lower Jurassic to Upper Triassic Kunga Group), cut by basalt and feldspar porphyry dikes. The bedding strikes approximately 160 degrees and dips about 70 degrees east. To the east are volcanics which are probably correlative to the Upper Triassic Karmutsen Formation (Vancouver Group).

The ore zone, measuring roughly 100 by 35 by 15 metres, trends 345 degrees and plunges 10 to 15 degrees. Skarn and magnetite replace limestone, minor volcanics and hornblende diorite at the base of the pendant. Garnet, calcite and epidote occur as replacement minerals. Pyrite and pyrrhotite are present in minor amounts. Individual samples of magnetite yielded values of 28 to 53 per cent iron and 0.24 to 1.96 per cent copper.

Inferred reserves are 181,420 tonnes grading 34 per cent iron, 0.9 per cent copper and 24.6 grams per tonne silver; assuming continuity between two exposures and three packsack holes (McDougall, 1964).

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1926-67; 1930-64
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EMR MP RESFILE (Star Group Apex)
GSC EC GEOL *3, Vol.1 (1926), pp. 30,31
GSC MAP 278A; 1385A
GSC P 86-20; 88-1E, pp. 213-216, 221-227; 89-1H, pp. 95-112;
90-10, pp. 59-87, 163-172
GSC SUM RPT *1909, pp. 79,80
MIN REV March/April 1988, pp. 19-24
EMPR OF 1998-10

DATE CODED: 1986/07/10
DATE REVISED: 1989/03/06

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103B 009**

NATIONAL MINERAL INVENTORY: 103B12 Cu2

NAME(S): **SWEDE**, BRANDY, D,
LAST CHANCE, ANA LAKE, WET,
EAGLE, LOCK, RAVEN

STATUS: Prospect
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103B12W
BC MAP:
LATITUDE: 52 42 34 N
LONGITUDE: 131 49 51 W
ELEVATION: 20 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Old adits, Plan #3 (Assessment Report 13991); located south of Anna Inlet.

Underground

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

NORTHING: 5843709

EASTING: 308769

COMMODITIES: Copper Silver Platinum Gold

MINERALS

SIGNIFICANT: Chalcopyrite Bornite Pyrite Pyrrhotite Gold
Palladium Gallium Platinum
COMMENTS: Platinum and palladium occur in trace amounts.
ALTERATION: Chlorite Epidote
ALTERATION TYPE: Silicific'n Epidote Chloritic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated Vein Breccia
CLASSIFICATION: Volcanogenic
TYPE: D03 Volcanic redbed Cu
SHAPE: Irregular

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Upper Triassic	Vancouver	Karmutsen	
Triassic-Jurassic	Kunga	Undefined Formation	

LITHOLOGY: Amygdaloidal Basalt
Basalt
Greenstone
Andesite Agglomerate
Ignimbrite
Limestone
Black Limestone
Limy Argillite

GEOLOGICAL SETTING

TECTONIC BELT: Insular PHYSIOGRAPHIC AREA: Queen Charlotte Ranges
TERRANE: Wrangell
METAMORPHIC TYPE: Regional RELATIONSHIP: Syn-mineralization GRADE: Greenschist
Post-mineralization

INVENTORY

ORE ZONE: ADIT REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1967
SAMPLE TYPE: Chip
COMMODITY GRADE
Silver 20.5700 Grams per tonne
Copper 1.7000 Per cent
COMMENTS: 4.5 metre sample from South Wall Adit.
REFERENCE: Property File: Selnes, W.E., 1970, Figure 3A.

CAPSULE GEOLOGY

The property includes the whole of the Swede Peninsula on the east side of Anna Inlet in Klunkwoi Bay, Moresby Island. It is located between sea level and 457 metres elevation. The Swede group, consisting of 8 claims, was staked in January 1907 by Messrs. Larsen, Pearson, and Rogers. The adjoining Last Chance group (103B 003), consisting of 6 claims, was staked late in 1907 by Messrs. Wintermite, McEachern, and Jones. A few open cuts were developed on the properties. In 1908 the property was bonded to J. Wulffsohn, who by 1910 had carried out development work in 3 adits. The main adit, 24 metres

CAPSULE GEOLOGY

above sea level, was driven for 52 metres. Another adit, 24 metres to the east and on the same level as the main adit, is a drift 10 metres in length. A third adit, at an elevation of 137 metres, was driven for 17 metres.

In 1916 The Granby Mining Company Limited carried out 607 metres of diamond drilling in 9 holes.

In 1951 Granby made a further reconnaissance examination of the property.

During 1956 New Jersey Zinc Explorations Company (Canada) Limited optioned the property. Exploration consisted of geological mapping, sampling, and the drilling of 3 diamond drill holes totalling 99 metres. Queen Charlotte Resources Ltd. acquired the property during 1961, and carried out geological and geophysical surveys.

In 1967 Cosmic-Lode Mines Ltd. acquired the property under option from Fleetwood Resources Ltd. Work on the property, then known as the "D" claims, included 5 trenches totalling 305 metres and 11 diamond drill holes totalling 305 metres.

In the fall of 1968 the area was restaked as the Brandy group and later transferred to Ana Lake Mining Ltd. During 1969, the company conducted a program of bulk sampling of the mineral zones exposed in the adits and trenches, deepened old trenches and trenched new areas. Preliminary geological mapping and topographical surveys were carried out. X-ray diamond drilling totalling 921 metres was done to obtain geological and structural information on the mineralized zones. An airborne magnetometer survey was completed in August 1969.

In 1983, J.S. Christie and G.G. Richards sampled and mapped the Eagle, Lock and Raven claims. Diamond International Industries Inc. sampled in 1985 and drilled 3 holes (261.5 metres) in 1988.

The property is underlain mainly by Vancouver Group, Upper Triassic Karmutsen Formation volcanics consisting of andesitic agglomerate, pillow lavas, ignimbrite, amygdaloidal basalt and minor sandstone and limestone. The volcanics are overlain by massive grey limestone, black limestone and limy argillites of the Triassic to Jurassic Kunga Group. The rocks are cut by dacite, andesite and diorite dikes related to the Eocene-Oligocene Kano Plutonic Suite.

The peninsula is bounded by two north trending major faults, thought to be block faults. Weak shearing, brecciation and silicification have developed between the two faults.

Mineralization is confined to the amygdaloidal basalts and consists of fine disseminations, blebs, veinlets and stringers of chalcopyrite and bornite. The sulphides show preferential concentration with areas of chloritized and epidotized amygdules. Pyrite and pyrrhotite occur in minor amounts.

Copper mineralization is low-grade (0.5 to 2 per cent) over a 100 metre length. Some samples from the "Bornite" adit assayed small values in silver, gold, platinum and trace palladium and gallium (Selnes, W.E., 1970, page 24).

Three adits sampled in 1967 assayed from 3.5 per cent copper up to 2.5 per cent copper with silver values ranging from 6.86 grams to 20.57 grams per tonne silver (Selnes, W.E., 1970, Figure 3A).

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EMPR ASS RPT *426, 662, 1889, 6005, *11603, 12760, 13991, 17719
EMPR BULL *54, pp. 215,216
EMPR EXPL 1976-E161; 1983-492; 1985-C363
EMPR OF *1986-7, pp. 34,35
EMPR PF (*Selnes, W.E., (1970): Ana Lake Mining Ltd., Copper Mineralization potentialities and Proposed Future Development Program, Brandy Mineral Claims Group, Queen Charlotte Islands in Prospectus for Ana Lake Mining Ltd., dated May 15, 1973; Ana Lake Mining Ltd. Prospectus dated September 14, 1971 - includes report by Selnes, W.E., dated December 2, 1970; Livingston, E., (1956): Geological Report on the Swede Group, Moresby Island B.C., Queen Charlotte Islands, August 21, 1956)
EMR MP CORPFILE: (Ana Lake Mining Ltd.; New Jersey Zinc Exploration Company (Canada) Ltd.)
GSC MAP 1385A
GSC P 86-20; 88-1E, pp. 213-216,221-227; 89-1H, pp. 95-112; 90-10, pp. 59-87, 465-487; 92-1A, pp. 351-360
GSC SUM RPT 1909, pp. 78,79
GCNL #4, 1983; #91, 1984; #11,#171, 1985; #46, 1986
MIN REV March/April 1988, pp. 19-24

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

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GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 40
REPORT: RGEN0100

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N MINER March 14, 1985
PERS COMM (R.G. Anderson, March 1989)
USGS Prof. Paper 630 pp. 28,29
V STOCKWATCH Dec.11, 1987

DATE CODED: 1986/07/10
DATE REVISED: 1999/08/30

CODED BY: LDJ
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103B 010**

NATIONAL MINERAL INVENTORY: 103B12 Au2

NAME(S): **SHUTTLE ISLAND PLACER**, TICKSEY

STATUS: Past Producer Open Pit

MINING DIVISION: Skeena

REGIONS: British Columbia, Queen Charlotte Islands

NTS MAP: 103B12E

UTM ZONE: 09 (NAD 83)

BC MAP:

LATITUDE: 52 40 09 N

NORTHING: 5838916

LONGITUDE: 131 42 36 W

EASTING: 316762

ELEVATION: 1 Metres

LOCATION ACCURACY: Within 500M

COMMENTS: Shuttle Island located in Darwin Sound.

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated

CLASSIFICATION: Placer

TYPE: C03 Marine placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Recent
Upper Triassic

Undefined Group
Vancouver

Unnamed/Unknown Formation
Karmutsen

LITHOLOGY: Unconsolidated Gravel
Volcanic

HOSTROCK COMMENTS: Placer gold source most likely from auriferous veins in Vancouver Group, Upper Triassic Karmutsen volcanics.

GEOLOGICAL SETTING

TECTONIC BELT: Insular

TERRANE: Wrangell

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

CAPSULE GEOLOGY

The beach placer deposit is located on the north part of Shuttle Island in Darwin Sound. Gold nuggets up to \$15 in value were discovered in 1918 by employees of a timber company in the gravel on the beach. The beach was subsequently staked as the Ticksey placer claim.

In 1919 owner J. Hendricks hauled beach gravel by boat to a small creek about 0.8 kilometre away for washing. About 1679 grams of gold recovered from this operation were sent to the Dominion Government Assay Office, in Vancouver, the owner keeping an additional estimated \$300-\$400 worth of nuggets. In 1921 a pump was installed to supply water for sluicing and about 186 grams gold were recovered during 1922. Another sluicing operation began in December 1933 373 grams of gold were recovered.

Gold occurs in beach gravels derived from erosion of small gold-bearing quartz veins in volcanic rocks of the Upper Triassic Vancouver Group, Karmutsen Formation (refer to Ellen - 103B 012).

Recorded production from the beach placer deposit of Shuttle Island during the years 1919, 1922 and 1933 totals 2468 grams of gold (National Mineral Inventory Card 103B12 Au2).

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EMPR BULL 28, p. 48; 54, pp. 174,218
GSC MAP 1385A
GSC P 86-20; 88-1E, pp. 221-227; 89-1H; 90-10; 92-2A, pp. 351-360
CMJ May 21, p. 389

DATE CODED: 1986/07/10
DATE REVISED: 1989/03/09

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103B 011**

NATIONAL MINERAL INVENTORY:

NAME(S): **ARCHIE - ADIT CREEK**, ADIT CREEK

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103B06E
BC MAP:

Underground

MINING DIVISION: Skeena

LATITUDE: 52 18 19 N
LONGITUDE: 131 09 31 W
ELEVATION: 120 Metres

UTM ZONE: 09 (NAD 83)

NORTHING: 5797187
EASTING: 352829

LOCATION ACCURACY: Within 500M

COMMENTS: Adits, Figure 1 (Assessment Report 8197). Located on the hill slopes north of Ikeda Cove, approximately 2 kilometres southwest of Ikeda Point.

COMMODITIES: Iron Copper

MINERALS

SIGNIFICANT: Magnetite Chalcopyrite Pyrite
ASSOCIATED: Calcite Quartz
ALTERATION: Epidote Pyrite
COMMENTS: Calc-silicate alteration assemblage prevalent.
ALTERATION TYPE: Skarn
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Podiform Massive
CLASSIFICATION: Skarn Replacement Industrial Min.
TYPE: K03 Fe skarn
SHAPE: Regular

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Triassic-Jurassic	Kunga	Undefined Formation	
Upper Triassic	Vancouver	Karmutsen	
Tertiary			Kano Plutonic Suite

ISOTOPIC AGE: 43.7 +/- 1.1 Ma
DATING METHOD: Potassium/Argon
MATERIAL DATED: Hornblende

LITHOLOGY: Limestone
Skarn
Magnetite Skarn
Massive Magnetite
Argillite
Greenstone
Volcanic Rock
Felsic Sill

HOSTROCK COMMENTS: Age date from andesite dike of Carpenter Bay Dike Swarm (GSC Paper 90-10, page 71, Table 2).

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Wrangell
METAMORPHIC TYPE: Contact Regional
PHYSIOGRAPHIC AREA: Queen Charlotte Ranges
RELATIONSHIP: Syn-mineralization Post-mineralization
GRADE: Greenschist Hornfels

CAPSULE GEOLOGY

The area is underlain by limestone and argillite of the Jurassic to Triassic Kunga Group which is intruded by felsic sills related to the Eocene-Oligocene Kano Plutonic Suite (Carpenter Bay Dike Swarm). The Kunga limestones are conformably underlain by Vancouver Group, Upper Triassic Karmutsen Formation volcanics.

Iron skarn mineralization occurs in limestone adjacent to a felsic sill near the Karmutsen contact. The skarn is a pod of massive magnetite, 1.5 to 3 metres wide and 10 metres long with a selvage (less than a metre) of pyrite, magnetite and chalcopyrite.

Between 1979 and 1982, Placer Development Limited conducted sampling and geological mapping. In 1987, G.G. Richards sampled the property.

BIBLIOGRAPHY

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EMPR BULL 54

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 43
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR EXPL 1980-365; 1981-231; 1987-C346
GSC MAP 1385A
GSC P 86-20; 88-1E, pp. 213-216, 221-227; 89-1H, pp. 95-112, 117-120;
90-10, pp. 59-87, 163-172; 91-1A, pp. 383-391
MIN REV March/April 1988, pp. 19-24

DATE CODED: 1986/07/17
DATE REVISED: 1999/08/30

CODED BY: LDJ
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

BIBLIOGRAPHY

EMPR AR 1918-41,105; 1919-40; 1920-44; 1921-39; 1922-42; 1923-43;
1924-43; 1963-128
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EMPR BULL *54, p. 218
EMPR EXPL 1980-366; *1984-360
EMPR FIELDWORK 1997, pp. 19-1-19-14
EMPR INDEX 3-195
EMR MP CORPFILE (The "Ellen Group" Gold Mining Company, Limited)
GSC MAP 278A; 1385A
GSC P 86-20; 88-1E, pp. 221-227; 89-1H; 90-10; 92-1a, pp. 351-360
GCNL #73, 1981
Chevron File

DATE CODED: 1986/07/10
DATE REVISED: 1999/08/30

CODED BY: LDJ
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103B 013**

NATIONAL MINERAL INVENTORY: 103B12 Fe1

NAME(S): **LOBSTALK**, MARVEN, VALLEY,
BUD

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103B12E
BC MAP:

MINING DIVISION: Skeena

LATITUDE: 52 40 09 N
LONGITUDE: 131 40 16 W
ELEVATION: 20 Metres

UTM ZONE: 09 (NAD 83)

NORTHING: 5838818
EASTING: 319391

LOCATION ACCURACY: Within 500M

COMMENTS: Figure 34 (Bulletin 54); located on the western shore of Lyell Island.

COMMODITIES: Iron

MINERALS

SIGNIFICANT: Magnetite Pyrite
ALTERATION TYPE: Skarn
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Skarn Replacement Industrial Min.
TYPE: K03 Fe skarn

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Upper Triassic	Vancouver	Karmutsen	

LITHOLOGY: Greenstone
Limestone
Magnetite Skarn

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Wrangell
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

RELATIONSHIP:

GRADE: Greenschist

CAPSULE GEOLOGY

The property is located on the west side of Lyell Island, Queen Charlotte Islands, northwest of Lyell Bay. The showings are less than 30 metres from shore.

The property was held in 1965 as the Marven group of 10 located claims. During the year Falconbridge Nickel Mines, Limited, put down 2 short packsack diamond drill holes; one bottomed in skarny magnetite at 27 metres; the other ended in greenstone at 23 metres. In 1964 a detailed magnetometer survey of the property was carried out by Placid Oil Company.

Pyritic magnetite replaces regionally metamorphosed greenstone and minor limestone of the Vancouver Group, Upper Triassic Karmutsen Formation. The rocks strike 150 degrees and dip about 50 degrees east.

Magnetite exposures and a magnetic anomalous area cover 14 square metres. A drill hole encountered magnetite skarn at 27 metres depth.

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EMPR ASS RPT *482, *645
EMPR BULL *54, p. 192
EMPR PF (McDougall, J.J., (1956): Report on Properties at Ikeda Bay, Queen Charlotte Islands, pp. 30-32 - refer to the Lily Mine, 103B 028)
GSC MAP 1385A
GSC P 86-20; 88-1E, pp. 221-227; 89-1H; 90-10; 92-1A, pp. 351-360
MIN REV March/April 1988, pp. 19-24

DATE CODED: 1986/07/11
DATE REVISED: 1989/03/09

CODED BY: LDJ
REVISED BY: LLC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103B 014**

NATIONAL MINERAL INVENTORY: 103B11 Sds1

NAME(S): **HOTSPRING ISLAND**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103B11W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 52 34 34 N
LONGITUDE: 131 26 36 W
ELEVATION: 10 Metres

NORTHING: 5827922
EASTING: 334439

LOCATION ACCURACY: Within 500M

COMMENTS: West shore of Hotspring Island; located about 6.4 kilometres south of Lyell Island.

COMMODITIES: Hotspring Sodium Sulphate

MINERALS

SIGNIFICANT: Chloride Sulphate
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Hydrothermal Industrial Min.
TYPE: T02 Geothermal spring

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Tertiary	Undefined Group	Masset	
Lower Cretaceous	Undefined Group	Longarm	

LITHOLOGY: Agglomerate
Siltstone
Greywacke

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Wrangell

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

CAPSULE GEOLOGY

The hot mineral spring is located at a 9-metre elevation on the west shore of Hotspring Island which lies 26 kilometres south of Lyell Island.

Analysis of the spring was taken in 1901.

The wallrock consists of a volcanic hypabyssal porphyry plug of the Tertiary Masset Formation, intruding siltstone and greywacke of the Lower Cretaceous Longarm Formation. These rocks are cut by quartz veins up to several centimetres wide.

The hot spring issues from several fissures within agglomerates at a rate of about 0.06 cubic metres per minute. The issuing temperature is 72 degrees celsius and the pH at 23 degrees celsius is 8.1. An analysis of the water gave 28.5 grains per litre of chlorides and 1.2 grains per litre of sulphates. Elemental content of the water, in parts per million, is as follows: Si - 46, Ca - 61, Na - 784, K - 48, Cl - 1742, SO4 - 199 and HCO3 - 24.

The hot spring may be a saline spring recirculating warmed meteoric waters with added seawater.

BIBLIOGRAPHY

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EMPR BULL 54, Fig. 34
GSC MAP 1385A
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McDonald, J.J., (1978): Hotsprings of Western Canada, A Complete Guide; Labrador Tea Company, Vancouver, pp. 106-108

DATE CODED: 1986/06/25
DATE REVISED: 1989/03/09

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103B 015**

NATIONAL MINERAL INVENTORY: 103B5 Mo1

NAME(S): **YAKULANAS**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103B05E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 52 24 29 N
LONGITUDE: 131 32 26 W
ELEVATION: 1 Metres

NORTHING: 5809462
EASTING: 327194

LOCATION ACCURACY: Within 500M

COMMENTS: Showing, Figure 34 (Bulletin 54); located on the western shore of Yakulanas Bay on the west side of Moresby Island.

COMMODITIES: Molybdenum Copper

MINERALS

SIGNIFICANT: Molybdenite Chalcopyrite Pyrite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein

CLASSIFICATION: Hydrothermal Epigenetic Igneous-contact

TYPE: L PORPHYRY

SHAPE: Irregular

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE

Upper Triassic
Middle Jurassic

GROUP

Vancouver

FORMATION

Karmutsen

IGNEOUS/METAMORPHIC/OTHER

San Christoval Plutonic Suite

ISOTOPIC AGE: 170-175 +/- 5 Ma

DATING METHOD: Uranium/Lead

MATERIAL DATED: Zircon

LITHOLOGY: Amphibolite Gneiss
Quartz Diorite

HOSTROCK COMMENTS: San Christoval Plutonic Suite is dated Middle Jurassic; age dates from Geological Survey of Canada 1989 research work-Pers.Comm.:Anderson,R.

GEOLOGICAL SETTING

TECTONIC BELT: Insular

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

TERRANE: Wrangell

METAMORPHIC TYPE: Contact Regional

RELATIONSHIP: Syn-mineralization
Post-mineralization

GRADE: Amphibolite

CAPSULE GEOLOGY

The showing is located at sea level on the southwest side of Yakulanas Bay on the west side of Moresby Island.

Irregular quartz veins with coarse molybdenite, pyrite and chalcopyrite, occur in Vancouver Group, Upper Triassic Karmutsen Formation amphibolite gneiss adjacent to quartz diorite of the Middle Jurassic San Cristoval Plutonic Suite.

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EMPR BULL *54, p. 220

GSC MAP 1385A

GSC P 88-1E, pp. 213-216,221-227; 89-1H, pp. 95-112; 90-10, pp. 59-87; 92-1E, pp. 117-123

MIN REV March/April 1988, pp. 19-24

PERS COMM (R.G. Anderson, March 1989)

DATE CODED: 1986/06/26
DATE REVISED: 1989/03/03

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103B 016**

NATIONAL MINERAL INVENTORY: 103B6 Ni1

NAME(S): **JOHNSON NICKEL**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103B06W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 52 24 54 N
LONGITUDE: 131 21 41 W
ELEVATION: 25 Metres

NORTHING: 5809821
EASTING: 339404

LOCATION ACCURACY: Within 500M

COMMENTS: Showing, Figures 12, 13 (Assessment Report 8251); located near Section Cove, Burnaby Island.

COMMODITIES: Nickel Copper

MINERALS

SIGNIFICANT: Pyrrhotite Chalcopyrite Bravoite

COMMENTS: Minor nickeliferous minerals occur.

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown

CLASSIFICATION: Magmatic Igneous-contact

TYPE: M02 Tholeiitic intrusion-hosted Ni-Cu

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Triassic-Jurassic

Kunga

Undefined Formation

Burnaby Island Plutonic Suite

Jurassic

ISOTOPIC AGE: 164 +/- 3 Ma

DATING METHOD: Uranium/Lead

MATERIAL DATED: Zircon

LITHOLOGY: Gabbro
Limestone
Argillite

HOSTROCK COMMENTS: Diorite stock & gabbroic dikes related to Jurassic Burnaby Island Plutonic Suite. Age date:R.G. Anderson (GSC), Pers.Comm., March, 1989.

GEOLOGICAL SETTING

TECTONIC BELT: Insular

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

TERRANE: Wrangell

METAMORPHIC TYPE: Contact Regional

RELATIONSHIP: Syn-mineralization

GRADE: Greenschist
Hornfels

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1963

SAMPLE TYPE: Grab

COMMODITY

GRADE

Copper

1.0000

Per cent

Nickel

1.0000

Per cent

REFERENCE: Bulletin 54, page 216.

CAPSULE GEOLOGY

The property is located at the northwestern end of Burnaby Island. The original discovery lies in the bottom of the westernmost north-flowing creek, about 183 metres from the shore.

The showing was apparently discovered by a Nick Johnson, who staked 2 claims. Silver Standard Mines Limited and Jedway Iron Ore Limited, a subsidiary of The Granby Mining Company Limited, optioned the 2 claims and staked an additional 138 claims. Joint exploration of the property was carried on from January 3rd to June 5th, 1963, and included geological mapping, magnetometer, electromagnetic, and geochemical soil surveys, trenching, and 565 metres of packsack diamond drilling in 30 holes. The diamond drilling showed the original discovery was confined to a small pocket. The geophysical work located other bodies of similar mineralization, none of which were considered to be large enough to warrant further work.

The area is underlain by limestones and argillites of the Jurassic to Triassic Kunga Group. These are intruded by small heterogeneous diorite stocks and later gabbro dikes and plugs related

CAPSULE GEOLOGY

to the Middle to Late Jurassic Burnaby Island Plutonic Suite. The rocks are cut by north-northwest faults related to the Louscoone Inlet-Rennell Sound fault zone.

An outcrop, about 5.5 metres in diameter, consists of gabbro mineralized with pyrrhotite, chalcopyrite and bravoite with minor nickeliferous minerals. The occurrence contains about 1 per cent nickel and 1 per cent copper (Bulletin 54, page 216). The mineralized gabbro body is very localized, however, another mineralized outcrop was located several metres to the south.

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EMPR ASS RPT *8094, *8251
EMPR BULL *54, p. 216
EMPR EXPL *1979-240; *1980-364
EMR MP CORPFILE (Silver Standard Mines Limited-Annual Reports
1963, 1964; The Granby Mining Company Limited)
GSC MAP 1385A
GSC P 88-1E, pp. 213-216,*221-227; 89-1H, pp. 95-104,*105-112;
90-10, pp. 59-87; 91-1A, pp. 383-391

DATE CODED: 1986/07/07
DATE REVISED: 1989/03/06

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

CAPSULE GEOLOGY

to the east.

The massive to poorly bedded garnet-actinolite-diopside-zoisite skarn is interbedded with baked cherty siltstone and layered carbonate. Massive pyrrhotite pods with accessory chalcopyrite, molybdenite and magnetite occur along the skarn and fault-mylonite zones. Allemonite is associated with calcite veins and the pyrrhotite mineralization, which is sometimes nickeliferous.

BIBLIOGRAPHY

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EMPR BULL *54, p. 193
EMPR EXPL 1979-240; *1980-364
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GSC P 86-20; *88-1E, pp. 213-216, 221-227; *89-1H, pp. 95-112; 90-10,
pp. 59-87, 253-277; 91-1A, pp. 383-391
MIN REV March/April 1988, pp. 19-24

DATE CODED: 1986/07/08
DATE REVISED: 1989/03/05

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103B 018**

NATIONAL MINERAL INVENTORY:

NAME(S): **NICK'S SHOWINGS**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103B06W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 52 25 39 N
LONGITUDE: 131 18 41 W
ELEVATION: 60 Metres

NORTHING: 5811101
EASTING: 342849

LOCATION ACCURACY: Within 500M

COMMENTS: Showings, Figures 10, 11 (Assessment Report 8251); located in the northern part of Burnaby Island.

COMMODITIES: Copper Molybdenum Nickel

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Pyrrhotite Molybdenite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Skarn Igneous-contact Replacement
TYPE: K01 Cu skarn
SHAPE: Irregular

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Triassic-Jurassic Jurassic	Kunga	Undefined Formation	Burnaby Island Plutonic Suite

ISOTOPIC AGE: 164 +/- 3 Ma

DATING METHOD: Uranium/Lead
MATERIAL DATED: Zircon

LITHOLOGY: Argillite
Skarn
Hornfels
Limestone
Quartz Monzonite

HOSTROCK COMMENTS: Monzonitic intrusives related to Burnaby Is. Plutonic Suite. Age date from R.G. Anderson (GSC), Personal Communication: March, 1989.

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Wrangell
METAMORPHIC TYPE: Contact Regional
PHYSIOGRAPHIC AREA: Queen Charlotte Ranges
RELATIONSHIP: Syn-mineralization Post-mineralization
GRADE: Greenschist Hornfels

CAPSULE GEOLOGY

The area is underlain by argillite and limestone of the Jurassic to Triassic Kunga Group in contact with the monzonitic intrusives of the Middle to Late Jurassic Burnaby Island Plutonic Suite.

Copper, molybdenum and nickel showings occur in skarn and hornfelsed argillite near the contact with quartz monzonite. The mineralization consists of disseminated chalcopyrite, pyrrhotite, pyrite and minor molybdenite.

BIBLIOGRAPHY

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EMPR BULL 54, p. 220
EMPR EXPL 1979-240; 1980-364
GSC MAP 1385A
GSC P 88-1E, pp. 213-216, *221-227; 89-1H, pp. 95-112; 90-10, pp. 59-87, 163-172; 91-1A, pp. 383-391
MIN REV March/April 1988, pp. 19-24

DATE CODED: 1986/07/08
DATE REVISED: 1989/03/09

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103B 019**

NATIONAL MINERAL INVENTORY: 103B6 Fe3

NAME(S): **MAC**, JONES MAGNETITE, BURNABY

STATUS: Developed Prospect
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103B06W
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 52 24 54 N
LONGITUDE: 131 17 46 W
ELEVATION: 80 Metres

NORTHING: 5809677
EASTING: 343843

LOCATION ACCURACY: Within 500M

COMMENTS: Symbol, Figure 5, Sheet A (Bulletin 54); located in the northern part of Burnaby Island.

COMMODITIES: Iron Magnetite

MINERALS

SIGNIFICANT: Magnetite
ALTERATION: Garnet
ALTERATION TYPE: Skarn
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Concordant Massive
CLASSIFICATION: Skarn Replacement Epigenetic Industrial Min.
TYPE: K03 Fe skarn
SHAPE: Regular
MODIFIER: Faulted
DIMENSION: 0075 x 0045 x 0005 Metres STRIKE/DIP: 045/35N TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Upper Triassic	Kunga	Sadler	
Upper Triassic	Vancouver	Karmutsen	
Jurassic			Burnaby Island Plutonic Suite

ISOTOPIC AGE: 164 +/- 3 Ma
DATING METHOD: Uranium/Lead
MATERIAL DATED: Zircon

LITHOLOGY: Limestone
Massive Magnetite
Greenstone
Skarn
Monzonite

HOSTROCK COMMENTS: Karmutsen greenstones & Kunga limestones are intruded by Burnaby Is. Plutonic Suite. Age date: R.G. Anderson (GSC), Pers.Comm., March, 1989.

GEOLOGICAL SETTING

TECTONIC BELT: Insular PHYSIOGRAPHIC AREA: Queen Charlotte Ranges
TERRANE: Wrangell
METAMORPHIC TYPE: Contact Regional RELATIONSHIP: Syn-mineralization GRADE: Greenschist
Post-mineralization Hornfels

INVENTORY

ORE ZONE: MAC REPORT ON: Y
CATEGORY: Inferred YEAR: 1964
QUANTITY: 1360800 Tonnes
COMMODITY: Iron GRADE: 45.0000 Per cent
COMMENTS: Possible reserve grading between 40 to 50 per cent iron.
REFERENCE: George Cross News Letter No.102, 1964.

CAPSULE GEOLOGY

The property is located on Burnaby Island, Queen Charlotte Islands. The showings on the Mac No. 1 claim outcrop between elevations of 61 and 122 metres on the north side of an easterly flowing stream 5.2 kilometres southwest of Scudder Point. The showings were discovered by A. Hino in about 1906 but little exploration work was done other than a dip-needle survey. Merrican International Mines Ltd. acquired the Mac group of 12 claims in 1962 and subsequently expanded the property to 57 claims. Work by the company during 1963-1964 included a ground magnetometer survey, trenching, 11 X-ray drill holes totalling 364 metres and 16

CAPSULE GEOLOGY

EX diamond drill holes totalling 1678 metres.

The company has stated possible reserves of 1,360,778 tonnes, grading between 40 and 50 per cent iron (George Cross Newsletter No. 102, 1964). Considering the drilling pattern which was largely enforced by topography, and the resulting acute intersections of strata and ore, the results would require caution in interpretation (Brown, 1968).

The area is underlain by limestone of the Upper Triassic Sadler Formation (Kunga Group) and greenstone of the Vancouver Group, Upper Triassic Karmutsen Formation. Both are intruded by monzonitic stocks of the Middle to Late Jurassic Burnaby Island Plutonic Suite. The stratified rocks strike 045 to 060 degrees and dip 35 to 55 degrees northwest. Fine-grained basic dikes and sills cut the limestone.

A concordant body of magnetite occurs as a replacement at the limestone and greenstone contact. The body is about 75 metres long and varies in thickness from 1.5 metres at the west to 7.6 metres at the east, where it abuts against a greenstone dike. A steeply dipping northwest fault cuts the magnetite zone, offsetting the east half 25 metres to the northwest. The main showing is almost pure magnetite with rare garnet crystals. Other skarn minerals or sulphides are seemingly absent in the ore.

Diamond drilling encountered magnetite with a downward extension of 45 metres. An average assay for mineralized sections gave 49 per cent iron. Inferred reserves are 1,360,800 tonnes grading between 40 to 50 per cent iron (George Cross Newsletter No.102, 1964).

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EMPR BULL *54, pp. 193,194
EMPR EXPL 1980-364
EMPR PF (Selnes, W.E., (1963): Burnaby Island Iron Groups for Merrican International Mines Ltd., May 28, 1963; Sketch Maps by G.L. May, 1964)
EMR MP CORPFILE (Merrican International Industries Ltd.)
GSC EC GEOL Series #3 *Vol. 1, 1926, pp. 32,33
GSC MAP 1385A
GSC P 88-1E, pp. 213-216,*221-227; 89-1H, pp. 95-104,*105-112; 90-10, pp. 59-87, 163-172; 91-1A, pp. 383-391
CMH 1972, p. 73
GCNL #102, 1964
MIN REV March/April 1988, pp. 19-24
Placer Dome File

DATE CODED: 1986/07/08
DATE REVISED: 1989/03/05

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103B 020**

NATIONAL MINERAL INVENTORY: 103B6 Fe2

NAME(S): **JIB**, POOLE, UNDERLIME

STATUS: Developed Prospect
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103B06W
BC MAP:

Underground

MINING DIVISION: Skeena

LATITUDE: 52 21 09 N
LONGITUDE: 131 15 36 W
ELEVATION: 1 Metres

UTM ZONE: 09 (NAD 83)

NORTHING: 5802650
EASTING: 346081

LOCATION ACCURACY: Within 500M

COMMENTS: Two orebodies lie approximately 75 and 210 metres below sea level respectively, near Bluejay Cove on Burnaby Island (Bulletin 54).

COMMODITIES: Iron Magnetite Copper Titanium

MINERALS

SIGNIFICANT: Magnetite Pyrite Chalcopyrite Pyrrhotite Sphalerite
COMMENTS: Rare chalcopyrite, pyrrhotite and sphalerite.
ALTERATION: Garnet Epidote Actinolite Pyroxene Chlorite
Hematite Quartz Calcite

ALTERATION TYPE: Skarn
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Massive
CLASSIFICATION: Skarn Replacement Industrial Min.
TYPE: K03 Fe skarn
DIMENSION: 120 x 12 Metres STRIKE/DIP:
COMMENTS: Underlime orebody.

TREND/PLUNGE: 170/

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Upper Triassic	Kunga	Sadler	
Upper Triassic	Vancouver	Karmutsen	
Upper Jurassic			Burnaby Island Plutonic Suite

ISOTOPIC AGE: 164 +/- 3 Ma
DATING METHOD: Uranium/Lead
MATERIAL DATED: Zircon

LITHOLOGY: Greenstone
Limestone
Basalt Greenstone Sill
Diorite Porphyry
Basalt Andesite Dike
Monzonite
Quartz Monzonite
Skarn

HOSTROCK COMMENTS: Age date from the Geological Survey of Canada (R.G. Anderson, personal communication, March 1989).

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Wrangell
METAMORPHIC TYPE: Regional Contact RELATIONSHIP: GRADE: Greenschist Hornfels
PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

INVENTORY

ORE ZONE: TOTAL REPORT ON: Y
CATEGORY: Unclassified YEAR: 1965
QUANTITY: 7438220 Tonnes
COMMODITY: Iron GRADE: 49.4500 Per cent
COMMENTS: Estimated total reserves. Grade is soluble iron. Leitch Gold Mines Limited, 1965 Annual Report.
REFERENCE: Bulletin 54, page 197.

CAPSULE GEOLOGY

The property is located in the Queen Charlotte Islands, at the southeast corner of Burnaby Island, between Pelican and Bluejay Coves.

The shoreline in this vicinity was prospected during the period 1862-64 by Francis Poole, apparently for The Queen Charlotte Mining

CAPSULE GEOLOGY

and Prospecting Company, Limited. Several small garnet skarn zones containing chalcopyrite and magnetite, occurring at intrusive-limestone contacts, were the targets of Poole's work, which included a 4-metre shaft and a 4-metre adit. Further work was reported on the Poole showings in 1902 by owner J. Raper who extended the shaft to 9 metres and the adit to 5 metres.

Denison Mines Limited carried out an aeromagnetic survey over the area in 1961. A magnetic anomaly was located offshore but the claims then located were allowed to lapse.

The ground, including the old Poole showings, was restaked in September 1962 as the 9 claim Jib group under a joint exploration agreement between Leitch Gold Mines Limited and Highland-Bell, Limited (or its wholly owned subsidiary Mastodon-Highland Bell Mines Limited). A ground magnetometer survey in the fall of 1962 defined three magnetic anomalies of 5,000 to 10,000 gamma relief at and just offshore. The drilling of angle holes from shore began in January 1963 and 3721 metres of drilling in 18 holes was completed. Under the joint exploration agreement a new company, Burnaby Iron Mines Limited, was incorporated in January 1964. During 1964 a combined magnetic and sounding survey was carried out over the offshore claims. In 1965 an additional 2053 metres of diamond drilling was carried out in deepening 6 holes and the drilling of 5 new holes. This work increased the indicated reserves to approximately 7,257,480 tonnes having an average grade of 49.5 per cent iron (Leitch Gold Mines Limited, 1965 Annual Report). All but a small fraction of the deposit is more than 61 metres below the bedrock bottom of Hecate Strait and hence should be amenable to standard underground mining methods.

Teck Corporation in 1971 acquired the assets of Highland-Bell, Limited and Leitch Mines Limited (changed from Leitch Gold Mines Limited in 1970); Highland and Leitch were dissolved in 1974 and 1975 respectively, leaving Burnaby Iron Mines Limited under the direct control of Teck Corporation.

Massive chloritized amygdaloidal basalts of the Upper Triassic Karmutsen Formation (Vancouver Group) are overlain by about 250 metres of grey massive limestone and black flaggy limestone of the Upper Triassic Sadler and Peril formations (Lower Jurassic to Upper Triassic Kunga Group). To the north are monzonites and quartz monzonites of the Late Jurassic Burnaby Island Plutonic Suite. The stratified rocks are intruded by basaltic greenstone sills likely related to Karmutsen volcanism, by skarned diorite porphyries, and by late basalt to andesite dikes.

The strata generally strikes northeast and dips gently northwest with minor west trending, 10 to 20 degree plunging folds. Three prominent trends of steep dipping block faults are 130 to 140 degrees, 60 to 70 degrees, and 10 to 20 degrees.

Two distinct orebodies lie offshore at about 75 and 210 metres below sea level, respectively. The Underlime orebody, the deepest, is generally conformable, replacing the uppermost part of the Karmutsen volcanics and to a lesser extent the basal Sadler limestone. The body trends about 170 degrees for over 120 metres, with widths from 12 to 45 metres in the south part. The orebody is separated from adjacent greenstone or limestone by a thin sheath of skarn.

The upper orebodies are concentrated about greenstone sills and are less regular than the Underlime orebody, but are generally higher grade and thicker (up to 60 metres). Skarn is a common transitional rock between ore and greenstone or limestone, but does not form a continuous sheath. The thicker sections appear to be related to the faults, particularly the main fault (striking 125 degrees) through the ore zone.

The ore is generally pure magnetite with gradations to skarn with trace amounts of magnetite and hematite. Sulphides are erratic with mainly pyrite and rare chalcopyrite, pyrrhotite and sphalerite. The average content of the ore is 0.02 per cent copper, 0.2 per cent sulphur, 0.05 per cent phosphorous, 0.08 per cent titanium, 7.5 per cent silica and 1.5 per cent alumina (Open File 1988-28, page 86).

Skarn minerals are variably developed and include garnet, epidote, actinolite, pyroxene, chlorite, quartz and calcite.

Estimated total reserves are 7,438,220 tonnes grading 49.45 per cent soluble iron (Bulletin 54, page 197).

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EMPR EXPL 1980-364
EMPR OF *1988-28, pp. 83-86; 1992-1; 1992-9

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EMR MP CORPFILE (Leitch Gold Mines Limited; Highland-Bell, Limited;
Burnaby Iron Mines Limited; Teck Corporation)
EMR MP RESFILE (Jib)
GSC EC GEOL *3, Vol.1 (1926), pp. 32,33
GSC MAP 1385A
GSC P *88-1E, pp. 213-216,221-227; 89-1H, pp. 95-112; 90-10, pp.
59-87, 163-172; 91-1A, pp. 383-391
CANMET IR 63, p. 111
MIN REV March/April 1988, pp. 19-24
W MINER *Oct. 1965, p. 97

DATE CODED: 1986/07/17
DATE REVISED: 1989/03/07

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103B 021**

NATIONAL MINERAL INVENTORY: 103B6 Cu18

NAME(S): **SKINCUTTLE ISLAND**, COPPER ISLANDS

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103B06E
BC MAP:

Underground

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 52 20 49 N
LONGITUDE: 131 13 36 W
ELEVATION: 30 Metres

NORTHING: 5801961
EASTING: 348332

LOCATION ACCURACY: Within 500M

COMMENTS: Centre of Skincuttle Island. See also George Island (103B 002) and East Copper Island (103B 022).

COMMODITIES: Copper Iron Magnetite

MINERALS

SIGNIFICANT: Chalcopyrite Magnetite Pyrite Bornite Tennantite
Cuprite

ASSOCIATED: Quartz

ALTERATION TYPE: Skarn

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated Vein
CLASSIFICATION: Skarn Replacement Industrial Min.
TYPE: K01 Cu skarn

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Upper Triassic
Upper Triassic

GROUP

Kunga
Vancouver

FORMATION

Sadler
Karmutsen

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Andesite
Garnet Skarn
Skarn
Limestone
Basalt

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Wrangell

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

CAPSULE GEOLOGY

The Copper Islands showings are located off the south-eastern corner of Burnaby Island, on three small islands, Skincuttle, George, and East Copper.

These showings were discovered by Francis Poole while prospecting for Queen Charlotte Mining Company in 1862-3. There is no record of this company as a Canadian incorporation.

In 1900 the showings were rediscovered by A. Heino who staked three mineral claims, the Skincuttle Entrance, Golden Gate, and Trust, on East Copper Island. Mr. Heino worked the claims until about 1930. Development consisted of a 30-metre shaft with a 55-metre crosscut, a 12-metre shaft, and a 46-metre adit. In 1907 Abe Johnson restaked the Red Raven claim on the south side of East Copper Island. He drove a 11-metre adit and a 3-metre crosscut on the property. In 1917 the East Copper Island showings (103B 022), held as the Quinitisa claim, produced 36.2 tonnes of copper ore which was shipped to the Granby smelter.

The Skincuttle Island showings were held in 1902-07 by Messrs. Law, Hamilton and Raper. Development work on the three claims, Skincuttle, Poole, and Margaret, included 6.7-metre and 9.1-metre shafts, two crosscut adits, 6 open cuts, and some trenching. The showings were later staked by A. Heino.

The George Island showing (103B 002) was owned by W. Campbell in 1910.

In the mid 1960's the Copper Islands showings were held as follows: Skincuttle Island, part of Jib "B" group; George Island, Sandy Nos. 1 to 4; East Copper Island, Elma group - five claims. Work done at this time included a minor amount of packsack drilling on East Copper Island, and a magnetometer survey at sea off the island by Burnaby Iron Mines Limited in 1964.

The Copper Islands are underlain by grey limestone of the Upper Triassic Sadler Formation (Kunga Group) and intrusive sills of

CAPSULE GEOLOGY

amygdaloidal andesite to basalt of the probable Vancouver Group, Upper Triassic Karmutsen Formation. The strata strikes east, dips 10 to 30 degrees north, and is cut by small steep block faults oriented north-northwest and west.

The showings are mainly in garnet-rich skarns replacing the volcanics several hundred metres along strike but rarely over 3 metres thick. Mineralization occurs as disseminated chalcopyrite, and minor magnetite, pyrite, bornite, tennantite and cuprite. Chalcopyrite also occurs disseminated in adjacent unskarned limestone, as veinlets transecting the bedding in and near skarns and in quartz veins associated with the block faults.

The Skincuttle Island showing is about 35 centimetres wide.
A. Heino mined 9 tonnes in 1909, but no returns were made.

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MIN REV *March/April 1988, pp. 19-24

DATE CODED: 1986/07/16
DATE REVISED: 1999/08/30

CODED BY: LDJ
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103B 022**

NATIONAL MINERAL INVENTORY: 103B6 Cu18

NAME(S): **EAST COPPER ISLAND, RED RAVEN, QUINTSA, SKINCUTTLE ENTRANCE, COPPER ISLANDS**

STATUS: Past Producer
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103B06E
BC MAP:

Underground

MINING DIVISION: Skeena

LATITUDE: 52 21 29 N
LONGITUDE: 131 10 36 W
ELEVATION: 30 Metres

UTM ZONE: 09 (NAD 83)

NORTHING: 5803093
EASTING: 351775

LOCATION ACCURACY: Within 500M

COMMENTS: Centre of East Copper Island; located off the southeastern corner of Burnaby Island. See also George Island (103B 002) and Skincuttle Island (103B 021).

COMMODITIES: Copper Silver Iron Magnetite

MINERALS

SIGNIFICANT: Chalcopyrite Magnetite Bornite Tennantite Cuprite
Pyrite
ASSOCIATED: Quartz Calcite
ALTERATION: Hornblende Garnet
ALTERATION TYPE: Skarn
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated Vein Concordant
CLASSIFICATION: Skarn Replacement Industrial Min.
TYPE: K01 Cu skarn
SHAPE: Regular
DIMENSION: Metres STRIKE/DIP: 090/20N TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Upper Triassic	Kunga	Sadler	
Upper Triassic	Vancouver	Karmutsen	

LITHOLOGY: Amygdaloidal Andesite
Amygdaloidal Basalt
Garnet Skarn
Skarn
Limestone

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Wrangell

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1919
SAMPLE TYPE: Grab
COMMODITY GRADE
Copper 3.5000 Per cent
COMMENTS: Mineralized zone reported to average 3.5 per cent copper with minor silver values.
REFERENCE: National Mineral Inventory Card 103BC Cu18.

CAPSULE GEOLOGY

The Copper Islands showings are located off the south-eastern corner of Burnaby Island, on three small islands, Skincuttle, George, and East Copper.

These showings were discovered by Francis Poole while prospecting for Queen Charlotte Mining Company in 1862-3. There is no record of this company as a Canadian incorporation.

In 1900 the showings were rediscovered by A. Heino who staked three mineral claims, the Skincuttle Entrance, Golden Gate, and Trust, on East Copper Island. Mr. Heino worked the claims until about 1930. Development consisted of a 30-metre shaft with a 55-metre crosscut, a 12-metre shaft, and a 46-metre adit. In 1907 Abe Johnson restaked the Red Raven claim on the south side of East Copper Island. He drove a 11-metre adit and a 3-metre crosscut on the property. In 1917 the East Copper Island showings, held as the

CAPSULE GEOLOGY

Quinitza claim, produced 36.2 tonnes of copper ore which was shipped to the Granby smelter.

The Skincuttle Island showings (103B 021) were held in 1902-07 by Messrs. Law, Hamilton and Raper. Development work on the three claims, Skincuttle, Poole, and Margaret, included 6.7-metre and 9.1-metre shafts, two crosscut adits, 6 open cuts, and some trenching. The showings were later staked by A. Heino.

The George Island showing (103B 002) was owned by W. Campbell in 1910.

In the mid 1960's the Copper Islands showings were held as follows: Skincuttle Island, part of Jib "B" group; George Island, Sandy Nos. 1 to 4; East Copper Island, Elma group - five claims. Work done at this time included a minor amount of packsack drilling on East Copper Island, and a magnetometer survey at sea off the island by Burnaby Iron Mines Limited in 1964.

The Copper Islands are underlain by grey limestone of the Upper Triassic Sadler Formation (Kunga Group) and intrusive sills of amygdaloidal andesite to basalt probably associated with the Vancouver Group, Upper Triassic Karmutsen Formation. The strata strike east, dip 10 to 30 degrees north, and are cut by small steep block faults oriented north-northwest and west.

The showings are mainly in garnet-rich skarns, which replace the volcanics for several hundred metres along strike but rarely over 3 metres thick. Mineralization occurs as disseminated chalcopyrite, and minor magnetite, pyrite, bornite, tennantite and cuprite. Chalcopyrite also occurs disseminated in adjacent unskarned limestone as veinlets transecting the bedding in and near skarns and in quartz veins associated with the block faults. The mineralized zone was reported to average 3.5 per cent copper with small values in silver (National Mineral Inventory Card 103B6 Cul8).

The East Copper Island showings were worked by adits and shafts and produced over 7000 kilograms of copper and 700 grams of silver from 1903 to 1917.

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GSC MAP 278A; 1385A
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GSC SUM RPT *1909 p. 78
MIN REV March/April 1988, pp. 19-24

DATE CODED: 1986/07/16
DATE REVISED: 1999/08/30

CODED BY: LDJ
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103B 023**

NATIONAL MINERAL INVENTORY: 103B6 Cu12

NAME(S): **GIGGER, SEA KING, MOTHER LODE,
BANK OF COMMERCE, BLUE JAY**

STATUS: Past Producer
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103B06W
BC MAP:
LATITUDE: 52 20 44 N
LONGITUDE: 131 16 41 W
ELEVATION: 5 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Symbol, Figure 34 (Bulletin 54); located near Kingfisher Cove, Burnaby Island.

Underground
MINING DIVISION: Skeena
UTM ZONE: 09 (NAD 83)
NORTHING: 5801916
EASTING: 344828

COMMODITIES: Iron Copper Magnetite

MINERALS

SIGNIFICANT: Magnetite Chalcopyrite Pyrite
ASSOCIATED: Calcite Hornblende
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Concordant Massive Vein
CLASSIFICATION: Replacement Industrial Min.
TYPE: K03 Fe skarn
DIMENSION: Metres STRIKE/DIP: 030/80W TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Triassic-Jurassic Kunga Undefined Formation

LITHOLOGY: Limestone
Massive Magnetite
Skarn
Intrusive Dike

GEOLOGICAL SETTING

TECTONIC BELT: Insular PHYSIOGRAPHIC AREA: Queen Charlotte Ranges
TERRANE: Wrangell

CAPSULE GEOLOGY

The showings, discovered in 1862 or 1863, are located at sea level on the southeast side of Burnaby Island. The Sea King mineral claim was staked in 1907 by a Captain Locke. Some surface stripping was done to trace the contact. In 1918 copper ore from the Bank of Commerce claim was shipped to Jedway by A.T. Wilds. In 1919 Messrs. Campbell and Wilds, owners of the Mother Lode and Bank of Commerce claims, sank a shaft 11 metres on a chalcopyrite showing. Intermittent work was continued by Campbell and Wilds into 1921. Limestones of the Jurassic to Triassic Kunga Group are cut by igneous dikes. The limestone contains a metre band of magnetite with minor chalcopyrite and pyrite which strikes 30 degrees and dips 80 degrees west. A short distance to the west is a light grey-coloured, 1.5 metre wide, igneous dike with hornblende, stringers of calcite and minor magnetite and chalcopyrite.

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EMPR INDEX 3-188
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GSC MAP 1385A
GSC P 88-1E, pp. 221-227; 89-1H, pp. 95-104; 90-10, pp. 163-172; 91-1A, pp. 383-391
MIN REV March/April 1988, pp. 19-24

DATE CODED: 1986/07/16
DATE REVISED: 1999/08/30

CODED BY: LDJ
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103B 023**

MINFILE NUMBER: **103B 024**

NATIONAL MINERAL INVENTORY: 103B6 Cu9

NAME(S): **LUCKY SEVEN**, DORATHKALON, PRODUCER,
PIPE, ARCHIE

STATUS: Past Producer
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103B06E
BC MAP:

Underground

MINING DIVISION: Skeena

LATITUDE: 52 18 49 N
LONGITUDE: 131 11 41 W
ELEVATION: 60 Metres

UTM ZONE: 09 (NAD 83)

NORTHING: 5798188
EASTING: 350395

LOCATION ACCURACY: Within 500M

COMMENTS: Mineralized fissure; shaft. Figure 6 (Assessment Report 10198).
Located along the only major creek mid-way between Funter Point and
Deluge Point about 2.0 kilometres east of Harriet Harbour.

COMMODITIES: Copper Silver Gold Zinc Lead

MINERALS

SIGNIFICANT: Chalcopyrite Pyrite Pyrrhotite Arsenopyrite Sphalerite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Massive Disseminated
CLASSIFICATION: Epigenetic
TYPE: I02 Intrusion-related Au pyrrhotite veins
SHAPE: Regular
DIMENSION: Metres

STRIKE/DIP: 030/60E

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Lower Jurassic
Tertiary

GROUP

Kunga

FORMATION

Sandilands

IGNEOUS/METAMORPHIC/OTHER

Kano Plutonic Suite

LITHOLOGY: Black Argillite
Limestone

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Wrangell

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Chip

YEAR: 1988

COMMODITY

GRADE

Copper	9.0100	Per cent
Lead	0.0100	Per cent
Zinc	0.0700	Per cent
Silver	275.9500	Grams per tonne
Gold	0.3400	Grams per tonne

COMMENTS: Chip sample taken across 1.0 metre of dike.

REFERENCE: Assessment Report 17507.

CAPSULE GEOLOGY

This property is located on the southeast coast of Moresby Island on the lower courses of a creek about 2 kilometres east of Harriet Harbour. The elevation ranges from sea level to 61 metres.

The showing was probably located in 1915 by H.E. Bodine. At the time it was referred to as the Lucky Seven, but it was later called the Dorathkalon and Producer Groups. In 1916 a 15-metre incline shaft and a 18-metre drift were driven.

In 1918 the property was owned by Messrs. Thompson and McKinnon and bonded to Seattle interests. A 114-metre adit was driven, with a 30-metre raise to the old drift; an aerial tramway was installed. In 1920 the property reverted to the owners.

Jedway Iron Ore Limited acquired the property in 1961 as the located Pipe No. 6 claim.

Between 1979 and 1982, Placer Development Limited conducted sampling and geological mapping. In 1987, G.G. Richards sampled the property.

Massive to disseminated sulphides occur over widths of up to 3

CAPSULE GEOLOGY

metres along the faulted contact between flat-lying black argillites of the Upper Triassic-Lower Jurassic Sandilands Formation (Kunga Group) and a dioritic dike, likely of the Eocene Kano Plutonic Suite (Carpenter Bay dike swarm). The dike and mineralized zone strike 030 and dip 60 degrees southeast.

Mineralization consists of disseminated and massive pyrite, chalcopyrite and pyrrhotite, with minor arsenopyrite and sphalerite, occurring as disseminations and in massive sections up to 25 centimetres wide, along the altered and faulted hanging wall of the dike and in disrupted argillites. Float from the dioritic dike in the immediate vicinity of the working also contains veins of galena and sphalerite. Several chip samples assayed as follows (Assessment Report 17507):

Cu(%)	Pb(%)	Zn(%)	Ag(g/t)	Au(g/t)	Description
0.19	0.01	0.25	11.66	0.21	0.5 m of disseminated to massive sulphides in argillite
9.01	0.01	0.07	275.95	0.34	1.0 metres of dike, including 10 centimetres of massive sulphide along its hanging wall contact

Small shipments of hand cobbled ore were made. In 1916, 38 tonnes of hand cobbled ore were shipped. From this 1866 grams of gold, 6780 grams of silver and 3781 kilograms of copper were recovered.

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 EMPR EXPL 1980-365; 1981-231; 1987-C346
 EMPR INDEX 3-194
 GSC BULL 365
 GSC MAP 1385A
 GSC P *88-1E, pp. 213-216,221-227; 89-1H, pp. 95-112; 90-10, pp. 59-87, 163-172, 465-487; 91-1A, pp. 383-391
 MIN REV March/April 1988, pp. 19-24

DATE CODED: 1986/07/17
 DATE REVISED: 1999/08/30

CODED BY: LDJ
 REVISED BY: PSF

FIELD CHECK: N
 FIELD CHECK: N

MINFILE NUMBER: **103B 025**

NATIONAL MINERAL INVENTORY: 103B6 Fe8

NAME(S): **TIP**, TIP 1

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103B06E
BC MAP:

MINING DIVISION: Skeena

LATITUDE: 52 18 19 N
LONGITUDE: 131 13 16 W
ELEVATION: 1 Metres

UTM ZONE: 09 (NAD 83)

NORTHING: 5797316
EASTING: 348568

LOCATION ACCURACY: Within 500M

COMMENTS: Located on the eastern shore at the head of Harriet Harbour (just south of Funter Point).

COMMODITIES: Iron Copper Magnetite

MINERALS

SIGNIFICANT: Magnetite Chalcopyrite Pyrite
ASSOCIATED: Calcite Quartz
ALTERATION: Garnet
ALTERATION TYPE: Skarn
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Replacement Skarn Industrial Min.
TYPE: K01 Cu skarn
SHAPE: Irregular
DIMENSION: 46 x 15 Metres STRIKE/DIP: 060/35N TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Upper Triassic
Upper Triassic

GROUP

Vancouver
Kunga

FORMATION

Karmutsen
Sadler

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Greenstone
Limestone
Garnet Skarn
Copper Magnetite Skarn

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Wrangell

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

CAPSULE GEOLOGY

This property is located on the southeast coast of Moresby Island, on the shore just south of the dock at Harriet Harbour. The showing was discovered and explored by Francis Poole in 1863. Jedway Iron Ore Limited acquired the property in 1961 as the Tip No. 1 claim.

An irregular garnetiferous copper-magnetite skarn occurs at the contact of the Vancouver Group, Upper Triassic Karmutsen volcanics and Upper Triassic Sadler Formation limestone. The mineralized body, consisting of magnetite, chalcopyrite, pyrite, garnet, calcite and quartz, is 46 metres long and 15 metres wide and strikes 060 degrees with a 25 to 45 degree north dip.

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GSC PROG RPT *1878-1879, Pt. B, pp. 17, 53-55
MIN REV *March/April 1988, pp. 19-24

DATE CODED: 1986/07/24
DATE REVISED: 1989/03/08

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103B 026**

NATIONAL MINERAL INVENTORY: 103B6 Fe1

NAME(S): **JESSIE** JEDWAY (L.1976,1977,1861,1865), HARRIET HARBOUR

STATUS: Past Producer Open Pit Underground

MINING DIVISION: Skeena

REGIONS: British Columbia, Queen Charlotte Islands

NTS MAP: 103B06E

UTM ZONE: 09 (NAD 83)

BC MAP:

LATITUDE: 52 17 34 N

NORTHING: 5795880

LONGITUDE: 131 11 56 W

EASTING: 350041

ELEVATION: 270 Metres

LOCATION ACCURACY: Within 500M

COMMENTS: Open pit; Located on the hilltop 1.5 kilometres east-southeast of Harriet Harbour. See also Adonis (103B 027), Lily (103B 028) and Rose (103B 029).

COMMODITIES: Iron

Magnetite

MINERALS

SIGNIFICANT: Magnetite

ASSOCIATED: Garnet Epidote

ALTERATION: Amphibole Chlorite

ALTERATION TYPE: Skarn Chloritic Sericitic

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Concordant Massive

CLASSIFICATION: Skarn Replacement Epigenetic Industrial Min.

TYPE: K03 Fe skarn

SHAPE: Tabular

DIMENSION: 0250 x 0150 x 0080 Metres STRIKE/DIP: 120/40N TREND/PLUNGE:

COMMENTS: Maximum area of mineralized bodies.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Upper Triassic Vancouver

Triassic-Jurassic Kunga

Jurassic

Karmutsen

Undefined Formation

Burnaby Island Plutonic Suite

ISOTOPIC AGE: 164 +/- 3 Ma

DATING METHOD: Uranium/Lead

MATERIAL DATED: Zircon

LITHOLOGY: Greenstone

Skarn

Limestone

Argillite

Dioritic Porphyry

Quartz Diorite

Rhyolite Dike

HOSTROCK COMMENTS: Jedway Stock is part of the Burnaby Island Plutonic Suite. Age date from R.G. Anderson (GSC), Personal Communication, March, 1989.

GEOLOGICAL SETTING

TECTONIC BELT: Insular

TERRANE: Wrangell

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

METAMORPHIC TYPE: Contact Regional

RELATIONSHIP: Syn-mineralization
Post-mineralization

GRADE: Greenschist
Hornfels

CAPSULE GEOLOGY

The Jessie mine is on the southeast coast of Moresby Island. It is situated on the ridge between Harriet Harbour and Ikeda Cove about 2.4 kilometres southeast to the entrance to the Harbour at an elevation of 152 metres.

The Jessie is the key claim of a large group of claims acquired by The Granby Mining Company Limited, and its subsidiary, Jedway Iron Ore Limited. Jedway acquired 61 recorded claims, three mineral leases and ten Crown-granted claims. The three mineral leases cover four reverted Crown-grants as follows: Mineral Lease 2, Adonis (Lot 1865) (103B 027); Mineral Lease 37, Hot Punch (Lot 1976), and Iron Duke (Lot 1977); and Mineral Lease 105, Jessie (Lot 1861). The ten Crown-granted claims were as follows: Moresby Island (Lot 78) (103B 036); Magnet (Lot 79)(103B 034); Blue Belle (Lot 80) (103B 033); Ajax (Lot 81); Sandwich Fraction (Lot 92); Emma (Lot 854); Delia (Lot 2597); Lizzie B (Lot 2604); Cypress Queen (Lot 2607); Mattie H. Fraction (Lot 2608). These Crown-granted claims were originally part of the large block, owned by J.S. McMillan (see

CAPSULE GEOLOGY

Copper Queen, 103B 035). In addition, Granby holds 64 recorded claims in the vicinity.

The Jessie showings were located around 1908 by the Trethaway Brothers and "a considerable amount of work" was reported done on them. In 1912, the Jessie was Crown-granted to P. Drummond, the Hot Punch and the Iron Duke to R.R. Hill and the Harriet, Lot 86, to R.A. and J.O. Trethaway. These covered 116-35 acres. These showings are not rich in chalcopyrite so interest in the properties lapsed.

Little attention was paid to the properties until 1956 when Dr. J.M. Black, for Western Canada Steel Limited, explored the area and conducted a magnetometer survey over the showings. In 1959 Silver Standard Mines Limited acquired an option on the Jessie claim from Consolidated Exploration Company Limited, the Limestone, Diorite and Chance fraction claims from Western Canada Steel Limited, and the Hot Punch and Iron Duke from J.M. Black. A diamond drilling program was started and by 1960, 53 holes totalling 4988 metres had been drilled on the Jessie and Limestone claims, 22 holes totalling 467 metres on the Magnet, 3 holes totalling 329 metres on the Adonis and 7 holes totalling 169 metres on the Blue Belle. This outlined 226,796 tonnes.

In January 1961, The Granby Mining Company Limited optioned, and after additional drilling purchased, the property and formed Jedway Iron Ore Limited in April of that year. With further drilling the reserves were estimated to be 4,263,769 tonnes which would produce 2,331,465 tonnes of concentrate. The company had a contract with Sumitomo Shoji Kaisha of Japan to supply 1,814,370 tonnes of concentrate grading 62 per cent iron over a period of five years. Production by open-pit methods started in late summer 1962, and the 1,996 tonnes per day mill was put into operation in September. In 1964 some ore was contributed by the nearby Adonis property (103B 027) and in 1966 by the Rose property (103B 029).

During 1962 and 1963 an adit was driven 465 metres under the open pit at the 145 metre elevation. From this adit 4542 metres of diamond drilling proved reserves of 2,494,759 tonnes of 35 per cent iron between the adit level and the proposed bottom of the open pit at 229 metres elevation. Underground mining started in 1966.

Recoverable reserves on January 1, 1966, were 334,842 tonnes in the pit and 516,641 tonnes in one underground stope, for a total of 851,484 tonnes grading 35 per cent magnetic iron. An additional 873,437 tonnes of the same grade exists underground but was judged to be uneconomic. The ore bodies were exhausted and the mine closed in February, 1968.

In 1972, trenching, totalling 3737 cubic metres, was done on the Limestone and Jessie claims by Jedway Iron Ore Limited.

The Vancouver Group, Upper Triassic Karmutsen Formation, consisting of altered basalts is overlain by the lower part of the Jurassic to Triassic Kunga Group consisting of limestones and argillites. The strata generally strike east with an average dip of 050 degrees north. These rocks are cut by a sequence of intrusive bodies, from oldest to youngest, as follows: greenstones; diorite porphyry; diorite to quartz diorite of the Jedway Stock; rhyolite dikes; and small andesitic to basaltic dikes. Skarnification and mineralization occurred after intrusion of the Jedway Stock, which is part of the Middle to Late Jurassic Burnaby Island Plutonic Suite.

The Jessie orebodies are on the northern flank of a west northwest trending domal anticline near its intersection of a 140 degree trending fold and fault structure of probable younger age. The ore lenses are primarily in the Karmutsen greenstones, conformable with bedding, adjacent to and above the contact with the Jedway Stock. Two major fault orientations are the larger north trending, 45 to 75 degree dipping faults and the smaller 60 to 80 degree, similar dipping faults, which are sometimes offset by the north faults.

The mineralized bodies occur as replacement bands of magnetite separated by skarn, chloritic greenstone or diorite porphyry. In general, there are three bands: the upper, 30 to 35 metres below the Kunga contact and about 6 metres thick; the main or intermediate, 6 to 12 metres below and 12 to 24 metres thick; and a lower, 24 to 30 metres below the main and about 7 metres thick. These bands maintain their character over 250 metres of dip and strike length then coalesce at the upper elevations near the basin-like mass of diorite porphyry and limestone. As the bands reach a major fault zone, they follow up the faults and resemble dikes. These enlarge downward and then diverge into the bedding attitudes.

During the development of the Jedway Iron Mine, ore assayed 49 per cent iron, 0.025 per cent copper, 0.78 per cent sulphur, 0.09 per cent titanium and 0.035 per cent phosphorous (Minister of Mines Annual Report 1959, page 14). During production the concentrate averaged 62 per cent iron (Bulletin 54, page 199).

CAPSULE GEOLOGY

The total drill indicated ore reserves in 1961 were 4,260,000 tonnes of magnetite ore (Minister of Mines Annual Report 1961, page 15). The mine operated continuously from 1962 to 1968 when the ore was mined out. The mine used both open pit and underground methods simultaneously to mine the Jessie zone. During the period of production 3,938,702 tonnes of ore was milled producing about 2.1 megatonnes of iron concentrate. Production includes ore from the Adonis (103B 027) in 1964 and ore from the Rose (103B 029) in 1966.

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EMPR BC METAL MM00812
EMPR BULL *54, pp. 14, 198-202
EMPR ENG INSP 60852-60867
EMPR EXPL 1985-C362
EMPR GEM 1972-494
EMPR OF *1988-28, pp. 73-75
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Limited; The Granby Mining Company Limited)
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GSC EC GEOL *Series 3, Vol. 1, 1926, pp. 39-42
GSC MAP 1385A
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pp. 59-87, 163-172; 91-1A, pp. 383-391
CMJ July, 1964, p. 53
MIN REV *March/April 1988, pp. 19-24
W MINER *1959, pp. 110,112,113; *1962 pp. 14-17,28-42

DATE CODED: 1986/07/23
DATE REVISED: 1999/08/30

CODED BY: LDJ
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103B 027**

NATIONAL MINERAL INVENTORY: 103B6 Fe4

NAME(S): **ADONIS (L.1865)**, SWEET PEA (L.68), ADONIS EXTENSION,
LILY, JESSIE, JEDWAY

STATUS: Past Producer Open Pit

MINING DIVISION: Skeena

REGIONS: British Columbia, Queen Charlotte Islands

NTS MAP: 103B06E

UTM ZONE: 09 (NAD 83)

BC MAP:

LATITUDE: 52 17 29 N

LONGITUDE: 131 11 26 W

ELEVATION: 170 Metres

NORTHING: 5795708

EASTING: 350605

LOCATION ACCURACY: Within 500M

COMMENTS: Open pit; between Harriet Harbour and Ikeda Cove, on the Ikeda side of the ridge (part of the Lily Mine - 103B 028). See also Jessie (103B 026) and Rose (103B 029).

COMMODITIES: Iron

Magnetite

Copper

MINERALS

SIGNIFICANT: Magnetite Pyrite Chalcopyrite

ASSOCIATED: Quartz

ALTERATION: Garnet

COMMENTS: Calc-silicate mineral assemblage prevalent.

ALTERATION TYPE: Skarn

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Massive

CLASSIFICATION: Skarn

Replacement

Industrial Min.

TYPE: K03 Fe skarn

SHAPE: Tabular

MODIFIER: Faulted

DIMENSION: 75 x 55 x 15 Metres

STRIKE/DIP: 075/45N

TREND/PLUNGE:

COMMENTS: Approximate size; attitude of limestone.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Upper Triassic

Upper Triassic

GROUP

Vancouver

Kunga

FORMATION

Karmutsen

Sadler

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY:

Greenstone

Limestone

Massive Magnetite

Skarn

Magnetite Skarn

Diorite Sill

Diorite Porphyry

Basalt

GEOLOGICAL SETTING

TECTONIC BELT: Insular

TERRANE: Wrangell

METAMORPHIC TYPE: Contact

Regional

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

RELATIONSHIP: Syn-mineralization

Post-mineralization

GRADE: Greenschist

Hornfels

INVENTORY

ORE ZONE: SWEET PEA

REPORT ON: Y

CATEGORY: Indicated

YEAR: 1965

QUANTITY: 124284 Tonnes

COMMODITY

GRADE

Iron

35.0000

Per cent

COMMENTS: Grade is assumed from 1964 calculation on Adonis deposit. Drill indicated with a reasonable stripping ratio.

REFERENCE: Energy, Mines and Resources RESFILE - Adonis.

ORE ZONE: ADONIS

REPORT ON: Y

CATEGORY: Inferred

YEAR: 1964

QUANTITY: 124042 Tonnes

COMMODITY

GRADE

Iron

35.0000

Per cent

COMMENTS: Estimated potential.

REFERENCE: Energy, Mines and Resources RESFILE - Adonis.

CAPSULE GEOLOGY

These showings, on the southeast coast of Moresby Island, are between Harriet Harbour and Ikeda Cove from about 152 to 183 metres elevation on the Ikeda side of the ridge. The deposit is on the Adonis claim, Lot 1865, and extends onto the Sweet Pea claim, Lot 68 (part of the Lily Group, 103B 028). The Adonis claim is held by mineral lease by Jedway Iron Ore Limited but the Sweet Pea is held by Falconbridge Nickel Mines Limited and any ore mined on it will be on a royalty basis to that company.

The Adonis showing was probably discovered between 1906 and 1908 although there is little record of the early history. In 1912 the claim was Crown-granted to Messrs. P. Drummond, R.A. Trethawey and J.O. Trethawey.

Silver Standard Mines Limited carried out the first extensive prospecting by reconnaissance magnetometer survey and then drilled 13 EX holes totalling 329 metres in 1959 and 1960. Later Jedway Iron Ore Limited mapped it in detail in 1964 and drilled 9 AX holes totalling 508 metres. This work proved the presence of a small orebody. A kilometre of road was built to connect with the Jessie Mine (see 103B 026) and a pit prepared for production which began in September 1964. In 1965 additional drilling that totalled 333 metres in five AX holes in a line extending into the Sweet Pea claim proved an additional 124,284 tonnes of ore that has a reasonable stripping ratio.

In 1985 Falconbridge Limited conducted geological mapping and geochemical surveys in the area.

The Upper Triassic Karmutsen Formation (Vancouver Group) consisting of basaltic greenstone, is overlain by the Upper Triassic Sadler Formation (Kunga Group), consisting of 30 metres of limestone, striking 075 degrees and dipping 45 degrees north. The orebody occurs along the contact between the Karmutsen and Sadler formations and is bounded by steep 065 degree striking pre-ore faults about 55 metres apart. There is also a sill-like body of diorite porphyry and minor diorite at the contact.

Mineralization, consisting of massive magnetite with pyrite, chalcopyrite and skarn minerals, replaces mainly the greenstone, but also the limestone and diorite porphyry. The latter is altered to skarn with abundant garnet.

In 1964 the estimated potential of the Adonis deposit was 124,042 tonnes with 35.0 per cent magnetic iron. In 1965, additional drilling onto the adjacent Sweet Pea claim proved an additional 124,284 tonnes of ore with a reasonable stripping ratio (Energy, Mines and Resources RESFILE - Adonis).

In 1964, 96,844 tonnes of ore grading 35.0 per cent iron was mined. Production figures are included with the Jessie Mine (103B 026). See also Lily (103B 028) and Rose (103B 029).

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EMR MP RESFILE (Adonis)
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17; Vol. 35, Sept. 1962, p. 28
Falconbridge File

DATE CODED: 1986/07/23
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CODED BY: LDJ
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103B 028**

NATIONAL MINERAL INVENTORY: 103B6 Cu1

NAME(S): **LILY, LILY (IKEDA), LILY MINE,
IKEDA (L.66), AWAYA, IKEDA BAY**

STATUS: Past Producer
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103B06E
BC MAP:

Underground

MINING DIVISION: Skeena

LATITUDE: 52 17 24 N
LONGITUDE: 131 10 51 W
ELEVATION: 150 Metres

UTM ZONE: 09 (NAD 83)

NORTHING: 5795533
EASTING: 351263

LOCATION ACCURACY: Within 500M

COMMENTS: Lily mine, located between Harriet Harbour and Ikeda Cove, on the southern slope leading down to Ikeda Cove (Bulletin 54). See also Jessie (103B 026), Adonis (103B 027) and Rose (103B 029).

COMMODITIES: Copper Silver Gold Magnetite Iron

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Pyrrhotite Magnetite Sphalerite
ALTERATION: Chlorite Actinolite Quartz Calcite
ALTERATION TYPE: Skarn
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Massive Disseminated
CLASSIFICATION: Replacement Skarn Industrial Min.
TYPE: K01 Cu skarn
SHAPE: Tabular
MODIFIER: Sheared
DIMENSION: 76 x 6 x 4 Metres STRIKE/DIP: 010/45E TREND/PLUNGE:
COMMENTS: No. 1 shoot.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Upper Triassic	Vancouver	Karmutsen	
Upper Triassic	Kunga	Sadler	
Upper Jurassic			Burnaby Island Plutonic Suite

ISOTOPIIC AGE: 164 +/- 3 Ma
DATING METHOD: Uranium/Lead
MATERIAL DATED: Zircon

LITHOLOGY: Greenstone
Limestone
Diorite
Diabase Dike
Basalt Dike
Skarn

HOSTROCK COMMENTS: The Jedway stock is part of the Burnaby Island Plutonic Suite; the age date is from R.G. Anderson, personal communication, 1989.

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Wrangell
METAMORPHIC TYPE: Contact Regional RELATIONSHIP: GRADE: Greenschist Hornfels
PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

INVENTORY

ORE ZONE: LILY REPORT ON: Y
CATEGORY: Inferred YEAR: 1964
QUANTITY: 22677 Tonnes
COMMODITY GRADE
Copper 1.5000 Per cent
COMMENTS: Copper grades between 1.5 to 2.0 per cent; some gold and silver.
REFERENCE: Bulletin 54, page 203.

CAPSULE GEOLOGY

The Lily copper mine is located 1.2 kilometres west of the head of Ikeda Cove on the southeast coast of Moresby Island. The elevation ranges between 61 and 183 metres. The showings were discovered in 1898 by Mr. A. Ikeda who traced float on the beach up to the outcrop. By 1907, Awaya, Ikeda and Company, primarily a Japanese fishing company not registered in

CAPSULE GEOLOGY

Canada, held three claim groups in the area; the Lily, the Chrysanthemum (see Rose, 103B 029) and the Lotus (see 103B 040). The Lily Group comprised eight claims (Lots 66 to 72) covering 336.01 acres which were Crown-granted in 1908. Production started in 1906 but by 1909 all the easy-mining was finished. A new company, Ikeda Mines, Limited, was formed in Vancouver in 1910 and a programme of exploration and development was started which included 768 metres of diamond drilling in 22 holes. The company carried out assessment work on other claims in the area and in 1913 and 1917 received Crown-grants for 39 claims (Lots 93-100, 1857-1860, 1862, 1863, 1866-1882, 1884-1887, 1892, 1893, 1896 and 1963), including the Lotus and Chrysanthemum groups. In 1913 an aerial tramway was built from the Lily mine to the beach. By 1918 the mine was developed by four adits, all connected by winzes, with portals at 80, 94, 99, and 181 metres above sea level. The lowest, No. 3, is 201 metres long with two stopes, an 82-metre winze and a sub-level developed from it. The Nos. 2 and 2 1/2 have a combined length of 107 metres and No. 1 is 37 metres long.

There was little interest in the mine from 1920 until 1943 when St. Eugene Mining Corporation, Limited, bought the valid, Crown-granted claims; the reverted Crown-grants were subsequently acquired as mineral leases and additional claims were staked to include most of the original ground. Exploration of the Lily property was delayed until 1956 when it was examined and sampled in detail. Work in succeeding years included a geophysical survey in 1958 and 7 AX holes drilled for a total of 541 metres in 1964.

In July 1962 the properties were sold to Falconbridge Nickel Mines Limited. In 1985 Falconbridge Limited carried out geological mapping and a geochemical soil survey (2,050 samples) over the Lily and adjacent properties.

The area is underlain by greenstone and limestone of the Upper Triassic Vancouver Group (Karmutsen Formation) which is overlain by limestone of the Upper Triassic Sadler Formation (Lower Jurassic to Upper Triassic Kunga Group). Locally, the rocks strike 050 degrees and dip 35 degrees east and are flanked on the west by a sill-like body of fine diorite. The diorite is part of the Late Jurassic Burnaby Island Plutonic Suite and includes the Jedway stock. The stock has been dated at 164 Ma +/- 3 Ma (R.G. Anderson, personal communication, 1989).

The Lily mine contains four mineralized bodies, three of which occur as subparallel replacements of bedded shear zones in greenstone. Minerals present are chlorite, actinolite, quartz and calcite with pyrite, chalcopyrite, magnetite, pyrrhotite and traces of sphalerite. The sulphides occur as disseminations, streaks, bands and large irregular masses. Late diabase and basalt dykes cut the shears without offset.

The ore zones are referred to as the No. 1 shoot, measuring 76 by 67 by 4.5 metres, the No. 2 shoot, 43 by 15 by 4.5 metres, and the No. 31 Shoot, 43 by 12 by 0.6 metres. The average grade from production figures is 9.33 per cent copper, 3.8 grams per tonne gold and 64 grams per tonne silver. The fourth, or No. 1 adit body, lies 300 metres southwest of the Lily mine and is a 90 by 80 metre planar magnetite-rich skarn lens at the Sadler/Karmutsen contact. It is less than 3 metres wide with drill assays of 1.37 per cent copper over 0.8 metres and 58.53 per cent iron over 2.1 metres (Assessment Report 14818).

Inferred reserves at Lily are 22,677 tonnes grading between 1.5 and 2.0 per cent copper and some gold and silver (Bulletin 54, page 203).

The Lily produced 51,195 grams of gold, 862,548 grams of silver and 574,055 kilograms of copper from 13,410 tonnes between 1906 and 1920.

See also Jessie (103B 026), Adonis (103B 027) and Rose (103B 029).

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EMPR BC METAL MM00755
EMPR BULL *54, pp. 203-205,207
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EMPR OF 1988-28, pp. 73-77; 1992-1; 1992-9
EMPR PF (Larson, A.G. (1910): Report on the Ikeda-Awaya Company's Mining Property, Feb.7, 1910; Norrie, W.G. (1917): Ikeda Mine

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 74
REPORT: RGEN0100

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GSC MAP 1385A
GSC P 88-1E, pp. 213-216, 221-227; 89-1H, pp. 95-112; 90-10, pp. 59-87, 163-172; 91-1A, pp. 383-391
GSC SUM RPT *1909, pp. 76, 77
MIN REV March/April 1988, pp. 19-24
Falconbridge File

DATE CODED: 1986/07/22
DATE REVISED: 1999/08/30

CODED BY: LDJ
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103B 029**

NATIONAL MINERAL INVENTORY: 103B6 Fe6

NAME(S): **ROSE (L.1871)**, CHRYSANTHEMUM, IKEDA 1,
IKEDA 2, JESSIE, JEDWAY

STATUS: Past Producer Open Pit
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103B06E
BC MAP:

MINING DIVISION: Skeena

LATITUDE: 52 17 29 N
LONGITUDE: 131 09 06 W
ELEVATION: 160 Metres

UTM ZONE: 09 (NAD 83)

NORTHING: 5795628
EASTING: 353257

LOCATION ACCURACY: Within 500M

COMMENTS: Centre of ore bodies, located on the hill top between Ikeda Cove and
Collison Bay (Property File - McDougall, J.J., 1963, Map 1K 5/63).
See also Jessie (103B 026), Adonis (103B 027) and Lily (103B 028).

COMMODITIES: Iron Gold Magnetite

MINERALS

SIGNIFICANT:	Magnetite	Pyrrhotite	Pyrite	Chalcopyrite
ASSOCIATED:	Epidote	Chlorite	Diopside	
ALTERATION:	Garnet	Epidote	Chlorite	Diopside Hematite
ALTERATION TYPE:	Skarn		Propylitic	
MINERALIZATION AGE:	Unknown			

DEPOSIT

CHARACTER: Massive Concordant
CLASSIFICATION: Skarn Replacement Industrial Min.
TYPE: K03 Fe skarn
SHAPE: Tabular
DIMENSION: 0170 x 0120 x 0010 Metres STRIKE/DIP: 035/25W TREND/PLUNGE:
COMMENTS: Maximum area of orebodies.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Upper Triassic	Vancouver	Karmutsen	
Triassic-Jurassic	Kunga	Undefined Formation	
Jurassic			Burnaby Island Plutonic Suite

ISOTOPIC AGE: 164 +/- 3 Ma
DATING METHOD: Uranium/Lead
MATERIAL DATED: Zircon

LITHOLOGY: Greenstone
Limestone
Massive Magnetite
Skarn
Garnet Epidote Chlorite Skarn
Argillite
Diorite
Basalt

HOSTROCK COMMENTS: Burnaby Island Plutonic Suite (Collison Bay Stock) intrudes Karmutsen
volcanics and Kunga limestone.

GEOLOGICAL SETTING

TECTONIC BELT: Insular	PHYSIOGRAPHIC AREA: Queen Charlotte Ranges
TERRANE: Wrangell	
METAMORPHIC TYPE: Contact Regional	RELATIONSHIP: Syn-mineralization Post-mineralization
	GRADE: Greenschist Hornfels

INVENTORY

ORE ZONE: ROSE REPORT ON: Y
CATEGORY: Indicated YEAR: 1959
QUANTITY: 508930 Tonnes
COMMODITY: Iron GRADE: 40.0000 Per cent

COMMENTS: Low stripping ratio: from about 10 drillholes.
REFERENCE: Bulletin 54, page 208.

CAPSULE GEOLOGY

The Rose claim, located on the southeast coast of Moresby Island, is on the ridge between Ikeda Cove and Collison Bay between 122 and 198 metres above sea level. The Crown-granted claim (Lot 1871) covers 33.64 acres. The showings extend from the ridge-top

CAPSULE GEOLOGY

down the northwestern slope and just over the boundary onto the adjacent claims, Elva Nos. 3 and 4 and Maple. All claims are part of a large block held by Falconbridge Nickel Mines Limited (See Lily, 103B 028).

The showings were discovered by A. Ikeda and associates during the period 1901-1906 while prospecting in the vicinity of their Lily claim showings. Some stripping and prospecting ensued but the magnetite showings, being copper-poor, were of little interest at that time. The Rose claim was part of the Chrysanthemum Group of eight claims Crown-granted in 1913 (Lots 97, 100, 1868, 1869, and 1871 to 1874).

St. Eugene Mining Corporation, Limited, acquired the Lily and other claims in the mid 40's and drilled 2 holes for 24 metres in 1957 on the Rose claim. Silver Standard Mines Limited carried out a magnetometer survey in 1959. The Granby Mining Company Limited mapped the showings in detail in 1962 and Jedway Iron Ore Limited drilled 37 short holes totalling 1405 metres in 1965. Jedway started mining the property in 1966 on a royalty basis.

In 1985 and 1986, Falconbridge Limited conducted geological mapping, geochemical surveys and drilling in the area.

The Vancouver Group, Upper Triassic Karmutsen Formation, consisting of basaltic greenstones, is conformably overlain by limestones and argillites of the Jurassic to Triassic Kunga Group. The rocks are cut by dikes and sills of diabase, fine diorite porphyry, and diorite. Later dikes include andesite and felsite.

The Rose orebodies lie on the eastern end of a domal anticline adjacent to the Collision Bay Stock. This intrusive is dioritic in composition and is part of the Middle to Late Jurassic Burnaby Island Plutonic Suite. Bedding strikes 035 degrees and dips 20 to 30 degrees northwest. Faulting seems limited to small steep faults parallel to the strike.

The mineralized bodies consist of three parallel skarn bands, with widths up to 10.6 metres over an area 170 by 120 metres. Replacement is mainly in greenstone and consists of magnetite, garnet, chlorite and epidote with minor pyrrhotite, chalcopyrite and pyrite. A drill hole intersected 10.6 metres of 66 per cent iron with 0.34 per cent sulphur. A drill hole, about 200 metres to the southeast, intersected 2.07 grams per tonne gold over 1.5 metres (Assessment Report 14818).

The average grade of the magnetite ore is estimated at over 40.0 per cent iron with a sulphur content of about 1.0 per cent. Drilling in 1956 indicated about 508,930 tonnes of ore with a low stripping ratio. Total reserves of twice this amount may be recoverable at a much higher ratio (Bulletin 54, page 208).

Jedway Iron Ore Ltd. started mining this property on a royalty basis in 1966. Production figures are included in the Jessie Mine (103B 026) production. See Adonis (103B 027) and Lily (103B 028).

BIBLIOGRAPHY

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1967-A54,57; 1968-70,71
EMPR ASS RPT 194, 195, 14189, *14818
EMPR BULL *54, pp. 199,203,206-208
EMPR ENG INSP 60864, 60865
EMPR EXPL 1985-C362; 1986-C418
EMPR PF (McDougall, J.J., (1956): Report on Properties at Ikeda Bay, June 6, 1956, pp. 20,25; McDougall, J.J., (1963): Report on Coast Activities to May 31, 1963; McDougall, J.J., (1964): 1963 Report on Ikeda, pp. 6,7, Fig.5, Jan.31, 1964 (refer to the Lily Mine 103B028); Various maps)
EMR MP CORPFILE: (Ikeda Mines, Limited; St. Eugene Mining Corporation, Limited; Silver Standard Mines Limited; Jedway Iron Ore Limited; The Granby Mining Company Limited)
GSC EC GEOL *No. 3, Vol. 1, 1926, pp. 48-51
GSC MAP 1385A
GSC P 88-1E, pp. 213-216,*221-227; 89-1H, pp. 95-104,*105-112; 90-10, pp. 59-87; 91-1A, pp. 383-391
GSC SUM RPT 1909, p. 77
CANMET IR 1918, No. 509, pp. 113,114 (No. 78)
CANMET RPT MC 167, C3-2-10
MIN REV March/April 1988, pp. 19-24
Falconbridge File

DATE CODED: 1986/07/21
DATE REVISED: 1999/08/30

CODED BY: LDJ
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103B 030**

NATIONAL MINERAL INVENTORY: 103B6 Cu13

NAME(S): **TOGO (L.140), A.J., PRINCE**

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103B06E
BC MAP:

MINING DIVISION: Skeena

LATITUDE: 52 17 59 N
LONGITUDE: 131 14 06 W
ELEVATION: 20 Metres

UTM ZONE: 09 (NAD 83)

NORTHING: 5796727
EASTING: 347603

LOCATION ACCURACY: Within 500M

COMMENTS: Located near the shore on the west side of Harriet Harbour.

COMMODITIES: Copper Iron Magnetite

MINERALS

SIGNIFICANT: Magnetite Chalcopyrite
ASSOCIATED: Garnet Calcite Quartz
ALTERATION: Garnet
ALTERATION TYPE: Skarn
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated Massive
CLASSIFICATION: Skarn Replacement Industrial Min.
TYPE: K01 Cu skarn
DIMENSION: 18 x 4 Metres STRIKE/DIP: TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE: Upper Triassic GROUP: Vancouver FORMATION: Karmutsen IGNEOUS/METAMORPHIC/OTHER:

LITHOLOGY: Greenstone
Skarn
Garnet Skarn

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Wrangell

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

INVENTORY

ORE ZONE: ADIT REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1914
SAMPLE TYPE: Chip
COMMODITY: Copper GRADE: 3.0000 Per cent

COMMENTS: 2 metre sample from adit.

REFERENCE: Minister of Mines Annual Report 1914, page 162.

CAPSULE GEOLOGY

The property is located west of the entrance to Harriet Harbour, between sea level and 174 metres elevation, about 71 metres from the beach.

In 1908 three claims were surveyed by owner L.T. Watson. On September 20, 1911, the Togo claim (Lot 140), was Crown-granted to Benjamin Metcalfe.

In 1914 a 5-metre shaft was sunk on a 2-metre wide section of the replacement zone by Daykin and Metcalfe, who were the owners at that time.

A magnetite replacement zone, striking east-southeast for 18 metres with a maximum width of 3.6 metres, occurs in greenstone of the Vancouver Group, Upper Triassic Karmutsen Formation. The body contains abundant garnet, stringers of coarsely crystalline calcite and quartz with disseminated chalcopyrite.

A sample from a 2-metre section of the zone assayed 3 per cent copper (Minister of Mines Annual Report 1914, page 162).

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EMPR AR 1908-60; 1911-287; *1914-162
EMPR BULL 54, p. 220
EMPR PF (McDougall, J.J., (1956): Report on Properties at Ikeda Bay, Queen Charlotte Islands June 6, 1956 - refer to the Lily Mine, 103B 028)

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 78
REPORT: RGEN0100

BIBLIOGRAPHY

GSC EC GEOL *Series 3, Vol. 1, 1926, pp. 34,35
GSC MAP 1385A
GSC P 88-1E, pp. 213-216,221-227; 89-1H, pp. 95-112; 90-10; 91-1A,
pp. 383-391
MIN REV March/April 1988, pp. 19-24

DATE CODED: 1986/07/24
DATE REVISED: 1989/03/07

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103B 031**

NATIONAL MINERAL INVENTORY: 103B6 Cu4

NAME(S): **MODOC (L.83)**

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103B06E
BC MAP:

Underground

MINING DIVISION: Skeena

LATITUDE: 52 17 29 N
LONGITUDE: 131 13 31 W

UTM ZONE: 09 (NAD 83)

NORTHING: 5795780
EASTING: 348237

ELEVATION: 60 Metres

LOCATION ACCURACY: Within 500M

COMMENTS: Located on the west side of Harriet Harbour on Crown granted claim, Lot 83.

COMMODITIES: Gold Silver Copper Iron

MINERALS

SIGNIFICANT: Chalcopyrite Magnetite Pyrite

ASSOCIATED: Calcite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Massive
CLASSIFICATION: Replacement Industrial Min.

TYPE: T MISCELLANEOUS

DIMENSION: 15 x 3 Metres

STRIKE/DIP:

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Upper Triassic

GROUP

Vancouver

FORMATION

Karmutsen

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Greenstone

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Wrangell

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1929

SAMPLE TYPE: Grab

COMMODITY

GRADE

Silver 13.7000 Grams per tonne

Gold 1.4000 Grams per tonne

Copper 0.6000 Per cent

COMMENTS: Sample from a 15 metre long zone that ranges up to 3.6 metres in width.

REFERENCE: National Mineral Inventory Card 103B6 Cu4.

CAPSULE GEOLOGY

This property consists of one Crown-granted claim, Lot 83, covering 28.97 acres. It is situated at 76 metres elevation, 305 metres fast north of the Reco property (103B 032) on the southeast coast of Moresby Island. It was part of the large group originally held by J.S. McMillan (see Copper Queen, 103B 035).

The showing was discovered around 1906 and Crown-granted to McMillan in 1909. It was developed by a 6-metre adit and in 1909, 122 metres of diamond drilling was done on this and the Reco claim.

A vein-like body of magnetite with pyrite and chalcopyrite occurs in greenstone of the Vancouver Group, Upper Triassic Karmutsen Formation. The zone is 15 metres long and 3.6 metres wide and assays run 0.6 per cent copper, 1.4 grams per tonne gold and 13.7 grams per tonne silver (National Mineral Inventory Card 103B6 Cu4).

BIBLIOGRAPHY

EMPR AR 1907-67; 1908-60; 1909-275; *1929-60
EMPR BULL 54, pp. 209,220
GSC EC GEOL *Series 3, Vol. 1, 1926, p. 35
GSC MAP 1385A
GSC P 88-1E, pp. 221-227; 89-1H, pp. 95-112; 90-10; 91-1A, pp. 383-391
GSC SUM RPT 1909 p. 78

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 80
REPORT: RGEN0100

BIBLIOGRAPHY

MIN REV March/April 1988, pp. 19-24

DATE CODED: 1986/07/24
DATE REVISED: 1999/08/30

CODED BY: LDJ
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103B 032**

NATIONAL MINERAL INVENTORY: 103B6 Cu5

NAME(S): **RECO (L.82)**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103B06E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 52 17 19 N
LONGITUDE: 131 13 31 W
ELEVATION: 90 Metres

NORTHING: 5795471
EASTING: 348227

LOCATION ACCURACY: Within 500M

COMMENTS: Showing, Figure 6 (Minister of Mines Annual Report 1961, page 14).
Located 400 metres southwest of the south end of Harriet Harbour.

COMMODITIES: Copper Iron Gold Silver Magnetite

MINERALS

SIGNIFICANT: Magnetite Pyrite Chalcopyrite
ALTERATION: Garnet
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Massive
CLASSIFICATION: Skarn Replacement Industrial Min.
TYPE: K01 Cu skarn K03 Fe skarn
SHAPE: Tabular
MODIFIER: Fractured
DIMENSION: 24 x 2 Metres STRIKE/DIP: 090/40N TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Upper Triassic	Vancouver	Karmutsen	
Jurassic			Burnaby Island Plutonic Suite

ISOTOPIC AGE: 164 +/- 3 Ma
DATING METHOD: Uranium/Lead
MATERIAL DATED: Zircon

LITHOLOGY: Magnetite Skarn
Greenstone
Hornblende Diorite

HOSTROCK COMMENTS: Jedway Stock is part of Burnaby Island Plutonic Suite. Age date:
R.G. Anderson (GSC), Personal Communication, March, 1989.

GEOLOGICAL SETTING

TECTONIC BELT: Insular PHYSIOGRAPHIC AREA: Queen Charlotte Ranges
TERRANE: Wrangell
METAMORPHIC TYPE: Contact Regional RELATIONSHIP: Syn-mineralization GRADE: Greenschist
Post-mineralization Hornfels

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1929
SAMPLE TYPE: Grab
COMMODITY GRADE
Silver 24.0000 Grams per tonne
Gold 3.4000 Grams per tonne
Copper 1.5000 Per cent

COMMENTS: Sample from 24 metre long by 1.2 to 2.4 metre wide magnetite body.

REFERENCE: National Mineral Inventory Card 103B6 Cu5.

CAPSULE GEOLOGY

This property consists of one Crown-granted claims Lot 82, covering 40.63 acres. It is situated at 61 metres elevation about 1 kilometre southwest of Harriet Harbour on the southeast coast of Moresby Island. It is part of a large group originally held by J.S. McMillan (see Copper Queen, 103B 035).

The showing was discovered around 1906 and Crown-granted to McMillan in 1909. It was explored by surface work and a 4.6-metre shaft. In 1908, 122 metres of drilling was done on this and the adjoining Modoc claim (103B 031). Since then the only significant work was done in 1956 when Silver Standard Mines Limited drilled several short packsack holes totalling about 122 metres.

CAPSULE GEOLOGY

The property has remained in the McMillan family and in 1968 was held by Paul McMillan.

A body of magnetite, with garnet and veinlets of pyrite and chalcopyrite, occurs in fractured greenstone of the Vancouver Group, Upper Triassic Karmutsen Formation at the contact of hornblende diorite of the Jedway Stock. The Jedway Stock is part of the Middle to Late Jurassic Burnaby Island Plutonic Suite. The magnetite body, measuring 24 metres long and 1.2 to 2.4 metres wide, trends westward from the contact and dips north about 40 degrees. Assays run about 1.5 per cent copper, 3.4 grams per tonne gold and 24 grams per tonne silver (National Mineral Inventory Card 103B6 Cu5).

BIBLIOGRAPHY

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EMR MP CORPFILE (Silver Standard Mines Limited)
GSC EC GEOL *Series 3, Vol. 1, 1926, p. 36
GSC MAP 1385A
GSC P 88-1E, pp. 213-216,*221-227; 89-1H, pp. 95-112; 90-10, pp. 59-87; 91-1A, pp. 383-391
GSC SUM RPT 1909, p. 78
MIN REV March/April 1988, pp. 19-24

DATE CODED: 1986/07/24
DATE REVISED: 1999/08/31

CODED BY: LDJ
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103B 033**

NATIONAL MINERAL INVENTORY: 103B6 Fe7

NAME(S): **BLUE BELLE (L.80)**, DINGO (L.87)

STATUS: Prospect
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103B06E
BC MAP:

MINING DIVISION: Skeena

LATITUDE: 52 16 59 N
LONGITUDE: 131 13 36 W
ELEVATION: 240 Metres

UTM ZONE: 09 (NAD 83)

NORTHING: 5794856
EASTING: 348114

LOCATION ACCURACY: Within 500M

COMMENTS: Showing, Figure 2 (Minister of Mines, Annual Report 1961, page 14).
Located south of Harriet Harbour.

COMMODITIES: Iron Magnetite

MINERALS

SIGNIFICANT: Magnetite
ASSOCIATED: Garnet
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Replacement Skarn Industrial Min.
TYPE: K03 Fe skarn
DIMENSION: 0012 x 0004 Metres STRIKE/DIP: 135/90E TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Upper Triassic	Vancouver	Karmutsen	
Upper Triassic	Kunga	Sadler	

LITHOLOGY: Greenstone
Limestone
Massive Magnetite
Skarn
Garnet Skarn

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Wrangell

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

INVENTORY

ORE ZONE: BLUE BELLE REPORT ON: Y
CATEGORY: Indicated YEAR: 1960
QUANTITY: 13600 Tonnes

COMMODITY	GRADE
Iron	60.0000 Per cent

COMMENTS: Based on seven drillholes. The grade is probable at 50.0 per cent iron.

REFERENCE: Bulletin 54, page 208.

CAPSULE GEOLOGY

This property consists of one Crown-granted claim (Lot 80), covering 14.78 acres. It is located at 244 metres elevation about 0.8 kilometre southwest of Harriet Harbour on the southeast coast of Moresby Island. It has commonly been called the Dingo although this is actually a separate showing and claim. It is part of a large group of claims originally held by J.S. McMillan (see Copper Queen, 103B 035).

The showing was probably discovered around 1906 and was Crown-granted to McMillan in 1909. In 1960 Silver Standard Mines Limited drilled seven EX holes totalling 169 metres, out-lining 13,607 tonnes grading 60 per cent iron. Some geophysical work was also done.

Jedway Iron Ore Limited acquired the property in 1961.

A small pipe-like lens of magnetite with minor garnet, striking northwest and dipping near vertically, occurs at the contact of Vancouver Group, Upper Triassic Karmutsen volcanics and Upper Triassic Sadler Formation (Kunga Group) limestone. Surface exposure of the lens is about 12 metres long and 1.5 to 4.5 metres wide. Drilling in 1960 outlined about 13,600 tonnes grading probably 50.0 per cent iron (Bulletin 54, page 208).

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 84
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR AR 1909-275; 1911-287; 1959-14; 1960-12; 1961-14
EMPR BULL *54, p. 208
EMR MP CORPFILE (Silver Standard Mines Limited; Jedway Iron Ore
Limited)
GSC EC GEOL Series 3, Vol. 1, 1926, p. 36
GSC MAP 1385A
GSC P 88-1E, pp. 221-227; 89-1H, pp. 95-104; 90-10, pp. 163-172;
91-1A, pp. 383-391
GSC SUM RPT 1909, p. 78
W MINER Oct., 1959; Jan., 1962; Sept., 1962

DATE CODED: 1986/07/24
DATE REVISED: 1989/03/09

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103B 034**

NATIONAL MINERAL INVENTORY: 103B6 Fe12

NAME(S): **MAGNET**, IRON MOUNTAIN (L.79)

STATUS: Developed Prospect
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103B06E
BC MAP:

MINING DIVISION: Skeena

LATITUDE: 52 16 49 N
LONGITUDE: 131 13 51 W
ELEVATION: 150 Metres

UTM ZONE: 09 (NAD 83)

NORTHING: 5794556
EASTING: 347820

LOCATION ACCURACY: Within 500M

COMMENTS: Showing, Figure 2 (Minister of Mines, Annual Report 1961, page 14).
Located about 1.2 kilometres south of Harriet Harbour.

COMMODITIES: Iron Magnetite

MINERALS

SIGNIFICANT: Magnetite Chalcopyrite Pyrite Sphalerite
ASSOCIATED: Garnet Calcite
ALTERATION: Epidote Garnet
ALTERATION TYPE: Epidote Skarn
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratiform Massive
CLASSIFICATION: Skarn Replacement Industrial Min.
TYPE: K03 Fe skarn
SHAPE: Tabular
DIMENSION: 0110 x 0055 x 0006 Metres STRIKE/DIP: TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Upper Triassic
Upper Triassic
Jurassic

GROUP

Vancouver
Kunga

FORMATION

Karmutsen
Sadler

IGNEOUS/METAMORPHIC/OTHER

Burnaby Island Plutonic Suite

ISOTOPIC AGE: 164 +/- 3 Ma
DATING METHOD: Uranium/Lead
MATERIAL DATED: Zircon

LITHOLOGY: Greenstone
Massive Magnetite
Epidote Volcanic
Skarn
Garnetite
Limestone
Quartz Diorite
Diorite Porphyry Dike

HOSTROCK COMMENTS: Jedway Stock is part of Burnaby Island plutonic suite. Age date from R.G. Anderson, GSC, Personal Communication, March, 1989.

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Wrangell
METAMORPHIC TYPE: Contact Regional

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

RELATIONSHIP: Syn-mineralization
Post-mineralization

GRADE: Greenschist
Hornfels

INVENTORY

ORE ZONE: MAGNET

REPORT ON: Y

CATEGORY: Inferred YEAR: 1959
QUANTITY: 453590 Tonnes
COMMODITY: Iron GRADE: 60.0000 Per cent

COMMENTS: Estimated ore from drilling averaging 60 per cent iron as magnetite.
REFERENCE: Energy, Mines and Resources Reserves File - Magnet.

ORE ZONE: MAGNET

REPORT ON: Y

CATEGORY: Indicated YEAR: 1959
QUANTITY: 161480 Tonnes
COMMODITY: Iron GRADE: 60.0000 Per cent

COMMENTS: Drill indicated ore averaging 60.0 per cent iron as magnetite.
REFERENCE: Bulletin 54, page 209.

CAPSULE GEOLOGY

This showing is located about 0.9 kilometre southwest of Harriet Harbour between 442 and 488 metres elevation on the southeast coast of Moresby Island. The property consists of one Crown-granted claim, Lot 79, covering 38.03 acres. It was originally part of a large group held by J.S. McMillan (see Copper Queen, 103B 035).

The outcrop was discovered around 1906 by or for McMillan and was Crown-granted to him in 1911; it was originally known as Iron Mountain. Some stripping was done and a 7-metre adit was driven about 1908. Little further work was done until Silver Standard Mines Limited optioned the property in 1956. In the fall of 1959, 22 EX holes totalling 467 metres were drilled. Geophysical work was also done. Reserves have been estimated at 161,478 to 453,592 tonnes averaging 60 per cent magnetic iron.

The property was acquired in 1961 by Jedway Iron Ores Limited as a result of part of an agreement between The Granby Mining Company Limited and Silver Standard Mines Limited.

A lensoid body of massive magnetite replaces greenstone and pillowed greenstones of the Upper Triassic Karmutsen Formation (Vancouver Group) and minor limestone of the overlying Upper Triassic Sadler Formation (Kunga Group). The strata strike north and dip 20 to 35 degrees west. Fine diorite porphyry dikes cut the limestone and quartz diorite of the Jedway Stock intrudes these stratified rocks to the east. The Jedway Stock is part of the Middle to Late Jurassic Burnaby Island Plutonic Suite. A moderate size fault, striking about 125 degrees, either cuts the downdip part or localizes the mineralized body.

The mineralized body, measuring 110 by 55 by 6 metres, consists of massive magnetite with pods of garnetite and remnants of epidotized volcanic rocks. Along the western margin minor pyrite, chalcopyrite and trace sphalerite are reported.

In 1959, indicated reserves were 161,480 tonnes averaging 60.0 per cent iron as magnetite (Bulletin 54, page 209); and inferred reserves were 453,590 tonnes averaging 60.0 per cent iron as magnetite (Energy, Mines and Resources Reserves File - Magnet).

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- EMPR BULL *54, pp. 198,209
- GSC EC GEOL *Series 3, Vol. 1, pp. 37-39
- GSC MAP 1385A
- GSC P 88-1E, pp. 213-216, *221-227; 89-1H, pp. 95-104,*105-112;
90-10, pp. 59-87, 163-172; 91-1A, pp. 383-391
- GSC SUM RPT *1909, p. 78
- EMR MP CORPFILE (Silver Standard Mines Limited; Jedway Iron Ore Limited)
- EMR MP RESFILE (Magnet)
- MIN REV Mar./Apr., 1988, pp. 19-24
- W MINER Oct., 1959; Jan., Sept., 1962

DATE CODED: 1986/07/23
DATE REVISED: 1989/03/07

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103B 035**

NATIONAL MINERAL INVENTORY: 103B6 Cu3

NAME(S): **COPPER QUEEN (L.77)**

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103B06E
BC MAP:

Underground

MINING DIVISION: Skeena

LATITUDE: 52 16 44 N
LONGITUDE: 131 13 26 W
ELEVATION: 290 Metres

UTM ZONE: 09 (NAD 83)

NORTHING: 5794387
EASTING: 348289

LOCATION ACCURACY: Within 500M

COMMENTS: Showing, Figure 2 (Minister of Mines, Annual Report 1961, page 14.
Located approximately 1.6 kilometres south of Harriet Harbour.

COMMODITIES: Copper Iron Magnetite

MINERALS

SIGNIFICANT: Magnetite Chalcopyrite Pyrite Malachite
ASSOCIATED: Quartz
ALTERATION: Garnet Actinolite Malachite
ALTERATION TYPE: Skarn Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Massive Concordant Vein Disseminated
CLASSIFICATION: Skarn Replacement Igneous-contact Industrial Min.
TYPE: K03 Fe skarn K01 Cu skarn
SHAPE: Tabular
DIMENSION: 12 x 10 x 8 Metres STRIKE/DIP: 050/30N TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Upper Triassic
Jurassic

GROUP

Vancouver

FORMATION

Karmutsen

IGNEOUS/METAMORPHIC/OTHER

Burnaby Island Plutonic Suite

ISOTOPIC AGE: 164 +/- 3 Ma
DATING METHOD: Uranium/Lead
MATERIAL DATED: Zircon

LITHOLOGY: Greenstone
Magnetite Skarn
Andesitic Dike
Quartz Diorite

HOSTROCK COMMENTS: Jedway Stock is part of Burnaby Island Plutonic Suite (GSC P 89-1H,
pp. 105-112). Age date: R.G. Anderson, GSC, Pers. Comm., Mar., 1989.

GEOLOGICAL SETTING

TECTONIC BELT: Insular PHYSIOGRAPHIC AREA: Queen Charlotte Ranges
TERRANE: Wrangell
METAMORPHIC TYPE: Contact Regional RELATIONSHIP: Syn-mineralization GRADE: Greenschist
Post-mineralization Hornfels

INVENTORY

ORE ZONE: COPPER QUEEN REPORT ON: Y
CATEGORY: Unclassified YEAR: 1956
QUANTITY: 90720 Tonnes
COMMODITY: Copper GRADE: 1.7500 Per cent
COMMENTS: Estimated between 1.5 to 2 per cent copper by Silver Standard Mines
Limited.
REFERENCE: National Mineral Inventory 103B6 Cu3.

CAPSULE GEOLOGY

The Copper Queen claim (Lot 77) is located nearly one kilometre south of Harriet Harbour, on either side of a small steep creek at about 290 metres elevation, on the southeast coast of Moresby Island.

The Copper Queen is the key claim of a large block between Harriet Harbour and Huston Inlet originally held by J.S. McMillan. This block covers over 875 acres on Lots 77, 85, 87, 88, 92, 331, 2597 to 2604, 2607, 2608. These include Modoc (103B 031), Reco (103B 033), Moresby Island (103B 036), Eagle Tree (103B 037), Blue Belle (103B 032) and Magnet (103B 034). Some of the claims have remained in the McMillan family while others have been held by Jedway Iron Ore Limited and The Granby Mining Company Limited (see Jessie, 103B 026).

CAPSULE GEOLOGY

The Copper Queen showings were discovered around 1906 and the lot was Crown-granted to McMillan in 1909. In 1907 and 1908 some stripping was done, three short adits and one long adit were started and a tramline was cut to the beach. By 1909 the long adit reached its target but results were disappointing. The combined length of the four adits was about 137 metres. Very little further activity was reported until 1954 when R.E. Legg carried out diamond drilling in several short holes.

Silver Standard Mines Limited optioned 21 Crown-granted claims in this vicinity in 1956. Diamond drilling on the Copper Queen totalled 372 metres in 9 holes. Tonnage and grade have been estimated at 9,071 tonnes of 1.5 to 2 per cent copper.

The property has remained in the McMillan family and in 1968 was held by Paul McMillan.

The deposit occurs within amphibolitized greenstone of the upper part of the Vancouver Group, Upper Triassic Karmutsen Formation at the contact of mafic-rich quartz diorite of the Jedway Stock. The Jedway Stock is part of the Burnaby Island Plutonic Suite dated as Middle to Late Jurassic in age. The volcanics strike 050 degrees and dip 30 degrees north. North trending unaltered green pyritic andesite dikes cut the mineralization.

A bedded horizon of massive magnetite lenses, with streaks, blebs and veinlets of chalcopyrite and pyrite, as well as garnet and actinolite occur 15 metres above the contact. The main lens is exposed for 7.6 metres along strike and 12 metres down dip with a 3 metre width. Minor lenses of magnetite with chalcopyrite occur at the contact. Malachite is present also. At the fringe of the lenses, vuggy quartz-pyrite-magnetite veinlets occur.

BIBLIOGRAPHY

- EMPR AR 1907-66; 1908-59-60; 1909-71,275; 1910-84; 1911-76; 1912-110;
1913-104; 1914-162; 1919-40; 1920-44; 1923-44; 1925-65; 1926-67;
1928-64; 1929-60; *1961-14
EMPR BULL *54, pp. 209-210
EMR MP CORPFILE (Silver Standard Mines Limited)
GSC EC GEOL Series 3, Vol. 1, 1926, pp. 37,51
GSC MAP 1385A
GSC P 88-1E, pp. 213-216, *221-227; 89-1H, pp. 95-104,*105-112;
90-10, pp. 59-87; 91-1A, pp. 383-391
GSC SUM RPT *1909, p. 77
MIN REV Mar./Apr., 1988, pp. 19-24

DATE CODED: 1986/07/23
DATE REVISED: 1999/08/30

CODED BY: LDJ
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103B 036**

NATIONAL MINERAL INVENTORY: 103B6 Cu6

NAME(S): **MORESBY ISLAND (L.78)**, TATE, JEDWAY

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103B06E
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 52 16 54 N
LONGITUDE: 131 13 06 W
ELEVATION: 230 Metres

NORTHING: 5794684
EASTING: 348677

LOCATION ACCURACY: Within 500M

COMMENTS: Showing, Figure 2 (Minister of Mines, Annual Report 1961, page 14).
Located approximately 1.5 kilometres south of Harriet Harbour on
Crown granted Lot 78.

COMMODITIES: Copper Iron Silver Magnetite

MINERALS

SIGNIFICANT: Magnetite Chalcopyrite
ALTERATION: Garnet Epidote Actinolite
ALTERATION TYPE: Skarn
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated Massive
CLASSIFICATION: Skarn Replacement Igneous-contact Industrial Min.
TYPE: K01 Cu skarn K03 Fe skarn
SHAPE: Tabular

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Upper Triassic	Vancouver	Karmutsen	
Jurassic			Burnaby Island Plutonic Suite

ISOTOPIC AGE: 164 +/- 3 Ma

DATING METHOD: Uranium/Lead

MATERIAL DATED: Zircon

LITHOLOGY: Greenstone
Limestone
Quartz Diorite
Garnet Epidote Actinolite Skarn
Skarn
Massive Magnetite

HOSTROCK COMMENTS: Jedway Stock is part of Burnaby Island Plutonic Suite. Age date from
R.G. Anderson GSC, Personal Communication, March, 1989.

GEOLOGICAL SETTING

TECTONIC BELT: Insular

TERRANE: Wrangell

METAMORPHIC TYPE: Contact

Regional

RELATIONSHIP: Syn-mineralization
Post-mineralization

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

GRADE: Greenschist
Hornfels

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1929

SAMPLE TYPE: Chip

COMMODITY

GRADE

Silver

34.0000

Grams per tonne

Copper

1.1000

Per cent

COMMENTS: Chip samples from surface showings.

REFERENCE: Bulletin 54, page 210.

CAPSULE GEOLOGY

This property is located one kilometre southwest of Harriet Harbour at about 228 metres elevation on the southeast coast of Moresby Island. It covers an area of 45-79 acres on Lot 78. It was part of a large block originally held by J.S. McMillan (see Copper Queen, 103B 035).

The showings were discovered in 1905-1906 and Crown-granted in 1910. Early work consisted of trenching and open-cutting. In 1956 Silver Standard Mines Limited drilled two packsack holes totalling 30 metres. The reserves were estimated at 10,886 tonnes.

The property is now part of Jedway Iron Ore Limited's large

CAPSULE GEOLOGY

group of claims (see Jessie, 103B 026).

A small body of massive magnetite and a zone of disseminated chalcopyrite in a skarned, flat-lying lens of limestone occurs at the southern contact of quartz diorite of the Jedway Stock. The Jedway Stock is part of the Middle to Late Jurassic Burnaby Island Plutonic Suite. The limestone, which is an interlava unit within greenstones of the Vancouver Group, Upper Triassic Karmutsen Formation, is variably altered to skarn with replacement by garnet, epidote and actinolite. Disseminated chalcopyrite occurs over an area 100 by 70 metres. Chip samples of surface showings averaged 1.1 per cent copper and 34 grams per tonne silver (Bulletin 54, page 210).

BIBLIOGRAPHY

EMPR AR 1907-67; *1910-246; *1929-60; *1961-14
EMPR BULL *54, pp. 198,210
EMR MP CORPFILE (Silver Standard Mines Limited; Jedway Iron Ore Limited)
GSC MAP 1385A
GSC P 88-1E, pp. 213-216,221-227; 89-1H, pp. 95-112; 90-10, pp. 59-87; 91-1A, pp. 383-391
GSC SUM RPT 1909, p. 77
MIN REV March/April 1988, pp. 19-24

DATE CODED: 1986/07/23
DATE REVISED: 1999/08/30

CODED BY: LDJ
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

CAPSULE GEOLOGY

Massive and disseminated bodies of magnetite, pyrite and chalcopyrite occur along a sheared contact between Vancouver Group, Upper Triassic Karmutsen volcanics and quartz diorite of the Jedway Stock. The Jedway Stock is part of the Middle to Late Jurassic Burnaby Island Plutonic Suite. The contact trends 065 degrees and dips steeply south.

In 1956, the mineralized zone was reported to be over 100 metres long and 6 metres wide. Samples averaged 2.6 per cent copper, 3.5 grams per tonne gold and 34.3 grams per tonne silver (National Mineral Inventory Card 103B6 Cu7).

BIBLIOGRAPHY

EMPR AR 1908-60; 1914-513; *1929-60
EMPR BULL *54, pp. 209,211
EMR MP CORPFILE (Silver Standard Mines Limited)
GSC MAP 1385A
GSC P 88-1E, pp. 213-216, 221-227; 89-1H, pp. 95-112; 90-10, pp. 59-87; 91-1A, pp. 383-391
MIN REV March/April 1988, pp. 19-24

DATE CODED: 1986/07/23
DATE REVISED: 1999/08/30

CODED BY: LDJ
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103B 038**

NATIONAL MINERAL INVENTORY: 103B6 Fe10

NAME(S): **IDA, JIM, HUSTON**

STATUS: Prospect
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103B06E
BC MAP:

MINING DIVISION: Skeena

LATITUDE: 52 16 04 N
LONGITUDE: 131 11 36 W
ELEVATION: 240 Metres

UTM ZONE: 09 (NAD 83)

NORTHING: 5793088
EASTING: 350336

LOCATION ACCURACY: Within 500M

COMMENTS: Located approximately 1.5 kilometres east of the southeast end of
Huston Inlet on the southeast coast of Moresby Island.

COMMODITIES: Iron Magnetite

MINERALS

SIGNIFICANT: Magnetite
ASSOCIATED: Calcite
ALTERATION: Garnet
COMMENTS: Green garnet.
ALTERATION TYPE: Skarn
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Discordant Disseminated
CLASSIFICATION: Skarn Replacement Epigenetic Industrial Min.
TYPE: K03 Fe skarn
SHAPE: Irregular
DIMENSION: 60 x 8 Metres STRIKE/DIP: 010/90E TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Upper Triassic	Vancouver	Karmutsen	
Jurassic			Burnaby Island Plutonic Suite

ISOTOPIC AGE: 168 +4/-1 Ma
DATING METHOD: Uranium/Lead
MATERIAL DATED: Zircon

LITHOLOGY: Greenstone
Skarn
Magnetite Skarn
Diorite

HOSTROCK COMMENTS: Age date: GSC Paper 90-10, page 63, Figure 2.

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Wrangell
METAMORPHIC TYPE: Contact Regional
RELATIONSHIP: Syn-mineralization Post-mineralization
PHYSIOGRAPHIC AREA: Queen Charlotte Ranges
GRADE: Greenschist Hornfels

CAPSULE GEOLOGY

This property, along with the Hercules (103B 039) is part of the Jim Group of recorded claims held by Jedway Iron Ore Limited. It is situated about 1.6 kilometres east of the southeast end of Huston Inlet on the southeast coast of Moresby Island. The showing is at about 244 metres elevation.

The claim was staked around 1907 by J.S. McMillan, H. McEachern and F. Watson and in 1914 it was Crown-granted to McMillan and the Pioneer Queen Charlotte Development Company.

In 1980 and 1981, Chevron Canada Resources Ltd. conducted geochemical, geophysical and geological surveys on the Huston claim.

A vertical dike-like magnetite skarn, striking 010 degrees, occurs in Vancouver Group, Upper Triassic Karmutsen volcanics near its contact with diorites of the Burnaby Island Plutonic Suite. The skarn contains green garnet and calcite in variable amounts and minor sulphides. The showing strikes for nearly 60 metres with a width up to 8 metres. The estimated potential of the showing is about 10,890 tonnes of magnetic iron. No grade is stated (National Mineral Inventory Card 103B6 Fe 10).

BIBLIOGRAPHY

EMPR AR 1907-68; 1914-513; 1915-448
EMPR ASS RPT 8224, 9702, 13102

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 94
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR BULL *54, p. 211
EMPR EXPL 1980-365; 1981-95; 1984-358
GSC EC GEOLOGY Series 3, Vol. 1, 1926, p. 43
GSC MAP 1385A
GSC P 88-1E, pp. 213-216, 221-227; 89-1H, pp. 95-112; 90-10, pp.
59-87; 91-1A, pp. 383-391
MIN REV March/April 1988, pp. 19-24
Chevron File

DATE CODED: 1986/07/18
DATE REVISED: 1989/03/06

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

CAPSULE GEOLOGY

Watson and McEachern. Work included some open-cuts and two small adits.

In 1980 and 1981, Chevron Canada Resources Ltd. conducted geochemical, geophysical and geological surveys on the Huston claim.

An irregular skarn occurs over an area measuring 45 by 24 metres at the contact between basalts of the Vancouver Group, Upper Triassic Karmutsen Formation and quartz monzonite of the Middle Jurassic Burnaby Island Plutonic Suite. Overlying these are limestones and argillites of the Jurassic to Triassic Kunga Group.

The skarn is silicified and is mineralized variably with magnetite, pyrite and chalcopyrite, with garnet, quartz and calcite gangue.

A grab sample of the skarn assayed 0.75 per cent copper and a grab sample of a silicified basalt in contact with magnetite skarn about 100 metres to the northwest assayed 4.4 grams per tonne gold (Assessment Report 9207).

BIBLIOGRAPHY

EMPR AR 1907-68; 1909-71; 1910-84; 1911-76; 1912-110; 1913-101;
1914-162

EMPR ASS RPT *8224, *9702, 13102

EMPR BULL *54, p. 211

EMPR EXPL 1980-365; 1981-95; 1984-358

GSC EC GEOLOGY Series *No. 3, Vol. 1, 1926, pp. 43-44

GSC MAP 1385A

GSC P 88-1E, pp. 213-216, 221-227; 89-1H, pp. 95-112; 90-10, pp.

59-87; 91-1A, pp. 383-391

MIN REV March/April 1988, pp. 19-24

Chevron File

DATE CODED: 1986/07/18
DATE REVISED: 1999/08/30

CODED BY: LDJ
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103B 040**

NATIONAL MINERAL INVENTORY: 103B6 Cu2

NAME(S): **LOTUS (L.1860)**, IKEDA 7, IKEDA 8

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103B06E
BC MAP:

Underground

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 52 16 59 N
LONGITUDE: 131 10 06 W
ELEVATION: 160 Metres

NORTHING: 5794736
EASTING: 352092

LOCATION ACCURACY: Within 500M

COMMENTS: Ore zone, Map 1K3 (McDougall, 1956, Property File, refer to Lily Mine 103B 028). Located approximately 1.2 kilometres south of Ikeda Cove.

COMMODITIES: Copper Silver Gold

MINERALS

SIGNIFICANT: Pyrrhotite Pyrite Arsenopyrite Chalcopyrite Magnetite
ALTERATION: Chlorite Epidote
ALTERATION TYPE: Propylitic Skarn
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Concordant Massive
CLASSIFICATION: Skarn Replacement Epigenetic
TYPE: K01 Cu skarn
SHAPE: Tabular
DIMENSION: 15 x 12 x 6 Metres STRIKE/DIP: TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Upper Triassic	Kunga	Sadler	
Upper Triassic	Vancouver	Karmutsen	

LITHOLOGY: Basalt
Skarn
Limestone
Greenstone
Granodiorite
Diorite

GEOLOGICAL SETTING

TECTONIC BELT: Insular PHYSIOGRAPHIC AREA: Queen Charlotte Ranges
TERRANE: Wrangell
METAMORPHIC TYPE: Contact Regional RELATIONSHIP: Syn-mineralization GRADE: Greenschist
Post-mineralization Hornfels

INVENTORY

ORE ZONE: DRILLHOLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1985
SAMPLE TYPE: Drill Core
COMMODITY GRADE
Silver 17.6000 Grams per tonne
Gold 0.2500 Grams per tonne
Copper 0.5800 Per cent

COMMENTS: 3 metre drill core section, DDH 1K85-22.
REFERENCE: Assessment Report 14818.

CAPSULE GEOLOGY

This showing is located on the southeast coast of Moresby Island about 1.2 kilometres southwest of Ikeda Cove at an elevation of about 152 metres. It was originally the Lotus Crown-granted claim, Lot 1860, but is now held by recorded claims Ikeda Nos. 7 and 8, part of the large block held by Falconbridge Nickel Mines Limited (see Lily, 103B 028).

The showing was discovered by A. Ikeda and associates while prospecting in the vicinity of their Lily showings in the period 1901 to 1906. It was originally part of their Lotus Group of six claims. The claim was developed by a 23-metre open cut and a 36.5-metre adit driven in 1918 at an elevation of 146 metres.

The Vancouver Group, Upper Triassic Karmutsen Formation consisting primarily of basalt is conformably overlain by limestone of the Upper Triassic Sadler Formation (Kunga Group). A

CAPSULE GEOLOGY

sulphide-rich massive replacement body, consisting of pyrrhotite, pyrite, chalcopyrite and arsenopyrite, occurs at the contact between Sadler limestones and Karmutsen volcanics. The ore body is exposed on surface for 10 by 6 metres and is cut by a 14 metres adit. A 3-metre drill hole section contained 0.58 per cent copper, 17.6 grams per tonne silver and 0.25 gram per tonne gold (Assessment Report 14818).

BIBLIOGRAPHY

EMPR AR *1907-65; 1958-72
EMPR ASS RPT 193, 14189, *14818
EMPR BULL *54, p. 211
EMPR EXPL 1985-C362; 1986-C418
EMPR PF (McDougall, J.J., (1956): Report on Properties at Ikeda Bay, Queen Charlotte Islands, Jun.6, 1956 (refer to the Lily Mine - 103B 028))
EMR Mineral Resources Branch; Metals Committee File: MC 167-C3-2-10
EMR MP CORPFILE: (Ikeda Mines, Limited; St. Eugene Mining Corporation, Limited)
GSC MAP 1385A
GSC P 88-1E, pp. 213-216, 221-227; 89-1H, pp. 95-112; 90-10, pp. 163-172; 91-1A, pp. 383-391
CANMET RPT MC 167-C3-2-10
MIN REV March/April 1988, pp. 19-24
Falconbridge File

DATE CODED: 1986/07/22
DATE REVISED: 1999/08/30

CODED BY: LDJ
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103B 041**

NATIONAL MINERAL INVENTORY: 103B6 Fe5

NAME(S): **THUNDER (L.2611), DEAKINS, DAYKIN'S, SADIE (L.2610), SPADE FLUSH (L.2612)**

STATUS: Developed Prospect
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103B06E
BC MAP:
LATITUDE: 52 16 24 N
LONGITUDE: 131 10 06 W
ELEVATION: 225 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Adit, Figure 5A (Assessment Report 14818). Thunder adit is about 2.5 kilometres west-southwest from the end of Collison Bay.

Underground
MINING DIVISION: Skeena
UTM ZONE: 09 (NAD 83)
NORTHING: 5793654
EASTING: 352060

COMMODITIES: Iron Magnetite Copper Silver Gold

MINERALS

SIGNIFICANT: Magnetite Chalcopyrite Pyrite
ASSOCIATED: Quartz
ALTERATION: Chlorite Epidote Quartz Garnet
ALTERATION TYPE: Propylitic Skarn
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Massive Discordant Concordant
CLASSIFICATION: Skarn Replacement Industrial Min.
TYPE: K03 Fe skarn K01 Cu skarn
SHAPE: Tabular
DIMENSION: 64 x 6 Metres STRIKE/DIP: 030/65W TREND/PLUNGE:
COMMENTS: Adit zone.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Upper Triassic	Vancouver	Karmutsen	
Upper Triassic	Kunga	Sadler	

LITHOLOGY: Greenstone
Massive Magnetite
Garnet Skarn
Chlorite Epidote Garnet Skarn
Basalt
Limestone
Argillite

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Wrangell
PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

INVENTORY

ORE ZONE: THUNDER REPORT ON: Y
CATEGORY: Inferred YEAR: 1964
QUANTITY: 172365 Tonnes
COMMODITY: Iron GRADE: 35.0000 Per cent
COMMENTS: Estimated potential of ore grading 35 to 50 per cent iron.
REFERENCE: Energy, Mines and Resources Canada Reserves File - Thunder.

CAPSULE GEOLOGY

The showings are located on the southeast coast of Moresby Island, on the ridge between Ikeda Cove and Collison Bay, about 0.8 kilometre west of this Bay. The elevation is between 183 and 366 metres above sea level.

The showings were discovered in 1907 by Ike Thompson and C.T. Daykin. In 1914, the Sadie claim, Lot 2610, was Crown-granted to Thompson; the Thunder, Lot 2611, to Thompson and J.S. McMillan; the Spade Flush, Lot 2612, to Thompson and B. Metcalfe. These claims formed the Thunder Group covering 81.15 acres. The property was worked until the mid-1920's with surface stripping and the driving of a 91-metre adit on the Thunder claim in 1913-1914. During 1921 the group was optioned to Seattle interest.

In 1968 the Thunder claim was held by Mrs. Sadie Thompson and the McMillan estate, each having one-half interest. The other claims

CAPSULE GEOLOGY

are part of a large block held by Falconbridge Nickel Mines Limited (See Lily, 103B 028).

Recent exploration has mainly involved examination and magnetometer surveying, first by Falconbridge Nickel Mines Limited and then by The Granby Mining Company Limited and Jedway Iron Ore Limited. Basalts of the Vancouver Group, Upper Triassic Karmutsen Formation are conformably overlain by limestone and argillites of the Jurassic to Triassic Kunga Group. The limestone strikes about 030 degrees and dips gently west. The rocks are intruded by northeast striking, steep east dipping diorite, felsite and basalt dikes.

Magnetite, with variable pyrite, chalcopyrite and garnet-rich skarn, occur as conformable tabular bodies and as dike-like bodies, near normal to stratification. Mineralized zones occur in three areas. All zones are composed of mixtures, in varying degrees, of magnetite and garnet-rich skarn with epidote and chlorite. In some places chalcopyrite and pyrite form significant concentrations.

At the adit zone, a skarn and magnetite lens, 64 metres long and up to 6 metres wide, occurs within greenstone. The lens strikes 030 degrees and dips about 65 degrees west. About 400 metres to the west, a zone 150 metres long and up to 30 metres wide contains skarn and magnetite replacing Sadler Formation limestone at the Karmutsen contact. About 150 metres northwest of the adit are two distinct mineralized bodies, one an equant-shaped body up to 30 metres long, and another 35 degrees striking dike-like body, 60 metres long and 3 to 6 metres wide. A 2-metre adit sample assayed 2.6 per cent copper, 103 grams per tonne silver and 1.4 grams per tonne gold (Minister of Mines, Annual Report 1918, page 44).

Inferred reserves are 172,365 tonnes with 35.0 to 50.0 per cent iron (Energy, Mines and Resources Canada Reserves File - Thunder).

BIBLIOGRAPHY

- EMPR AR 1907-66; 1908-59; 1909-70; 1911-76; 1913-102-103; 1914-161,513; *1918-42-44; 1920-45; 1921-39,272; 1923-44; 1925-66; 1926-67-68; 1928-65; *1929-62; 1958-72
EMPR ASS RPT 193, *14189, *14818
EMPR BULL *54, pp. 212-213
EMPR EXPL 1985-C362; 1986-C418
EMPR OF *1988-28, pp. 86,87
EMPR PF (McDougall, J.J., (1956): Report on Properties at Ikeda Bay, Queen Charlotte Islands, Jun.6, 1956, pp. 23-24, refer to the Lily Mine - 103B 028; Sketch of Thunder Adit)
EMR MP RESFILE (Thunder)
GSC EC GEOL *No. 3, Vol. 1, 1926, pp. 44-47
GSC MAP 1385A
GSC P 88-1E, pp. 213-216,221-227; 89-1H, pp. 95-112; 90-10, pp. 163-172; 91-1A, pp. 383-391
MIN REV March/April 1988, pp. 19-24
Falconbridge File

DATE CODED: 1986/07/21
DATE REVISED: 1989/03/07

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103B 042**

NATIONAL MINERAL INVENTORY: 103B6 Cu14

NAME(S): **MEAL TICKET (L.2011 G1)**, COLLISON BAY, LECKIE,
 SAM'S ADIT, BAY, TREASURE BOX,
 TREASURE VAULT, CASH BOX (L. 2012)

STATUS: Showing	Underground	MINING DIVISION: Skeena
REGIONS: British Columbia, Queen Charlotte Islands		UTM ZONE: 09 (NAD 83)
NTS MAP: 103B06E		NORTHING: 5793652
BC MAP:		EASTING: 352155
LATITUDE: 52 16 24 N		
LONGITUDE: 131 10 01 W		
ELEVATION: 120 Metres		
LOCATION ACCURACY: Within 500M		
COMMENTS: Adit, Figure 5A (Assessment Report 14818). Located about 800 metres south-southwest of Collison Bay.		

COMMODITIES: Copper Iron Silver Gold Magnetite

MINERALS

SIGNIFICANT: Magnetite	Pyrrhotite	Chalcopyrite	Pyrite
ASSOCIATED: Quartz			
ALTERATION: Garnet	Epidote	Quartz	Chlorite
ALTERATION TYPE: Skarn			
MINERALIZATION AGE: Unknown			

DEPOSIT

CHARACTER: Concordant	Massive		
CLASSIFICATION: Replacement	Skarn	Industrial Min.	
TYPE: K01 Cu skarn			
SHAPE: Tabular			
DIMENSION: 60 x 2	Metres	STRIKE/DIP:	TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Upper Triassic	Vancouver	Karmutsen	
Triassic-Jurassic	Kunga	Undefined Formation	

LITHOLOGY: Feldspar Porphyry
 Skarn
 Basalt
 Limestone
 Quartz Monzonite

GEOLOGICAL SETTING

TECTONIC BELT: Insular	PHYSIOGRAPHIC AREA: Queen Charlotte Ranges
TERRANE: Wrangell	
METAMORPHIC TYPE: Contact Regional	RELATIONSHIP: Syn-mineralization Post-mineralization
	GRADE: Greenschist Hornfels

INVENTORY

ORE ZONE: SAMPLE	REPORT ON: N
CATEGORY: Assay/analysis	YEAR: 1984
SAMPLE TYPE: Channel	
COMMODITY	GRADE
Silver	8.5000 Grams per tonne
Gold	1.2000 Grams per tonne
Copper	2.4700 Per cent
COMMENTS: 2.6 metre channel sample.	
REFERENCE: Assessment Report 14189.	

CAPSULE GEOLOGY

The showings, discovered in 1906 by R.J. Leckie, are located 0.8 kilometre south of Collison Bay at an elevation 85 metres. An adit was driven in 1907 for 10 metres; at 6.4 metres it cut obliquely a 1.2-metre zone of pyrrhotite containing values in copper, gold and silver. Mr. Leckie and associates in 1908 bonded 3 claims, the Meal Ticket, Treasure Vault, and Cash Box (Treasure Box), to the Trethaway Bros. but no development work was reported at that time. The claims were held from 1910 by Moresby Island Mines, Ltd. although there is no record of this company as a Canadian incorporation. The Meal Ticket (Lot 2011 G 1) and Cash Box (Lot 2012) were Crown-granted to the company in 1914. It was reported in 1915 that the Treasure Vault claim had been Crown-granted to Collison Bay Mining Company,

CAPSULE GEOLOGY

Limited.

The Meal Ticket group, consisting of the Meal Ticket, Treasure Box, and Treasure Vault claims, was owned from about 1918 to 1926 by George D. Scott, of Vancouver. No work was reported during this period.

Falconbridge Limited sampled on the property in 1985.

Volcanics of the Vancouver Group, Upper Triassic Karmutsen Formation are overlain by limestone of the Jurassic to Triassic Kunga Group.

A near horizontal tabular lens of magnetite with a thickness from 1 to 2.5 metres and a strike length of 60 metres occurs within feldspar porphyry. Associated with the magnetite are variable amounts of chalcopyrite, pyrrhotite and pyrite.

A grab sample from the adit assayed 4.55 grams per tonne gold, 35.0 grams per tonne silver and 5.88 per cent copper. A 2.6-metre channel sample from a trench 40 metres to the northeast assayed 1.20 grams per tonne gold, 8.5 grams per tonne silver and 2.47 per cent copper (Assessment Report 14189).

BIBLIOGRAPHY

- EMPR AR 1907-65-66; 1908-59; 1910-84; 1911-76; 1912-110; 1913-103; 1914-513; 1918-44; 1920-45; 1923-44; 1925-66; 1926-68; 1928-65
EMPR ASS RPT *14189, 14818
EMPR BULL *54, p. 213
EMPR EXPL 1985-C362; 1986-C418
GSC MAP 1385A
GSC P 88-1E, pp. 213-216, 221-227; 89-1H, pp. 95-112; 90-10, pp. 59-87; 91-1A, pp. 383-391
GSC SUM RPT *1909, p. 75
MIN REV March/April 1988, pp. 19-24

DATE CODED: 1986/07/21
DATE REVISED: 1989/03/07

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

CAPSULE GEOLOGY

Fraction, and a half interest in the Shamrock claim. The workings in 1909 included an upper adit (Gordon Tunnel), at the 152-metre elevation, which was 5 metres in length; the No. 1 adit, at an elevation of 107 metres, which comprised a 30-metre cross-cut from which a 30-metre drift and 24-metre winze were driven; and a lower adit, 15-metres in length, which did not reach the mineralization. The mine closed in November 1909.

In 1973 Barrel Resources Ltd. held 40 claims in the Itsa and CU groups, covering the southern and western shores of Collison Bay and including several old properties. Work done in the area included: linecutting and magnetometer survey, 7.4 kilometres; electromagnetic survey, 4.6 kilometres; geochemical soil survey, 97 samples taken on a 30 by 61-metre grid spacing.

Falconbridge Limited sampled on the property in 1985.

Basalts from the Vancouver Group, Upper Triassic Karmutsen Formation are conformably overlain by limestones of the Jurassic to Triassic Kunga Group. Diorites of the Collison Bay Stock, part of the Middle to Late Jurassic Burnaby Island Plutonic Suite, lie to the east.

A vein-like north trending zone, variably replaced by magnetite, pyrrhotite, pyrite and chalcopyrite, occurs within metasomatically altered Karmutsen greenstones. A 2-metre chip sample from the middle adit returned 1.4 per cent copper, 14.7 grams per tonne silver and 0.7 gram per tonne gold (Assessment Report 14189). The vein strikes intermittently for about 250 metres and is up to 4 metres wide.

Grab sampling from the upper adit returned values such as 10.6 grams per tonne of gold, 13.5 grams per tonne of silver and 1.84 per cent copper. Estimate of reserves of the dump material is 1600 tonnes with an average grade of 1.22 grams per tonne gold (Assessment Report 14189).

BIBLIOGRAPHY

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- EMPR ASS RPT 4668, *14189, 14818
- EMPR BULL *54, p. 213
- EMPR EXPL 1985-C362; 1986-C418
- EMPR GEM 1973-482
- GSC MAP 278A; 1385A
- GSC P 88-1E, pp. 213-216,221-227; 89-1H, pp. 95-112; 90-10, pp. 59-87; 91-1A, pp. 383-391
- GSC SUM RPT *1909, pp. 74,75
- MIN REV March/April 1988, pp. 19-24

DATE CODED: 1986/07/18
DATE REVISED: 1989/03/07

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103B 044**

NATIONAL MINERAL INVENTORY: 103B6 Cu16

NAME(S): **WIRELESS**, TELEPHONE, CU

STATUS: Past Producer
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103B06E
BC MAP:

Underground

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 52 16 49 N
LONGITUDE: 131 09 26 W
ELEVATION: 1 Metres

NORTHING: 5794404
EASTING: 352841

LOCATION ACCURACY: Within 500M

COMMENTS: Adits, Map 2 (Assessment Report 4668). Located on the northwest shore of Collision Bay.

COMMODITIES: Copper Gold Silver

MINERALS

SIGNIFICANT: Chalcopyrite Bornite
ALTERATION TYPE: Skarn
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Concordant Disseminated
CLASSIFICATION: Replacement Skarn
TYPE: K01 Cu skarn
SHAPE: Tabular
DIMENSION: Metres

STRIKE/DIP: 025/50N TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Upper Triassic
Jurassic

GROUP

Vancouver

FORMATION

Karmutsen

IGNEOUS/METAMORPHIC/OTHER

Burnaby Island Plutonic Suite

ISOTOPIC AGE: 164 +/- 3 Ma
DATING METHOD: Uranium/Lead
MATERIAL DATED: Zircon

LITHOLOGY: Basalt
Limestone
Skarn
Diorite

HOSTROCK COMMENTS: Collision Bay Stock is part of Burnaby Island Plutonic Suite (GSC P 88-1E, pp. 213-216). Age date: R.G. Anderson GSC, Pers.Comm., Mar.1989.

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Wrangell
METAMORPHIC TYPE: Contact Regional

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

RELATIONSHIP: Syn-mineralization GRADE: Hornfels

INVENTORY

ORE ZONE: ADIT

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Chip
COMMODITY

YEAR: 1984

COMMODITY	GRADE	
Silver	41.8000	Grams per tonne
Gold	1.0000	Grams per tonne
Copper	2.0000	Per cent

COMMENTS: A 3 metre chip sample from the adit.
REFERENCE: Assessment Report 14189.

CAPSULE GEOLOGY

The showing, discovered by the Daykin brothers, in 1906, is located on the western shore of Collision Bay.

In 1910, the Wireless and Telephone claims were owned by Daykin and Metcalfe. In 1911 a 15-metre crosscut adit was driven at sea-level to the vein. In 1973 Barrel Resources Ltd. held 40 claims in the Itsa and CU groups, covering the southern and western shores of Collision Bay and including several old properties. Work done over the area included linecutting and magnetometer survey, 1.4 kilometres; electromagnetic survey, 0.8 kilometre; geochemical soil survey of 97 samples taken on a 30 by 61-metre grid spacing.

The area is underlain by Vancouver Group, Upper Triassic Karmutsen Formation consisting predominantly of basalt and interlava limestones. Diorite of the Collision Bay Stock, part of the Middle to

CAPSULE GEOLOGY

Late Jurassic Burnaby Island Plutonic Suite, lies to the east of the showing. Disseminated chalcopyrite and bornite occur as a bedded replacement of a thin interlava limestone. The bed strikes 025 degrees and dips 045 to 050 degrees northwest and is up to 1.2 metres thick. A 3-metre chip sample from the adit assayed 2.0 per cent copper, 41.8 grams per tonne silver and 1.0 gram per tonne gold (Assessment Report 14189).

Between 1916 and 1917 approximately 15 tonnes of ore was shipped from this property. From this ore 361 kilograms of copper with 435 grams of gold and 374 grams of silver were recovered.

BIBLIOGRAPHY

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EMPR ASS RPT *4668, *14189
EMPR BC METAL MM00808
EMPR BULL *54, p. 213
EMPR EXPL 1985-C362
EMPR GEM 1973-482
EMPR INDEX 3-218
GSC MAP 1385A
GSC P 88-1E, pp. 213-216, 221-227; 89-1H, pp. 95-112; 90-10, pp. 59-87; 91-1A, pp. 383-391
MIN REV March/April 1988, pp. 19-24

DATE CODED: 1986/07/21
DATE REVISED: 1989/03/07

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103B 045**

NATIONAL MINERAL INVENTORY: 103B6 Cu17

NAME(S): **OCEANIC, CU**

STATUS: Past Producer
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103B06E
BC MAP:

Underground

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 52 16 54 N
LONGITUDE: 131 09 21 W
ELEVATION: 5 Metres

NORTHING: 5794556
EASTING: 352940

LOCATION ACCURACY: Within 500M

COMMENTS: Adit, Map 2 (Assessment Report 4668). Located on the northwest shore of Collision Bay.

COMMODITIES: Copper Silver

MINERALS

SIGNIFICANT: Chalcopyrite Bornite
ALTERATION TYPE: Skarn
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Replacement Skarn
TYPE: K01 Cu skarn

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Upper Triassic	Vancouver	Karmutsen	
Jurassic			Burnaby Island Plutonic Suite

ISOTOPIC AGE: 164 +/- 3 Ma
DATING METHOD: Uranium/Lead
MATERIAL DATED: Zircon

LITHOLOGY: Basalt
Limestone
Skarn
Diorite

HOSTROCK COMMENTS: Collision Bay Stock is part of Burnaby Island Plutonic Suite (GSC P 89-1H, pp.105-112). Age date: R.G. Anderson GSC, Pers.Comm., Mar. 1989.

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Wrangell
METAMORPHIC TYPE: Contact

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

RELATIONSHIP: Syn-mineralization
Post-mineralization

GRADE: Hornfels

CAPSULE GEOLOGY

The showing, discovered in 1906 by the Daykin brothers, is located on the west shore of Collision Bay below sea level, and may only be worked at low tide.

The property was worked on by owner John Lawson and Alex Smith in 1913. Some ore was mined and sacked for shipment to the smelters. In the same year the property was surveyed preparatory to obtaining a Crown grant.

Barrel Resources Ltd. in 1973 held 40 claims in the Itsa and CU groups, covering the southern and western shores of Collision Bay and including several old properties.

Work done over the area included linecutting and magnetometer survey, 74 kilometres; electromagnetic survey, 4.6 kilometres; geochemical soil survey, 97 samples taken at 30 by 61-metre grid spacing.

The area is underlain by Vancouver Group, Upper Triassic Karmutsen Formation consisting of basalt and interlava limestones. Diorite of the Collision Bay Stock, part of the Middle to Late Jurassic Burnaby Island Plutonic Suite, lies to the east of the occurrence.

Mineralization, consisting of chalcopyrite and minor bornite, occurs in altered limestone and parts of the bordering intrusive.

In 1913, about 14 tonnes of ore was shipped from the property. From this ore, 534 kilograms of copper with 218 grams of silver were recovered.

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 108
REPORT: RGEN0100

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EMPR BC METAL MM00778
EMPR BULL *54, p. 213
EMPR EXPL 1985-C362; 1986-C418
EMPR GEM 1973-482
EMPR INDEX 3-207
GSC MAP 1385A
GSC P 88-1E, pp. 213-216,*221-227; 89-1H, pp. 95-104,*105-112;
90-10, pp. 59-87; 91-1A, pp. 383-391
GSC SUM RPT *1909, p. 75
MIN REV March/April 1988, pp. 19-24

DATE CODED: 1986/07/21
DATE REVISED: 1989/03/07

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103B 046**

NATIONAL MINERAL INVENTORY: 103B6 Fe13

NAME(S): **PLUNGER, IVAN, HILL**

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103B06E
BC MAP:

Underground

MINING DIVISION: Skeena

LATITUDE: 52 15 34 N
LONGITUDE: 131 11 26 W
ELEVATION: 230 Metres

UTM ZONE: 09 (NAD 83)

NORTHING: 5792156
EASTING: 350497

LOCATION ACCURACY: Within 500M

COMMENTS: Located 1.5 kilometres east of the southeast end of Huston Inlet.

COMMODITIES: Iron Copper Magnetite

MINERALS

SIGNIFICANT: Magnetite Chalcopyrite Pyrite

ALTERATION: Garnet

ALTERATION TYPE: Skarn

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated Concordant
CLASSIFICATION: Skarn Replacement Epigenetic Industrial Min.
TYPE: K03 Fe skarn K01 Cu skarn

SHAPE: Irregular

MODIFIER: Sheared

DIMENSION: 150 x 60 Metres

STRIKE/DIP:

TREND/PLUNGE:

COMMENTS: Mineralized area of scattered magnetite bodies.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Upper Triassic
Jurassic

GROUP

Vancouver

FORMATION

Karmutsen

IGNEOUS/METAMORPHIC/OTHER

Burnaby Island Plutonic Suite

ISOTOPIC AGE: 168 +/- 1 Ma

DATING METHOD: Uranium/Lead

MATERIAL DATED: Zircon

LITHOLOGY: Greenstone
Magnetite Skarn
Skarn
Limestone
Diorite
Garnet Magnetite Skarn

HOSTROCK COMMENTS: Age date: GSC Paper 90-10, page 63, Figure 2.

GEOLOGICAL SETTING

TECTONIC BELT: Insular

TERRANE: Wrangell

METAMORPHIC TYPE: Contact Regional

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

RELATIONSHIP: Pre-mineralization
Syn-mineralization
Post-mineralization

GRADE: Greenschist
Hornfels

CAPSULE GEOLOGY

This property is located on the southeast coast of Moresby Island about 0.3 kilometre east of the head of Huston Inlet between 91 and 259 metres elevation. In 1968 the property was held as the Plunger Nos. 1-4 by The Granby Mining Company Limited and is part of a large group held by Granby and Jedway Iron Ore Limited (see Jessie, 103B 026).

Apparently the showings were originally known as the Ivan Group which was discovered in 1908. The group consisted of three claims held by Messrs. I. Thompson, W. Mckinnon and A. Sivart. They worked the group until 1914, driving 21 metres of adit and doing surface work.

In 1962, Jedway Iron Ore Limited carried out 46 metres of packsack drilling on the property.

A 150 by 8-metre skarn with magnetite, pyrite and chalcopyrite occurs as a replacement of a northwest-trending shear zone in metasomatically altered greenstone of the Vancouver Group, Upper Triassic Karmutsen Formation near the contact with diorite of the Burnaby Island Plutonic Suite. Post-mineralization rhyolite and basalt dikes and minor limestone occur in the area.

About 100 metres north is a 15 by 9-metre magnetite garnet skarn.

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 110
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR AR 1908-60; 1909-71; 1910-84; 1911-76; 1912-110; 1913-101,104;
1914-162
EMPR ASS RPT 9702
EMPR BULL *54, p. 214, 220
EMPR EXPL 1981-358
GSC EC GEOL Series 3, Vol. 1, 1926, pp. 42,43
GSC MAP 1385A
GSC P 88-1E, pp. 213-216,221-227; 89-1H, pp. 95-112; 90-10, pp.
59-87; 91-1A, pp. 383-391
MIN REV March/April 1988, pp. 19-24

DATE CODED: 1986/07/18
DATE REVISED: 1999/08/30

CODED BY: LDJ
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103B 047**

NATIONAL MINERAL INVENTORY:

NAME(S): **CARNATION**, ROY'S SHOWING

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103B06E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 52 16 54 N
LONGITUDE: 131 11 11 W
ELEVATION: 160 Metres

NORTHING: 5794618
EASTING: 350856

LOCATION ACCURACY: Within 500M

COMMENTS: Showing, Map 1K3 (McDougall, 1956) Roy's Showing, Figure 5A
(Assessment Report 14818. Located about 1.5 kilometres southwest of Ikeda Cove.

COMMODITIES: Copper Silver Gold Magnetite Iron

MINERALS

SIGNIFICANT: Chalcopyrite Pyrrhotite Pyrite Magnetite
ALTERATION: Chlorite Epidote
ALTERATION TYPE: Skarn Epidote Chloritic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Massive
CLASSIFICATION: Skarn Replacement Industrial Min.
TYPE: K01 Cu skarn

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Upper Triassic	Vancouver	Karmutsen	
Triassic-Jurassic	Kunga	Undefined Formation	
Jurassic			Burnaby Island Plutonic Suite

ISOTOPIC AGE: 164 +/- 3 Ma
DATING METHOD: Uranium/Lead
MATERIAL DATED: Zircon

LITHOLOGY: Porphyritic Andesite
Massive Magnetite
Skarn
Limestone
Greenstone
Basalt
Diorite Sill

HOSTROCK COMMENTS: Diorite sills related to Jurassic Burnaby Island Plutonic Suite (GSC P 88-1E, pp. 213-216). Age date: R.G. Anderson, Pers.Comm.,Mar.,1989.

GEOLOGICAL SETTING

TECTONIC BELT: Insular PHYSIOGRAPHIC AREA: Queen Charlotte Ranges
TERRANE: Wrangell
METAMORPHIC TYPE: Contact Regional RELATIONSHIP: Syn-mineralization GRADE: Greenschist
Post-mineralization Hornfels

INVENTORY

ORE ZONE: DRILLHOLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1985
SAMPLE TYPE: Drill Core
COMMODITY GRADE
Silver 31.3000 Grams per tonne
Gold 3.3000 Grams per tonne
Copper 0.5000 Per cent

COMMENTS: 30 centimetre drill hole section.
REFERENCE: Assessment Report 14818.

CAPSULE GEOLOGY

Vancouver Group, Upper Triassic Karmutsen Formation consisting predominantly of basalt is overlain by limestone of the Jurassic to Triassic Kunga Group. The rocks are intruded by diorite sills related to the Middle to Late Jurassic Burnaby Island Plutonic Suite. A north trending, 3-metre long, 1-metre wide zone of massive magnetite with chalcopyrite, pyrite and pyrrhotite occurs in chlorite and epidote altered porphyritic andesite. Assays of 12 to 20 per cent copper, 53 grams per tonne silver and 8.9 grams per tonne gold

CAPSULE GEOLOGY

occur across a narrow width. A drill hole by Falconbridge Limited intersected a 30-centimetre wide zone of massive sulphides and assayed 3.3 grams per tonne gold, 31.3 grams per tonne silver and 0.5 per cent copper (Assessment Report 14818).

BIBLIOGRAPHY

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EMPR ASS RPT 14189, *14818
EMPR BULL 54
EMPR EXPL 1986-C418
EMPR PF (McDougall, J.J., (1956): Report on Properties at Ikeda Bay, Queen Charlotte Islands, Jun.6, 1956, refer to the Lily Mines - 103B 028)
GSC MAP 1385A
GSC P 88-1E, pp. 213-216,221-227; 89-1H, pp. 95-112; 90-10, pp. 59-87; 91-1A, pp. 383-391
MIN REV March/April 1988, pp. 19-24

DATE CODED: 1986/07/22
DATE REVISED: 1989/03/09

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103B 048**

NATIONAL MINERAL INVENTORY: 103B3 Cu3

NAME(S): **LOUSCOONE**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103B03W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 52 12 49 N
LONGITUDE: 131 17 26 W
ELEVATION: 200 Metres

NORTHING: 5787270
EASTING: 343512

LOCATION ACCURACY: Within 500M

COMMENTS: Showing, Figure 34 (Bulletin 54). Located west of Louscoone Inlet.

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Copper Cuprite Tetrahedrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Epigenetic
TYPE: D03 Volcanic redbed Cu

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Upper Triassic	Vancouver	Karmutsen	

LITHOLOGY: Basalt
Basaltic Volcanic

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Wrangell

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

CAPSULE GEOLOGY

The Louscoone showing, discovered in 1959, is located west of the north end of Louscoone Inlet. Native copper, cuprite and tetrahedrite are reported to occur in basaltic rocks of the Upper Triassic, Vancouver Group, Karmutsen Formation.

BIBLIOGRAPHY

EMPR BULL 54, p. 220
GSC MAP 1385A
GSC P 88-1E, pp. 221-227; 89-1H; 90-10; 93-1E, pp. 1-8

DATE CODED: 1986/06/26
DATE REVISED: 1989/03/03

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103B 049**

NATIONAL MINERAL INVENTORY: 103B3 Cu11

NAME(S): **SAKAI**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103B03E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 52 08 54 N
LONGITUDE: 131 03 11 W
ELEVATION: 1 Metres

NORTHING: 5779524
EASTING: 359530

LOCATION ACCURACY: Within 500M

COMMENTS: Symbol, Figure 34 (Bulletin 54). Located east of Rose Harbour on Moore Head near the eastern point of Kunghit Island.

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Bornite
ASSOCIATED: Calcite
ALTERATION TYPE: Carbonate
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated Breccia
CLASSIFICATION: Igneous-contact Epigenetic
TYPE: T MISCELLANEOUS

SHAPE: Irregular
MODIFIER: Fractured

DIMENSION: 450 x 45 Metres

COMMENTS: The zone is sheared and has a near vertical dip and strikes in a north direction.

STRIKE/DIP:

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Upper Triassic
Tertiary

GROUP

Vancouver

FORMATION

Karmutsen

IGNEOUS/METAMORPHIC/OTHER

Kano Plutonic Suite

ISOTOPIC AGE: 46 +/- 1 Ma

DATING METHOD: Uranium/Lead

MATERIAL DATED: Zircon

LITHOLOGY: Brecciated Volcanic
Brecciated Sediment/Sedimentary
Breccia
Limestone
Basalt

HOSTROCK COMMENTS: Age date from R.G. Anderson Geological Survey of Canada, Personal Communication, March, 1989.

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Wrangell

METAMORPHIC TYPE: Contact Regional

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

RELATIONSHIP: Syn-mineralization
Post-mineralization

GRADE: Greenschist
Hornfels

CAPSULE GEOLOGY

The property is situated on Moore Head near the eastern point of Kunghit Island.

The showings, discovered in 1910, were owned in 1913 by J. Uniaka. Work included a 15-metre open cut across the fracture at the south end of the claim.

A mineralized zone, 450 by 45 metres, occurs along a north striking fractured contact between basalt and limestone of the Vancouver Group, Upper Triassic Karmutsen Formation. Bornite is disseminated within the calcite, cementing the volcanic and sediment brecciated fragments.

A post tectonic pluton occurs south of the showing. This intrusive is part of the Tertiary Kano Plutonic Suite.

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EMPR BULL 54, p. 220
GSC MAP 1385A
GSC P 88-1E, pp. 213-216,*221-227; 89-1H, pp. 95-112; 90-10, pp. 59-87

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 115
REPORT: RGEN0100

BIBLIOGRAPHY

MIN REV March/April 1988, pp. 19-24

DATE CODED: 1986/06/26
DATE REVISED: 1989/03/03

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103B 050**

NATIONAL MINERAL INVENTORY: 103B3 Cu2

NAME(S): **COPPER COIN**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103B03E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 52 07 39 N
LONGITUDE: 131 00 26 W
ELEVATION: 1 Metres

NORTHING: 5777119
EASTING: 362602

LOCATION ACCURACY: Within 500M

COMMENTS: Symbol, Figure 34 (Bulletin 54). Located on High Island, which is just northeast of Kughit Island.

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite Pyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Replacement Epigenetic
TYPE: T MISCELLANEOUS

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Upper Triassic
Tertiary

GROUP

Vancouver

FORMATION

Karmutsen

IGNEOUS/METAMORPHIC/OTHER

Kano Plutonic Suite

ISOTOPIIC AGE: 46 +/- 1 Ma
DATING METHOD: Uranium/Lead
MATERIAL DATED: Zircon

LITHOLOGY: Basalt
Limestone

HOSTROCK COMMENTS: Age date is from R.G. Anderson Geological Survey of Canada, Personal Communication, March, 1989.

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Wrangell
METAMORPHIC TYPE: Contact Regional

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

RELATIONSHIP: Syn-mineralization Post-mineralization
GRADE: Greenschist Hornfels

CAPSULE GEOLOGY

The showing is located at sea level on the east side of High Island, just to the northeast of Kughit Island. The property was owned by J. Uniaka in 1913; no exploration work was reported.

In 1931 some stripping and open cutting was reported to have been carried out.

High Island is underlain by basalts and interlava limestone of the Upper Triassic Vancouver Group, Karmutsen Formation. West of the island, is a post-tectonic pluton which is part of the Tertiary Kano Plutonic Suite.

An exposure of 60 centimetres of chalcopyrite occurs in a replacement zone at the limestone/volcanic contact. Some disseminated pyrite and chalcopyrite occurs in the basic rocks.

BIBLIOGRAPHY

EMPR AR *1913-102
EMPR BULL 54, p. 220
GSC MAP 1385A
GSC P 88-1E, pp. 213-216, 221-227; 89-1H, pp. 95-112; 90-10, pp. 59-87

DATE CODED: 1986/06/26
DATE REVISED: 1989/03/05

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103B 051**

NATIONAL MINERAL INVENTORY: 103B3 Fe1

NAME(S): **TREAT BAY**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103B03E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 52 04 09 N
LONGITUDE: 131 01 36 W

NORTHING: 5770669
EASTING: 361090

ELEVATION: 0001 Metres

LOCATION ACCURACY: Within 500M

COMMENTS: Symbol, Figure 34 (Bulletin 54). Located at sea level within Treat Bay on Kunghit Island.

COMMODITIES: Iron Copper Magnetite

MINERALS

SIGNIFICANT: Magnetite Chalcopyrite Pyrite Pyrrhotite Malachite

ALTERATION: Malachite

ALTERATION TYPE: Oxidation

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Concordant Massive Disseminated
CLASSIFICATION: Skarn Replacement Epigenetic Industrial Min.
TYPE: K03 Fe skarn
SHAPE: Irregular

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Upper Triassic
Upper Triassic

GROUP
Vancouver
Kunga

FORMATION
Karmutsen
Sadler

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Basalt
Limestone
Skarn

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Wrangell

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

CAPSULE GEOLOGY

The showing is located at sea level at the north end of Treat Bay on Kunghit Island. It has been staked several times. An irregular metasomatic skarn body occurs at the contact between basalts of the Upper Triassic Vancouver Group, Karmutsen Formation and limestone of the Upper Triassic Sadler Formation (Kunga Group). Mineralization consists of massive and disseminated magnetite, pyrite, pyrrhotite, malachite and chalcopyrite.

BIBLIOGRAPHY

EMPR BULL 54, p. 220
GSC MAP 1385A
GSC P 88-1E, pp. 213-216, 221-227; 89-1H, pp. 95-112; 90-10, pp. 163-172; 93-1E, pp. 1-8
MIN REV March/April 1988, pp. 19-24

DATE CODED: 1986/06/26
DATE REVISED: 1989/03/03

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103B 052**

NATIONAL MINERAL INVENTORY: 103B6 Cu10

NAME(S): **FLO, SWAN**

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103B06W
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 52 22 29 N
LONGITUDE: 131 17 36 W
ELEVATION: 45 Metres

NORTHING: 5805192
EASTING: 343890

LOCATION ACCURACY: Within 500M

COMMENTS: Showing, Figure 34 (Bulletin 54). Located on the southern shore of Poole Inlet on Burnaby Island.

COMMODITIES: Copper Iron Magnetite

MINERALS

SIGNIFICANT: Chalcopyrite Magnetite
ALTERATION TYPE: Skarn
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Massive Disseminated
CLASSIFICATION: Skarn Replacement Industrial Min. K01 Cu skarn
TYPE: K03 Fe skarn
DIMENSION: 40 x 30 Metres STRIKE/DIP: TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Triassic-Jurassic Kunga
Lower Cretaceous Undefined Group
Jurassic

FORMATION

Undefined Formation
Longarm

IGNEOUS/METAMORPHIC/OTHER

Burnaby Island Plutonic Suite

ISOTOPIC AGE: 164 +/- 3 Ma
DATING METHOD: Uranium/Lead
MATERIAL DATED: Zircon

LITHOLOGY: Limestone
Siltstone
Skarn
Greywacke
Monzonite

HOSTROCK COMMENTS: Burnaby Island Plutonic Suite rocks intrude Kunga limestones. Age date: R.G. Anderson, GSC, Pers.Comm., Mar., 1989.

GEOLOGICAL SETTING

TECTONIC BELT: Insular PHYSIOGRAPHIC AREA: Queen Charlotte Ranges
TERRANE: Wrangell
METAMORPHIC TYPE: Contact Regional RELATIONSHIP: Syn-mineralization Post-mineralization GRADE: Greenschist Hornfels

INVENTORY

ORE ZONE: DRILLHOLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1964
SAMPLE TYPE: Drill Core
COMMODITY GRADE
Copper 1.0000 Per cent
Iron 60.8000 Per cent

COMMENTS: Values from diamond drilling range from 60.8 to 69.6 per cent iron and 1.0 to 4.0 per cent copper.

REFERENCE: EMPR Annual Report 1964, page 46; NMI card 103B6 Cu10.

CAPSULE GEOLOGY

The showings are situated less than 61 metres from tidewater at the east entrance to Poole Inlet on Burnaby Island.

The Flo group of 24 recorded claims was held in 1964 by Merrican International Mines Ltd. The company completed 152 metres of diamond drilling in the vicinity.

The area is underlain predominantly by massive grey limestone and black, thin bedded limestone of the Upper Triassic Sadler and Peril Formations (Kunga Group) and lithic siltstone and greywacke of the Lower Cretaceous Longarm Formation. A monzonitic intrusive of the Middle to Late Jurassic Burnaby Island Plutonic Suite occurs east of the showing.

CAPSULE GEOLOGY

A magnetite replacement zone, 40 by 30 metres, occurs in Kunga limestone near a major north trending fault. Assays on four samples from diamond drilling in 1964, ranged from 60.80 per cent to 69.60 per cent iron (National Mineral Inventory Card 103B6 Cu10).

About 180 metres east of the magnetite zone, chalcopryrite outcrops in the limestone as two occurrences, 60 metres apart, with lengths of 9 and 22 metres, respectively. Widths range from 3 to 4.5 metres, with assays showing 4 per cent copper and 1 per cent copper (Minister of Mines, Annual Report 1964, page 46).

BIBLIOGRAPHY

EMPR AR *1964-46-47
EMPR ASS RPT *8901
EMPR BULL *54, p. 214
EMPR EXPL 1980-364
EMPR PF (Selnes, W.E., (1963): Burnaby Island Iron Groups for Merrican International Mines Ltd., May 28, 1963, refer to Mac - 103B 019)
EMR MP CORPFILE (Merrican International Industries Ltd.)
GSC MAP 1385A
GSC P 86-20; 88-1E, pp. 213-216,221-227; 89-1H, pp. 95-112; 90-10, pp. 163-172; 91-1A, pp. 383-391
MIN REV March/April 1988, pp. 19-24

DATE CODED: 1986/07/07
DATE REVISED: 1989/03/06

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103B 053**

NATIONAL MINERAL INVENTORY: 103B6 Fe14

NAME(S): **CARPENTER BAY**, CAR, PEERLESS,
PRINCESS

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103B06E
BC MAP:
LATITUDE: 52 15 04 N
LONGITUDE: 131 09 56 W
ELEVATION: 450 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Showing, Figure 34 (Bulletin 54). Located on a ridge north of Carpenter Bay.

Underground
MINING DIVISION: Skeena
UTM ZONE: 09 (NAD 83)
NORTHING: 5791177
EASTING: 352175

COMMODITIES: Iron Magnetite Copper

MINERALS

SIGNIFICANT: Magnetite Chalcopyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Skarn Replacement Epigenetic Industrial Min.
TYPE: T MISCELLANEOUS
DIMENSION: 14 x 5 Metres STRIKE/DIP: TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Triassic	Vancouver	Karmutsen	
Triassic-Jurassic	Kunga	Undefined Formation	
Jurassic			Burnaby Island Plutonic Suite

ISOTOPIC AGE: 168 +/- 1 Ma
DATING METHOD: Uranium/Lead
MATERIAL DATED: Zircon

LITHOLOGY: Greenstone
Magnetite
Skarn
Volcanic Rock
Limestone
Argillite
Intrusive Rock
Quartz Monzonite

HOSTROCK COMMENTS: Age date: GSC Paper 90-10, page 63, Figure 2.

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Wrangell
METAMORPHIC TYPE: Contact Regional
PHYSIOGRAPHIC AREA: Queen Charlotte Ranges
RELATIONSHIP: Syn-mineralization Post-mineralization
GRADE: Greenschist Hornfels

CAPSULE GEOLOGY

The Peerless group is situated at an elevation of 488 metres on the north side of a ridge, 2.4 kilometres north of Carpenter Bay. In 1908 the owners, the Young Bros., developed a number of adits on the property.

A magnetite lens 13.7 by 5.5 metres, with lesser chalcopyrite occurs near the contact volcanics of the Vancouver Group, Upper Triassic Karmutsen Formation and quartz monzonites of the Burnaby Island Plutonic Suite. Minor argillite and limestone of the Jurassic to Triassic Kunga Group overlies the volcanic rocks.

BIBLIOGRAPHY

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EMPR BULL 54, p. 220
GSC MAP 1385A
GSC P 88-1E, pp. 213-216, *221-227; 89-1H, pp. 95-104, *105-112;
90-10, pp. 59-87
GSC SUM RPT *1909, pp. 75-76
MIN REV Mar./Apr., 1988, pp. 19-24

DATE CODED: 1986/07/07
DATE REVISED: 1999/08/30

CODED BY: LDJ
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103B 053**

MINFILE NUMBER: **103B 054**

NATIONAL MINERAL INVENTORY: 103B6 Cu8

NAME(S): **HOPE**, HOPE FR., HUSTON

STATUS: Prospect
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103B06E
BC MAP:

Underground

MINING DIVISION: Skeena

LATITUDE: 52 15 49 N
LONGITUDE: 131 11 36 W
ELEVATION: 60 Metres

UTM ZONE: 09 (NAD 83)

NORTHING: 5792625
EASTING: 350322

LOCATION ACCURACY: Within 500M

COMMENTS: Showing, Figure 4 (Assessment Report 9702). Located 1.5 kilometres east of Huston Inlet on the southeast coast of Moresby Island.

COMMODITIES: Copper Iron Magnetite

MINERALS

SIGNIFICANT: Magnetite Chalcopyrite Pyrite Pyrrhotite
ASSOCIATED: Ilmenite Quartz
ALTERATION: Garnet
ALTERATION TYPE: Skarn
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Massive
CLASSIFICATION: Skarn Replacement Epigenetic Industrial Min.
TYPE: K01 Cu skarn K03 Fe skarn
SHAPE: Regular
DIMENSION: 25 x 6 Metres STRIKE/DIP: 060/80E TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Plutonic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Upper Triassic Jurassic	Vancouver	Karmutsen	Burnaby Island Plutonic Suite

ISOTOPIC AGE: 168 +/- 1 Ma
DATING METHOD: Uranium/Lead
MATERIAL DATED: Zircon

LITHOLOGY: Diorite
Magnetite Skarn
Massive Magnetite
Skarn
Greenstone
Volcanic Rock

HOSTROCK COMMENTS: Age Date: GSC Paper 90-10, page 63, Figure 2.

GEOLOGICAL SETTING

TECTONIC BELT: Insular PHYSIOGRAPHIC AREA: Queen Charlotte Ranges
TERRANE: Wrangell
METAMORPHIC TYPE: Contact Regional RELATIONSHIP: Syn-mineralization GRADE: Greenschist
Post-mineralization Hornfels

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1918
SAMPLE TYPE: Chip
COMMODITY _____ GRADE _____
Copper 2.7000 Per cent
COMMENTS: 3 metre chip sample.
REFERENCE: Minister of Mines, Annual Report 1918, pages 39-40.

CAPSULE GEOLOGY

The Hope Group, consisting of the Hope and Hope Fraction, is situated one kilometre east of the southeast end of Huston Inlet on the southeast coast of Moresby Island. The showings are found between 76 and 91 metres above sea level.

The group was staked around 1910 by Hugh McEachern who held it until the late 1920's. Work on the property consisted of a short adit, open-cuts and some stripping. In 1929, the group was owned by A.J. Wild and partners.

Silver Standard Mines Limited drilled a 81-metre packsack hole in February 1960, which intersected 61 metres of magnetite with 2 metres containing 0.85 per cent copper.

CAPSULE GEOLOGY

The Granby Mining Company Limited held the property in the 1960's as part of a large group of located claims.

The property has an estimated potential of 9,072-18,144 tonnes (BCI 103 B-C - 54).

A skarn body occurs within a diorite stock of the Burnaby Island Plutonic Suite near its contact with Vancouver Group, Upper Triassic Karmutsen Formation volcanics. The massive magnetite skarn contains chalcopyrite, pyrite, pyrrhotite, ilmenite and garnet. It strikes northeast for about 25 metres with a width up to 6 metres. A 3-metre sample assayed 2.7 per cent copper with traces of gold and silver (Minister of Mines, Annual Report 1918, pages 39-40). A second showing occurs several metres to the south along strike. This mineralized skarn is smaller and hosts low copper values.

BIBLIOGRAPHY

EMPR AR 1913-101; 1914-162; *1918-39-40,104; 1922-42; 1923-44;
1925-66; *1926-67; 1928-65; 1929-61
EMPR ASS RPT 8224, *9702, 13102
EMPR BULL *54, p. 214
EMPR EXPL 1980-365; 1981-95; 1984-358
GSC EC GEOL Series 3, Vol. 1, 1926, p. 51
GSC MAP 1385A
GSC P 88-1E, pp. 213-216, 221-227; 89-1H, pp. 95-112; 90-10,
pp. 59-87; 91-1A, pp. 383-391
MIN REV Mar./Apr., 1988, pp. 19-24
Chevron File

DATE CODED: 1986/07/18
DATE REVISED: 1989/03/06

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103B 055**

NATIONAL MINERAL INVENTORY: 103B3 Cu1

NAME(S): **RASPBERRY COVE** THREE GAMBLERS, N.B.

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103B03E
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 52 09 54 N
LONGITUDE: 131 04 16 W
ELEVATION: 5 Metres

NORTHING: 5781413
EASTING: 358348

LOCATION ACCURACY: Within 500M

COMMENTS: Beach outcrop, Appendix E (Assessment Report 1245). Located near Forayth Point along the Houston Stewart Channel.

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Porphyry
TYPE: L04 Porphyry Cu ± Mo ± Au

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Upper Triassic
Tertiary

GROUP

Vancouver

FORMATION

Karmutsen

IGNEOUS/METAMORPHIC/OTHER

Kano Plutonic Suite

ISOTOPIC AGE: 46.2 +/- 0.4 Ma
DATING METHOD: Uranium/Lead
MATERIAL DATED: Zircon

LITHOLOGY: Greenstone
Quartz Monzonite
Porphyry

HOSTROCK COMMENTS: The Carpenter Bay Pluton is part of the Kano Plutonic Suite. Age date from sample taken at Point Langford(GSC Paper 90-10, p. 67, Table 1).

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Wrangell
METAMORPHIC TYPE: Contact Regional

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

RELATIONSHIP: Syn-mineralization
Post-mineralization

GRADE: Greenschist
Hornfels

INVENTORY

ORE ZONE: OUTCROP

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Grab
YEAR: 1963

COMMODITY: Copper
GRADE: 7.0800 Per cent

COMMENTS: Sample taken across 60 centimetres of beach outcrop.
REFERENCE: Assessment Report 1245.

CAPSULE GEOLOGY

The showing is located just above sea level on Houston Stewart Channel, one kilometre west of Point Langford.

The beach outcrop was discovered in 1968.

The area is underlain by greenstone of the Upper Triassic Vancouver Group Karmutsen Formation which is cut by quartz monzonite of the Carpenter Bay pluton, part of the Tertiary Kano Plutonic Suite (Geological Survey of Canada, Paper 90-10, pages 59-87). Copper mineralization occurs in small veins in the rocks. A beach outcrop of a well-mineralized porphyry gave values of 7.08 per cent (across 60 centimetres) and 8.95 per cent (float) copper (Assessment Report 1245).

BIBLIOGRAPHY

EMPR AR 1968-283
EMPR ASS RPT *1245, 9014
EMPR BULL *54, p. 220
EMPR EXPL 1980-363-4
EMPR FIELDWORK 1997, 19-1-19-14

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 124
REPORT: RGEN0100

BIBLIOGRAPHY

GSC MAP 1385A
GSC P 88-1E, pp. 213-216, 221-227; 89-1H, pp. 95-112; 90-10, pp.
59-87
MIN REV Mar./Apr., 1988, pp. 19-24

DATE CODED: 1986/07/07
DATE REVISED: 1989/03/03

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103B 056**

NATIONAL MINERAL INVENTORY:

NAME(S): **CARPENTER**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103B03E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 52 12 29 N
LONGITUDE: 131 03 21 W
ELEVATION: 120 Metres

NORTHING: 5786171
EASTING: 359529

LOCATION ACCURACY: Within 500M

COMMENTS: Sample location, Figure 5 (Assessment Report 10002). Located just south of Carpenter Bay.

COMMODITIES: Gold Copper

MINERALS

SIGNIFICANT: Pyrite Arsenopyrite Chalcopyrite Pyrrhotite
ASSOCIATED: Quartz Carbonate
ALTERATION: Clay Quartz Carbonate
ALTERATION TYPE: Argillic Silicific'n Carbonate
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Epigenetic Igneous-contact
TYPE: H05 Epithermal Au-Ag: low sulphidation
SHAPE: Irregular
MODIFIER: Sheared Folded
DIMENSION: Metres STRIKE/DIP: 160/90E TREND/PLUNGE:
COMMENTS: Shear zone.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Triassic-Jurassic	Kunga	Undefined Formation	
Tertiary			Kano Plutonic Suite

ISOTOPIC AGE: 46 +/- 1 Ma
DATING METHOD: Uranium/Lead
MATERIAL DATED: Zircon

LITHOLOGY: Feldspar Porphyry Dike
Quartz Carbonate Vein
Biotite Hornfels
Quartz Monzonite
Felsite Dike
Andesitic Dike
Limy Argillite
Argillite
Limestone

HOSTROCK COMMENTS: The Langford Point Pluton is part of the Kano plutonic suite. Age date: R.G. Anderson, GSC, Personal Communication, March, 1989.

GEOLOGICAL SETTING

TECTONIC BELT: Insular PHYSIOGRAPHIC AREA: Queen Charlotte Ranges
TERRANE: Wrangell
METAMORPHIC TYPE: Contact Regional RELATIONSHIP: Syn-mineralization GRADE: Greenschist
Post-mineralization Hornfels

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1982
SAMPLE TYPE: Chip
COMMODITY: Gold GRADE: 0.7200 Grams per tonne
COMMENTS: 5 metre width, sample taken from a clay rich zone.
REFERENCE: Assessment Report 10021.

CAPSULE GEOLOGY

The area is underlain by the upper part of the Jurassic to Triassic Kunga Group, comprising thin bedded limy argillite, argillite and minor limestone. The sediments are cut by quartz monzonite of the Carpenter Bay Pluton which is part of the Tertiary Kano Plutonic Suite.

CAPSULE GEOLOGY

The Kunga Group is strongly folded and faulted and intruded by north to northwest trending dikes of primarily andesitic composition and lesser felsite composition of the Kano Plutonic Suite (Carpenter Bay Dike Swarm). Extensive zones of biotite hornfels are developed near the quartz monzonite pluton.

Pyrite, arsenopyrite, minor chalcopyrite and pyrrhotite mineralization occurs in shear zones associated with quartz-carbonate veinlets and felsite and feldspar porphyry dikes. The mineralized rocks are soft clay-rich zones. The highest gold values from this zone assayed 0.42 and 0.72 grams per tonne over a width of 5 metres (Assessment Report 10021).

BIBLIOGRAPHY

EMPR ASS RPT *10021
EMPR BULL 54
EMPR EXPL 1981-182
EMPR FIELDWORK 1997, 19-1-19-14
GSC MAP 1385A
GSC P 88-1E, pp. 213-216, 221-227; 89-1H, pp. 95-112, 117-120;
90-10, pp. 59-87, 465-487

DATE CODED: 1986/07/07
DATE REVISED: 1989/03/09

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103B 057**

NATIONAL MINERAL INVENTORY:

NAME(S): **NFG**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103B06W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 52 25 09 N
LONGITUDE: 131 15 36 W
ELEVATION: 80 Metres

NORTHING: 5810063
EASTING: 346313

LOCATION ACCURACY: Within 500M

COMMENTS: Area of drilling, Map 2 (Assessment Report 2879). Located on Burnaby Island.

COMMODITIES: Iron

MINERALS

SIGNIFICANT: Magnetite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Epigenetic Industrial Min.
TYPE: K03 Fe skarn

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Triassic-Jurassic
Jurassic

GROUP

Kunga

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Burnaby Island Plutonic Suite

ISOTOPIC AGE: 164 +/- 3 Ma
DATING METHOD: Uranium/Lead
MATERIAL DATED: Zircon

LITHOLOGY: Limestone
Monzonite

HOSTROCK COMMENTS: Burnaby Island Plutonic Suite intrudes Kunga Group limestones. Age date from R.G. Anderson, GSC, Personal Communication, March, 1989.

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Wrangell
METAMORPHIC TYPE: Contact Regional

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

RELATIONSHIP: Syn-mineralization
Post-mineralization

GRADE: Greenschist
Hornfels

CAPSULE GEOLOGY

Magnetite occurs in limestone of the Jurassic to Triassic Kunga Group which are cut by the monzonitic Middle to Late Jurassic Burnaby Island Plutonic Suite to the east.

BIBLIOGRAPHY

EMPR ASS RPT *2879
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EMPR GEM 1971-110
GSC MAP 1385A
GSC P 88-1E, pp. 213-216, 221-227; 89-1H, pp. 95-112; 90-10, pp. 59-87, 163-172; 91-1A, pp. 383-391
MIN REV Mar./Apr., 1988, pp. 19-24

DATE CODED: 1986/07/07
DATE REVISED: 1988/11/18

CODED BY: LDJ
REVISED BY: JNR

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103B 058**

NATIONAL MINERAL INVENTORY:

NAME(S): **MCECHRAN COVE** POGMOHOM

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103B12W
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 52 42 29 N
LONGITUDE: 131 48 16 W
ELEVATION: 15 Metres

NORTHING: 5843485
EASTING: 310546

LOCATION ACCURACY: Within 500M

COMMENTS: Description and Map 1 (Assessment Report 598). Located on the east side of McEchran Cove on Moresby Island.

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Unknown
TYPE: D03 Volcanic redbed Cu

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Upper Triassic	Vancouver	Karmutsen	

LITHOLOGY: Amygdaloidal Basalt

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Wrangell

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

CAPSULE GEOLOGY

Chalcopyrite occurs within amygdaloidal basalts of the Vancouver Group, Upper Triassic Karmutsen Formation.

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EMPR ASS RPT *598, *10993
EMPR BULL 54
EMPR EXPL 1982-355-6
GSC MAP 278A; 1385A
GSC P 88-1E, pp. 221-227; 89-1H; 90-10, 92-1A, pp. 351-360

DATE CODED: 1986/07/07
DATE REVISED: 1989/03/09

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103B 059**

NATIONAL MINERAL INVENTORY:

NAME(S): **KUNGHIT ISLAND**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103B03E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 52 05 59 N
LONGITUDE: 131 04 26 W
ELEVATION: 15 Metres

NORTHING: 5774159
EASTING: 357951

LOCATION ACCURACY: Within 1 KM
COMMENTS: Centre of Kunghit Island, limestone band.

COMMODITIES: Limestone

MINERALS

SIGNIFICANT: Calcite
MINERALIZATION AGE: Upper Triassic
ISOTOPIC AGE:

DATING METHOD: Fossil

MATERIAL DATED: Various fossils

DEPOSIT

CHARACTER: Massive
CLASSIFICATION: Sedimentary
TYPE: R09 Limestone
DIMENSION: 30
COMMENTS: Minimum thickness.

Stratiform
Syngenetic
Metres

Concordant
Industrial Min.

STRIKE/DIP: 135/40W

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE: Upper Triassic
GROUP: Kunga

FORMATION: Sadler

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Limestone
Argillite

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Wrangell

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

CAPSULE GEOLOGY

The lower two members of the Jurassic to Triassic Kunga Group, Sadler and Peril Formations, represent the main limestone resource of the Queen Charlotte Islands, particularly the basal massive grey limestone member (Sadler Formation). Its thickness varies from less than 30 metres to more than 200 metres.

The Kunga Group consisting of the limestone members and an overlying argillite member, Sandilands Formation, rests conformably on the Vancouver Group, Upper Triassic Karmutsen Formation.

The Sadler limestone strikes northwest across the centre of Kunghit Island.

BIBLIOGRAPHY

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EMPR OF 1992-18, pp. 43-45
GSC MAP 1385A
GSC P *88-1E, pp. 221-227; 89-1H; 90-10, pp. 163-172; 93-1E, pp. 1-8

DATE CODED: 1986/06/24
DATE REVISED: 1989/03/09

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103B 060**

NATIONAL MINERAL INVENTORY:

NAME(S): **KUNGA ISLAND**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103B13E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 52 45 39 N
LONGITUDE: 131 34 26 W
ELEVATION: 400 Metres

NORTHING: 5848772
EASTING: 326328

LOCATION ACCURACY: Within 1 KM
COMMENTS: Centre of Kunga Island, limestone band.

COMMODITIES: Limestone

MINERALS

SIGNIFICANT: Calcite
MINERALIZATION AGE: Upper Triassic
ISOTOPIC AGE:

DATING METHOD: Fossil

MATERIAL DATED: Various fossils

DEPOSIT

CHARACTER: Massive
CLASSIFICATION: Sedimentary
TYPE: R09 Limestone
SHAPE: Regular
DIMENSION: 180
COMMENTS: Thickness of bed.

Stratiform
Syngenetic
Concordant
Industrial Min.

Metres STRIKE/DIP: 360/60E TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Upper Triassic	Kunga	Sadler	

LITHOLOGY: Limestone
Greenstone
Argillite

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Wrangell

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

CAPSULE GEOLOGY

The lower two members of the Jurassic to Triassic Kunga Group, the Sadler and Peril formations, represent the main limestone resource of the Queen Charlotte Islands, particularly the basal Sadler limestone. Its thickness varies from less than 30 metres to more than 200 metres.

A bed of massive grey limestone of the Upper Triassic Sadler Formation strikes north across Kunga Island for 3 kilometres and dips 40 to 60 degrees to the east. The bed is bounded to the west by underlying volcanics of the Upper Triassic Karmutsen Formation and to the east by thinly bedded black limestone of the overlying Upper Triassic Peril Formation. On the north shore of the island the bed is 180 metres thick, where it is intercalated with a mafic flow or sill 23 metres thick.

A chip sample taken across a stratigraphic thickness of 152 metres at the south shore of Kunga Island assayed 53.2 per cent CaO, 0.11 per cent MgO and 42.03 per cent loss on ignition (EMPR Open 1992-18, page 45)

BIBLIOGRAPHY

EMPR BULL 54, pp. 50,51,57,175, Fig.5, Sheet B
EMPR OF 1992-18, pp. 43-45
EMPR PF (Assays and Cross Sections by Sutherland-Brown, 1959)
GSC MAP 1385A
GSC P 88-1E, pp. 221-227; 90-10, pp. 163-172; 92-1A, pp. 351-360

DATE CODED: 1986/06/24
DATE REVISED: 1999/09/05

CODED BY: LDJ
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103B 061**

NATIONAL MINERAL INVENTORY:

NAME(S): **LIMESTONE ISLAND**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103B13E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 52 54 29 N
LONGITUDE: 131 36 46 W
ELEVATION: 50 Metres

NORTHING: 5865239
EASTING: 324300

LOCATION ACCURACY: Within 1 KM
COMMENTS: Centre of Limestone Island.

COMMODITIES: Limestone

MINERALS

SIGNIFICANT: Calcite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Massive Stratiform Concordant
CLASSIFICATION: Sedimentary Syngenetic Industrial Min.
TYPE: R09 Limestone
SHAPE: Regular
DIMENSION: 700 x 700 Metres STRIKE/DIP: 120/15N TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Upper Triassic	Kunga	Sadler	

LITHOLOGY: Limestone
Argillite

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Wrangell

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

CAPSULE GEOLOGY

The lower two members of the Jurassic to Triassic Kunga Group, the Sadler and Peril formations, represent the main limestone resource of the Queen Charlotte Islands, particularly the basal Sadler limestone. Its thickness varies from less than 30 metres to more than 200 metres.

Massive grey limestone of the Upper Triassic Sadler Formation covers the whole of Limestone Island, a small island covering 700 by 700 metres just east of Louise Island. The limestone is extensively folded and faulted in places and the beds strike northwest and dip gently to the northeast. The analysis of three chip samples representing a 60-metre stratigraphic section on the southwest shore of the island averaged 54.45 per cent CaO, 0.06 per cent MgO and 2.37 per cent insolubles (Bulletin 54, p.175).

BIBLIOGRAPHY

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EMPR OF 1992-18, pp. 43-45
GSC MAP 1385A
GSC P *88-1E, pp. 221-227; 89-1H, pp. 7-11; 90-10, pp. 31-50, 163-172

DATE CODED: 1986/06/24
DATE REVISED: 1999/09/05

CODED BY: LDJ
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103B 062**

NATIONAL MINERAL INVENTORY:

NAME(S): **CRESCENT**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103B13W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 52 45 29 N
LONGITUDE: 131 53 56 W
ELEVATION: 200 Metres

NORTHING: 5849298
EASTING: 304391

LOCATION ACCURACY: Within 500M

COMMENTS: Trench one, Figures 10, 14, 20 (Assessment Report 8092). Located west of Cresent Inlet.

COMMODITIES: Gold Silver Molybdenum Zinc

MINERALS

SIGNIFICANT: Pyrite Pyrrhotite Arsenopyrite Molybdenite Sphalerite

Magnetite

ASSOCIATED: Calcite Quartz Chlorite

ALTERATION: Chlorite Pyrite Silica

ALTERATION TYPE: Chloritic Silicific'n

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Breccia
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: H05 Epithermal Au-Ag: low sulphidation
SHAPE: Irregular

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Middle Jurassic
Triassic-Jurassic
Tertiary

GROUP

Yakoun
Kunga

FORMATION

Undefined Formation
Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Kano Plutonic Suite

ISOTOPIC AGE: 38.9 +/- 0.1 Ma

DATING METHOD: Uranium/Lead

MATERIAL DATED: Zircon

LITHOLOGY: Hornfels
Argillite
Lapilli Tuffaceous Breccia
Rhyolite
Gabbro
Hornblende Feldspar Porphyry
Diabase
Andesite Volcanic
Tuff

HOSTROCK COMMENTS: Age date: GSC Paper 90-10, page 64, figure 3.

GEOLOGICAL SETTING

TECTONIC BELT: Insular

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

TERRANE: Wrangell

METAMORPHIC TYPE: Contact Regional

RELATIONSHIP: Syn-mineralization
Post-mineralization

GRADE: Greenschist
Hornfels

INVENTORY

ORE ZONE: VEIN

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1986

SAMPLE TYPE: Channel

COMMODITY

GRADE

Gold

66.4000

Grams per tonne

COMMENTS: 4.2 centimetre quartz vein in trench one.

REFERENCE: Assessment Report 14503.

CAPSULE GEOLOGY

The area is underlain by massive grey limestone and thin bedded argillite of the Jurassic/Triassic Kunga Group, which is disconformably overlain by andesites, tuffs and agglomerates of the Middle Jurassic Yakoun Group. These rocks are intruded and metamorphosed by a complex gabbro pluton ranging from coarse mesocratic gabbro and finely crystalline diabase to hornblende feldspar porphyries. These intrusives are thought to be part of the

CAPSULE GEOLOGY

Eocene-Oligocene Kano Plutonic Suite. The gabbro engulfs masses of rhyolite and dacite of the Tertiary Masset Formation. Conformably underlying the Kunga sediments are Vancouver Group, Upper Triassic Karmutsen volcanics exposed to the southwest and in an anticlinal core to the east. The volcanics generally have horizontal flow attitudes. Block faults, trending 038, cut the pluton.

Anomalous gold values occur mainly in pyritic rhyolite and gabbro of the Masset Formation. Higher values occur within narrow quartz veins within the volcanics and Kunga argillites. Chloritized and brecciated rhyolite generally contains pyrite, pyrrhotite, arsenopyrite and occasionally molybdenite, sphalerite and magnetite.

Trench one contains 6 small quartz veins, 0.5 to 9 centimetres in width, trending 018 degrees with one trending 007 degrees, and all near vertical dips. The veins are hosted by pyritic intermediate lapilli tuff-breccia of the Yakoun Group and fall along a 150 degree trending fault.

A sample of a 4.2-centimetre quartz vein in trench one returned 66.4 grams per tonne gold and 35 grams per tonne silver. Drilling below trench one intersected 4.7 grams per tonne gold over 29 centimetres in hornfelsed Kunga argillite. Drilling 500 metres to the southwest intersected 4.7 grams per tonne gold over 76 centimetres in a quartz-clinopyroxene dike (Assessment Report 14503).

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EMPR PF (Richards, G.G., (1988): *Summary Report and Diamond Drilling Proposal on the Lockeport Prospect, Moresby Island, Queen Charlotte Islands, Feb.19, 1988, for Skygold Resources Ltd. in Prospectus dated Jun.15, 1988)
GSC MAP 1385A
GSC P 86-20; 88-1E, pp. 213-216, *221-227; 89-1H, pp. 95-112, 117-120; 90-10, pp. 59-87, 163-172, 305-324, 465-487; 91-1A, pp. 383-391; 92-1A, pp. 351-365

DATE CODED: 1986/07/11
DATE REVISED: 1989/03/03

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

CAPSULE GEOLOGY

northeast trending crossfaults. Better grades of mineralization occur in discontinuous pods, lenses and shoots of unknown orientation. Trenching and drilling indicated grades of mineralized zones ranged 1.7 to 10.6 grams per tonne gold over widths ranging from 0.5 to 8.0 metres. Silver values ranged 0.34 to 5.1 grams per tonne (Assessment Report 11834).

Showing #1 (original discovery) mineralization is developed in silicified or hornfelsed graphitic argillites interbedded within sheared pillowed greenstones. These sediments contain up to 10 per cent bedded syngenetic pyrite, but the higher gold values (0.34 to 1.37 grams per tonne gold) occur in zones of silicification with quartz veinlets and fracture pyrite. The mineralized zone is up to 10 metres wide and the best assay returned 1.37 grams per tonne gold over 1.5 metres.

Showing #2, 650 metres south-southeast of showing #1, is a 5 metre wide zone of variable mineralized and altered greenstones. A 2-metre wide core of silicified ankeritic clay-altered breccia contains 5 per cent disseminated pyrite and 5 per cent disseminated arsenopyrite. The best assay gave 11.6 grams per tonne gold over 1.0 metres.

Three hundred metres further south-southeast, showing #3 occurs over a 30-metre strike length in bleached greenstone fragment breccia. A 5-metre wide zone of strong silicification and ankerite alteration contains up to 3 per cent arsenopyrite and 3 per cent pyrite with minor chalcopyrite. A 6.0-metre sample returned 1.47 grams per tonne gold.

Two hundred metres southwest of showing #1 is Drill Site 83-04, which is part of a second parallel mineralized zone trending north-west, with several left lateral offsets. The best surface assay returned 5.35 grams per tonne gold over 1.5 metres and Drill hole 83-04 returned 13.58 grams per tonne gold and 5.1 grams per tonne silver over 0.26 metre. A drill hole 150 metres to the south gave 8.6 grams per tonne gold and 3.4 grams per tonne silver over 1.85 metres (Assessment Report 11834).

BIBLIOGRAPHY

EMPR ASS RPT 9696, 10163, 10973, *11834
EMPR BULL 54
EMPR EXPL 1981-93, 221; 1982-354-355; 1983-492
GCNL *#218, 1982; #16,*#174, 1983; #165, 1986
IPDM May/Jun., 1983
GSC MAP 1385A
GSC P *88-1E, pp. 221-227; 89-1H; 92-1A, pp. 351-360

DATE CODED: 1986/07/09
DATE REVISED: 1989/03/03

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

CAPSULE GEOLOGY

and flows. Andesite dikes are common and wallrocks show extensive carbonate and zeolite veining.

Gold in excess of 1.0 grams per tonne occurs in 12 of 23 holes drilled. Most intersections ran 2 to 5 grams per tonne gold over 3 to 12 metres. Diamond-drill hole 80-5 intersected 4.36 grams per tonne gold over 27.4 metres, including 19.13 grams per tonne gold over 6.1 metres (Assessment Report 8663).

BIBLIOGRAPHY

EMPR ASS RPT 7820, 8501, *8663, 10094, 10121, 10132, 10133, 10778,
*13331
EMPR BULL 54
EMPR EXPL 1979-241; *1980-367; 1981-201,209,212; 1982-354; *1984-359
EMPR FIELDWORK 1997, 19-1-19-14
GSC MAP 1385A
GSC P *88-1E, pp. 221-227, 269-274; 90-10, pp. 305-324
GCNL #1 (Jan.2), 1985
Placer Dome File

DATE CODED: 1986/07/14
DATE REVISED: 1989/03/09

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103B 065**

NATIONAL MINERAL INVENTORY:

NAME(S): **ROSE**

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103B03E
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 52 05 34 N
LONGITUDE: 131 06 31 W
ELEVATION: 170 Metres

NORTHING: 5773455
EASTING: 355550

LOCATION ACCURACY: Within 500M

COMMENTS: Diamond-drill hole R-81-3, Figure 5, (Assessment Report 9718).
Located on the west side of Kunghit Island, southeast of Arnold Point.

COMMODITIES: Gold Copper Molybdenum

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Molybdenite Pyrrhotite

ALTERATION: Silica Chlorite Garnet

COMMENTS: Calc-silicate assemblages pervasive along limy beds near intrusive.

ALTERATION TYPE: Silicific'n Argillic Chloritic Skarn

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated Concordant

CLASSIFICATION: Skarn Igneous-contact

TYPE: * Unknown

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Triassic-Jurassic

Upper Triassic

Middle Jurassic

GROUP

Kunga

Vancouver

FORMATION

Sandilands

Karmutsen

IGNEOUS/METAMORPHIC/OTHER

San Christoval Plutonic Suite

ISOTOPIC AGE: 170-175 +/- 5 Ma

DATING METHOD: Uranium/Lead

MATERIAL DATED: Zircon

LITHOLOGY: Hornfels Argillite
Hornfels
Skarn
Black Limestone
Quartz Diorite
Diorite
Intermediate Dike

HOSTROCK COMMENTS: Dioritic rocks of the San Christoval Plutonic Suite dated as Middle-Late Jurassic from GSC current research (Pers. Comm.: R.G. Anderson).

GEOLOGICAL SETTING

TECTONIC BELT: Insular

TERRANE: Wrangell

METAMORPHIC TYPE: Contact Regional

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

RELATIONSHIP: Syn-mineralization
Post-mineralization

GRADE: Greenschist
Hornfels

INVENTORY

ORE ZONE: DRILLHOLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1981

SAMPLE TYPE: Drill Core

COMMODITY

Gold 0.9000 Grams per tonne

COMMENTS: 3 metre core sample which averages 0.3 grams per tonne gold over 45.0 centimetres.

REFERENCE: Assessment Report 9718.

CAPSULE GEOLOGY

The property is underlain by massive lava flows, pillow lavas and breccias of the Vancouver Group, Upper Triassic Karmutsen Formation in fault contact with massive grey limestones, flaggy black limestone and argillite of the Sadler, Peril and Sandilands Formations, respectively, all of the Jurassic to Triassic Kunga Group. These rocks are intruded by acid to intermediate dikes and diorite-quartz diorite plugs related to the Middle Jurassic San Christoval Plutonic Suite.

A major north-northwest trending and 50 to 60 degree northeast

CAPSULE GEOLOGY

dipping fault, separating the sediments to the east and volcanics to the west, is part of the Rennell - Louscoone fault system.

The Kunga rocks are strongly hornfelsed and locally skarn has developed in an area of dikes and plugs of diorite to quartz diorite. This area of dioritic intrusives is enveloped by a 100 to 300 metre wide halo of hard flinty hornfelsed argillites. Pyrite and pyrrhotite are common within the hornfels zone. Within the diorite a few scattered quartz veins contain pyrite, chalcopyrite and molybdenite.

A drill hole intersected anomalous gold values related to intensely recrystallized and altered sediments. A 45-metre intersection averaged 0.3 grams per tonne gold with a high of 0.9 grams per tonne gold over 3.0 metres (Assessment Report 9718).

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EMPR BULL 54
EMPR EXPL *1980-383; 1981-100
GSC MAP 1385A
GSC P 88-1E, pp. *213-216, *221-227; 89-1H, pp. 95-112; 90-10, pp. 59-87, 163-172; 93-1E, pp. 1-8
MIN REV Mar./Apr., 1988, pp. 19-24
PERS COMM (Anderson, R.G., Mar., 1989)
Chevron File

DATE CODED: 1986/07/08
DATE REVISED: 1999/08/30

CODED BY: LDJ
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103B 066**

NATIONAL MINERAL INVENTORY:

NAME(S): **LOCKE, LOCKPORT, GOLDYLOCKE, LOCKEPORT**

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103B12W
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 52 43 34 N
LONGITUDE: 131 53 31 W
ELEVATION: 425 Metres

NORTHING: 5845727
EASTING: 304717

LOCATION ACCURACY: Within 500M

COMMENTS: No. 1 showing, Figure 7, (Assessment Report 9059). Located southwest of Crescent Inlet.

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Arsenopyrite Pyrite
ASSOCIATED: Quartz
ALTERATION: Chlorite Silica
ALTERATION TYPE: Chloritic Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: H EPITHERMAL E03 Carbonate-hosted disseminated Au-Ag
SHAPE: Irregular

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Triassic-Jurassic
Upper Triassic
Tertiary

GROUP

Kunga
Vancouver

FORMATION

Sandilands
Karmutsen

IGNEOUS/METAMORPHIC/OTHER

Kano Plutonic Suite

LITHOLOGY: Limy Argillite
Argillite
Limestone
Jasperoid
Greenstone
Rhyolite Dike
Dacite Dike

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Wrangell
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

RELATIONSHIP: Syn-mineralization
Post-mineralization

GRADE: Greenschist
Hornfels

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Chip
COMMODITY: Gold

YEAR: 1987

GRADE: 9.2000 Grams per tonne

COMMENTS: 1.5-metre sample at No. 1 showing.
REFERENCE: Assessment Report 17097.

CAPSULE GEOLOGY

Upper Triassic Karmutsen Formation (Vancouver Group) greenstones are in fault contact with Jurassic to Triassic Kunga Group rocks comprised of grey massive and black bedded limestones (Sadler and Peril formations) and thin-bedded limy argillites (Sandilands Formation).

The Kunga rocks are bounded to the west, east and south by major faults trending north, north-northeast and west-northwest, respectively. Karmutsen rocks lie beyond these faults.

Three gold showings occur within Kunga sediments along or within rhyolitic or dacitic dikes and along or close to strong northwest trending faults. The dikes are likely of the Eocene-Oligocene Kano Plutonic Suite (Lyell Island dike swarm). The showings contain up to 20 per cent combined arsenopyrite and pyrite, occurring as

CAPSULE GEOLOGY

disseminations in limy argillites and along fractures associated with minor quartz veins in zones of weak to pervasive silicification.

A 1.5-metre sample at No. 1 showing assayed 9.2 grams per tonne gold. A rock sample from the No. 2 showing, 490 metres north-northwest of the No. 1 showing, returned an assay of 3.91 grams per tonne gold. The No. 3 showing, 300 metres south-southeast of No. 1, is a jasperoid body 10 to 12 metres wide by 80 metres long in grey limestone (Sadler Formation) and contains anomalous gold values in excess of 5 grams per tonne (Assessment Report 17097).

BIBLIOGRAPHY

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GSC MAP 1385A
GSC P *88-1E, pp. 213-216,221-227; 89-1H, pp. 95-112, 117-120; 90-10, pp. 59-87, 163-172, 465-487; 92-1A, pp. 351-360
GCNL #218, 1982

DATE CODED: 1986/07/11
DATE REVISED: 1999/08/31

CODED BY: LDJ
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103B 067**

NATIONAL MINERAL INVENTORY:

NAME(S): **WATER LILY (L.93)**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103B06E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 52 17 49 N
LONGITUDE: 131 09 31 W
ELEVATION: 1 Metres

NORTHING: 5796260
EASTING: 352801

LOCATION ACCURACY: Within 500M

COMMENTS: Showing, Map 1K3 (McDougall, 1956). Located on an island in Ikeda Cove. Most noticeable at low tide.

COMMODITIES: Iron Magnetite Copper

MINERALS

SIGNIFICANT: Magnetite Chalcopyrite Pyrrhotite Pyrite
ASSOCIATED: Garnet Calcite
ALTERATION TYPE: Skarn
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated Massive
CLASSIFICATION: Skarn Replacement Industrial Min.
TYPE: K03 Fe skarn K01 Cu skarn
DIMENSION: 30 x 30 Metres STRIKE/DIP: TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Upper Triassic	Vancouver	Karmutsen	
Triassic-Jurassic	Kunga	Undefined Formation	

LITHOLOGY: Andesite
Skarn
Magnetite Skarn
Basalt
Limestone

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Wrangell

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

INVENTORY

ORE ZONE: DRILLHOLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1956
SAMPLE TYPE: Drill Core
COMMODITY: Iron GRADE: 44.0000 Per cent
COMMENTS: The sample width is 2.1 metres.
REFERENCE: Property File - Report by J.J. McDougall, 1956.

CAPSULE GEOLOGY

Vancouver Group, Upper Triassic Karmutsen volcanics are overlain conformably by Jurassic to Triassic by Kunga limestones. A skarn contains magnetite and pyrrhotite over a 30 by 30 metre island in Ikeda Cove. A drill hole assayed 44 per cent iron over 2.1 metres (McDougall, 1956). One hundred fifty metres to the north, a 1.2-metre wide, 3-metre long zone of chalcopyrite occurs in andesite.

BIBLIOGRAPHY

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EMPR ASS RPT 14189, 14818
EMPR BULL 54
EMPR EXPL 1986-C418
EMPR PF (McDougall, J.J., (1956): Report on Properties at Ikeda Bay, Queen Charlotte Islands, Jun.6, 1956, p. 17, refer to the Lily Mine - 103B 028)
GSC MAP 1385A
GSC P *88-1E, pp. 221-227; 89-1H; 90-10, pp. 163-172; 91A, pp. 383-391

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RUN TIME: 12:06:33

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GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

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BIBLIOGRAPHY

MIN REV Mar./Apr., 1988, pp. 19-24

DATE CODED: 1986/07/22
DATE REVISED: 1989/03/09

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103B 068**

NATIONAL MINERAL INVENTORY:

NAME(S): **COLINEAR CREEK**, CRESCENT

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103B12W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 52 44 49 N
LONGITUDE: 131 54 16 W
ELEVATION: 120 Metres

NORTHING: 5848077
EASTING: 303966

LOCATION ACCURACY: Within 500M

COMMENTS: Showing, Map II (Assessment Report 14503). Located west of Crescent Inlet.

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Pyrite Arsenopyrite
ASSOCIATED: Quartz
ALTERATION: Pyrite
ALTERATION TYPE: Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic
TYPE: H05 Epithermal Au-Ag: low sulphidation

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Triassic-Jurassic
Middle Jurassic

GROUP

Kunga
Yakoun

FORMATION

Sandilands
Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Argillite
Volcaniclastic
Intermediate Volcanic
Mafic Intrusive
Basalt

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Wrangell
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

RELATIONSHIP: Syn-mineralization
Post-mineralization

GRADE: Greenschist
Hornfels

INVENTORY

ORE ZONE: VEIN

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Chip
YEAR: 1984

COMMODITY: Gold
GRADE: 25.4000 Grams per tonne

COMMENTS: 8-metre sample along a 1 to 2.5-centimetre wide quartz vein.
REFERENCE: Assessment Report 14503.

CAPSULE GEOLOGY

Basaltic rocks of the Vancouver Group, Upper Triassic Karmutsen Formation are overlain conformably by sedimentary Jurassic to Triassic Kunga Group. These are overlain by the Middle Jurassic Yakoun Group intermediate volcanic and volcaniclastic rocks which are overlain by the Tertiary Masset Formation consisting of felsic to intermediate volcanic rocks and intermediate to mafic intrusive rocks. A major 038 degree trending block fault extends along Colinear Creek.

A 2 to 4-centimetre wide quartz vein follows a 055-degree north trending right lateral fault as indicated by drag folding and offsetting of beds in the argillite of the Upper Triassic-Lower Jurassic Sandilands Formation (Kunga Group). The vein also parallels the bedding at 070 degrees north. A 1 to 2.5 centimetre wide sample taken along the vein for a distance of 8 metres assayed 25.4 grams per tonne gold (Assessment Report 14503).

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EMPR ASS RPT 8092, 8252, 9102, *14503, *15437
EMPR BULL 54

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PAGE: 145
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BIBLIOGRAPHY

EMPR EXPL 1979-242; 1980-368-369; 1986-C418; 1987-C347
EMPR FIELDWORK 1997, 19-1-19-14
EMPR PF (Richards, G.G., (1988): Summary Report and Diamond Drilling
Proposal on the Lockeport Prospect, Moresby Island, Feb.19, 1988,
for Skygold Resources Ltd., in Prospectus dated Jun.15, 1988, refer
to Locke - 103B 066 or Crescent - 103B 062)
GSC MAP 1385A
GSC P *88-1E, pp. 221-227; 90-10, pp. 163-172; 92-1A, pp. 351-360

DATE CODED: 1986/09/18
DATE REVISED: 1999/08/30

CODED BY: LDJ
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103B 069**

NATIONAL MINERAL INVENTORY:

NAME(S): **CARNATION CREEK**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103B06E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 52 17 19 N
LONGITUDE: 131 09 51 W
ELEVATION: 80 Metres

NORTHING: 5795345
EASTING: 352395

LOCATION ACCURACY: Within 500M

COMMENTS: Skarn, Figure 43 (Assessment Report 14818). Located approximately 1 kilometre south of Ikeda Cove.

COMMODITIES: Copper Silver Gold Iron Magnetite

MINERALS

SIGNIFICANT: Pyrite Magnetite Chalcopyrite
ALTERATION: Chlorite
ALTERATION TYPE: Skarn
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Massive
CLASSIFICATION: Skarn Replacement Industrial Min.
TYPE: K03 Fe skarn
SHAPE: Regular
DIMENSION: 5 x 2 Metres STRIKE/DIP: TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Upper Triassic	Vancouver	Karmutsen	
Jurassic			Burnaby Island Plutonic Suite

ISOTOPIC AGE: 164 +/- 3 Ma
DATING METHOD: Uranium/Lead
MATERIAL DATED: Zircon

LITHOLOGY: Basalt
Massive Magnetite
Magnetite Skarn
Skarn
Greenstone
Monzonitic Diorite
Granodiorite

HOSTROCK COMMENTS: Burnaby Island Plutonic Suite intrudes Karmutsen volcanics. Age date from R.G. Anderson, GSC, Personal Communication, March, 1989.

GEOLOGICAL SETTING

TECTONIC BELT: Insular PHYSIOGRAPHIC AREA: Queen Charlotte Ranges
TERRANE: Wrangell
METAMORPHIC TYPE: Contact Regional RELATIONSHIP: Syn-mineralization GRADE: Greenschist
Post-mineralization Hornfels

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1984
SAMPLE TYPE: Grab
COMMODITY GRADE
Silver 12.8000 Grams per tonne
Gold 0.2500 Grams per tonne
Copper 1.2500 Per cent
COMMENTS: Sample of massive magnetite with minor chalcopyrite.
REFERENCE: Assessment Report 14818.

CAPSULE GEOLOGY

Chloritic basalt of the Vancouver Group Upper Triassic Karmutsen Formation is intruded by a monzodiorite to granodiorite stock. These intrusives are part of the Middle to Late Jurassic Burnaby Island Plutonic Suite. A magnetite skarn occurs in the basalt near the intrusive contact and along the trace of the Carnation Creek fault. The skarn measures 5 by 2 metres and contains pyrite veinlets. A grab sample of the massive magnetite, plus minor chalcopyrite, assayed 0.25 gram per tonne gold, 12.8 grams per tonne silver and

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CAPSULE GEOLOGY

1.25 per cent copper (Assessment Report 14818).

BIBLIOGRAPHY

EMPR ASS RPT *14818
EMPR BULL 54
EMPR EXPL 1986-C418
GSC MAP 1385A
GSC P 88-1E, pp. 213-216, 221-227; 89-1H, pp. 95-112; 90-10, pp.
59-87; 91-1A, pp. 383-391
MIN REV Mar./Apr., 1988, pp. 19-24

DATE CODED: 1986/11/20
DATE REVISED: 1989/03/10

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103B 070**

NATIONAL MINERAL INVENTORY:

NAME(S): **COLLISON BAY ADIT**

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103B06E
BC MAP:
LATITUDE: 52 17 09 N
LONGITUDE: 131 08 46 W
ELEVATION: 35 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Adit, Figure 5 A (Assessment Report 14818). Located on the point, halfway down the northern side of Collison Bay.

Underground
MINING DIVISION: Skeena
UTM ZONE: 09 (NAD 83)
NORTHING: 5794999
EASTING: 353617

COMMODITIES: Copper Silver Gold Iron

MINERALS

SIGNIFICANT: Magnetite Pyrite Chalcopyrite
ALTERATION: Garnet Hematite
ALTERATION TYPE: Skarn Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Replacement Skarn Industrial Min.
TYPE: K03 Fe skarn

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE: Upper Triassic
GROUP: Vancouver
FORMATION: Karmutsen
IGNEOUS/METAMORPHIC/OTHER:

LITHOLOGY: Basalt
Magnetite Garnet Skarn
Skarn

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Wrangell
PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

INVENTORY

ORE ZONE: SKARN
REPORT ON: N
CATEGORY: Assay/analysis
SAMPLE TYPE: Grab
COMMODITY: Silver 7.4000 Grams per tonne
Gold 0.0900 Grams per tonne
Copper 0.7400 Per cent

COMMENTS: Sample from magnetite-garnet skarn.
REFERENCE: Assessment Report 14818.

CAPSULE GEOLOGY

A magnetite-garnet skarn, with minor pyrite and chalcopyrite, occurs in volcanic rocks of the Vancouver Group, Upper Triassic Karmutsen Formation. A grab sample assayed 0.74 per cent copper, 7.4 grams per tonne silver and 0.09 gram per tonne gold (Assessment Report 14818).

BIBLIOGRAPHY

EMPR ASS RPT *14818
EMPR BULL 54
EMPR EXPL 1986-C418
GSC MAP 1385A
GSC P 88-1E, pp. 213-216, *221-227; 89-1H, pp. 95-112; 90-10; 91-1A, pp. 383-391
MIN REV *Mar./Apr., 1988, pp. 19-24

DATE CODED: 1986/11/20
DATE REVISED: 1989/03/10

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103B 071**

NATIONAL MINERAL INVENTORY:

NAME(S): **ARCHIE (CAMP CREEK)**, ARCHIE, CAMP CREEK

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103B06E
BC MAP:

MINING DIVISION: Skeena
UTM ZONE: 09 (NAD 83)

LATITUDE: 52 17 59 N
LONGITUDE: 131 09 56 W
ELEVATION: 55 Metres

NORTHING: 5796583
EASTING: 352337

LOCATION ACCURACY: Within 1 KM

COMMENTS: Located on the northern slopes of Ikeda Cove, approximately 2.5 kilometres southwest of Ikeda Point.

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite Pyrrhotite Pyrite

ALTERATION: Epidote Pyrite

COMMENTS: Calc-silicate minerals common.

ALTERATION TYPE: Skarn

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Massive Podiform Disseminated
CLASSIFICATION: Skarn Igneous-contact
TYPE: K01 Cu skarn

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Triassic-Jurassic

Upper Triassic

Jurassic

GROUP

Kunga

Vancouver

FORMATION

Undefined Formation

Karmutsen

IGNEOUS/METAMORPHIC/OTHER

Burnaby Island Plutonic Suite

ISOTOPIC AGE: 164 +/- 3 Ma

DATING METHOD: Uranium/Lead

MATERIAL DATED: Zircon

LITHOLOGY:

Limestone
Skarn
Calc-silicate Skarn
Felsic Sill
Volcanic Rock

HOSTROCK COMMENTS: Felsic sills related to Burnaby Island Plutonic Suite intrude Kunga limestones. Age date: R.G. Anderson GSC, Pers. Comm., Mar., 1989.

GEOLOGICAL SETTING

TECTONIC BELT: Insular

TERRANE: Wrangell

METAMORPHIC TYPE: Contact Regional

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

RELATIONSHIP: Syn-mineralization
Post-mineralization

GRADE: Greenschist
Hornfels

CAPSULE GEOLOGY

The area is predominantly underlain by limestones and argillites of the Jurassic to Triassic Kunga Group. These rocks are intruded by felsic sills related to the Middle to Late Jurassic Burnaby Island Plutonic Suite. Upper Triassic Vancouver Group, Karmutsen volcanics, conformably underlie the Kunga limestones.

Skarns occur near the base of Camp Creek. About 350 metres west of the creek are epidote-pyrite-pyrrhotite skarns, plus ubiquitous calc-silicate minerals and minor chalcopyrite. No anomalous values of gold or arsenic were reported.

BIBLIOGRAPHY

EMPR ASS RPT 8197, 8714, *10198, 16225, 19026
EMPR BULL 54
EMPR EXPL 1980-365; 1981-231; 1987-C346
GSC MAP 1385A
GSC P 88-1E, pp. 213-216, 221-227; 89-1H, pp. 95-112; 90-10, pp. 59-87; 91-1A, pp. 383-391
MIN REV Mar./Apr., 1988, pp. 19-24

DATE CODED: 1988/10/28
DATE REVISED: 1989/03/10

CODED BY: JNR
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103B 072**

NATIONAL MINERAL INVENTORY:

NAME(S): **ARCHIE**

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103B06E
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 52 17 59 N
LONGITUDE: 131 10 06 W
ELEVATION: 85 Metres

NORTHING: 5796589
EASTING: 352148

LOCATION ACCURACY: Within 500M

COMMENTS: Located on the northern slopes of Ikeda Cove, approximately 2.8 kilometres southwest of Ikeda Point.

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Pyrite Pyrrhotite
ALTERATION: Silica
ALTERATION TYPE: Sericitic Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Hydrothermal Epigenetic Igneous-contact
TYPE: * Unknown

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Triassic-Jurassic
Upper Triassic
Jurassic

GROUP

Kunga
Vancouver

FORMATION

Sandilands
Karmutsen

IGNEOUS/METAMORPHIC/OTHER

Burnaby Island Plutonic Suite

ISOTOPIC AGE: 164 +/- 3 Ma
DATING METHOD: Uranium/Lead
MATERIAL DATED: Zircon

LITHOLOGY: Black Argillite
Limestone
Felsic Sill
Volcanic Rock

HOSTROCK COMMENTS: Felsic sills of Burnaby Island Plutonic Suite intrude Kunga rocks.
Age date from R.G. Anderson, GSC, Personal Communication, Mar., 1989.

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Wrangell
METAMORPHIC TYPE: Contact Regional

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

RELATIONSHIP: Syn-mineralization Post-mineralization
GRADE: Greenschist Hornfels

CAPSULE GEOLOGY

The area is underlain mainly by limestone and argillite of the Jurassic to Triassic Kunga Group. These rocks are intruded by felsic sills related to the Middle to Late Jurassic Burnaby Island Plutonic Suite. Upper Triassic Vancouver Group, Karmutsen volcanics conformably underlie the Kunga Group limestones.

The argillaceous part of the Kunga Group (Sandilands Formation) is variable silicified and hornfelsed. Pyrite and pyrrhotite occur as disseminations and more rarely as fracture fillings, forming 2 to 5 per cent of rock volume and locally up to 15 per cent. Gold anomalies appear to be associated with sulphide veinlets within pyritic and silicified argillites.

BIBLIOGRAPHY

EMPR ASS RPT 8197, 8714, *10198, 16225, 19026
EMPR BULL 54
EMPR EXPL 1980-365; 1981-231; 1987-C346
GSC MAP 1385A
GSC P 88-1E, pp. 213-216, 221-227; 89-1H, pp. 95-112; 90-10, pp. 163-172; 91-1A, pp. 383-391
MIN REV Mar./Apr., 1988, pp. 19-24

DATE CODED: 1988/10/28
DATE REVISED: 1989/03/10

CODED BY: JNR
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103B 073**

NATIONAL MINERAL INVENTORY:

NAME(S): **LOCKE 2**, LOCKPORT, LOCKEPORT

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103B12W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 52 43 52 N
LONGITUDE: 131 54 00 W
ELEVATION: 600 Metres

NORTHING: 5846304
EASTING: 304195

LOCATION ACCURACY: Within 500M

COMMENTS: Centre of No. 4 showing on west flank of ridge separating Crescent and Botany Inlets (Assessment Report 17097, Figure 4).

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Arsenopyrite Pyrite
ASSOCIATED: Quartz
ALTERATION: Chlorite Silica
ALTERATION TYPE: Chloritic Silicific'n
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Shear Vein Disseminated
CLASSIFICATION: Epigenetic Hydrothermal
DIMENSION: 150 Metres STRIKE/DIP:
COMMENTS: Two showings 150 metres apart may represent a single north trending zone.

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Upper Triassic

GROUP

Vancouver

FORMATION

Karmutsen

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Volcanic
Greenstone

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Wrangell
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

RELATIONSHIP: Syn-mineralization

GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1987

SAMPLE TYPE: Chip

COMMODITY

GRADE

Gold

5.0000

Grams per tonne

COMMENTS: A 1.8 metre chip sample from No. 5 showing, Sample 6610).

REFERENCE: Assessment Report 17097.

CAPSULE GEOLOGY

Upper Triassic Karmutsen Formation (Vancouver Group) greenstones are in fault contact with Jurassic to Triassic Kunga Group rocks comprised of grey massive and black bedded limestones (Sadler and Peril formations) and thin-bedded limy argillites (Sandilands Formation).

Two gold showings, about 150 metres apart, occur within sheared, chloritic and partially silicified Karmutsen volcanics. Mineralization consists of disseminated arsenopyrite and pyrite, accompanied by minor quartz veining. The No. 2 showing of occurrence 103B 066 lies about 520 metres to the southeast.

A 0.5-metre chip sample of arsenopyrite-pyrite mineralization from the northern most of the two showings (No. 4 showing), assayed 5.76 grams per tonne gold (Assessment Report 17097, sample 6661). A second sample consisting of 0.25 metre of quartz vein assayed 25.8 grams per tonne gold (sample 6658). A 1.8-metre chip sample from the southern (No. 5) showing assayed 5.0 grams per tonne gold (sample 6610).

BIBLIOGRAPHY

EMPR ASS RPT *17097
EMPR BULL 54

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BIBLIOGRAPHY

GSC MAP 1385A
GSC P 88-1E, pp. 221-227; 89-14; 90-10; 92-1A, pp. 351-380

DATE CODED: 1999/08/31
DATE REVISED: 1999/08/31

CODED BY: PSF
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103B 074**

NATIONAL MINERAL INVENTORY:

NAME(S): **LYELL ISLAND BITUMEN 1**, POWRIVCO BAY

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: Queen Charlotte Islands
NTS MAP: 103B12E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 52 42 45 N
LONGITUDE: 131 32 02 W
ELEVATION: 120 Metres

NORTHING: 5843301
EASTING: 328837

LOCATION ACCURACY: Within 500M

COMMENTS: Located on northern Lyell Island, 4.2 kilometres northeast of the southwest corner of Powrivco Bay, 350 metres from the coast (Geological Survey of Canada Paper 92-1A, page 345, Figure 1).

COMMODITIES: Bitumen

MINERALS

SIGNIFICANT: Bitumen
ASSOCIATED: Zeolite
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Stockwork
CLASSIFICATION: Epigenetic Fossil Fuel Industrial Min.
TYPE: I VEIN, BRECCIA AND STOCKWORK

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Middle Jurassic

GROUP

Yakoun

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Tuff Breccia
Pillow Lava

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Wrangell

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

CAPSULE GEOLOGY

Bitumen is found near the northwestern coast of Lyell Island, 4.2 kilometres northeast of Powrivco Bay. The bitumen occurs as brittle, vitreous black globules in a vuggy stockwork of zeolite-lined fractures hosted in aquagene tuff-breccia and pillow lava of the Middle Jurassic Yakoun Group.

BIBLIOGRAPHY

EMPR BULL 54
GSC MAP 1385A
GSC P 88-1E; 89-1H; 90-10; *92-1A, pp. 343-350

DATE CODED: 1999/10/30
DATE REVISED: 1999/10/30

CODED BY: PSF
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103B 075**

NATIONAL MINERAL INVENTORY:

NAME(S): **LYELL ISLAND BITUMEN 2**, POWRIVCO BAY

STATUS: Showing
REGIONS: Queen Charlotte Islands
NTS MAP: 103B12E
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 52 39 28 N
LONGITUDE: 131 31 05 W
ELEVATION: 350 Metres

NORTHING: 5837178
EASTING: 329694

LOCATION ACCURACY: Within 500M

COMMENTS: Located on central Lyell Island, 3.6 kilometres southeast of Powrivco Bay (Geological Survey of Canada Paper 92-1A, page 345, Figure 1).

COMMODITIES: Bitumen

MINERALS

SIGNIFICANT: Bitumen

MINERALIZATION AGE:

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic Industrial Min.
TYPE: I VEIN, BRECCIA AND STOCKWORK

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Tertiary			Kano Plutonic Suite

LITHOLOGY: Andesite Porphyry

HOSTROCK COMMENTS: Hosted in the Lyell Island plutonic complex of the Kano Plutonic Suite (Geological Survey of Canada Paper 92-1E, pages 117-123).

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Wrangell

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

CAPSULE GEOLOGY

This bitumen occurrence is exposed in a roadside quarry on central Lyell Island, 3.6 kilometres southeast of Powrivco Bay. The bitumen consists of granular, black material filling open joints in andesite porphyry of the Eocene to Oligocene Lyell Island plutonic complex (Kano Plutonic Suite).

BIBLIOGRAPHY

EMPR BULL 54
GSC MAP 1385A
GSC P 88-1E; 89-1H; 90-10; *92-1A, pp. 343-350; *92-1E, pp. 117-123

DATE CODED: 1999/10/30
DATE REVISED: 1999/10/30

CODED BY: PSF
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

CAPSULE GEOLOGY

at an elevation of 18 metres is a 12-metre drift. From the lower adit a winze was sunk for 12 metres from which a 3-metre crosscut and 21-metre drift were driven. An open stope exists from the lower to the upper adit levels.

Gold Harbour Mines Limited, incorporated in 1933, installed an amalgamating mill which could handle 36 tonnes per day. Initial milling treated an old dump, recovering 4354 grams of gold. From a small open cut the company is reported to have recovered \$179000 in gold. Operations were suspended on December 13, 1933.

In 1939, D.F. Kidd, lessee, is reported to have made a shipment of 13.6 tonnes of high-grade ore from 4,665 grams of gold were recovered.

Charlotte Resources Ltd. drilled the property in 1981.

The area is underlain by Upper Triassic Vancouver Group greenstones of the Karmutsen Formation. These rocks have undergone low grade regional greenschist facies metamorphism and host abundant chlorite and some pumpellyite.

The deposit occurs in flat lying pillow lava and greenstone of the Upper Triassic Karmutsen Formation. A 60 metre wide fault zone, contains a stringer vein system striking 037 degrees with two main branches striking 045 degrees and 027 degrees, and dipping near vertically. The veins, a few centimetres wide, consist of quartz and calcite with minor pyrite, chalcopyrite and fine free gold. Minor silicification and chloritization of the wallrock occur near the fracture zone.

A 61-centimetre sample near the south end of the open stope in the lower adit assayed 8.57 grams per tonne gold and 3.4 grams per tonne silver (Bulletin 54, pages 217,218).

Intermittent production has been reported from 1859 to 1939 but records are incomplete. Recovery in 1859 is estimated between 7530 to 112,000 grams of gold based on reported dollar recovery. Recovery in 1908 is estimated at 900 grams of gold. Recorded production from 1913 to 1939 totals 171 tonnes. From this ore 8,739 grams of gold and 1,244 grams of silver were recovered.

BIBLIOGRAPHY

- EMPR AR 1907-58,72; 1908-60; 1909-71,76,77; 1910-84; 1911-77;
1913-104,419; 1914-509; 1915-75,444; 1918-41,42; 1921-38; 1922-40;
1923-42; *1932-41-44; 1933-36,39,40; 1934-B3; 1939-67
EMPR ASS RPT 9720
EMPR BC METAL MM00727
EMPR BULL *54, pp. 165,166,217
EMPR EXPL 1981-100
EMPR INDEX 3-194
EMPR PF (Jeffrey, W.G. and Perkins, R. (1958): Sketch maps; Starr,
C.C. (1934): Report on Early Bird Mine, Gold Harbour, 5pp, sketch
map 1" = 200')
EMR MP CORPFILE (Gold Harbour Mines, Limited)
GSC MAP 1385A
GSC MEM 88, p. 174
GSC P 86-20; *88-1E, pp. 221-227; 89-1H; 90-10
GSC Report of Progress 1878-79, p. 13B; 1887, pp. 17R,143R
GCNL #73, 1981

DATE CODED: 1986/06/26
DATE REVISED: 1989/02/23

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103C 002**

NATIONAL MINERAL INVENTORY: 103C16 Au2

NAME(S): **HAIDA GOLD**, BLUE MULE, KOOTENAY,
RUPERT, SWINDLE

STATUS: Prospect
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103C16E
BC MAP:
LATITUDE: 52 51 29 N
LONGITUDE: 132 09 26 W
ELEVATION: 150 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Drill site, Map 1 (Assessment Report 13649). Located 1.2 kilometres north of the east end of the south arm of Kootenay Inlet.

Underground
MINING DIVISION: Skeena
UTM ZONE: 08 (NAD 83)
NORTHING: 5860267
EASTING: 691384

COMMODITIES: Gold Silver Copper

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Gold
COMMENTS: Minor free gold.
ASSOCIATED: Quartz Calcite
ALTERATION: Silica Chlorite
ALTERATION TYPE: Silicific'n Chloritic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stockwork Vein Disseminated
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I01 Au-quartz veins
SHAPE: Regular
MODIFIER: Faulted
DIMENSION: 310 x 30 x 1 Metres STRIKE/DIP: 090/70S TREND/PLUNGE:
COMMENTS: Main quartz vein.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE: Upper Triassic
GROUP: Vancouver
FORMATION: Karmutsen
IGNEOUS/METAMORPHIC/OTHER:

LITHOLOGY: Greenstone

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Wrangell
PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

INVENTORY

ORE ZONE: DRILLHOLE
REPORT ON: N
CATEGORY: Assay/analysis
SAMPLE TYPE: Drill Core
COMMODITY: Gold
GRADE: 2.0200 Grams per tonne
COMMENTS: Drill hole sample assayed over a length of 0.9 metre.
REFERENCE: Assessment Report 13649.

CAPSULE GEOLOGY

The property is located at an elevation of about 150 metres, 1.2 kilometres north of the south arm of Kootenay Inlet on the west side of Moresby Island. The showings were discovered and three claims staked by Jones, Wiggs, and McRae in 1919. In 1921 Jones and Larson leased the property for three years. Work on the largest vein consisted of open-cutting and stripping for a length of 183 to 213 metres. In 1922 a sample of several hundred pounds of ore assayed at \$23.60 a ton in gold of which \$14 was recoverable free gold. By 1923 a 10 ton Ross mill, with a capacity of one ton per day, had been installed. In 1926 the main vein was traced to a total length of 2134 metres. E.C. Stevens, in 1930, restaked the showings as the 4 claim Rupert group. Open cutting and stripping located additional parallel veins. Haida Gold Mines, Limited, incorporated in 1933, surveyed the original claims and with additional staking expanded the property to 10 claims. Work done included surface stripping and trenching, crosscutting, and underground drifting on vein C. Detailed sampling in the 85-metre long drift adit (No. 1 adit) showed values varying

CAPSULE GEOLOGY

from 0.69 to 48.7 grams per tonne gold, with an average assay value of 0.214 ounces of gold per ton across a width of 29 inches. In late 1933, C.C. Starr began adit No. 3 at the 66-metre elevation, 88 metres below No. 1 adit. No. 3 adit intersected vein C at a distance of 118 metres from the portal where the vein was drifted on for 37 metres. The property was closed in October 1934 due to lack of funds.

The property was examined by Vidette Gold Mines, Limited, in 1936. Work was reported to have resumed during the year.

Cusac Industries Ltd. surveyed and drilled (457 metres) the property in 1985.

An east striking, steeply south dipping quartz vein system occurs in massive greenstone of the Upper Triassic Vancouver Group, Karmutsen Formation. Several veins, 0.2 to 1.3 metres in width, are traced over a 310-metre strike length. The veins are composed mainly of quartz and calcite with sparse pyrite, chalcocopyrite and free gold. The vein walls are slightly silicified and chloritized. Six chip samples averaged 15 grams per tonne gold over a 1.5-metre width along 76 metres of strike length (Assessment Report 13649).

Sampling, in 1934, of an adit returned 7.4 grams per tonne gold over 0.7 metre. In 1985 a drill hole intersected 2.02 grams per tonne gold over 0.9 metre, and a second assay returned 1.7 grams per tonne gold (Assessment Report 13649).

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1926-66; 1928-64; 1932-44-46; 1933-40; 1934-B3,B4; 1936-B4
EMPR ASS RPT 8070, 9263, *13649
EMPR BULL *54, p. 218
EMPR EXPL 1980-370; 1985-C363
EMPR PF (*Rpt by J.T. Mandy, 1932; Starr, C.C. (1933): Report of Examination of Haida Gold Mines Ltd. Property; Letter by C.C. Starr, August, 1934; Map showing workings on 'C' Vein (with assays), 1933; Surface plan of workings on claims (with assays), (1" = 100'), 1933; Cross-section map (1" = 100'), (showing assays), 1933)
EMR MP CORPFILE (Haida Gold Mines Limited)
GSC MAP 1385A
GSC P 86-20; *88-1E, pp. 221-227; 89-1H; 90-10
CMH 1986-87, p. 118
GCNL #225,#231, 1984
N MINER Nov.13, 1984
West. Can. Mining News: Sept.10, 1933; Jan.24,May 10, 1935;
Apr.24, 1936
Placer Dome File
Chevron File

DATE CODED: 1986/07/14
DATE REVISED: 1989/03/03

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

ORE ZONE: TASU

REPORT ON: Y

CATEGORY: Indicated
QUANTITY: 2721560 Tonnes
COMMODITY: _____ GRADE: _____
Copper 0.2750 Per cent

YEAR: 1980

COMMENTS: 3,628,740 tonnes were depleted from a reserve of 6,350,300 tonnes before the mine closure in 1983.

REFERENCE: Energy, Mines and Resources Mineral Bulletin 189, page 20.

CAPSULE GEOLOGY

The property is located on the south side of Tasu Sound, west coast of Moresby Island, Queen Charlotte Islands. The Nos. 1, 2, 3, and 4 ore zones, respectively, extend up the north slope of the mountain between elevations of 91 and 457 metres. The concentrator is located at the shoreline just west of Gowing Island.

The magnetite occurrence was discovered by the Haida Indians in the latter part of the eighteenth century. In 1908 prospector named Gowing, of Grand Forks, was sent by lumberman J.E. Corlett, of Seattle, to investigate the rumour of the occurrence of an unknown mineral. He was guided to Tasu Sound by Henry Moody and his father, both prominent Haida's of Skidgate Mission on Graham Island, who not only knew of the original discovery but had prospected the hillside and found magnetite-copper outcrops. Gowing was made to wait on the island, which now bears his name, while his guides sampled the showings and staked 4 claims, one of which was later Crown-granted as the Tassoo claim. Gowing agreed to purchase the 4 claims for \$2,000.00. Mr. Moody, Senior, sent word to Albert Jones, son of a close friend, to come and stake adjacent claims in order to share in the discovery. Albert Jones' arrival was delayed and Henry Moody returned to stake additional claims surrounding the original four.

On Gowing's return a partnership was formed, including himself, J.E. Corlett and F.C. Elliott of Revelstoke, to acquire and develop the 20 claim property, now known as the Warwick group. Trenching during 1908, and 61 metres of adit driven in 1909, was carried out under the names Elliott Mining Company and Tassoo Mining and Smelting Company, respectively; there is no record of these as Canadian incorporations. The property was subsequently optioned to R.R. Hedley and associates, of Vancouver, who incorporated the Tassoo Syndicate, Limited, in December 1913. A tramline was built to the shore and ore shipments began in 1914. Exploration and development work included driving a 91-metre long adit at 360 metres on the Tassoo claim and sinking a 12-metre deep winze. Production was from two stopes in the adit. A lower adit at elevation 323 metres was driven 61 metres, but not far enough to encounter the ore. J.E. Corlett obtained Crown-grants on 24 claims (Lots 600-623) including the Tassoo (Lot 604) and Warwick (Lot 615) claims, in 1915. The mine operated intermittently until 1917.

All that remained of the property in later years was two key claims, the Tassoo and Warwick Crown-grants. In 1952 Albert Jones returned with son Cliff, and George Brown, to stake 6 claims adjoining the two Crown-grants. In 1953 Dr. Alex Smith acquired the two Crown-grants at a tax sale and in 1955 optioned the 6 claims from Albert Jones.

Frobisher Limited, which was controlled by Ventures Limited, incorporated Wesfrob Mines Limited in February 1956 to acquire, explore and develop the property, then comprising 21 Crown-granted and 11 recorded claims. During 1956-1957 some 6706 metres of diamond drilling was done on No. 3 zone. No further work was done until 1961 when geological and magnetometer surveys were carried out and 4971 metres of diamond drilling in 70 holes. Falconbridge Nickel Mines Limited, through a merger with Ventures Limited in 1962 acquired Wesfrob Mines as a wholly owned subsidiary. Diamond drilling continued and to the end of 1964 totalled some 40,234 metres. Proven ore reserves at that time were 22,679,625 tonnes averaging 41.33 per cent iron; of this the No. 3 zone contained about 6,168,858 tonnes averaging 47.65 per cent iron and 0.66 per cent copper.

The 7,257 ton per day mill was put into production in June 1967 with ore from the No. 3 zone open pit. Open pits were subsequently established on the No. 2 and No. 1 zones. Ore passes were driven from No. 2 and No. 3 (upper) zones to a haulage adit driven at the 198-metre level. In 1973 this level was extended 66 metres and a crosscut driven to No. 3 zone.

The Della-Blujay group, comprising Crown-grant Nos. 2995, 2996, 2999, 3004, and 3007, and several recorded claims, lies west of the No. 2 and 3 zones and apparently covers No. 5 zone, which is in part a down faulted extension of No. 2 and 3 zones. During 1970-1971 the Della-Bluejay adit was driven from a point on the shoreline some 1067 metres southwest of the concentrator for a distance of 791 metres. Exploratory diamond drilling included 4291 metres underground and

CAPSULE GEOLOGY

3559 metres on surface. No further underground development was done on the Dela-Bluejay until 1974 when a decline was sunk from the 67-metre elevation in No. 1 zone open pit. Underground development was completed in 1977 and with the exhaustion of ore in the open pits the switch to underground mining was made during the year. Reserves (proven) as of January 1, 1980 were 2,384,731 tonnes at 0.275 per cent copper (Canadian Reserves as of January 1, 1980, MR 189, page 20, Energy, Mines and Resources, Ottawa).

Wesfrob Mines Limited was dissolved in January 1980 and the mine became the Wesfrob Mining Division of Falconbridge Nickel Mines Limited. Ore reserves of 6,350,296 tonnes at the end of 1980 were sufficient to continue the operation through 1987. Due to lower copper prices and other economic factors some 3,628,740 tonnes of low-grade material were deleted from reserves in 1981-82. Economic reserves were depleted and the mine closed permanently on October 5th, 1983. Lumberton Mills Ltd. subsequently acquired the property and equipment from Falconbridge Limited; Lumberton was placed in receivership in 1987.

The area is underlain by the Jurassic-Triassic Kunga Group and the Upper Triassic Karmutsen Formation of the Vancouver Group. These rocks have undergone regional greenschist facies metamorphism.

The Tasu orebodies occur at the contact between grey limestone of the Upper Triassic Sadler Formation (Kunga Group) and massive amygdaloidal greenstones of the Upper Triassic Karmutsen Formation. These rocks, were intruded by various stages of igneous rocks. First, the volcanics were cut by minor related sills. Next, a complex diorite porphyry laccolith was emplaced between the Karmutsen and Sadler formations. The foliated hornblende diorite and quartz diorite of the Middle Jurassic San Christoval Pluton intruded the stratified rocks, followed by skarn development and mineralization. Finally, earlier andesitic and later basaltic dike swarms cut all rocks.

The panel of Karmutsen and Kunga rocks that form the locus of the ore deposits has been moderately compressed into a synclinorium bordered on each limb by anticlines, all with axes trending 330 and plunging 25 degrees. The ore zones occur along the crest of the eastern anticline and extend down the west limb toward the synclinal axis. The most significant faults strike north-northwest and dip steeply. The faults pre-date the mineralization, but some have been subjected to later movement. The ore zones are crosscut by a large number of post ore dikes and in some areas they have diluted the grade.

The orebodies and their skarn envelope form a tabular panel, 30 to 120 metres thick, which conforms to the bedding attitude (roughly 175 degree strike, 20 degree west dip) of the Karmutsen greenstones. However, the ore replaces diorite porphyry sills and Sadler limestone. This panel extends over a horizontal area at least 1000 by 1200 metres, which contain linear ore "build-ups" along pre-ore fault lines.

Ore zones 1 to 4 represent "build-up" and fringe areas. Zone 5 includes all known mineralized areas to the west. The orebodies of No. 1 zone, the furthest north zone, replace diorite porphyry, are skarn rich and generally copper poor. No. 3 zone orebodies, about 650 metres to the south-southeast, replace limestone, are relatively skarn free, copper-rich and are concentrated just above the contact of the Karmutsen Formation. No. 2 zone lies between No's. 1 and 3 and has intermediate characteristics to both zones. No. 4 zone lies 200 metres south of No. 3 and has similar characteristics.

The oxide and sulphide minerals have distribution and textures characteristic of a later metasomatic sequence. Magnetite replaces all earlier minerals and is found principally in the core of the skarn areas and as central bands in skarn replacement veinlets. Still younger are the sulphide minerals, pyrite, pyrrhotite, chalcopyrite, and rare sphalerite. Sulphur content of the orebodies is fairly uniform at 2 to 3 per cent, regardless whether chalcopyrite is the main sulphide, as in No. 3 zone, or pyrite and pyrrhotite, as in No. 1 and No. 2 zones. The sulphide minerals generally occur as blebs and small masses in magnetite but are also common as veinlets. Grades are roughly 40 per cent iron, 0.3 per cent copper and 3.4 grams per tonne silver.

Production from 1914 to the mine closure in October 1983 totalled 23,297,228 tonnes of ore mined. From this 1,430,141 grams gold, 52,822,505 grams silver and 57,090,466 kilograms of copper were recovered. Iron concentrates produced were 12.35 million tonnes, averaging 65 per cent iron.

Underground development was completed in 1977 and with exhaustion of ore in the open pits, underground mining was initiated during that year. Indicated reserves as of were 2,721,560 tonnes grading 0.275 per cent copper (Energy, Mines and Resources Mineral

CAPSULE GEOLOGY

Bulletin 189, page 20). Total ore reserves outlined by the end of 1980 were reported as a 6,350,300 tonnes. Due to lower copper prices and other economic factors some 3,628,740 tonnes of low-grade material were deleted from the reserves in 1981-1982. Economic reserves were depleted and the mine closed permanently on October 5, 1983.

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- EMPR BC METAL MM00019
- EMPR BULL *54, pp. 183-189
- EMPR GEM 1969-73; 1970-101,102; 1971-110,111; 1972-494-497; 1973-482-484; 1974-320,321
- EMPR IR 1984-2, pp. 99, 102; 1984-3, pp. 105, 108; 1984-4, p. 121; 1984-5, pp. 113, 115; 1986-1, p. 111
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- EMPR OF *1988-28, pp. 77-79
- EMPR PF (*Various maps, plans and sections; Campbell, C.M. (1958): Report on Economic Analysis of the Tasu Project, Feb.24, 1958; Polk, G.K. (1962): Westfrob Mines Ltd., Report on 1961 Field Season at Tasu, Queen Charlotte Island, Jan.30, 1962; McDougall, J.J. (1963): Report on Wesfrob Mines Ltd., Air Mag Survey, Tasu Area, 1963, Jun.25, 1963; Polk, G.K. (1964): Report on Westfrob Mines Ltd., Geology to March 1964, Apr.10, 1964; Photographs of Tasu Mine; Starr, C.C. (1953): Letter on Jones Group of claims to Waddington Mining Corporation Ltd.; Starr, C.C. (1953): Letter on Jones Group to R. Crowe-Swords; Starr, C.C. (1953): Notes on Various Trails to Tassoo Harbour; *Starr, C.C. (1953): Report of Preliminary Examination of the Jones Group of Mineral Claims, 4 pp., map scale 1" = 300', detail of workings scale 1" = 40')
- EMR MIN BULL MR 31, p. 144; 166; *189, p. 20; 223 B.C.280
- EMR MP RESFILE (Tasu Mine)
- EMR MP CORPFILE (Wesfrob Mines Limited; Falconbridge Nickel Mines Limited)
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- GSC BULL 172, pp. 81,82
- GSC EC GEOL No. 3, pp. 31,32
- GSC MAP 278A; 1385A
- GSC P 86-20; 88-1E, pp. 213-216,221-227; 89-1H, pp. 95-112; 90-10, pp. 59-87, 163-172
- MIN REV March/April 1988, pp. 19-24
- W MINER, Oct., 1965, pp. 87-96; Jun., 1967, pp. 40-66; May, 1983
- WESTERN MINER & OIL Review Vol. 32, Oct., 1959, pp. 38-44
- Falconbridge File
- EMPR OF 1998-10

DATE CODED: 1986/07/15
DATE REVISED: 1989/02/23

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103C 004**

NATIONAL MINERAL INVENTORY: 103C16 Fe3

NAME(S): **GARNET**, KING NEPTUNE, RUBY,
 AJAX, TOMMY, TASU 4,
 JONES, SEA GULL FR. (L.618), SEAL (L.619),
 INA FR. (L.622)

STATUS: Prospect
 REGIONS: British Columbia, Queen Charlotte Islands
 NTS MAP: 103C16E
 BC MAP:

Underground

MINING DIVISION: Skeena

LATITUDE: 52 46 14 N
 LONGITUDE: 132 01 11 W
 ELEVATION: 240 Metres

UTM ZONE: 08 (NAD 83)

NORTHING: 5850912
 EASTING: 701042

LOCATION ACCURACY: Within 500M

COMMENTS: Copper-iron mineralization, Figure 38 (Bulletin 54). Situated on the northwestern end of the peninsula between Fairfax and Botany Inlets, Tasu Sound.

COMMODITIES: Copper Gold Molybdenum Lead Iron Magnetite Zinc Silver

MINERALS

SIGNIFICANT: Chalcopyrite Magnetite Pyrite Sphalerite Molybdenite
 ASSOCIATED: Quartz
 ALTERATION: Chlorite Actinolite Sericite
 ALTERATION TYPE: Chloritic Silicific'n Sericitic
 MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Massive Vein Stockwork Disseminated
 CLASSIFICATION: Skarn Replacement Hydrothermal Industrial Min.
 TYPE: K01 Cu skarn L04 Porphyry Cu ± Mo ± Au
 SHAPE: Regular
 DIMENSION: 60 x 10 Metres STRIKE/DIP: TREND/PLUNGE:
 COMMENTS: Dimensions for massive magnetite body.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Upper Triassic	Vancouver	Karmutsen	
Upper Triassic	Kunga	Sadler	
Middle Jurassic			San Christoval Plutonic Suite

ISOTOPIC AGE: 170-175 +/- 5 Ma
 DATING METHOD: Uranium/Lead
 MATERIAL DATED: Zircon

LITHOLOGY: Greenstone
 Limestone
 Andesite
 Basalt
 Granodiorite
 Quartz Diorite

HOSTROCK COMMENTS: San Christoval Plutonic Suite dated by Geological Survey of Canada in current research (Pers. Comm.: Anderson, R.G., March, 1989).

GEOLOGICAL SETTING

TECTONIC BELT: Insular
 TERRANE: Wrangell

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
 CATEGORY: Assay/analysis YEAR: 1964
 SAMPLE TYPE: Chip

<u>COMMODITY</u>	<u>GRADE</u>	
Silver	89.1000	Grams per tonne
Gold	0.6900	Grams per tonne
Copper	2.3000	Per cent
Iron	12.4000	Per cent
Lead	0.1000	Per cent
Zinc	12.0500	Per cent

COMMENTS: The sample width is greater than 24 metres.
 REFERENCE: Property File: Report by J.P. Elwell, 1964.

CAPSULE GEOLOGY

The Garnet and Ruby groups of claims are located on the northwestern end of the peninsula between Fairfax and Botany Inlets, Tasu Sound, at an elevation of between 91 and 290 metres.

In 1908 the property was staked as the Ajax group by Messrs. Chapman, Kitson, and Husband. At that time a 21-metre adit (Tommy adit) was driven on the southern boundary of the claims.

Five claims, the Garnet 1 and 2, and Ruby 1-3, were located in 1953 by R.E. Wolverton for The Consolidated Mining and Smelting Company of Canada Limited. Intermittent exploration by trenching was carried out over the next few years. The claims were retained by Mr. Wolverton after the company's interest terminated.

In 1962 Silver Standard Mines Limited optioned the five claims. Work done between November 12 and December 10 of that year included drilling four packsack holes totalling 65 metres, cleaning out some trenches, and conducting a magnetometer survey. The option was subsequently dropped.

Bardale Mining and Development Ltd., by an October 1964 option agreement, acquired the Garnet 1 and 2, and Ruby 1-3 claims from R.E. Wolverton and R.F. Sandner. Additional staking was done to a total of 61 claims. By an agreement of August 1965 the above option was assigned to Moresby Mines Limited. Work during the period 1964-1966 included 3353 metres of trenching, 21 kilometres of line cutting, a magnetometer survey on a 61 by 15 metre grid, geological and geochemical surveying and mapping, and 496 metres of diamond drilling in 12 holes.

From June 1967 to August 1968, the 61 claims were under option to Canadian Superior Exploration Limited from Moresby Mines Limited. During that time the work done included mapping the surface workings, geological mapping on an area 914 by 732 metres on the Ruby 1, 2, and 4 and Garnet 15, 17, and 19, an induced polarization survey covering 15 claims, a magnetometer survey covering 6 claims, geochemical sampling on 6 claims, 13 trenches, totalling 62 metres, and drilling of 6 holes totalling 600 metres.

From February 1971 the claims were operated by Imperial Oil Enterprises Ltd. Development work by the company included topographical and geological mapping, a geochemical survey, an induced polarization survey, and 10 holes drilled totalling 650 metres. The option was dropped in 1972.

The Dowa Mining Co., Ltd. optioned the property in 1974. Three holes were diamond drilled a total of 215 metres on Garnet 1 and 2. Alyska Resources Corporation mapped and sampled the property in 1997.

Greenstones of the Upper Triassic Vancouver Group, Karmutsen Formation are intruded by quartz diorites of the Middle Jurassic San Christoval Pluton. The greenstones are overlain by massive grey limestone of the Upper Triassic Sadler Formation (Kunga Group), which forms a northwest trending synclinal keel west of the batholith. Diorite dikes cut the volcanics and sediments.

Three main types of mineralization occur in several showings on the property. Massive magnetite, with minor gold and silver and varying amounts of pyrite and chalcopryrite, is best represented by a showing trenched and drilled in 1966 by Moresby Mines. A 60 by 10 metre mineralized body within greenstones and limestone at the northeast margin of the limestone keel averaged 1.3 per cent copper, 23.7 per cent iron and 20.6 grams per tonne silver. A 150 by 6 metre body, with similar mineralization, 250 metres to the southwest, averaged 2.1 per cent copper, 48 per cent iron and 6.9 grams per tonne gold (Elwell, J.P., 1964).

North of the latter body, by about 100 metres, is a wide zone (over 25 metres) of massive sphalerite with varying amounts of magnetite, chalcopryrite and pyrite and minor gold-silver values, within altered limestone, near the limestone-greenstone contact. The zone strikes roughly 125 degrees for about 150 metres and dips about 60 degrees to the east. A 24-metre wide chip sample at the southern end of the zone assayed 12.05 per cent zinc, 2.30 per cent copper, 12.40 per cent iron, 89.1 grams per tonne silver and 0.69 gram per tonne gold. Drill results were poor (Elwell, J.P. 1964).

The third type of mineralization occurs north east of the massive magnetite zones, in an area measuring about 1500 by 500 metres, within the San Christoval quartz diorite over the northern most 2 kilometres of the Corlett Peninsula. Mineralization consists of pyrite, chalcopryrite and molybdenite disseminated and on fractures associated with quartz, chlorite, actinolite and sericite. Mineralization occurs in zones up to about 10 metres wide that are separated by barren quartz diorite. Thirty-three rock samples averaged 0.029 per cent copper, with gold values ranging from 0.14 gram per tonne to less than 0.005 gram per tonne (Assessment report 25123, page 9).

Smaller scattered occurrences of skarn mineralization are

CAPSULE GEOLOGY

widespread throughout the area. They typically form lenses, pods, veins and somewhat irregular replacements of limestone, almost always adjacent to faults occupied by basalt to andesite dikes.

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1967-56; 1968-70
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EMPR EXPL 1981-214
EMPR GEM *1971-110; *1972-497; *1974-321-322
EMPR PF (Elwell, J.P., (1964): Report on the Garnet and Ruby Claims
in Moresby Mines Ltd. Prospectus; Starr, C.C. (1953): Report of
Preliminary Examination of the Jones Group of Mineral Claims,
4 pp., map scale 1" = 300', in 103C 003)
EMR MP CORPFILE (Imperial Oil Enterprises Ltd.; Moresby Mines
Limited)
GSC MAP 278A; 1385A
GSC P 86-20; 88-1E, pp. 213-216,*221-227; 89-1H, pp. 95-112; 90-10,
pp. 59-87, 163-172
MIN REV March/April 1988, pp. 19-24
PERS COMM (R.G. Anderson, March 1989)
Falconbridge File

DATE CODED: 1986/07/15
DATE REVISED: 1999/08/31

CODED BY: LDJ
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103C 005**

NATIONAL MINERAL INVENTORY: 103C16 Fe2

NAME(S): **OLD TASU TOWNSITE** OLD TOWNSITE, TASU,
JM 1

MINING DIVISION: Skeena

STATUS: Prospect
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103C16E
BC MAP:

UTM ZONE: 08 (NAD 83)

LATITUDE: 52 45 04 N
LONGITUDE: 132 01 26 W
ELEVATION: 50 Metres

NORTHING: 5848738
EASTING: 700850

LOCATION ACCURACY: Within 500M
COMMENTS: Symbol, Figure 34 (Bulletin 54); 1.5 kilometres southeast of Tasu Mine.

COMMODITIES: Magnetite Iron Copper

MINERALS

SIGNIFICANT: Magnetite Chalcopyrite Pyrite
ALTERATION TYPE: Skarn
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Massive Disseminated
CLASSIFICATION: Skarn Replacement Industrial Min.
TYPE: K03 Fe skarn
SHAPE: Regular
DIMENSION: 10 Metres STRIKE/DIP: 130/70E TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Triassic-Jurassic	Kunga	Undefined Formation	
Upper Triassic	Vancouver	Karmutsen	
Middle Jurassic			San Christoval Plutonic Suite

ISOTOPIC AGE: 170-175 +/- 5 Ma
DATING METHOD: Uranium/Lead
MATERIAL DATED: Zircon

LITHOLOGY: Limestone
Skarn

HOSTROCK COMMENTS: San Christoval Pluton part of Jurassic San Christoval Plutonic Suite dated by current GSC research (Pers. Comm.: R.G. Anderson, Mar. 1989).

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Wrangell

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

CAPSULE GEOLOGY

These showings are on the old Tasu townsite, on Hunger Harbour, Fairfax Inlet. They are on located claims held by Wesfrob Mines Limited as part of the large block of the Tasu mine but are separate from the main Tasu orebodies (103C 003). Signs of old work indicate the mineralization was probably known about 1910. In 1954 Cominco located the showings and did some stripping and pitting. In the summer of 1964 Wesfrob drilled nine AX holes totalling 715 metres at the property.

The magnetite showings occur on the steeply dipping west limb of a synclinal pendant of Jurassic to Triassic Kunga Group limestone with a sheath of Upper Triassic Vancouver Group, Karmutsen Formation greenstone and skarn. These rocks are engulfed by diorite of the Middle Jurassic San Christoval Pluton. The greenstone and skarn varies in thickness from 6 to 46 metres and trends 130 degrees. Near the skarn sheath, ore replaces limestone with up to 10 metres wide of massive magnetite and scattered magnetite with some pyrite and chalcopyrite disseminated in the skarn.

Limited drilling proved less than 90,720 tons of relatively low-grade ore (National Mineral Inventory Card 103C16 Fe2).

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EMPR PF (Refer to *Tasu 103C 003)
GSC MAP 1385A
GSC P 86-20; 88-1E, pp. 213-216,221-227; 89-1H, pp. 95-112;

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

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GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 167
REPORT: RGEN0100

BIBLIOGRAPHY

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MIN REV March/April 1988, pp. 19-24
PERS COMM (Anderson, R.G., March 1989)
Falconbridge File

DATE CODED: 1986/07/16
DATE REVISED: 1989/03/01

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103C 006**

NATIONAL MINERAL INVENTORY:

NAME(S): **QP, P, Q**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103C16E
BC MAP:

UTM ZONE: 08 (NAD 83)

LATITUDE: 52 59 19 N
LONGITUDE: 132 08 31 W
ELEVATION: 130 Metres

NORTHING: 5874826
EASTING: 691834

LOCATION ACCURACY: Within 500M

COMMENTS: Showing, Figure 2, 3 (Assessment Report 6121), located near the eastern end of Kuper Inlet.

COMMODITIES: Copper Silver

MINERALS

SIGNIFICANT: Bornite Malachite
ASSOCIATED: Quartz
ALTERATION: Silica Chlorite Malachite
ALTERATION TYPE: Silicific'n Chloritic Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: D03 Volcanic redbed Cu

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Triassic-Jurassic	Kunga	Undefined Formation	
Upper Triassic	Vancouver	Karmutsen	
Jurassic			Burnaby Island Plutonic Suite

ISOTOPIC AGE: 164 +/- 3 Ma
DATING METHOD: Uranium/Lead
MATERIAL DATED: Zircon

LITHOLOGY: Argillite
Andesite
Greenstone
Limestone

HOSTROCK COMMENTS: Middle to Late Jurassic Burnaby Island Plutonic Suite dated by R.G. Anderson of Geological Survey of Canada (Pers. Comm.: March, 1989).

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Wrangell

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

CAPSULE GEOLOGY

The area is underlain mainly by Upper Triassic Vancouver Group, Karmutsen Formation greenstones and lesser Triassic to Jurassic Kunga Group grey limestones and argillite. Minor quartz feldspar porphyries intrude both units and may be related to a stock of the Middle to Late Jurassic Burnaby Island Plutonic Suite which occurs to the southeast.

Copper mineralization is confined to a silicified fault bounded shale wedge (0.5 by 2.0 metres), in part graphitic but non-calcareous. It is surrounded by non-mineralized chloritized andesites. Bornite and malachite are the principle copper minerals and occur in cross-cutting quartz veinlets and fractures. A typical sample assayed 1.8 per cent copper and 3.4 grams per tonne silver (Assessment Report 6121). Falconbridge Limited held the property as the P and Q claims in 1976.

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EMPR BULL 54
EMPR EXPL *1976-161,162
GSC MAP 1385A
GSC P 86-20; 88-1E, pp. 213-216,*221-227; 89-1H, pp. 95-112; 90-10, pp. 59-87, 163-172
PERS COMM (Anderson, R.G., March, 1989)

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 169
REPORT: RGEN0100

BIBLIOGRAPHY

Falconbridge File

DATE CODED: 1986/07/14
DATE REVISED: 1989/03/03

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103C 007**

NATIONAL MINERAL INVENTORY:

NAME(S): **SHG, SHG MAGNUM, SHG WEDGE,
SHG TREND, SHG MILL**

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103C16E
BC MAP:

MINING DIVISION: Skeena

LATITUDE: 52 52 59 N
LONGITUDE: 132 12 36 W
ELEVATION: 600 Metres

UTM ZONE: 08 (NAD 83)

LOCATION ACCURACY: Within 500M

NORTHING: 5862907
EASTING: 687723

COMMENTS: Located on a ridge lying due north of the east end of the north arm of Kootenay Inlet on Moresby Island.

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Pyrite Pyrrhotite Arsenopyrite
ASSOCIATED: Quartz Epidote Tremolite Magnetite
ALTERATION: Tremolite
ALTERATION TYPE: Skarn
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated Vein
CLASSIFICATION: Skarn Epigenetic
TYPE: H03 Hot spring Au-Ag K03 Fe skarn

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Upper Triassic	Kunga	Sadler	
Upper Triassic	Vancouver	Karmutsen	

LITHOLOGY: Skarn
Limestone
Greenstone
Meta Volcanic
Intermediate Dike
Breccia

GEOLOGICAL SETTING

TECTONIC BELT: Insular PHYSIOGRAPHIC AREA: Queen Charlotte Ranges
TERRANE: Wrangell
METAMORPHIC TYPE: Regional RELATIONSHIP: Syn-mineralization GRADE: Greenschist
Post-mineralization

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1980
SAMPLE TYPE: Chip
COMMODITY: Gold GRADE
0.1550 Grams per tonne
COMMENTS: Chip sample R1688.
REFERENCE: Assessment Report 8010.

CAPSULE GEOLOGY

The oldest rocks on the property consist of massive volcanic flows, breccias and pillowed lavas of the Upper Triassic Vancouver Group, Karmutsen Formation. These volcanics have undergone regional greenschist facies metamorphism and are overlain by massive limestone of the Upper Triassic Sadler Formation (Kunga Group). Small intermediate composition dikes intrude the Sadler limestone and to a lesser degree the Karmutsen greenstones. The dikes are spatially related to quartz veins and silicified breccias.

On the property, quartz veins and silicified breccias occur in limestone over an area of about 800 metres by 800 metres. Within the central zone, massive quartz veins up to 2.0 metres in width and quartz stringers occur within the acid to intermediate dikes. Silicified breccia is common along several of the dike margins. The breccias contain minor pyrite and arsenopyrite.

Skarn mineralization is poorly exposed on the property but occurs near the base of the Sadler limestone. Common mineralization is

CAPSULE GEOLOGY

sulphide-epidote and fine-grained silicates with some magnetite. The sulphides comprise 2 to 10 per cent of the rock volume and consist of pyrite, pyrrhotite and arsenopyrite. Tremolite occurs with severe bleaching of the limestone. Tremolite is common locally at the limestone-greenstone contact.

Numerous rock chip samples were collected in 1980 by Placer Development Limited. Individual dike-quartz vein occurrences have values ranging from trace to 0.155 gram per tonne gold (Assessment Report 8010).

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GSC MAP 1385A
GSC P 86-20; 88-1E, pp. 213-216,*221-227; 89-1H, pp. 95-112; 90-10,
pp. 163-172
MIN REV March/April, 1988, pp. 19-24

DATE CODED: 1989/02/23
DATE REVISED: 1999/08/30

CODED BY: LLD
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103F 001**

NATIONAL MINERAL INVENTORY:

NAME(S): **SOL (GUMBO ZONE)**, GUMBO, NEEDLES,
COURTE, SOL, MMG,
RILEY CREEK

MINING DIVISION: Skeena
UTM ZONE: 08 (NAD 83)
NORTHING: 5916998
EASTING: 670830

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103F08W
BC MAP:
LATITUDE: 53 22 34 N
LONGITUDE: 132 26 01 W
ELEVATION: 275 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Drill hole C 80-3 (Assessment Report 8225). Located northeast of
Shields Bay, Rennell Sound.

COMMODITIES: Gold Silver Antimony

MINERALS

SIGNIFICANT: Pyrite Stibnite Arsenopyrite
ASSOCIATED: Quartz Calcite
ALTERATION: Clay Sericite Carbonate Silica
ALTERATION TYPE: Propylitic Silicific'n Argillic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated Breccia
CLASSIFICATION: Epithermal Hydrothermal Epigenetic
TYPE: H03 Hot spring Au-Ag
DIMENSION: Metres STRIKE/DIP: 130/ TREND/PLUNGE:
COMMENTS: Fault zone.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Middle Jurassic	Yakoun	Undefined Formation	

LITHOLOGY: Massive Andesite
Pyroclastic Andesite
Conglomerate
Volcanic Sediment/Sedimentary
Argillite
Quartz Diorite
Porphyritic Felsic Dike

HOSTROCK COMMENTS: Yakoun Formation now Yakoun Group (Geological Survey of Canada
Paper 88-1E, pages 221-229).

GEOLOGICAL SETTING

TECTONIC BELT: Insular PHYSIOGRAPHIC AREA: Queen Charlotte Ranges
TERRANE: Wrangell

INVENTORY

ORE ZONE: DRILLHOLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1980
SAMPLE TYPE: Drill Core
COMMODITY
Silver 0.6000 Grams per tonne
Gold 3.3000 Grams per tonne
COMMENTS: The sample width is 2 metres.
REFERENCE: Assessment Report 8225.

CAPSULE GEOLOGY

The area is underlain by Middle Jurassic Yakoun Group rocks dominated by pyroclastic andesites and lesser massive andesite, conglomerates, volcanic sediments and argillites. These rocks are cut by quartz diorites and porphyritic felsic dikes.

The dominant structure on the property is a major west northwest trending fault zone (Rennell-Louscoone fault system), with associated splays and subparallel faults. The fault system appears to control the mineralization and alteration.

Carbonate-sulphide-sericite-silica alteration occurs in a zone up to 500 metres long and 120 metres wide. The abundance of carbonate in the area may express mobilization of the limy fraction of the underlying Juro-Triassic Kunga Group.

CAPSULE GEOLOGY

Disseminated and fracture filled pyrite, stibnite and arsenopyrite, associated with quartz and calcite veins occur within pyroclastics and clay-carbonate altered andesite, along the major northwest trending fault zone. A clay-like "gumbo zone" with breccia textures appears to be derived from pyroclastics, but also, generally related to the faulting.

Drilling encountered elevated gold and arsenic values associated with quartz-carbonate-pyrite (+/- arsenopyrite) veinlets in minor shears and associated alteration zones within Yakoun volcanics. A drill hole intersected a 2 metre section which assayed 3.3 grams per tonne gold and 0.6 grams per tonne silver (Assessment Report 8225).

Geological mapping and geochemical surveys by JMT Services Corp. and Chevron Canada Ltd. in 1977 and 1978 led to the discovery of the Gumbo Zone. Four diamond drill holes were drilled by the joint venture in 1980. Misty Mountain Gold Ltd. flew airborne radiometrics, resistivity and magnetometer surveys over the showing in 1995. A VLF geophysical survey was completed over the showing on behalf of the owner, Sam Courte, in 1997 to locate a potentially gold-bearing structure at depth.

BIBLIOGRAPHY

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24008, *24981, 25086, 25087
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EMPR OF 2000-14
GSC BULL 365
GSC MAP 1385A; 5-1990
GSC OF 2319
GSC P 86-20; 88-1E, pp. 221-227; 89-1H; 90-10; 91-1A, pp. 353-358
GCNL #179, #198, 1985
Chevron File

DATE CODED: 1986/06/09
DATE REVISED: 1988/11/29

CODED BY: LDJ
REVISED BY: JNR

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103F 002**

NATIONAL MINERAL INVENTORY: 103F7 Sb1

NAME(S): **POINT**, GOSPEL, RENNELL SOUND

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103F07E
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 08 (NAD 83)

LATITUDE: 53 24 24 N
LONGITUDE: 132 31 16 W
ELEVATION: 5 Metres

NORTHING: 5920191
EASTING: 664892

LOCATION ACCURACY: Within 500M

COMMENTS: Sample zone, showing 86-15 (Assessment Report 15325). Located just north of Gospel Point, Rennell Sound.

COMMODITIES: Antimony Silver

MINERALS

SIGNIFICANT: Pyrite Stibnite Arsenopyrite
ALTERATION: Clay
ALTERATION TYPE: Argillic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Breccia Disseminated
CLASSIFICATION: Epithermal Hydrothermal Epigenetic Igneous-contact
TYPE: H03 Hot spring Au-Ag
SHAPE: Irregular
DIMENSION: 700 x 500 Metres STRIKE/DIP: TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Middle Jurassic	Yakoun	Undefined Formation	
Middle Jurassic			San Christoval Plutonic Suite

ISOTOPIC AGE: 170-175 +/- 5 Ma

DATING METHOD: Uranium/Lead

MATERIAL DATED: Zircon

LITHOLOGY: Rhyolite Ash Flow
Andesite Flow
Basalt Flow
Diorite
Rhyolite Tuff
Breccia
Andesite
Basalt
Rhyolite

HOSTROCK COMMENTS: Age date from R.G. Anderson, March 1989, Personal Communication.

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Wrangell

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

CAPSULE GEOLOGY

The occurrence is located close to shore, 600 metres north of Gospel Point in Rennell Sound. It may be confused with the Courte (103F 003).

The property is underlain by Middle Jurassic Yakoun Group volcanics and dioritic rock of the West Kano Pluton, which is part of the Middle Jurassic San Christoval Plutonic Suite. Uranium/lead age dates on this plutonic suite have given it an isotopic age of between 170 and 175 plus or minus 5 million years (Personal Communication: R.G. Anderson, March 1989). The volcanics consist of basalt and andesite flows and rhyolite ash flows and tuffs.

A 700 by 500 metre zone of hydrothermally altered pyritic rhyolite tuffs, with minor arsenopyrite and stibnite, occurs in contact with the dioritic pluton to the west. Within this zone, the tuffs are clay altered and, near the contact, intensely brecciated. The contact appears, in part, to be a strong northeast striking fault.

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EMPR ASS RPT 7819, 11533, 15325
EMPR BULL 54, p. 220
EMPR EXPL 1979-244; 1986-C419

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

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GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 175
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR FIELDWORK 1997, p. 19-1-19-14
GSC BULL 365
GSC MAP 1385A
GSC OF 2319
GSC P 86-20; 88-1E, pp. 213-216, 221-227, 269-274; 89-1H, pp. 73-79,
95-112; 90-10, pp. 59-87, 305-324

DATE CODED: 1986/06/06
DATE REVISED: 1988/11/29

CODED BY: LDJ
REVISED BY: JNR

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103F 003**

NATIONAL MINERAL INVENTORY: 103F8 Sb1

NAME(S): **COURTE SOL, RENNELL SOUND,
STIB, MMG, RILEY CREEK**

MINING DIVISION: Skeena

STATUS: Prospect
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103F08W
BC MAP:

UTM ZONE: 08 (NAD 83)

LATITUDE: 53 21 59 N
LONGITUDE: 132 24 26 W
ELEVATION: 275 Metres

NORTHING: 5915981
EASTING: 672625

LOCATION ACCURACY: Within 500M
COMMENTS: Chip sample, Map 2 (Assessment Report 6968). Located northeast of Shields Bay, Rennell Sound.

COMMODITIES: Antimony Gold Silver Lead Zinc

MINERALS

SIGNIFICANT: Pyrite Stibnite Arsenopyrite Chalcopyrite Sphalerite
 Pyrrhotite Galena
ASSOCIATED: Quartz Calcite
ALTERATION: Sericite Clay Carbonate Silica Chlorite
ALTERATION TYPE: Sericitic Silicific'n Propylitic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated Stockwork
CLASSIFICATION: Hydrothermal Epithermal Epigenetic
TYPE: H03 Hot spring Au-Ag
SHAPE: Irregular
MODIFIER: Faulted
DIMENSION: 500 x 120 Metres STRIKE/DIP: 150/90 TREND/PLUNGE:
COMMENTS: Mineralized area; related fault.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Middle Jurassic	Yakoun	Undefined Formation	
Cretaceous	Queen Charlotte	Undefined Formation	

LITHOLOGY: Massive Andesite
Pyroclastic Andesite
Conglomerate
Sandstone
Volcanic Sediment/Sedimentary
Argillite
Quartz Diorite
Rhyolitic Feldspar Porphyry Dike

HOSTROCK COMMENTS: Yakoun Formation now Yakoun Group (Geological Survey of Canada Paper 88-1E, pages 221-229).

GEOLOGICAL SETTING

TECTONIC BELT: Insular PHYSIOGRAPHIC AREA: Queen Charlotte Ranges
TERRANE: Wrangell

INVENTORY

ORE ZONE: CREEK REPORT ON: N

CATEGORY: Assay/analysis YEAR: 1974
SAMPLE TYPE: Chip
COMMODITY GRADE
Gold 1.3700 Grams per tonne
Antimony 0.4000 Per cent

COMMENTS: The sample was collected over 95 metres across the main fault zone.
REFERENCE: Assessment Report 24981, page 8.

CAPSULE GEOLOGY

The showings are at about the 500 foot elevation in the bottom of a steep south-flowing tributary of Riley Creek. The showings were originally reported in 1918 and were staked in 1942 by V. Courte when it received some examination and a little channel sampling. The area is underlain by Middle Jurassic Yakoun Group rocks dominated by pyroclastic andesites and lesser massive andesite, conglomerates, volcanic sediments and argillites. Thinly bedded to

CAPSULE GEOLOGY

massive sandstone and minor conglomerate of an unnamed formation of Cretaceous age are in fault contact with Yakoun rocks just east of the occurrence (GSC Open File 2319). These units are cut by quartz diorites and porphyritic felsic dikes.

The dominant structure on the property is a major west northwest trending fault zone (Rennell-Louscoone fault system), with associated splays and subparallel faults. Locally, a vertical dipping fault striking 150 degrees appears to control the emplacement of rhyolitic feldspar porphyry dikes and related mineralization and alteration.

Sericite-clay-carbonate-minor silica alteration occurs in an area up to 500 metres long and 120 metres wide. Individual zones of alteration vary from a few tens of metres to over 70 metres in width and are associated with faults and dikes. The abundance of carbonate in the area may express mobilization of the limy fraction of the underlying Juro-Triassic Kunga Group.

Sulphide mineralization occurs in the alteration zones and in stockworks of irregular quartz and calcite veinlets developed in feldspar porphyry dikes. Mineralization consists of pyrite, arsenopyrite, and stibnite, with minor pyrrhotite, chalcopyrite, sphalerite, and galena.

A chip sample of continuous exposure in Sol Creek assayed 1.37 grams per tonne gold and 0.4 per cent antimony over 95 metres (Assessment Report 24981, page 8). A drill hole 425 metres east-southeast from mineralization exposed in Sol Creek assayed 1.37 grams per tonne gold and 0.23 per cent antimony over 10 metres (Assessment Report 24981, page 8). A 1971 survey indicated a 70 by 300-metre area in which the surface grade was estimated to be 1.4 grams per tonne gold and 0.40 per cent antimony (Assessment Report 8225). A 2.27 kilogram sample, taken by Luke Watson in 1942, assayed trace gold, 19.2 grams per tonne silver, 0.1 per cent lead, 0.2 per cent zinc and 32.9 per cent antimony (Minister of Mines Annual Report 1942, page 32). This sample may be from the Point (103F 002).

This prospect has been explored intermittently since its discovery in 1942 by Victor Courte and Robert Mickle. Quintana Minerals Corp. completed geochemical and geological surveys in 1974. JMT Services Corp. and Chevron Canada Ltd. conducted geological and geochemical surveys in 1978, followed by the drilling of nine holes in 1979 to 1981. Umex Ltd. located claims over the eastern end of the prospect and by 1981 completed geological, geochemical and airborne geophysical surveys. Six short holes were also drilled by the company in 1981. Noranda Exploration Co. Ltd., Umex Ltd. and Noramex Minerals Inc. conducted geological, geochemical and ground geophysical surveys in 1985 and 1986, followed by the drilling of two diamond drill holes totalling 682 metres in 1986. Misty Mountain Gold Ltd. completed airborne, radiometrics, resistivity, magnetometer surveys over the prospect in 1995, while exploring a large block of claims surrounding the Sol property.

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EMPR BULL 54, p. 215
EMPR EXPL 1977-205; 1978-232,233; 1979-246-247; 1980-374; 1986-C419
EMPR FIELDWORK 1997, p. 19-1-19-14
EMPR PF (Report by F. Joubin, 1943)
GSC BULL 365
GSC MAP 1385A
GSC OF 2319
GSC P 86-20; 88-1E; 89-1H; 90-10; 91-1A, pp. 353-358, 367-371
GCNL #179,#198, 1985
Chevron File

DATE CODED: 1986/06/09
DATE REVISED: 1999/10/02

CODED BY: LDJ
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103F 004**

NATIONAL MINERAL INVENTORY: 103F8 Cu1

NAME(S): **NORTHWESTER**, MAGNET

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103F08W
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 08 (NAD 83)

LATITUDE: 53 17 44 N
LONGITUDE: 132 29 36 W
ELEVATION: 640 Metres

NORTHING: 5907898
EASTING: 667173

LOCATION ACCURACY: Within 500M

COMMENTS: Showing 1, Figure II (Assessment Report 495). Located at the end of Van Inlet.

COMMODITIES: Copper Iron

MINERALS

SIGNIFICANT: Chalcopyrite Magnetite Pyrrhotite Pyrite
ALTERATION: Actinolite Garnet Malachite
ALTERATION TYPE: Skarn Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Massive Disseminated
CLASSIFICATION: Skarn Replacement Industrial Min.
TYPE: K01 Cu skarn
DIMENSION: 400 x 100 Metres STRIKE/DIP: 060/70N TREND/PLUNGE: /
COMMENTS: Area of scattered mineralization, dips vary between 70 degrees to 90 degrees northwest.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Upper Triassic	Vancouver	Karmutsen	
Upper Triassic	Kunga	Sadler	
Tertiary			Kano Plutonic Suite

ISOTOPIC AGE: 32.2 +/- 1.0 Ma
DATING METHOD: Uranium/Lead
MATERIAL DATED: Zircon

LITHOLOGY: Greenstone
Limestone
Skarn
Andesite
Volcanic Sandstone
Diorite
Andesite Dike
Basalt Dike

HOSTROCK COMMENTS: Kano(diorite) pluton cuts both Karmutsen Formation & Kunga Group. Age date from Geological Survey of Canada Paper 89-1H, page 109.

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Wrangell

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

CAPSULE GEOLOGY

The Northwester showing is located 1.6 kilometres north of the head of Van Inlet, being reached by tractor road and trail from Shields Bay on Rennell sound. The showing was discovered and staked by G. McRae and A Dewall. The 11 claim Magnet group was optioned to Mastodon-Highland Bell Mines Limited. In 1962 the company carried out geological, magnetometer, and electromagnetic surveys.

Magnetite and chalcopyrite mineralization occurs scattered over a 400 metre wide zone along the contact between Upper Triassic Karmutsen greenstone and overlying Upper Triassic Sadler Formation limestone of the Upper Triassic to Lower Jurassic Kunga Group. The Kunga Group is overlain by Middle Jurassic Yakoun Group andesites and volcanic sandstones. The volcanics and limestone strike 60 degrees, dip steeply northwest and are cut by numerous andesite and basalt dikes. The dioritic Central Kano pluton of the Tertiary Kano Plutonic Suite outcrops to the south and west.

Pods of massive magnetite and associated chalcopyrite, malachite and pyrrhotite occur mainly in the Karmutsen volcanics and within actinolite garnet skarn.

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
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GSC P 86-20; 88-1E; 89-1H; 90-10, pp. 59-87, 163-172

DATE CODED: 1986/06/12
DATE REVISED: 1989/03/13

CODED BY: LDJ
REVISED BY: GJP

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103F 005**

NATIONAL MINERAL INVENTORY: 103F2 Cu1

NAME(S): **GDAL**, DAL

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103F02E
BC MAP:

UTM ZONE: 08 (NAD 83)

LATITUDE: 53 14 29 N
LONGITUDE: 132 33 16 W
ELEVATION: 300 Metres

NORTHING: 5901732
EASTING: 663307

LOCATION ACCURACY: Within 500M
COMMENTS: Located northeast of Gudal Bay.

COMMODITIES: Copper Iron

MINERALS

SIGNIFICANT: Magnetite Chalcopyrite Pyrrhotite Pyrite
ALTERATION: Epidote Garnet Malachite
ALTERATION TYPE: Skarn Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Skarn Replacement Industrial Min.
TYPE: K01 Cu skarn
SHAPE: Irregular

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Upper Triassic
Upper Triassic
Tertiary

GROUP

Vancouver
Kunga

FORMATION

Karmutsen
Sadler

IGNEOUS/METAMORPHIC/OTHER

Kano Plutonic Suite

ISOTOPIC AGE: 32.2 +/- 1.0 Ma
DATING METHOD: Uranium/Lead
MATERIAL DATED: Zircon

LITHOLOGY: Greenstone
Limestone
Skarn
Limy Argillite
Rhyolite Dike
Dacitic Dike
Diorite

HOSTROCK COMMENTS: Kano (diorite) Pluton cuts both Karmutsen Formation and Kunga Group.
Age date from Geological Survey of Canada Paper 89-1H, page 109.

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Wrangell

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

CAPSULE GEOLOGY

The showing is located at an elevation of 152 metres on Gudal Bay. The area was prospected by Mastodon-Highland Bell Mines Limited during August of 1962. The property consisted of 32 claims. The area is underlain by Vancouver Group mafic volcanic flows and greenstones of the Upper Triassic Karmutsen Formation, which are overlain by massive grey limestones of the Upper Triassic Sadler Formation (Kunga Group). The Sadler Formation is, in turn, overlain by contorted and sheared flaggy black limestone and limy argillites of the Jurassic to Triassic Peril and Sandilands formations (Kunga Group). Tertiary rhyolite and dacite dikes cut the rocks along northwest and northeast trends. The Central Kano diorite pluton, part of the Tertiary Kano Plutonic Suite, lies to the north. Scattered magnetite, chalcopyrite, malachite and pyrrhotite mineralization occurs along the Karmutsen-Sadler contact and in epidote-garnet skarn.

BIBLIOGRAPHY

EMPR AR 1962-10
EMPR ASS RPT 8662, 9688
EMPR BULL 54
EMPR OF 2000-14
EMPR PF (Report by J.C. Stephen, 1962)
GSC MAP 1385A

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 181
REPORT: RGEN0100

BIBLIOGRAPHY

GSC P 86-20; 88-1E; 89-1H; 90-10, pp. 59-87, 163-172

DATE CODED: 1986/06/12
DATE REVISED: 1988/11/29

CODED BY: LDJ
REVISED BY: JNR

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103F 006**

NATIONAL MINERAL INVENTORY:

NAME(S): **NEEDLES, RILEY, COURTE,
MMG, RILEY CREEK**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103F08W
BC MAP:

UTM ZONE: 08 (NAD 83)

LATITUDE: 53 22 54 N
LONGITUDE: 132 27 21 W
ELEVATION: 100 Metres

NORTHING: 5917563
EASTING: 669330

LOCATION ACCURACY: Within 500M

COMMENTS: Mineralized fault zone, Map 1 (Assessment Report 6968). Located northeast of Shields Bay, Rennell Sound.

COMMODITIES: Gold Silver Antimony

MINERALS

SIGNIFICANT: Pyrite Arsenopyrite Stibnite

ASSOCIATED: Quartz Calcite

ALTERATION: Clay Sericite Hematite Limonite Chlorite

Silica

ALTERATION TYPE: Propylitic Silicific'n Oxidation Argillic

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated Massive Vein

CLASSIFICATION: Hydrothermal Epithermal Epigenetic

TYPE: H03 Hot spring Au-Ag

SHAPE: Irregular

MODIFIER: Faulted

DIMENSION: Metres

STRIKE/DIP: 130/

TREND/PLUNGE:

COMMENTS: Fault zone.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Middle Jurassic

Yakoun

Undefined Formation

LITHOLOGY: Massive Andesite
Argillite
Pyroclastic Andesite
Volcanic Sediment/Sedimentary
Quartz Diorite
Felsic Dike
Conglomerate
Agglomerate

HOSTROCK COMMENTS: Yakoun Formation now Yakoun Group (Geological Survey of Canada Paper 88-1E, pages 221-229).

GEOLOGICAL SETTING

TECTONIC BELT: Insular

TERRANE: Wrangell

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1986

SAMPLE TYPE: Chip

COMMODITY

GRADE

Silver

0.6800

Grams per tonne

Gold

0.9600

Grams per tonne

COMMENTS: The sample width is 1.0 metre.

REFERENCE: Assessment Report 15325.

CAPSULE GEOLOGY

The area is underlain by Middle Jurassic Yakoun Group rocks dominated by pyroclastic andesites and lesser massive andesite, conglomerates, volcanic sediments and argillites. These rocks are cut by quartz diorites and porphyritic felsic dikes.

The dominant structure on the property is a major west northwest trending fault zone (Rennell-Louscoone fault system), with associated splays and subparallel faults. The fault system appears to control the mineralization and alteration.

Clay-carbonate-sericite-silica as well as pervasive propylitic

CAPSULE GEOLOGY

alteration occurs in a zone up to 300 metres by 350 metres. The abundance of carbonate in the area may express mobilization of the limy fraction of the underlying Juro-Triassic Kunga Group.

Disseminated, massive and fracture filled pyrite occurs within a zone of altered andesite, agglomerate flows, and pyroclastics with intercalated argillite. The zone also includes a 5 to 10-metre mineralized northwest trending fault zone. A sample assayed 13.7 grams per tonne gold (Assessment Report 11533).

A post mineral fault, trending northeast, is interpreted to offset the west part of the mineralized zone 500 metres to the southwest. The termination of the mineralization is interpreted to be caused by pinching and swelling along a series of subparallel northwest trending faults.

A 3.0-metre chip sample of the altered zone assayed 0.93 gram per tonne gold and a 1.0 metre sample assayed 0.96 gram per tonne gold and 0.68 gram per tonne silver (Assessment Report 15325).

Misty Mountain Gold Ltd. flew airborne radiometrics, resistivity and magnetometer surveys over the showing in 1995 while exploring a large block of claims surrounding the Sol property.

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EMPR ASS RPT 6726, 6968, 7265, 8225, 10144, *11533, *15325, 24008,
25086
EMPR BULL 54
EMPR EXPL 1978-233; 1979-246-47; 1980-374; 1983-496; 1986-C419
EMPR FIELDWORK 1997, 19-1-19-14
GSC BULL 365
GSC MAP 1385A; 5-1990
GSC OF 2319
GSC P 86-20; 88-1E; 89-1H; 90-10; 91-1A, pp. 353-358
GCNL #179,#198, 1985

DATE CODED: 1986/06/09
DATE REVISED: 1988/11/29

CODED BY: LDJ
REVISED BY: JNR

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103F 007**

NATIONAL MINERAL INVENTORY: 103F1 Cu1

NAME(S): **DOWNIE ISLAND SHOWING**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103F01W
BC MAP:

UTM ZONE: 08 (NAD 83)

LATITUDE: 53 07 19 N
LONGITUDE: 132 16 56 W
ELEVATION: 450 Metres

NORTHING: 5889105
EASTING: 681974

LOCATION ACCURACY: Within 500M

COMMENTS: Symbol, Figure 34 (Bulletin 54). The showing is southeast of Downie Island on Moresby Island.

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Malachite
COMMENTS: Copper stain observed from air.
ALTERATION: Malachite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Replacement
TYPE: K01 Cu skarn

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Triassic-Jurassic	Kunga	Undefined Formation	

LITHOLOGY: Limestone

HOSTROCK COMMENTS: Kunga Formation now Kunga Group (Geological Survey of Canada Paper 88-1E, pages 221-229).

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Wrangell

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

CAPSULE GEOLOGY

The showing is located at about the 457 metre elevation on Moresby Island, 5.6 kilometres southeast of Downie Island in Skidgate Channel.

A copper showing occurs as a metasomatic replacement within moderately north dipping limestone of the Juro-Triassic Kunga Group.

BIBLIOGRAPHY

EMPR BULL 54, p. 220
EMPR OF 2000-14
GSC MAP 1385A; 4-1990
GSC P 86-20; 88-1E; 89-1H, pp. 7-11; 90-10, pp. 163-172

DATE CODED: 1986/06/13
DATE REVISED: 1988/12/02

CODED BY: LDJ
REVISED BY: JNR

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103F 008**

NATIONAL MINERAL INVENTORY: 103F1 Cu2

NAME(S): **MATAJUR (B ZONE)**, TOM, SECURITY,
YOUNG, ROD, WADDINGTON

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103F01W
BC MAP:

MINING DIVISION: Skeena

LATITUDE: 53 02 39 N
LONGITUDE: 132 19 46 W
ELEVATION: 60 Metres

UTM ZONE: 08 (NAD 83)
NORTHING: 5880337
EASTING: 679138

LOCATION ACCURACY: Within 500M
COMMENTS: Drill area, Map A-5 (Assessment Report 667). Located northeast of Mackenzie Cove.

COMMODITIES: Copper Zinc

MINERALS

SIGNIFICANT: Pyrrhotite Chalcopyrite Sphalerite
ASSOCIATED: Pyrite Magnetite
ALTERATION: Epidote
ALTERATION TYPE: Skarn
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated Massive
CLASSIFICATION: Skarn
TYPE: K01 Cu skarn

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Upper Triassic	Vancouver	Karmutsen	

LITHOLOGY: Greenstone
Limestone

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Wrangell

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

INVENTORY

ORE ZONE: MAIN SHOWING

REPORT ON: N

CATEGORY: Assay/analysis	YEAR: 1990
SAMPLE TYPE: Chip	
COMMODITY	GRADE
Copper	1.4700 Per cent

COMMENTS: Chip sample was taken over a ten by ten metre area.
REFERENCE: Assessment Report 20330, sample D7.

CAPSULE GEOLOGY

The showings are located north of Security Inlet, near Mackenzie Cove, at an elevation of 152 metres. The Waddington Mining Corporation Limited held 9 claims in this vicinity in 1953. Placid Oil Company held the property as the Young and Rod groups in 1965. A geophysical survey was carried out at the time.

The area is underlain by Vancouver Group Upper Triassic Karmutsen greenstone and minor limestone which dip moderately to the north. Thinly bedded sediments, possibly of the Jurassic to Triassic Kunga Group, outcrop in the vicinity along the northeast side of Mackenzie Cove.

Three closely spaced mineralized outcrops occur on a broad ridge 150 to 200 metres northeast of Mackenzie Cove. The most significant of these consists of a ten by ten metre outcrop of clay-altered pyritic volcanic containing abundant massive pyrrhotite and pyrite with traces of chalcopyrite. A chip sample of weathered material collected over the ten by ten metre area assayed 1.47 per cent copper (Assessment Report 20330, sample D7).

A chip sample taken across a five by five metre zone of pyrrhotite and pyrite rich gossan, fifty metres northeast of the previous mineralization, assayed 0.91 per cent copper (sample D8).

A zone of pyritic epidote skarn hosted in a small pod of white marble, 35 metres west of the main showing, comprises the third area of mineralization.

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

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CAPSULE GEOLOGY

These showings were prospected and sampled by Doromin Resources in 1990. Inco Exploration and Technical Services flew airborne VLF and magnetometer surveys over the region in 1992.

BIBLIOGRAPHY

EMPR ASS RPT 667, 676, *20330, 22517
EMPR BULL 54, p. 220
EMPR OF 2000-14
GSC MAP 1385A
GSC P 86-20; 88-1E; 89-1H; 90-10
CMH 1954, p. 196

DATE CODED: 1986/06/13
DATE REVISED: 1999/09/27

CODED BY: LDJ
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 188
REPORT: RGEN0100

BIBLIOGRAPHY

GSC MAP 1385A; 5-1990
GSC MEM 88, p. 171
GSC OF 2319
GSC P *81-25, pp. 49-52; 86-20; 88-1E, pp. 221-227; 89-1H; pp. 19-22;
90-10, pp. 51-58, 163-172
GCNL #217, 1975; #173, 1976
N MINER Mar.4, 1982

DATE CODED: 1999/10/30
DATE REVISED: 1999/10/30

CODED BY: PSF
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103F 010**

NATIONAL MINERAL INVENTORY:

NAME(S): **MARIE LAKE (ROCKHOUND)**, ROCKHOUND, MARIE,
M

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103F08W
BC MAP:

UTM ZONE: 08 (NAD 83)

LATITUDE: 53 29 09 N
LONGITUDE: 132 19 56 W
ELEVATION: 180 Metres

NORTHING: 5929449
EASTING: 677116

LOCATION ACCURACY: Within 500M

COMMENTS: Showing, Figure 4 (Assessment Report 8398). The Rockhound showing is located south of Marie Lake on the Marie Property (M claims).

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Pyrite
ASSOCIATED: Quartz
ALTERATION: Silica Chalcedony
ALTERATION TYPE: Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epithermal Hydrothermal Epigenetic
TYPE: H03 Hot spring Au-Ag

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Tertiary	Undefined Group	Masset	
Tertiary			Kano Plutonic Suite

ISOTOPIC AGE: 27.0 +/- 0.3 Ma
DATING METHOD: Uranium/Lead
MATERIAL DATED: ZIRCON

LITHOLOGY: Feldspar Porphyry
Basaltic Flow
Dacitic Pyroclastic
Rhyolite

HOSTROCK COMMENTS: Age date of diorite from Sheila Lake Pluton (GSC Paper 90-10, page 64, Figure 3).

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Wrangell

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Chip
COMMODITY

YEAR: 1980

Gold

GRADE

1.0000

Grams per tonne

COMMENTS: From a 6 metre chip sample.

REFERENCE: Assessment Report 8398.

CAPSULE GEOLOGY

The area is underlain by Jurassic volcanics and clastic sediments of the Yakoun and Maude groups, which are intruded by the Sheila Lake Pluton of the Tertiary Kano Plutonic Suite. All rocks are overlain by Tertiary volcanics of the Masset Formation, consisting of basalt flows, and rhyolite and dacite pyroclastics.

The showing consists of abundant quartz-pyrite and chalcedony veinlets cutting silicified dacitic feldspar porphyry of the Sheila Lake Pluton, near its east end. A 6.0 metre wide sample assayed 1.0 gram per tonne gold (Assessment Report 8398).

Misty Mountain Gold Ltd. flew airborne radiometrics, resistivity and magnetometer surveys over the showing in 1995. This showing was also soil-sampled and prospected by the company in 1995 and 1996.

BIBLIOGRAPHY

EMPR ASS RPT *7563, 8398, 9843, 16454, 24008, 25064

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 190
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR BULL 54
EMPR EXPL 1980-376
EMPR FIELDWORK 1997, p. 19-1-19-14
EMPR OF 2000-14
EMPR PF (Prospectus: International Baron Resources Ltd., Jun.6, 1988)
GSC MAP 1385A
GSC OF 2319
GSC P 86-20; 88-1E, pp. 213-216; 89-1H, pp. 95-112; 90-10, pp. 59-87
Chevron File

DATE CODED: 1986/06/10
DATE REVISED: 1988/12/02

CODED BY: LDJ
REVISED BY: GJP

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103F 011**

NATIONAL MINERAL INVENTORY:

NAME(S): **MARIE LAKE (PROSPECTOR)**, PROSPECTOR, MARIE,
M

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103F09W
BC MAP:

UTM ZONE: 08 (NAD 83)

LATITUDE: 53 30 19 N
LONGITUDE: 132 20 06 W
ELEVATION: 110 Metres

NORTHING: 5931604
EASTING: 676851

LOCATION ACCURACY: Within 500M

COMMENTS: Drill hole, Figure 4 (Assessment Report 8398). The Prospector occurrence is located northwest of Marie Lake on the Marie Property (M claims).

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Pyrite
ASSOCIATED: Quartz Calcite
ALTERATION: Silica Pyrite
ALTERATION TYPE: Silicific'n Pyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated Stockwork
CLASSIFICATION: Epithermal Hydrothermal Epigenetic
TYPE: H03 Hot spring Au-Ag

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Tertiary

GROUP

Undefined Group

FORMATION

Masset

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Rhyolite
Dacite

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Wrangell

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

INVENTORY

ORE ZONE: DRILLHOLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1980

SAMPLE TYPE: Drill Core

COMMODITY

GRADE

Gold

0.5500

Grams per tonne

COMMENTS: The sample length is 18.3 metres from a percussion drill.

REFERENCE: Assessment Report 8398.

CAPSULE GEOLOGY

The area is underlain by Tertiary volcanics of the Masset Formation, which are underlain by calcareous argillites and sandstones of the Middle Jurassic Yakoun(?) Group. Dacitic to rhyolitic flows and pyroclastics display extensive silicification and pyritization.

A percussion drill hole (M6) intersected 18.3 metres of rhyolite pyroclastics with disseminated and fractured pyrite grading 0.55 gram per tonne gold (Assessment Report 8398). A stockwork trends 050 and consists of chalcedonic quartz and pyrite.

Misty Mountain Gold Ltd. flew airborne radiometrics, resistivity and magnetometer surveys over the showing in 1995. This showing was also sampled and prospected by the company in 1995 and 1996.

BIBLIOGRAPHY

EMPR ASS RPT 7563, 7980, 8398, 9843, 16454, 24008, 25064
EMPR BULL 54
EMPR EXPL 1979-248; 1980-376; 1987-C349
EMPR FIELDWORK 1997, p. 19-1-19-14
EMPR PF (Prospectus: International Baron Resources Ltd., Jun.6, 1988)
GSC MAP 1385A; 6-1990
GSC OF 2319
GSC P 86-20; 88-1E, pp. 269-274; 89-1H, pp. 73-79; 90-10, pp. 305-324

MINFILE NUMBER: **103F 011**

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
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ENERGY AND MINERALS DIVISION

PAGE: 192
REPORT: RGEN0100

BIBLIOGRAPHY

Chevron File

DATE CODED: 1986/06/10
DATE REVISED: 1999/09/13

CODED BY: LDJ
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **103F 012**

NATIONAL MINERAL INVENTORY: 103F/8 Col 1

NAME(S): **WILSON CREEK**, CAMP WILSON

STATUS: Developed Prospect
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103F08W
BC MAP:

Underground

MINING DIVISION: Skeena

LATITUDE: 53 25 53 N
LONGITUDE: 132 15 12 W
ELEVATION: 100 Metres

UTM ZONE: 08 (NAD 83)

NORTHING: 5923593
EASTING: 682583

LOCATION ACCURACY: Within 500M

COMMENTS: The deposit is located in the Yakoun Basin in the north central part of Graham Island.

COMMODITIES: Coal

MINERALS

SIGNIFICANT: Coal
MINERALIZATION AGE: Middle Jurassic

DEPOSIT

CHARACTER: Stratiform
CLASSIFICATION: Fossil Fuel
TYPE: A04 Bituminous coal
SHAPE: Irregular
MODIFIER: Folded
DIMENSION: 5
COMMENTS: Thickness of coal seam.

Stratabound
Syngenetic
Sedimentary

Faulted
Metres

STRIKE/DIP: 010/60E

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Middle Jurassic	Yakoun	Undefined Formation	

LITHOLOGY: Coal
Sandstone
Shale
Conglomerate

HOSTROCK COMMENTS: Yakoun Formation now Yakoun Group (Geological Survey of Canada Paper 88-1E, pages 221-229).

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Wrangell
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

RELATIONSHIP: Post-mineralization

GRADE: HVol Bituminous

INVENTORY

ORE ZONE: CAMP WILSON

REPORT ON: Y

CATEGORY: Inferred
QUANTITY: 1220000 Tonnes
COMMODITY: Coal
COMMENTS: Grade for average volatile matter.
REFERENCE: Geological Survey of Canada, Summary Report 1912, page 37.

YEAR: 1912

GRADE: 35.0000 Per cent

CAPSULE GEOLOGY

A single coal seam, the "Wilson Seam", occurs in the Wilson Creek area interbedded with sandy shale, sandstone and pebbly conglomerate of the Middle Jurassic Yakoun Group. The seam, which consists of high volatile "B" bituminous coal, varies from 1.2 to 5.5 metres thick and contains up to 4.9 metres of coal. The seam is divided into two benches by a 13 centimetre thick sandstone layer, 1.5 metres above the seam floor. The lower bench is dirty and contains several thin shale and bone coal bands. The upper bench, approximately 3.7 metres thick, consists entirely of coal with varying ash contents. The seam floor is sandstone while the roof is a pebbly sandstone.

Analyses of the coal indicates moisture contents ranging from 1.06 per cent to 2.65 per cent, volatile matter 6.1 per cent to 43.5 per cent (generally approximately 35 per cent), fixed carbon 31.2 per cent to 74.1 per cent (generally approximately 50 per cent), ash 2.92 per cent to 57.10 per cent (average less than approximately 20 per cent), and sulphur 0.5 per cent to 1.2 per cent.

The structure consists of a narrow synclinal basin trending northwest and plunging slightly north. The coal occurs on the

CAPSULE GEOLOGY

west limb and central portions of the syncline. The coal bearing strata strike north-northwest and dip 60 to 80 degrees east. Minor folding occurs and locally northwest-southeast trending faults disrupt the structure.

Work done on the Camp Wilson occurrence includes two adits, one open cut, two shallow pits and five diamond-drill holes. Total underground workings consist of approximately 55.0 metres of drifts and crosscuts, and 12 metres of shafts.

Based on a 1.2 metre thickness of coal underlying an area of 0.78 square kilometres, the coal reserve of Camp Wilson is 1.22 million tonnes (Geological Survey of Canada, Summary Report 1912, page 37).

The coal showing is located at an elevation of about 76 metres near Wilson Creek, 22.5 kilometres west of Lawn Point.

By 1919, there were three work openings: No. 1 opening, on the east side of Wilson creek, consists of an adit 16.4 metres along the coal seam. At 2.4 kilometres from the entrance a winze 4.2 metres deep gave access to two drifts totalling 15.2 metres in length. A crosscut exposes the full width of the seam at the end of the northern drift. No. 2 opening, 122 metres southeast from No. 1, on the west side of Wilson creek, is a shaft 4.2 metres deep from which a drift runs south on the seam for 6 metres. No. 3 opening, 23 metres northwest from No. 1, is an adit and incline, partly on the seam and partly in the glacial till. Its total length in a northeast direction is 23 metres.

A 1912 sample gave the following analysis: water, 2.44 per cent; volatile matter, 35.96 per cent; fixed carbon, 48.64 per cent; ash, 12.26 per cent; sulphur, 0.80 per cent.

A preliminary estimate of probable mineable reserves by Mackay for the Royal Commission on coal, in 1946, was 5,600,000 tons. In 1971 ownership belbriget to MacMillan, Bloedel and Power River Industries (Alberni) Ltd. An induced polarization survey was carried out by Trincon Exploration Survey Ltd.

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*1914-165-171; 1915-75; 1916-88
EMPR BULL 54, pp. 74,75,91,106,177
EMPR COAL ASS RPT *93
EMPR GEM 1971-503-504
GSC ANN RPT 1904, Pt.B (Vol.16), pp. 31-44
GSC BULL 365
GSC MAP 1385A
GSC MEM *69, pp. 141-158; *88, pp. 17, 143-151
GSC OF 2319
GSC P 86-20; 88-1E; 89-1H, pp. 19-22; 90-10; 91-1A, pp. 353-358
GSC SUM RPT *1912, pp. 12-40
Report on the Royal Commission on Coal, pp. 51,641, Ottawa, 1946

DATE CODED: 1986/05/21
DATE REVISED: 1988/12/02

CODED BY: EVK
REVISED BY: JNR

FIELD CHECK: N
FIELD CHECK: N

CAPSULE GEOLOGY

to the east. To the east of the anticline is a narrow north-south trending canoe shaped syncline, while to the west is a flat syncline modified by low undulating folds. The strata locally contain minor folds and are cut by minor faults. The coal is cut by numerous dikes.

Work done on the occurrence includes one 20.7 metre adit and one 9 metre inclined shaft.

Given an average thickness of coal of 0.915 metre underlying a probable area of 2.1 square kilometres, the coal reserve for Camp Robertson would be 2.44 million tonnes (Geological Survey of Canada, Summary Report 1912, page 37).

The showing, first prospected in 1893, is located 3.2 kilometres south of Yakoun Lake at an elevation of 274 metres.

From 1893 to 1913 a number of openings were developed. One adit follows the coal seam under glacial drift, through faulted and broken ground of massive, soft, brownish gray shale, and then slopes 13 degrees for 20 metres. Analysis of the coal showed: water, 0.80 per cent; volatile matter, 23.27 per cent; fired carbon, 51.39 per cent; ash, 24.54 per cent; no sulphur; and a fuel ratio of 2.21.

In 1914, the property was held by Imperial Trust Company of New York. A preliminary estimate of probable mineable reserves by Mackay for the Royal Commission on Coal, in 1946, was 11,200,000 tons.

BIBLIOGRAPHY

EMPR AR 1898-1163; 1902-56; 1903-210; 1906-75,85; 1910-175;
1913-105; *1914-165-171; 1915-75; 1916-88

EMPR BULL 54, pp. 75,91,177

EMPR COAL ASS RPT *93

GSC ANN RPT 1904, Pt.B (Vol.16), pp. 31-44

GSC MAP 1385A

GSC MEM *69, pp. 141-158; *88, pp. 126-136

GSC OF 2319

GSC P 86-20; 88-1E, pp. 221-227; 89-1H; 90-10, pp. 253-277, 279-294;

90-1F, pp. 5-10; 91-1A, pp. 367-371

GSC SUM RPT *1912, pp. 12-40

Report of the Royal Commission on Coal, pp. 51, 641, Ottawa, 1946

DATE CODED: 1986/05/21
DATE REVISED: 1988/12/02

CODED BY: EVK
REVISED BY: JNR

FIELD CHECK: N
FIELD CHECK: N

CAPSULE GEOLOGY

Middle Jurassic volcanics and sediments of the Yakoun Group immediately northeast of the deposit (GSC Open File 2319).

The strata are intruded by various sills and dikes.

The prospect, located on Anthracite creek, was discovered in 1898.

The opening is an adit on the right bank of the creek driven for 14 metres across the measures which strike north 32 degrees west, and dip 85 degrees southwest. A drift, 3.6 metres from the opening, goes 9 metres southeast in the seam.

A preliminary estimated of probable mineable reserves by Mackay for the Royal Commission on Coal, in 1946, was 4,064,000 tonnes.

BIBLIOGRAPHY

EMPR AR 1898-971,1163; 1902-56; 1903-210; 1906-85; *1914-165-171;
1915-75; 1916-88

EMPR BULL 54, p. 177

EMPR COAL ASS RPT *93

GSC ANN RPT 1904, Pt.B (Vol. 16), pp. 44

GSC MAP 1385A; 5-1990

GSC MEM *69, pp. 141-158; *88, pp. 17, 136-140

GSC OF 2319

GSC P 86-20; 88-1E, pp. 221-227; 89-1H; 90-10, pp. 253-277, 279-294;

91-1A, pp. 367-371

GSC SUM RPT *1912, pp. 12-40

Report on the Royal Commission on Coal, pp. 51, 641, Ottawa, 1946

DATE CODED: 1986/05/21
DATE REVISED: 1999/09/16

CODED BY: EVK
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103F 016**

NATIONAL MINERAL INVENTORY: 103F/1 Col1

NAME(S): **SLATECHUCK**

STATUS: Prospect
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103F01W
BC MAP:

Underground

MINING DIVISION: Skeena

LATITUDE: 53 13 35 N
LONGITUDE: 132 15 24 W
ELEVATION: 300 Metres

UTM ZONE: 08 (NAD 83)

NORTHING: 5900786
EASTING: 683238

LOCATION ACCURACY: Within 500M

COMMENTS: The deposit is located in the Honna Basin in the Slatechuck Valley in the vicinity of Skidegate Inlet.

COMMODITIES: Coal

MINERALS

SIGNIFICANT: Coal
MINERALIZATION AGE: Eocene
ISOTOPIC AGE:

DATING METHOD: Fossil

MATERIAL DATED: Pollen

DEPOSIT

CHARACTER: Stratiform
CLASSIFICATION: Fossil Fuel
TYPE: A05 Anthracite

Stratabound
Syngenetic

Sedimentary

SHAPE: Irregular

MODIFIER: Folded

Faulted

DIMENSION: 2

Metres

STRIKE/DIP:

TREND/PLUNGE:

COMMENTS: Locally faulting and folding (resulting in disturbed and crushed coal) is intense. Thickness of coal seam.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Eocene

GROUP

Undefined Group

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

DATING METHOD: Fossil
MATERIAL DATED: Pollen

LITHOLOGY: Coal
Black Shale

HOSTROCK COMMENTS: Dating of pollen from coal float suggests an age of Lower Eocene to Lower Oligocene (Geological Survey of Canada Paper 90-10, p. 271).

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Wrangell
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

RELATIONSHIP: Post-mineralization

GRADE: Anthracite

INVENTORY

ORE ZONE: SLATECHUCK

REPORT ON: Y

CATEGORY: Inferred
QUANTITY: 10160500 Tonnes
COMMODITY: Coal

YEAR: 1946

GRADE: 5.0000 Per cent

COMMENTS: Grade of average volatile matter.
REFERENCE: Royal Commission on Coal, 1946.

CAPSULE GEOLOGY

Anthracite coal is exposed at Coal Creek and Slatechuck Creek. The coal occurs in three seams, A, B, and C which are 1.8 metres, 1.7 metres, and 1.5 metres thick respectively. The seams consist of alternating dull, crushed coal, shale, and anthracitic, black hard coal, with coal constituting approximately 50 to 75 per cent of the seam. The seams may be fault or fold repeats of a single seam or horizon.

The coal is discontinuous and occurs in streaks and lenticles within a soft black carbonaceous shale of an unnamed shale unit of Lower Eocene to Lower Oligocene age (Unit Tsh, Geological Survey of Canada Paper 90-10, pages 31 to 50, Figure 9). Analyses of the coal indicate volatile matter contents ranging from 2.3 to 6.85 per cent, fixed carbon 57.23 to 90.8 per cent, ash 3.1 per cent to 29.49 (generally approximately 21 per cent), and sulphur 0.20 to 0.45 per cent. The coal has been metamorphosed by dikes, sills and other volcanics.

CAPSULE GEOLOGY

The seams have been locally intensely folded and faulted. The degree of disturbance appears to decrease northwards towards Slatechuck Creek.

In 1912 an adit was driven for 222 metres across the coal measures by The British Pacific Coal Company, Limited. Reserves were estimated at 3,300,000 long tons. A 1912 sample was analyzed to contain water, 6.85 per cent; volatile matter, 5.43 per cent; fixed carbon, 66.32 per cent; ash, 21.40 per cent; sulphur, 0.20 per cent.

The brilliant hard, anthracitic looking material was analyzed to contain water, 2.3 per cent; volatile matter, 3.8 per cent; fixed carbon, 90.8 per cent; ash, 3.1 per cent.

A preliminary estimate of probable mineable reserves by Mackay for the Royal Commission on Coal, in 1946, was 10,160,500 tonnes.

BIBLIOGRAPHY

EMPR AR 1902-55; 1903-210; 1906-80,82; *1914-165-171; 1915-75;
1916-88; 1923-23,41
EMPR BULL 54, p. 177
EMPR COAL ASS RPT *93
GSC MAP 1385A; 4-1990
GSC MEM *69, pp. 141-158; *88, pp. 17,121
GSC P 86-20; 88-1E, pp. 221-227; 89-1H, pp. 7-11, 70; 90-10,
pp. 31-50, 271; 91-1A, pp. 367-371
GSC SUM RPT *1912, pp. 12-40
Report on the Royal Commission on Coal, pp. 51,641, Ottawa, 1946

DATE CODED: 1986/05/21
DATE REVISED: 1999/09/16

CODED BY: EVK
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103F 017**

NATIONAL MINERAL INVENTORY: 103F/1 Col 2

NAME(S): **COWGITZ**, BRITISH PACIFIC

STATUS: Past Producer
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103F01W
BC MAP:

Underground

MINING DIVISION: Skeena

LATITUDE: 53 13 11 N
LONGITUDE: 132 16 00 W
ELEVATION: 450 Metres

UTM ZONE: 08 (NAD 83)

NORTHING: 5900019
EASTING: 682599

LOCATION ACCURACY: Within 500M

COMMENTS: The deposit is located in the Honna Basin at Cowgitz.

COMMODITIES: Coal

MINERALS

SIGNIFICANT: Coal
MINERALIZATION AGE: Eocene
ISOTOPIC AGE:

DATING METHOD:

MATERIAL DATED: Pollen

DEPOSIT

CHARACTER: Stratiform
CLASSIFICATION: Fossil Fuel
TYPE: A05 Anthracite
SHAPE: Irregular

Stratabound
Syngenetic
Sedimentary

MODIFIER: Folded
DIMENSION: 1

Faulted
Metres

STRIKE/DIP:

TREND/PLUNGE:

COMMENTS: The strata are almost vertical and faulting (or folding) producing repeats of the coal, is common. Thickness of coal seam.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Eocene

Undefined Group

Undefined Formation

LITHOLOGY: Coal
Shale
Sandstone
Iron Formation

HOSTROCK COMMENTS: Dating of pollen from coal float suggests an age of Lower Eocene to Lower Oligocene (Geological Survey of Canada Paper 90-10, p.271).

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Wrangell
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

RELATIONSHIP: Post-mineralization

GRADE: Semi-Anthracite

INVENTORY

ORE ZONE: COWGITZ

REPORT ON: Y

CATEGORY: Inferred
QUANTITY: 3250000 Tonnes
COMMODITY: Coal

YEAR: 1912

GRADE: 6.0000
Per cent

COMMENTS: Grade of average volatile matter.

REFERENCE: Geological Survey of Canada, Summary Report 1912.

CAPSULE GEOLOGY

A single coal seam is present in an unnamed unit of Eocene to Oligocene age, interbedded with shale and sandstone (Unit Tsh, Geological Survey of Canada Paper 90-10, pages 31 to 50, Figure 9). The seam is lenticular (merging along strike into black shale and ironstone) and varies in thickness from 0 to 1.8 metres (average 0.9 metre). The seam is repeated by faulting so that at the Hooper workings two exposures of the seam, 0.76 metre and 0.15 metre thick, occur stratigraphically above the main seam. The coal is a bright semi-anthracite.

The strata are close to vertical and faulting is common with local disturbances of the strata. The coal occurs in close proximity to the underlying volcanics.

A coal seam approximately 1.5 metres thick occurs on King Creek, 0.4 kilometre northeast of the Hooper Creek openings. The coal is anthracite and is fairly clean. The seam here occurs 152 metres above the base of the Haida Formation and may be a continuation of the Hooper Creek or Slatechuck (103F 016) seams. Dips are steep in

CAPSULE GEOLOGY

the area.

Analyses from the Cowgitz coals indicate volatile matter ranging from 4.77 to 8.14 per cent, fixed carbon 74.09 to 85.76 per cent, ash 6.69 to 14.16 per cent and sulphur 0.89 to 1.53 per cent.

Work done includes three major adits, three short adits, three small shafts - a total of 335 metres of crosscutting and 152 metres of drifting on coal with only a few hundred tons of coal shipped. British Pacific Coal Company, Limited produced 32 tonnes in 1912.

The showing, located at an elevation of 305 metres near the headwaters of Hooper creek in the vicinity of Skidegate inlet, was discovered in 1859.

In 1865, the showing was opened up along a 0.6-metre seam by the Queen Charlotte Coal Mining Company, Limited. The property was abandoned in 1872.

In 1912 the caved workings were examined by The British Pacific Coal Company, Limited.

Analysis of the 0.6 metre seam showed: water 1.6 per cent, volatile matter, 5.02 per cent; fixed carbon, 83.09 per cent; ash 8.76 per cent; sulphur, 1.53 per cent; and a fuel ratio of 16.5. A preliminary estimate of probable mineable reserves by Mackay for the Royal Commission on coal, in 1946, was 3,360,900 tons.

Based on an average coal seam thickness of 1.8 metres (from at least three different seams) underlying an area of 2.6 square kilometres, the coal reserve of the Cowgitz prospect is about 3.25 million tonnes (Geological Survey of Canada Summary Report 1912, page 37).

BIBLIOGRAPHY

- EMPR AR 1894-32; 1902-55,56; 1903-210; 1906-79; 1907-74;
1912-278; *1914-165-171; 1915-75; 1916-88
EMPR BULL 54, p. 177
EMPR COAL ASS RPT *93
GSC ANN RPT 1904, Pt.B (Vol. 16), p. 31
GSC MAP 1385A; 4-1990
GSC MEM *69, pp. 141-158; *88, pp. 17,120-121
GSC P 86-20; 88-1E, pp. 221-227; 89-1H, pp. 7-11, 70; 90-10, pp.
31-50, 271; 91-1A, pp. 367-371
GSC PROG RPT 1872-1873, pp. 57,63; 1878-1879, p. 71-B
GSC SUM RPT *1912, pp. 12-40
Report on the Royal Commission on Coal, pp. 51, 641, Ottawa, 1946

DATE CODED: 1986/05/21
DATE REVISED: 1999/09/17

CODED BY: EVK
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

CAPSULE GEOLOGY

The slate or argillite is used by the Haidas for carving. The Haida Natives have a Crown-granted mineral claim centred on the quarry.

A study done by the British Museum showed the argillite specimen they examined to consist largely of pyrophyllite with some iron serpentine (Harding, 1989).

BIBLIOGRAPHY

EMPR AR 1903-211; 1906-81,82; 1909-75
EMPR BULL *54, pp. 101,176
EMPR PF (Harding, R.R. (1989): Rhodonite and Argillite from
British Columbia (the Sea Rose and Slatechuck respectively)
(in Sea Rose file - 092M 015)
GSC ANN RPT 1904, Vol. 16, Pt.B, pp. 29-31
GSC MAP 1385A; 4-1990
GSC MEM 88, p. 172
GSC P 86-20; 88-1E; 89-1H; 90-10, pp. 31-50, 271
GSC PROG RPT 1878-1879, p. 303; 1872-1873, pp. 61,62
GSC RPT #996, 1908, p. 54
CANMET RPT *452, pp. 195,196

DATE CODED: 1986/06/04
DATE REVISED: 1999/09/17

CODED BY: LDJ
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103F 019**

NATIONAL MINERAL INVENTORY: 103F10 Pr13

NAME(S): **IRNSIDE MOUNTAIN**

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103F10W
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 08 (NAD 83)

LATITUDE: 53 42 49 N
LONGITUDE: 132 53 51 W
ELEVATION: 300 Metres

NORTHING: 5953529
EASTING: 638867

LOCATION ACCURACY: Within 500M

COMMENTS: Symbol, Figure 34 (Bulletin 54). Iron Side Mountain is located northeast of Port Louis on Graham Island.

COMMODITIES: Perlite Volcanic Glass

MINERALS

SIGNIFICANT: Perlite

ALTERATION: Pyrite Silica

COMMENTS: Gossanous area; alteration minerals are not indicated in text.

ALTERATION TYPE: Argillic

Silicific'n

Pyrite

Oxidation

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Massive

Stratiform

CLASSIFICATION: Volcanogenic

Syngenetic

Industrial Min.

Hydrothermal

TYPE: R12 Volcanic glass - perlite

SHAPE: Irregular

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Tertiary

Undefined Group

Masset

LITHOLOGY: Dacite Flow
Rhyolite Flow
Rhyolite
Dacite
Rhyolite Breccia
Dacite Breccia

HOSTROCK COMMENTS: Tartu Member, Unit TMfa (Geological Survey of Canada Map 7-1990).

GEOLOGICAL SETTING

TECTONIC BELT: Insular

TERRANE: Wrangell

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

CAPSULE GEOLOGY

The perlite occurrence is located south of Ironside Mountain, 2.4 kilometres northeast of Port Louise.

The area is underlain by sub-aerial dacitic to rhyolitic flows and/or domes, with minor breccias and pyroclastics of the Upper Oligocene to Lower Pliocene Masset Formation, which form a plateau volcanic sequence up to 5 kilometres thick dipping gently to the east.

Perlite occurs as a flow-like mass in rhyolite units of the Tartu Facies.

A large gossanous area has zones of argillic alteration, silicification, and pyritization which may reflect the presence of a subvolcanic intrusive. The area was staked in 1986 by City Resources as the Virgo claims and prospected in 1987. No economic mineralization or significant assays were reported (Assessment Report 17053).

BIBLIOGRAPHY

EMPR ASS RPT 17053
EMPR BULL *54, pp. 115,175
EMPR EXPL 1979-250,251; 1980-540
EMPR FIELDWORK 1989, pp. 485-486
GSC MAP 1385A; 7-1990
GSC P 86-20; 88-1E, pp. 221-227, 269-274; 89-1H, pp. 73-79; 90-10, pp. 305-324

DATE CODED: 1986/06/04
DATE REVISED: 1989/02/15

CODED BY: LDJ
REVISED BY: GJP

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103F 020**

NATIONAL MINERAL INVENTORY: 103F10 Pr12

NAME(S): **COATES CREEK, SEAVIEW**

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103F10W
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 08 (NAD 83)

LATITUDE: 53 42 19 N
LONGITUDE: 132 47 16 W
ELEVATION: 450 Metres

NORTHING: 5952822
EASTING: 646136

LOCATION ACCURACY: Within 500M

COMMENTS: Figure 3 (Assessment Report 6926).

COMMODITIES: Perlite Volcanic Glass

MINERALS

SIGNIFICANT: Perlite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratiform Massive
CLASSIFICATION: Volcanogenic Syngenetic Industrial Min. Hydrothermal
TYPE: R12 Volcanic glass - perlite
SHAPE: Regular
DIMENSION: 400 x 100 x 50 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: Southern body.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Tertiary	Undefined Group	Masset	

LITHOLOGY: Dacite Flow
Dacite
Rhyolite Flow
Rhyolite
Rhyolite Breccia
Dacite Breccia

HOSTROCK COMMENTS: Tartu Member, Unit TMfa (Geological Survey of Canada Map 7-1990).

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Wrangell

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

CAPSULE GEOLOGY

The perlite occurrence is located at the headwaters of Coates Creek, 10 kilometres west of Port Louis.

The area is underlain by sub-aerial dacitic to rhyolitic flows/domes, breccias and pyroclastics of the Upper Oligocene to Lower Pliocene Masset Formation, which form a plateau volcanic sequence up to 5 kilometres thick dipping gently to the east.

Perlite occurs as a flow-like mass in rhyolite units of the Tartu Facies. The perlite is a "pearly" lustered acidic to sub-acidic volcanic glass with a deep blue "serpentinitic" appearance on fresh surface and grey to brown-black on weathered surface.

The perlite forms two possibly unconnected bodies. The southern body strikes north-south for 400 metres and is 100 metres thick and 50 metres wide. The northern body, 250 metres long, 100 metres wide, and about 100 metres thick, strikes east-west.

BIBLIOGRAPHY

EMPR ASS RPT *6926
EMPR BULL 54, pp. 115,175
EMPR FIELDWORK 1989, pp. 485-486; 1997, pp. 19-1-19-14
GSC MAP 1385A; 7-1990
GSC P 86-20; 88-1E, pp. 221-227, 269-274; 89-1H, pp. 73-79; 90-10, pp. 305-324

DATE CODED: 1986/06/04
DATE REVISED: 1988/12/02

CODED BY: LDJ
REVISED BY: JNR

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103F 021**

NATIONAL MINERAL INVENTORY: 103F/10 Pr11

NAME(S): **SKELU BAY**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103F10W
BC MAP:

UTM ZONE: 08 (NAD 83)

LATITUDE: 53 32 09 N
LONGITUDE: 132 51 56 W
ELEVATION: 600 Metres

NORTHING: 5933817
EASTING: 641569

LOCATION ACCURACY: Within 500M

COMMENTS: Symbol, Figure 34 (Bulletin 54). Located north of Skelu Bay, Graham Island.

COMMODITIES: Perlite Volcanic Glass

MINERALS

SIGNIFICANT: Perlite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratiform Massive
CLASSIFICATION: Volcanogenic Syngenetic Industrial Min. Hydrothermal
TYPE: R12 Volcanic glass - perlite
SHAPE: Irregular

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Tertiary	Undefined Group	Masset	

LITHOLOGY: Dacitic Flow
Dacite
Rhyolite Flow
Rhyolite
Dacite Pyroclastic
Rhyolite Pyroclastic

HOSTROCK COMMENTS: Tartu Member, Unit TMf (Geological Survey of Canada Map 7-1990).

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Wrangell

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

CAPSULE GEOLOGY

The perlite occurrence is located 1.6 kilometres north of Skelu Bay.
The area is underlain by a series of sub-aerial dacite to rhyolite flows, domes and pyroclastics of the Upper Oligocene to Lower Pliocene Masset Formation. This plateau volcanic sequence is up to 5 kilometres thick and dips gently to the north-east.
Perlite occurs as a flow-like mass in rhyolite units of the Tartu Facies.

BIBLIOGRAPHY

EMPR BULL 54, pp. 115,175
EMPR FIELDWORK 1989, pp. 485-486; 1997, pp. 19-1-19-14
GSC MAP 1385A; 7-1990
GSC P 86-20; 88-1E, pp. 221-227, 269-274; 89-1H, pp. 73-79; 90-10, pp. 305-324

DATE CODED: 1986/06/04
DATE REVISED: 1988/12/02

CODED BY: LDJ
REVISED BY: JNR

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103F 022**

NATIONAL MINERAL INVENTORY: 103F9 Pr11

NAME(S): **BLACKWATER PERLITE** BLACKWATER CREEK

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103F09W
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 08 (NAD 83)

LATITUDE: 53 34 10 N
LONGITUDE: 132 22 13 W
ELEVATION: 95 Metres

NORTHING: 5938836
EASTING: 674133

LOCATION ACCURACY: Within 500M

COMMENTS: Location from Site 2, Figure 5-1-6 (Geological Fieldwork 1989, page 486).

COMMODITIES: Perlite Volcanic Glass

MINERALS

SIGNIFICANT: Perlite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratiform Massive
CLASSIFICATION: Volcanogenic Syngenetic Industrial Min. Hydrothermal
TYPE: R12 Volcanic glass - perlite
SHAPE: Irregular
DIMENSION: 85 Metres STRIKE/DIP: 180/65E TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Tertiary	Undefined Group	Masset	

LITHOLOGY: Basaltic Flow
Andesite Flow
Felsic Flow
Pyroclastic
Basalt
Andesite

HOSTROCK COMMENTS: Tartu Member, Unit TMm (Geological Survey of Canada Map 6-1990).

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Wrangell

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

CAPSULE GEOLOGY

The perlite occurrence is located on the south side of Blackwater Creek, 6.5 kilometres south of Juskatla Inlet.

The area is underlain by a sequence of basalts, andesites and minor felsic flows, pyroclastics and interflow breccias of the Upper Oligocene to the Lower Pliocene Masset Formation. This unit forms a plateau volcanic sequence dipping gently to the northwest.

Medium grey to black perlite crops out for 85 metres along the roadcut immediately northeast of bridge Q9 over Blackwater Creek. The bed strikes north and dips 65 degrees east. Samples tested with a hand-held propane torch expanded to several times their volume (Geological Fieldwork 1989, page 486). A sample tested by CANMET exhibited the following characteristics (Geological Fieldwork 1990, pages 265 to 267):

Per cent weight loss when heated to 800 degrees Celsius: 4.3
Softening temperature (degrees Celsius): 1240-1270
Density before heating to softening temp. (kg per cubic metres): 2370
Density after heating to softening temp. (kg per cubic metre): 450

BIBLIOGRAPHY

EMPR ASS RPT 17083
EMPR BULL *54, p. 175
EMPR FIELDWORK *1989, pp. 485, 486; *1990, pp. 265-267; 1997, pp. 19-1-19-14
GSC MAP 1385A
GSC P 86-20; 88-1E, pp. 221-227, 269-274; 89-1H, pp. 73-79; 90-10, pp. 305-324

DATE CODED: 1986/06/04
DATE REVISED: 1999/09/20

CODED BY: LDJ
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103F 023**

NATIONAL MINERAL INVENTORY: 103F9 Pr12

NAME(S): **GOLD CREEK**, CANOE CREEK

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103F09W
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 08 (NAD 83)

LATITUDE: 53 30 29 N
LONGITUDE: 132 15 26 W
ELEVATION: 150 Metres

NORTHING: 5932109
EASTING: 681996

LOCATION ACCURACY: Within 500M

COMMENTS: Symbol, Figure 34 and Figure 5, Sheet C (Bulletin 54). Located east of Marie Lake, Graham Island.

COMMODITIES: Perlite Volcanic Glass

MINERALS

SIGNIFICANT: Perlite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratiform Massive
CLASSIFICATION: Volcanogenic Syngenetic Industrial Min. Hydrothermal
TYPE: R12 Volcanic glass - perlite
SHAPE: Irregular

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Tertiary	Undefined Group	Masset	

LITHOLOGY: Basaltic Flow
Basaltic Breccia
Rhyolite Flow
Rhyolite

HOSTROCK COMMENTS: Tartu Member, Unit TMm (Geological Survey of Canada Map 6-1990).

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Wrangell

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

CAPSULE GEOLOGY

The perlite occurrence is located 1.6 kilometres north of the junction of Gold Creek and the Yakoun River.

The north side of Gold Creek, between Marie Lake and its confluence with the Yakoun River, 4.5 kilometres to the east, is underlain by sediments and volcanics of the Middle Jurassic Yakoun Group. These rocks are overlain by basaltic to felsic flows and lesser pyroclastics of the Upper Oligocene to Lower Pliocene Masset Formation.

Perlite is reported to occur in rhyolite of the Masset Formation on the steep north slope of Gold Creek, 1.1 kilometres northwest of its confluence with the Yakoun River (Bulletin 54).

Several large boulders of medium grey perlite, three to five metres across, occur along MacMillan Bloedel's mainline logging road just north of Gold Creek, 1.6 kilometres southwest of the previously described occurrence and 1.9 kilometres west of Gold Creek's confluence with the Yakoun River (Site 5, Geological Fieldwork 1989, page 486). Samples heated with a hand-held propane torch expanded (Geological Fieldwork 1989, page 486). Additional testing by CANMET indicated the following characteristics (Geological Fieldwork 1990, pages 265 to 267):

Per cent weight loss when heated to 800 degrees Celsius: 7.9
Softening temperature (degrees Celsius): 1235-1270
Density after heating to softening temp. (kg per cubic metre): 166

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GSC MAP 1385A; 6-1990
GSC OF 2319
GSC P 86-20; 88-1E, pp. 221-227, 269-274; 89-1H, pp. 73-79; 90-10,

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 211
REPORT: RGEN0100

BIBLIOGRAPHY

pp. 305-324

DATE CODED: 1986/06/04
DATE REVISED: 1999/09/21

CODED BY: LDJ
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103F 024**

NATIONAL MINERAL INVENTORY: 103F9 Bnt1

NAME(S): **BLACKWATER CREEK**

STATUS: Showing Open Pit

MINING DIVISION: Skeena

REGIONS: British Columbia, Queen Charlotte Islands

NTS MAP: 103F09W

UTM ZONE: 08 (NAD 83)

BC MAP:

LATITUDE: 53 34 29 N

NORTHING: 5939239

LONGITUDE: 132 22 16 W

EASTING: 674171

ELEVATION: 150 Metres

LOCATION ACCURACY: Within 500M

COMMENTS: Symbol, Figure 34 (Bulletin 54).

COMMODITIES: Bentonite

MINERALS

SIGNIFICANT: Bentonite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratiform

Stratabound

Industrial Min.

CLASSIFICATION: Volcanogenic

Syngenetic

TYPE: E06 Bentonite

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Tertiary

Undefined Group

Masset

LITHOLOGY:

Rhyolite

Basaltic Flow

Basaltic Breccia

Rhyolite Flow

Basalt

HOSTROCK COMMENTS: Tartu Member, Unit TMm (Geological Survey of Canada Map 6-1990).

GEOLOGICAL SETTING

TECTONIC BELT: Insular

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

TERRANE: Wrangell

CAPSULE GEOLOGY

The showing is located at an elevation of 152 metres on the north side of Blackwater Creek, 6.4 kilometres southwest of Juskatla.

A quarry was opened to obtain material for road construction but the material proved unsatisfactory for that purpose.

The area is underlain by a series of sub-aerial basaltic and andesitic flows with minor felsic flows and pyroclastics of the Upper Oligocene to Lower Pliocene of the Masset Formation, which form a plateau volcanic sequence up to 5 kilometres thick dipping gently to the northwest.

Bentonite occurs with rhyolite of the Tartu Facies (Bulletin 54).

The area was staked in 1986 by City Resources as the Linda claims, and prospected in 1987. No economic mineralization or significant assays were reported (Assessment Report 17083).

BIBLIOGRAPHY

EMPR ASS RPT 17083

EMPR BULL *54, p. 176

EMPR FIELDWORK 1997, 19-1-19-14

GSC MAP 1385A; 6-1990

GSC P 86-20; 88-1E, pp. 221-227, 269-274; 89-1H, pp. 73-79;

90-10 pp. 305-324

DATE CODED: 1986/06/04

CODED BY: LDJ

FIELD CHECK: N

DATE REVISED: 1989/02/15

REVISED BY: GJP

FIELD CHECK: N

MINFILE NUMBER: **103F 025**

NATIONAL MINERAL INVENTORY: 103F9 Dtm1

NAME(S): **SKONUN MARINE DIATOMITE**, SKONUN DIATOMITE, DRILLSKID ROAD,
YAKOUN RIVER

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103F09E
BC MAP:
LATITUDE: 53 33 59 N
LONGITUDE: 132 09 00 W
ELEVATION: 25 Metres
LOCATION ACCURACY: Within 500M

MINING DIVISION: Skeena
UTM ZONE: 08 (NAD 83)
NORTHING: 5939057
EASTING: 688729

COMMENTS: Located on sample site 3 on the east bank of the Yakoun River, 2.5 kilometres west-southwest of New Year Lake and 13 kilometres south-southeast of Port Clements (Assessment Report 25676, Figures 4, 6A).

COMMODITIES: Diatomite

MINERALS

SIGNIFICANT: Diatomite
MINERALIZATION AGE: Miocene
ISOTOPIC AGE:

DATING METHOD: Fossil

MATERIAL DATED: Marine bivalves

DEPOSIT

CHARACTER: Unconsolidated Stratabound
CLASSIFICATION: Sedimentary Syngenetic Industrial Min.
TYPE: F06 Lacustrine diatomite
SHAPE: Tabular
DIMENSION: 4 Metres STRIKE/DIP:
COMMENTS: Thickness of bed. Marine bivalves from exposures on the Yakoun River are dated as Late Miocene. Diatomite is of marine origin.

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Miocene	Undefined Group	Skonun	
DATING METHOD:	Fossil		
MATERIAL DATED:	Marine bivalves.		

LITHOLOGY: Diatomaceous Shale
Diatomaceous Clay
Shale
Silty Shale
Sandy Shale

HOSTROCK COMMENTS: Marine bivalves from the Yakoun River are dated as Late Miocene (Assessment Report 25676, page 10).

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Overlap Assemblage

PHYSIOGRAPHIC AREA: Queen Charlotte Lowland

CAPSULE GEOLOGY

Diatomite-bearing sediments of the Skonun Formation outcrop along the Yakoun River, 2.5 to 3 kilometres west-southwest of New Year Lake and about 13 kilometres south of Port Clements.

Clastic sediments of the Tertiary Skonun Formation underlie a broad region of low relief comprising the Queen Charlotte Lowland on northeastern Graham Island. To the west, the sediments are separated from Tertiary and older volcanics underlying hilly and mountainous terrain of the Queen Charlotte Ranges by the northwest trending Sandspit fault.

The showing is hosted in a sequence of recessive, poorly indurated sandstones and shales of the Miocene Upper Skonun Formation (unit 2, Geological Survey of Canada Paper 90-10, pages 337-371). This sequence is interpreted to have been deposited in a tide-dominated shallow marine shelf environment (Geological Survey of Canada Paper 90-10, Assessment Report 25676).

Six shale samples collected at a river-side cliff exposure and at several roadcuts 600 metres southwest and 700 metres south-southwest of the river exposure contained trace too abundant diatom fragments. Three samples of light grey very porous shale, medium grey extremely porous, well-indurated silty shale and medium grey very porous, sandy-silty shale from the three sites contained abundant mesh patterned diatom fragments up to 0.06 mm in size. The thickness of these diatom-bearing horizons has not been determined

CAPSULE GEOLOGY

but one bed of diatomaceous clay occurring in the vicinity was previously reported to be 3 to 4 metres thick.

Absorption tests on three samples ranged from 0.52 to 0.81 millilitres per gram for water. One sample also tested 0.55 millilitres per gram for oil absorption (Assessment Report 25676, Appendix 3, Table 1).

This occurrence was sampled and prospected by Homegold Resources Ltd. in 1997.

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GSC MAP 1385A; 6-1990
GSC OF 2319
GSC P 86-20; 88-1E, pp. 221-227; 89-1H, pp. 87-94; *90-10, pp. 337-371

DATE CODED: 1986/06/04
DATE REVISED: 1999/11/06

CODED BY: LDJ
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103F 026**

NATIONAL MINERAL INVENTORY: 103F16 Au1

NAME(S): **BLUE JACKET CREEK**, MASSET SOUND, BLACK SANDS

STATUS: Past Producer Open Pit

MINING DIVISION: Skeena

REGIONS: British Columbia, Queen Charlotte Islands

UTM ZONE: 08 (NAD 83)

NTS MAP: 103F16E

BC MAP:

LATITUDE: 53 59 39 N

NORTHING: 5986477

LONGITUDE: 132 08 26 W

EASTING: 687552

ELEVATION: 5 Metres

LOCATION ACCURACY: Within 500M

COMMENTS: Symbol, Figure 34 (Bulletin 54). Located just south of Masset, on Masset Sound.

COMMODITIES: Gold Platinum Iron Titanium Zirconium

MINERALS

SIGNIFICANT: Gold Platinum Magnetite Ilmenite Zircon

ASSOCIATED: Rutile Hematite Garnet Epidote Staurolite

Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
 CLASSIFICATION: Placer Industrial Min.

TYPE: C03 Marine placers

SHAPE: Irregular

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Quaternary			Unnamed/Unknown Informal

LITHOLOGY: Unconsolidated Sandstone
 Clay

GEOLOGICAL SETTING

TECTONIC BELT: Insular
 TERRANE: Overlap Assemblage

PHYSIOGRAPHIC AREA: Queen Charlotte Lowland

INVENTORY

ORE ZONE: CONCENTRATE REPORT ON: N

CATEGORY: Assay/analysis YEAR: 1929

SAMPLE TYPE: Rock

COMMODITY	GRADE	
Gold	20.6000	Grams per tonne
Platinum	68.6000	Grams per tonne

COMMENTS: The sample was assayed from concentrates.

REFERENCE: Minister of Mines Annual Report 1929.

CAPSULE GEOLOGY

The gold-bearing black sands of northeast Graham Island have been known since 1877. The Blue Jacket Creek sands are located 1.6 kilometres south of Masset, on Masset Sound.

In 1923 a gold-washing plant with a capacity of 30 yards per hour was installed; values were estimated at 80 cents per yard. Registered in 1924, P.B.C. Mines Co., with a capital of \$759,000 held 7 hydraulic leases. The company carried out placer operations from March to October and conducted concentration and fire assay tests to determine average gold content. Graham Island Mining Co., Limited was incorporated in 1926 to acquire 5 leases covering an area of 2286 by 5791 metres of beach. A 10 ton chemical testing plant was installed on the property. From a 48 ton sample, sorted from 72 tons of sand from various pits in the area, a recovery of \$76 in gold or \$1.06 a ton was obtained. By 1928, the company had dug and sampled 56 test pits; the best sample assayed 0.6 ounces of gold and 2 ounces of platinum per ton.

Mogul Mining Corporation Limited in about 1956 acquired placer mining leases covering about 17 square kilometres. In June 1957 Lexindin Gold Mines, Limited, acquired from Mogul a 65 per cent interest in the property. Beach sand and cyanide tailings samples were sent to the Mines Branch, Ottawa in December 1956 and June 1957. A sample of concentrates returned 20.6 grams per tonne gold and 68.6

CAPSULE GEOLOGY

grams per tonne platinum (Annual Report 1929).

Pleistocene to Recent deposits of unconsolidated to semi-consolidated sands, clays, sandy clays, gravels, conglomerates, and a basal blue-grey glacial clay overlies Tertiary Skonun Formation.

Black sand deposits have a lenticular and varying distribution along the base of bordering beach-bluffs. The black sands, derived from the erosion of the bluffs and subsequent concentration by wave and wind action, contain magnetite, titaniferous-hematite, ilmenite, rutile, zircon, gold, and platinum.

The black sands occur in lenses 2 to 30 centimetres thick, 6 metres wide and 152 metres long. A sample of the beach sands assayed 23.9 per cent magnetite, 38.8 per cent hematite and ilmenite, 15.0 per cent garnet, 11.2 per cent quartz and feldspar, 3.6 per cent altered silicates, 3.0 per cent hornblende, 2.0 per cent epidote, 1.2 per cent zircon, 0.9 per cent staurolite, 0.3 per cent titanite, and 0.1 per cent rutile (Economic Geology Report 25).

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- EMPR AR 1923-41; 1924-43; *1929-65; 1932-39; 1933-40
- EMPR BULL 1 (1933), pp. 24-25; 2(1930), pp.28-31; *54, p. 174
- EMPR PF (Various Reports on Black Sands)
- EMR MP CORPFILE (The Queen Charlotte Islands Collieries, Limited; Trethewey-Tough Mining Syndicate, Limited; Graham Island Mining Co., Limited)
- GSC EC GEOL 25, p. 131
- GSC MAP 278A; 1385A
- GSC MEM 88, pp. 173,174
- GSC P 86-20; 88-1E; 89-1H; 90-10
- B.C. MINER Nov. 1933, pp. 714-718
- CANMET IR No. MD 3177, Oct. 1957
- CMJ Apr.11, 1924; Nov.6,Oct.18,20, 1925; Nov.28, 1924, p. 1165
- Western Canada Mining News: July 10, 1931

DATE CODED: 1986/06/03
DATE REVISED: 1988/12/06

CODED BY: LDJ
REVISED BY: JNR

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103F 027**

NATIONAL MINERAL INVENTORY:

NAME(S): **DOME**, HARRISON ISLAND

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103F09W
BC MAP:

UTM ZONE: 08 (NAD 83)

LATITUDE: 53 37 49 N
LONGITUDE: 132 23 16 W
ELEVATION: 1 Metres

NORTHING: 5945377
EASTING: 672841

LOCATION ACCURACY: Within 500M

COMMENTS: Trachyte, Sketch 1, 3 (Assessment Report 7111). Southwest end of Harrison Island, Juskatla Inlet.

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Pyrite Marcasite Gold
ASSOCIATED: Quartz
ALTERATION: Silica Jarosite
ALTERATION TYPE: Silicific'n Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Breccia Disseminated
CLASSIFICATION: Epithermal Hydrothermal Epigenetic
TYPE: H03 Hot spring Au-Ag

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Tertiary	Undefined Group	Masset	

LITHOLOGY: Trachyte
Rhyolite Tuff

HOSTROCK COMMENTS: Tartu Member, Unit TMfa (Geological Survey of Canada Map 6-1990).

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Wrangell

PHYSIOGRAPHIC AREA: Queen Charlotte Lowland

CAPSULE GEOLOGY

The southwest end of Harrison Island is underlain by Mid-Tertiary Masset Formation rocks consisting of rhyolite tuffs and a unit of porous, chalky-white weathering, light grey trachyte. The trachyte, exposed for 100 metres, is silicified and heavily fractured in some areas. The fractures are coated with jarosite and fine pyrite. A possible 60 degree fault cuts the volcanics.

Randomly distributed in the trachyte are fractures and brecciated areas with blue-grey chalcedonic quartz, fine pyrite, marcasite, and traces of free gold.

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GSC MEM 88, p. 175
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90-10, pp. 305-324

DATE CODED: 1986/06/12
DATE REVISED: 1988/12/06

CODED BY: LDJ
REVISED BY: JNR

FIELD CHECK: N
FIELD CHECK: N

CAPSULE GEOLOGY

and minor arsenopyrite occur as disseminations and vein and fracture fillings.

Gold values are generally isolated and only locally continuous. A quartz breccia and stockwork zone assayed 10.8 grams per tonne gold over 1 metre, a sample 400 metres to the northeast assayed 17.7 grams per tonne gold over 1 metre, and a sample 300 metres to the northwest assayed 15.2 grams per tonne gold (Assessment Report 11084).

BIBLIOGRAPHY

EMPR ASS RPT 7441, 7763, 8405, 9830, *11084, 16449
EMPR BULL 54
EMPR EXPL 1979-243; 1980-371; 1982-360
EMPR FIELDWORK 1997, pp. 19-1-19-14
EMPR PF (Prospectus, Englefield Resources Ltd., April 1987)
GSC MAP 1385A
GSC P 86-20; 88-1E; 89-1H; 90-10
Chevron File

DATE CODED: 1986/06/17
DATE REVISED: 1989/03/13

CODED BY: LDJ
REVISED BY: GJP

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103F 029**

NATIONAL MINERAL INVENTORY:

NAME(S): **SECURITY (OVERPROOF)**, OP, OVERPROOF,
A

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103F01W
BC MAP:

UTM ZONE: 08 (NAD 83)

LATITUDE: 53 01 29 N
LONGITUDE: 132 15 46 W
ELEVATION: 240 Metres

NORTHING: 5878343
EASTING: 683689

LOCATION ACCURACY: Within 500M

COMMENTS: High grade sample location (H1270), Figure 3 (Assessment Report 7763).
Located northwest of Hastings Point, Inskip Channel. "A" zone from
Assessment Report 16449.

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Pyrite Arsenopyrite

ASSOCIATED: Quartz

ALTERATION: Silica Tourmaline Epidote Sericite Calcite

ALTERATION TYPE: Hematite

MINERALIZATION AGE: Silicific'n Tourmalin'z'n Propylitic Oxidation

DEPOSIT

CHARACTER: Vein

Stockwork

Disseminated

CLASSIFICATION: Hydrothermal

Epithermal

Epigenetic

TYPE: H05 Epithermal Au-Ag: low sulphidation

SHAPE: Irregular

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Upper Triassic
Upper Triassic

GROUP

Vancouver
Kunga

FORMATION

Karmutsen
Sadler

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Limestone
Basalt
Rhyolite Dike
Rhyolite Flow
Black Argillite
Pillow Basalt
Rhyolite

HOSTROCK COMMENTS: Kunga Formation reclassified as Kunga Group (Geological Survey of
Canada Paper 88-1E, pages 221-229).

GEOLOGICAL SETTING

TECTONIC BELT: Insular

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

TERRANE: Wrangell

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

INVENTORY

ORE ZONE: VEINLET

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1982

SAMPLE TYPE: Rock

COMMODITY

GRADE

Gold

13.2000

Grams per tonne

COMMENTS: The sample was taken from a thin quartz veinlet.

REFERENCE: Assessment Report 8405.

CAPSULE GEOLOGY

The Overproof showing is underlain by subaerial, massive and amygdaloidal basalt flows of the Vancouver Group, Upper Triassic Karmutsen Formation, which have undergone low grade greenschist regional metamorphism. Interbeds of black argillites and limestone occur at lower elevations within the Karmutsen Formation. A sedimentary succession of limestone and argillite of the Triassic to Jurassic Kunga Group occur as down dropped blocks underlying the southern portions of the property. Submarine pillow and massive basalts lie north of the area. Rhyolite dikes and flow banded sheets intrude the rocks.

Several north trending quartz veins, associated with dikes and

CAPSULE GEOLOGY

faults, carry gold mineralization with disseminated and fracture filled pyrite and minor arsenopyrite. Common alteration includes silicification, chloritization, epidotization, hematization, and tourmaline.

A quartz vein cutting massive grey limestone of the Upper Triassic Sadler Formation (Kunga Group) assayed 44.6 grams per tonne gold (Assessment Report 9830) and thin quartz veinlets cutting limestone with interbedded argillite assayed 13.2 grams per tonne gold (Assessment Report 8405).

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EMPR ASS RPT 7441, *7763, 8405, 9830, *11084, 16449
EMPR BULL 54
EMPR EXPL 1979-243; 1980-371; 1982-360; 1987-C347,C348
EMPR FIELDWORK 1997, pp. 19-1-19-14
EMPR PF (Prospectus: Englefield Resources Ltd., April, 1987)
GSC MAP 1385A
GSC P 86-20; 88-1E, pp. 221-227; 89-1H, pp. 117-120;
90-10 pp. 163-172, 465-487
Chevron File

DATE CODED: 1986/06/17
DATE REVISED: 1989/02/14

CODED BY: LDJ
REVISED BY: GJP

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103F 030**

NATIONAL MINERAL INVENTORY: 103F8 Cu2

NAME(S): **NRM**, BIDIUK COPPER

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103F08W
BC MAP:

MINING DIVISION: Skeena
UTM ZONE: 08 (NAD 83)

LATITUDE: 53 21 39 N
LONGITUDE: 132 28 36 W
ELEVATION: 15 Metres

NORTHING: 5915197
EASTING: 668027

LOCATION ACCURACY: Within 500M

COMMENTS: Survey area (Assessment Report 2015). Located near the shore on the northern side of Shields Bay, Rennel Sound.

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Bornite Chalcopyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Breccia
CLASSIFICATION: Skarn Replacement
TYPE: K01 Cu skarn
SHAPE: Irregular
DIMENSION: 9 x 6 Metres

STRIKE/DIP: TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Upper Triassic	Vancouver	Karmutsen	
Jurassic			San Christoval Plutonic Suite

ISOTOPIC AGE: 147 +/- 8 Ma
DATING METHOD: Potassium/Argon
MATERIAL DATED: Hornblende

LITHOLOGY: Skarn
Amygdaloidal Andesite
Amygdaloidal Basalt
Quartz Diorite
Sediment/Sedimentary

HOSTROCK COMMENTS: Age date from the nearby West Kano pluton of the San Christoval Plutonic Suite (Geological Survey of Canada Paper 90-10, p. 62, Fig.1)

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Wrangell

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

CAPSULE GEOLOGY

The showing is located on the northeast side of Shields Bay, south of Riley Creek.

A volcanic-sedimentary sequence of rock of probable Upper Triassic Karmutsen Formation, Vancouver Group, are intruded to the west by quartz diorite of the Middle to Late Jurassic San Christoval Plutonic Suite. Dark green, structureless amygdaloidal andesites and basalts lie east of the northeast trending intrusive contact.

Irregular pods of bornite and minor chalcopyrite occur in a brecciated skarn within sediments. The mineralized zone is 6 to 9 metres wide and trends 110 degrees from the contact with the quartz diorite.

In 1969 Nikamor Bidiuk held the NRM 1 to 12 claims. Magnetometer and electromagnetic surveys were made on the NRM 3 and 4 claims.

Misty Mountain Gold Ltd. completed airborne, radiometrics, resistivity, magnetometer surveys over the prospect in 1995, while exploring a large block of claims adjacent to the showing.

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GSC MAP 1385A; 5-1990
GSC OF 2319
GSC P 67-2, Part A; 86-20; 88-1E, pp. 213-216, 221-227;
89-1H, pp. 95-112; 90-10, pp. 59-87

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 223
REPORT: RGEN0100

BIBLIOGRAPHY

Falconbridge File

DATE CODED: 1986/06/12
DATE REVISED: 1988/12/06

CODED BY: LDJ
REVISED BY: JNR

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103F 031**

NATIONAL MINERAL INVENTORY: 103F8 Cu3

NAME(S): **MINO**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands

UTM ZONE: 08 (NAD 83)

NTS MAP: 103F08E

BC MAP:

LATITUDE: 53 22 19 N

LONGITUDE: 132 00 36 W

ELEVATION: 120 Metres

NORTHING: 5917633

EASTING: 699022

LOCATION ACCURACY: Within 500M

COMMENTS: Centre of sulphide zone, north central Mino #8 (not confirmed).

COMMODITIES: Copper

Molybdenum

Zinc

Lead

MINERALS

SIGNIFICANT: Chalcopyrite Molybdenite Sphalerite Galena Pyrite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated

CLASSIFICATION: Hydrothermal

TYPE: * Unknown

SHAPE: Irregular

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Middle Jurassic

Jurassic

GROUP

Yakoun

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Burnaby Island Plutonic Suite

ISOTOPIC AGE: 159 +/- 10 Ma

DATING METHOD: Potassium/Argon

MATERIAL DATED: hornblende

LITHOLOGY: Andesite

Hornfels

Granodiorite

Quartz Diorite

Sediment/Sedimentary

HOSTROCK COMMENTS: Age date of the Chinukundl Pluton (Geological Survey of Canada Paper 90-10, page 74, Table 3).

GEOLOGICAL SETTING

TECTONIC BELT: Insular

TERRANE: Wrangell

METAMORPHIC TYPE: Contact

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

RELATIONSHIP:

GRADE: Hornfels

CAPSULE GEOLOGY

The showing is located at an elevation of 152 metres just east of the Tlell River.

The area is underlain by Middle Jurassic Yakoun Group andesites which are intruded by granodiorite and quartz diorite of the Chinukundl Pluton of the Middle to Late Jurassic Burnaby Island Plutonic Suite. The northwest trending Sandspit fault separates these rocks and the poorly consolidated sediments of the Tertiary Skonun Formation which lie to the northeast.

Disseminated pyrite with minor chalcopyrite, molybdenite, sphalerite, and galena occur within unfaulted wedges of sheared and hornfelsed Yakoun Group rocks, and within the intrusive rocks where north trending faults are favoured.

In 1968 MINO 1 to 78 claims were owned by E. Specogna, and G. Trinco. Falconbridge Nickel Mines Limited surveyed the Mino 1, 2, 5 and 6 claims with a soil sample and magnetometer survey. Silt samples were taken over the entire group for geochemical analysis. In 1969 the company collected 3500 soil and 1,000 silt samples in the vicinity of Tlell River and north of lower Millar Creek for geochemical analysis. They also blasted 20 trenches for a total length of 152.4 metres and 30 shallow pits.

In 1970, Adanac Mining and Exploration Ltd. optioned Mino 1 to 124, Nadisa 1 to 14, Lucia 1 to 24, Tania 1 to 6, and Carol 1 to 6 - a total of 174 claims. The company also staked Aida 1 to 70. Work included surface geological mapping on Mino 1, 2, 5, 6, and 49 and surface diamond drilling of 2 holes totalling 155 metres on Mino 1 and 49.

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 225
REPORT: RGEN0100

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GSC MAP 1385A
GSC OF 2319
GSC P 67-2,Part A; 86-20; 88-1E, pp. 214-216, 221-227; 89-1H,
pp. 95-112; 90-10, pp. 59-87; 91-1A, pp. 353-358

DATE CODED: 1986/06/19
DATE REVISED: 1988/12/06

CODED BY: LDJ
REVISED BY: JNR

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103F 032**

NATIONAL MINERAL INVENTORY: 103F7 Cu1

NAME(S): **BRENDAR**, CONE HEAD, BEV

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103F07E
BC MAP:

MINING DIVISION: Skeena

LATITUDE: 53 20 29 N
LONGITUDE: 132 40 36 W
ELEVATION: 380 Metres

UTM ZONE: 08 (NAD 83)

NORTHING: 5912582
EASTING: 654790

LOCATION ACCURACY: Within 500M

COMMENTS: High grade sample, Figures 5a, 5b (Assessment Report 10280).

COMMODITIES: Gold Copper Molybdenum

MINERALS

SIGNIFICANT: Chalcopyrite Molybdenite Pyrite Arsenopyrite Pyrrhotite
ASSOCIATED: Quartz Tourmaline
ALTERATION: Carbonate Sericite Tourmaline
ALTERATION TYPE: Carbonate Sericitic Tourmalin'z'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stockwork Breccia Vein Disseminated
CLASSIFICATION: Hydrothermal Porphyry Epigenetic
TYPE: L04 Porphyry Cu ± Mo ± Au
SHAPE: Irregular

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Middle Jurassic			San Christoval Plutonic Suite

ISOTOPIC AGE: 147 +/- 8 Ma
DATING METHOD: Potassium/Argon
MATERIAL DATED: Hornblende

Tertiary

ISOTOPIC AGE: 32.2 +/- 1.0 Ma
DATING METHOD: Uranium/Lead
MATERIAL DATED: Zircon

Kano Plutonic Suite

LITHOLOGY: Quartz Monzonite
Breccia
Granodiorite
Andesite Dike
Felsic Dike
Andesite

HOSTROCK COMMENTS: Jurassic age date of the West Kano Pluton (GSC Paper 90-10, page 62, Figure 1). Tertiary age date: GSC Paper 89-1H, page 109.

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Wrangell

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Rock
COMMODITY

YEAR: 1982

Gold

GRADE
27.0000 Grams per tonne

REFERENCE: Assessment Report 10280.

CAPSULE GEOLOGY

The showing is located near the centre of the peninsula between Rennell Sound and Kano Inlet at an elevation between 61 and 610 metres.

In 1970 Texas Gulf Sulphur Company carried out topographic mapping, surface geology mapping, a geochemical silt survey of 100 samples covering Bev 1 to 14.

The area is underlain by granodiorite of the Middle Jurassic West Kano Batholith, (San Christoval Plutonic Suite) intruded by a Tertiary quartz monzonite porphyry stock ("Cone Head stock") which is probably correlative with the Central Kano Pluton (Kano Plutonic Suite). The rocks are cut by andesite dikes, felsite dikes, and intrusive breccia "pipes".

CAPSULE GEOLOGY

Quartz-tourmaline veinlets occur along fractures, predominantly in felsite and primarily as a stockwork.

Mineralization is spacially associated with the porphyry stock and appears to be structurally controlled. Chalcopyrite, molybdenite, pyrrhotite, and pyrite occur along quartz-sericite fracture planes and arsenopyrite is most frequent along faults or within adjacent calcareous rocks.

Gold mineralization is very erratic and appears related to late stage quartz veining, crackle breccia, and breccia pipes within and adjacent to the quartz monzonite porphyry. A sample of a quartz-tourmaline vein assayed 27.0 grams per tonne gold (Assessment Report 10280).

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90-10, pp. 59-87, 465-487
PERS COMM (R.G. Anderson, Geological Survey of Canada, March, 1989)

DATE CODED: 1986/06/18
DATE REVISED: 1989/03/22

CODED BY: LDJ
REVISED BY: GJP

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103F 033**

NATIONAL MINERAL INVENTORY:

NAME(S): **SECURITY (B)**, OP, B

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103F01W
BC MAP:

UTM ZONE: 08 (NAD 83)

LATITUDE: 53 02 29 N
LONGITUDE: 132 17 46 W
ELEVATION: 200 Metres

NORTHING: 5880111
EASTING: 681384

LOCATION ACCURACY: Within 500M

COMMENTS: Sample location (T2-162), Figure 6a (Assessment Report 11084).
West side of Security Inlet.

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Pyrite Gold
ASSOCIATED: Quartz
ALTERATION: Chlorite Epidote Calcite Quartz Chalcedony
ALTERATION TYPE: Propylitic Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Stockwork Disseminated Breccia
CLASSIFICATION: Hydrothermal Epithermal Epigenetic
TYPE: H05 Epithermal Au-Ag: low sulphidation I01 Au-quartz veins
SHAPE: Irregular
DIMENSION: 900 x 12 Metres STRIKE/DIP: 030/70N TREND/PLUNGE:
COMMENTS: Quartz vein.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Upper Triassic
Tertiary

GROUP

Vancouver
Undefined Group

FORMATION

Karmutsen
Masset

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Massive Basalt
Pillow Basalt
Limestone
Argillite
Chert
Rhyolite
Gabbro
Mylonite
Basaltic Dike

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Wrangell
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

RELATIONSHIP:

GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Rock
COMMODITY

YEAR: 1982

GRADE
56.6000 Grams per tonne

REFERENCE: Assessment Report 11084.

CAPSULE GEOLOGY

The B zone is underlain by metamorphosed greenschist facies submarine pillow and massive basalts of the Vancouver Group, Upper Triassic Karmutsen Formation, with numerous interflow lenses of limestone, argillite and chert. These rocks are in fault contact with Tertiary Masset Formation rocks consisting of flow banded rhyolite intruded by gabbro with associated basalt dikes.

A large northwest dipping quartz vein, 900 metres long and up to 12 metres wide, trends northeast along the fault contact between the gabbro/rhyolite and basalt/sediment packages of rock. The breccia vein is comprised of quartz, basalt, rhyolite and gabbro breccias which are cut by quartz and calcite veins and contain fragments rimmed by chalcedony. Highly foliated mylonite occurs along the quartz vein.

CAPSULE GEOLOGY

Pyrite and gold mineralization occur within the quartz vein and surrounding wallrock. A sample of moderately fractured and quartz veined foliated rhyolite assayed 56.6 grams per tonne gold and a 15 centimetre sample, 60 metres to the northeast, of quartz stringers cutting gabbro assayed 6.48 grams per tonne gold (Assessment Report 11084).

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GSC P 86-20; 88-1E; 89-1H; 90-10
Chevron File

DATE CODED: 1986/06/17
DATE REVISED: 1989/02/23

CODED BY: LDJ
REVISED BY: GJP

FIELD CHECK: N
FIELD CHECK: N

ORE ZONE: SPECOGNA REPORT ON: Y

CATEGORY:	Measured	YEAR:	1997
QUANTITY:	33500000 Tonnes		
COMMODITY		GRADE	
Silver		3.0900	Grams per tonne
Gold		2.1100	Grams per tonne

COMMENTS: Cut-off of 1.2 grams per tonne gold. Additional lower grade stockpile of 19.2 million tonnes grading between 0.80 to 1.2 grams per tonne gold.

REFERENCE: Information Circular 1998-1, page 21.

ORE ZONE: STOCKPILE REPORT ON: Y

CATEGORY:	Inferred	YEAR:	1997
QUANTITY:	19200000 Tonnes		
COMMODITY		GRADE	
Gold		0.9900	Grams per tonne

COMMENTS: A lower grade stockpile resource.

REFERENCE: Information Circular 1998-1, page 21.

CAPSULE GEOLOGY

The Specogna deposit and surrounding area is underlain by three major formations, an intrusive igneous sequence, a major fault system and the mid-upper levels of an epithermal hot-spring-type (low sulphidation, quartz adularia sub-type) precious metal system.

The gold deposit is localized along the Sandspit fault, which strikes 162 degrees and dips about 45 to 50 degrees northeast in the vicinity of the deposit. The Sandspit fault is a normal right-lateral fault that separates the shale member of the Cretaceous Haida Formation (Queen Charlotte Group) from a downdropped block of Miocene-Pliocene Skonun Formation sediments (east of fault).

The Haida Formation is comprised of black-dark grey variably calcareous mudstone and argillites. The stratigraphic nomenclature of Cretaceous units of the Queen Charlotte Islands, including the Haida Formation, has come under review by various researchers at the Geological Survey of Canada. Cameron and Hamilton, 1988 had reassigned the shale member of the Haida Formation to the Skidegate Formation (Geological Survey of Canada Paper 88-1E, pp. 221-227). J.W. Haggart, 1991 dismissed this reassignment and reconfirmed the Haida Formation to include the shale member (G.S.C. Paper 91-10, pp. 253-277). Owing to problems in distinguishing the various Cretaceous units J.W. Haggart, et al., 1991 (G.S.C. Paper 91-1A, pp. 367-371) and J. Hesthamer, et al., 1991 (G.S.C. Open File 2319) suggest that formation names for the Queen Charlotte Group (excluding the Honna Formation) should be abandoned and the Haida shales should therefore be referred to informally as the "Cretaceous shale" of the Queen Charlotte Group.

The Skonun Formation, at least 600 metres in thickness in the vicinity of the deposit (62 per cent conglomerate; 31 per cent arkosic sandstone; 7 per cent sandstone and siltstone/mudstone), consists of a thick porous pebble conglomerate unit with north striking and gently east dipping interbeds of sandstone and siltstone. Several horizons of mudflow breccia (lahar deposits) occur interbedded with conglomerates at the deposit. J. Hesthamer, et al., 1991 (G.S.C. Open File 2319) had mapped conglomerates outcropping over the deposit as Cretaceous Honna Formation (Queen Charlotte Group, shown as unit KH0). Macrofossil and palynological evidence suggest an age of deposition of about 15-17 Ma (mid-Miocene) for these rocks (Champigny, 1981). They are therefore included with the Tertiary Skonun Formation.

Carbonaceous debris occur in the Skonun Formation as fragments, varying from logs several tens of centimetres in diameter to slivers. Logs appear to be aligned parallel to the strike of the larger quartz veins (i.e. 020 degrees). The percentage of carbon ranges from 0.04 to 0.23 per cent. The mudflow breccia horizons contain the most plant debris.

The Upper Oligocene to Lower Pliocene Masset Formation, consisting of porphyritic andesites and basalts, underlies the area to the immediate northwest and was likely the source of much of the sediments comprising the Skonun Formation.

At least two separate Miocene felsic intrusions occur in the deposit area. A dike of variably plagioclase porphyritic dacite to locally andesite ("main dacite dike") intrudes the Haida mudstone and Skonun sediments along the Sandspit fault. Various other smaller typically flow-banded quartz-feldspar porphyritic rhyolite dikes and irregular bodies occur in the Haida mudstone west of the Sandspit fault (e.g. at the Marino showing). The main dacite dike strikes 160 degrees for at least 900 metres and dips 40 to 60 degrees northeast.

CAPSULE GEOLOGY

The dike is 10 to 30 metres wide, locally swelling to 50 metres and generally narrows and becomes discontinuous with increasing depth. The unit is occasionally pitted and porous as a result of retrograde acid leaching. It is typically bordered to the east by a parallel zone of quartz-rich hydrothermal breccia. An intervening zone of crackle brecciated dacite is transitional between the dike and hydrothermal breccia. Peperitic textures suggest that the dacite dike intruded Skonun sediments during their deposition.

The dacite intrusion immediately predates the epithermal hot-spring suite and may have contributed to the movement of hydrothermal fluids upwards along deep-seated structures. The suite is dominated by a quartz matrix polymictic hydrothermal breccia, containing clasts of Skonun sediments, Haida mudstone and dacite. The breccia body strikes 170 degrees for 750 metres proximal to the Specogna fault and dips 40 to 65 degrees east. It consists of a wedge shaped zone up to 70 metres wide at or near surface that extends downdip for up to 650 metres. Fluidized and milled breccias occur at depth below the polymictic breccia. A zone of early mineralized banded chalcedonic and variably bladed (quartz after calcite) and late barren, vuggy and drusy quartz veins flanks the breccia to the east. These veins comprise a conjugate set with two dominant attitudes; 015 degrees/87 degrees west and 039 degrees/67 degrees northwest. Two main sinter horizons occur near the top of the deposit in Skonun conglomerates. These trend northerly for 350 metres and are up to 13 metres thick. The horizons are cut by all breccias and vein types. The presence of multiple sinter horizons in Skonun sediments and the occurrence of fragments of vein quartz (early mineralized and late barren) and clasts of previously silicified sandstone in the upper part of the Skonun Formation ("upper mudflow breccia") suggest that epithermal activity was contemporaneous with deposition of Skonun sediments.

Both sedimentary and intrusive rocks have been subjected to hydrothermal alteration that extends laterally eastwards away from the hydrothermal breccia over an area of 2 square kilometres. A zone of silicification and potassic alteration (adularia) developed proximal to the hydrothermal breccia is flanked to the east by a region of clay altered Skonun Formation sediments characterized by the presence of kaolinite-illite with minor alunite and sericite. Chloritic alteration is also reported.

Metallic mineralization at the Specogna deposit is dominated by pyrite and marcasite, which together typically comprise 2 to 4% of altered wallrocks in the form of semimassive replacements of conglomerate clasts to disseminations in finer grained sediments and intrusive dikes. Early mineralized quartz veins tend to be less sulphidic, while later barren veins are largely free of sulphides. Chalcopyrite is occasionally present in quartz veins below the deposit. Other minerals identified in decreasing order of abundance include limonite, hematite, native gold, cinnabar, sphalerite and pyrrhotite (Gasparrini, 1979).

Gold is finely disseminated in elevated concentrations within a broad zone of potassic alteration and silicification between the Sandspit fault to the west and the barren, argillic alteration zone to the east, (generally the contact between argillic alteration and silicification marks the 0.69 gram per tonne gold grade boundary). The gold is mostly free and extremely fine with occasional coarse accumulations. Higher concentrations of gold are associated with quartz veins and breccias, as indicated by channel sampling of the Specogna adit, where quartz veins 10 centimetres or wider were sampled separately from wallrock. One hundred and thirty seven vein samples averaged 9.61 grams per tonne gold, while intervening wallrock samples averaged 3.00 grams per tonne gold (Assessment Report 24972, page 26). Visible gold is almost entirely found in quartz veins, often at or near their margins. Visible gold occurs most often in narrow uniformly textured light grey quartz veins and secondarily in larger banded to mottled and bladed light to dark grey and brownish grey chalcedonic quartz veins.

The orebody is essentially wedge-shaped and extends 800 metres northwest along the Specogna fault. The wedge is approximately 250 metres wide at surface, thinning with depth to 50 metres at sea level (200 metres below surface). The orebody has been traced downdip for 300 to 400 metres. Mineable reserves estimated to June, 1997 are 33.5 million tonnes grading 2.11 grams per tonne gold at a cutoff grade of 1.20 grams per tonne gold (Assessment Report 25393, page 2). A lower grade stockpile is also estimated to contain 17 million tonnes averaging 0.99 gram per tonne gold (Misty Mountain Gold Limited Press Release, May 12, 1997). Independent Mining Consultants Inc., on behalf of Misty Mountain, estimated the deposit has a mineral reserve of 52.7 million tonnes grading 1.7 grams per tonne gold. The ore is distributed in four silicified lithologies. The

CAPSULE GEOLOGY

Skonun Formation contains 55 per cent of the total ore tonnage; hydrothermal breccia, 30 per cent; dacite, 13.0 per cent and Haida Formation mudstone, 2.0 per cent. Drilling in 1988 suggests mineralization may continue northeast of the proposed pit (Assessment Report 18785). Drilling 300 metres north of the deposit in 1998 intersected 9.98 metres of 10.07 grams per tonne gold in sheared and locally weakly silicified dacite dike, suggesting additional zones of mineralization may occur along the Sandspit fault (Press Release, Misty Mountain Gold Limited, February 25, 1999).

Gold recovery tests using a gravity circuit followed by standard flotation techniques were completed on deposit material grading 2.40 grams per tonne gold. Preliminary results indicate that conventional gravity circuits may recover 10 to 20 per cent of the gold, and flotation results indicate an 80 per cent or better overall gold recovery is achievable in a concentrate grading 30 to 40 grams per tonne gold. Tests on the flotation concentrate indicate that it is very amenable to bio-oxidation pre-treatment; oxidation rates are rapid and the gold recovery is excellent. Misty Mountain Gold is also testing bio-oxidation pretreatment of crushed ore, followed by simple heap leaching.

The Specogna deposit was discovered by Efrem Specogna and Johnny Trinco in 1970, while prospecting along the Sandspit fault. The prospect was optioned to a succession of companies during the early 1970s, commencing with Kennco Exploration Ltd. (1971), followed by Cominco Ltd. (1972), Placer Development Ltd. (1973) and finally Quintana Minerals Corp. (1974-75). Work performed by these companies included geological and soil geochemical surveys, and the drilling of 20 diamond drill holes totaling 1338 metres and 18 percussion holes totaling 603 metres. Consolidated Cinola Mines Ltd. optioned the property in 1977 and by 1980 had completed 139 diamond drill holes totaling 20,963 metres. Work by the company continued under a joint venture with Energy Reserves Canada Ltd., commencing with the excavation of the Specogna adit in 1981. Some 4,500 tonnes were excavated from 465 metres of underground workings and treated at a 45 tonne per day pilot mill at site. The joint venture completed 54 diamond drill holes totaling 7222 metres between 1981 and 1984. In 1986 City Resources (Canada) Ltd. acquired control of Consolidated Cinola Mines and continued exploration by drilling another 98 diamond drill holes and 63 percussion holes totaling 8483 metres and 6232 metres respectively, between 1986 and 1989. The company completed another 118 metres of underground development at the Specogna adit in 1987. Barrack Mine Management acquired control of City Resources Canada in 1989 and continued metallurgical and feasibility studies. In 1993 Australian interests acquired control and renamed the company Misty Mountain Gold Ltd.

The Hunter Dickinson Group, through Romulus Resources Ltd. optioned the deposit in 1994. Romulus Resources merged with Misty Mountain Gold in 1995, with the Hunter Dickinson Group acquiring full control of the new company. In 1995 and 1996 Romulus Resources and Misty Mountain Gold drilled 147 diamond drill holes totaling 34,627 metres on a 20 x 20 metre grid, with all holes angled to the southeast at -45 degrees, in order to crosscut at right angles to the northeasterly trending and steeply dipping quartz veins. The company completed an additional four diamond drill holes totaling 1999 metres in the fall of 1997 to test for potential bonanza-type deposits which may have developed at depths of up to 200 metres below the currently known Specogna deposit in a deeper, throttled portion of the epithermal system. Another four holes totaling 575 metres were drilled in the fall of 1998 to test resistivity and chargeability anomalies near the Sandspit fault north of the deposit. Additional work included bulk sampling of the Specogna adit in 1997 and 1998, and the completion of airborne geophysical surveys (VLF-EM, radiometrics, magnetometer) in 1995 and induced polarization surveys over the Sandspit fault in 1997. The company is continuing with various investigations involving metallurgical, environmental work, deposit modeling, resource estimation, mine designs, mineralogy, site facility locations and infrastructure planning, all leading to the completion of a comprehensive pre-feasibility study.

The Marino showing, located about 150 metres due west of the north end of the Specogna deposit, consists of an elongate body of quartz-feldspar porphyritic rhyolite, subcropping and outcropping over an area 80 by 40 metres. The body occurs in Haida mudstone about 90 metres west of the Sandspit fault. Mineralization at the showing consists of narrow quartz veins typically no more than 2 cm wide, that contain visible gold along their drusy and chalky cores.

Efrem Specogna shipped two bulk samples of gold ore from the Marino showing to the Tacoma smelter. The two samples were received on June 26, 1975 and analyzed as follows (T. Schroeter, personal communication, 1996);

CAPSULE GEOLOGY

Shipment 1
Net weight = 2431.7 kilograms (at 0.93 per cent moisture) - 2409.0 kilograms net dry weight
Assay = 116.5 grams per tonne gold, 52.1 grams per tonne silver, 0.01 per cent lead, 0.06 per cent copper, 0.01 per cent zinc, 0.25 per cent arsenic, 0.03 per cent bismuth, 91.9 per cent silica
Metal Content (payable) = 255.02 grams gold, 93.3 grams silver
Shipment 2
Net dry weight = 579.7 kilograms
Assay = 563.9 grams per tonne gold, 230.3 grams per tonne silver
Metal Content (payable) = 301.67 grams gold, 124.4 grams silver
Total production = 3011.45 kilograms yielding 556.69 grams gold and 217.7 grams silver.

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N MINER MAG October 1989
NW PROSP Dec.1986/Jan.1987; Dec.1987/Jan.1988; Jan./Feb.,
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PR REL Misty Mountain Gold Limited, May 12, Oct.8, 1997; Mar. 9,
1998; Feb.25, May 3, 1999; Taseko Mines Ltd., Dec.6, 2002;
Jan.7, 2003
SEG (Smithers Exploration Group) Cinola Gold Deposit, SEG Field
Tour, Edited by A. Panteleyev and T.G. Schroeter, Sept.23, 1988
SME 1985 'Discoveries of Epithermal Precious Metal Deposits', Edited
by V.F. Hollister, Chapter 13, pp. 137-145
V STOCKWATCH July 10, 1989
W MINER June, Oct. 1980; Jan. 1981; Apr. pp. 64-65, 1982;
Feb. pp. 54-59, 1984
WWW <http://www.hdgold.com/mglframe.htm>; <http://www.infomine.com/>
1997 Cordilleran Roundup Abstracts, p. 13
Chevron File
Falconbridge File
Victoria Times, Jan. 30, 1979, p. 7

DATE CODED: 1986/06/11
DATE REVISED: 1999/10/13

CODED BY: LDJ
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **103F 035**

NATIONAL MINERAL INVENTORY:

NAME(S): **SECURITY (OP 6), OP**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103F01W
BC MAP:

UTM ZONE: 08 (NAD 83)

LATITUDE: 53 01 09 N
LONGITUDE: 132 18 26 W
ELEVATION: 15 Metres

NORTHING: 5877612
EASTING: 680732

LOCATION ACCURACY: Within 500M

COMMENTS: Showings, Figure 7c, Sheet 1 (Assessment Report 9830). Located half way between Fairlie Point and Hastings Point along the northern shore of Inskip Channel.

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite Pyrite
ASSOCIATED: Ankerite
ALTERATION: Calcite Hematite Malachite Epidote
ALTERATION TYPE: Carbonate Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I06 Cu±Ag quartz veins
SHAPE: Irregular

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Upper Triassic	Vancouver	Karmutsen	

LITHOLOGY: Amygdaloidal Basalt
Black Argillite
Limestone
Massive Basalt

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Wrangell
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

RELATIONSHIP: GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE	REPORT ON: N
CATEGORY: Assay/analysis	YEAR: 1981
SAMPLE TYPE: Rock	
<u>COMMODITY</u>	<u>GRADE</u>
Copper	12.3000 Per cent

COMMENTS: The sample width is 15 centimetres.
REFERENCE: Assessment Report 9830.

CAPSULE GEOLOGY

The OP #6 showing is underlain by regionally metamorphosed greenschist facies subaerial massive and amygdaloidal basalt flows of the Vancouver Group, Upper Triassic Karmutsen Formation. Black argillites and limestones occur as interbedded sediments.

Copper mineralization is strongly associated with carbonate (ankerite?) veining and lenses. Chalcopyrite and malachite occur within these veins which cut moderately hematized amygdaloidal basalts.

A 15 centimetre carbonate (ankerite?) vein sample with chalcopyrite, malachite, and pyrite, assayed 12.3 per cent copper (Assessment Report 9830).

BIBLIOGRAPHY

EMPR ASS RPT *9830, 11084, 16449
EMPR BULL 54
EMPR EXPL 1982-360; 1987-C347
GSC MAP 1385A
GSC P 86-20; 88-1E; 89-1H; 90-10

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 237
REPORT: RGEN0100

BIBLIOGRAPHY

Chevron File

DATE CODED: 1986/06/17
DATE REVISED: 1988/12/06

CODED BY: LDJ
REVISED BY: JNR

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103F 036**

NATIONAL MINERAL INVENTORY:

NAME(S): **SHIP KIETA ISLAND**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103F16W
BC MAP:

UTM ZONE: 08 (NAD 83)

LATITUDE: 53 45 19 N
LONGITUDE: 132 16 06 W
ELEVATION: 1 Metres

NORTHING: 5959576
EASTING: 680203

LOCATION ACCURACY: Within 500M

COMMENTS: Description - West side of Ship Kieta Island in Masset Inlet.
Geological Survey of Canada Memoir 88).

COMMODITIES: Volcanic Glass Perlite

MINERALS

SIGNIFICANT: Tachylyte Perlite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Massive Stratiform
CLASSIFICATION: Volcanogenic Syngenetic Industrial Min.
TYPE: R12 Volcanic glass - perlite

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Tertiary	Undefined Group	Masset	

LITHOLOGY: Tachylyte
Rhyolite Flow
Basaltic Flow
Basaltic Breccia
Agglomerate
Rhyolite
Basalt

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Wrangell

PHYSIOGRAPHIC AREA: Queen Charlotte Lowland

CAPSULE GEOLOGY

The area is underlain by a series of Tertiary sub-aerial basaltic flows and breccias and rhyolite ash flows of the Masset Formation, which form a plateau volcanic sequence. Tachylyte forms fragments in an agglomerate. It is a black, glassy basalt, with a brilliant lustre, speckled with white, rectangular phenocrysts of feldspar up to a millimetre in size.

BIBLIOGRAPHY

EMPR BULL 54
EMPR FIELDWORK 1997, 19-1-19-14
GSC MAP 1385A
GSC MEM 88, p. 104
GSC P 86-20; 88-1E, pp. 221-227, 269-274; 89-1H, pp. 73-79;
90-10, pp. 305-324

DATE CODED: 1986/06/04
DATE REVISED: 1988/12/06

CODED BY: LDJ
REVISED BY: JNR

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103F 037**

NATIONAL MINERAL INVENTORY:

NAME(S): **JUSKATLA INLET**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103F09W
BC MAP:

UTM ZONE: 08 (NAD 83)

LATITUDE: 53 37 29 N
LONGITUDE: 132 27 36 W
ELEVATION: 1 Metres

NORTHING: 5944586
EASTING: 668088

LOCATION ACCURACY: Within 5 KM

COMMENTS: Description - West side of Juskatla Inlet (Geological Survey of Canada Memoir 88).

COMMODITIES: Volcanic Glass Perlite

MINERALS

SIGNIFICANT: Tachylyte Perlite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Massive Stratiform
CLASSIFICATION: Volcanogenic Syngenetic Industrial Min.
TYPE: R12 Volcanic glass - perlite

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Tertiary	Undefined Group	Masset	

LITHOLOGY: Tachylyte
Rhyolite Flow
Basaltic Flow
Basaltic Breccia
Rhyolite
Basalt

HOSTROCK COMMENTS: Hosted in units TM, TMm (Geological Survey of Canada Map 6-1990).

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Wrangell

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

CAPSULE GEOLOGY

The area is underlain by a series of Tertiary sub-aerial basaltic flows and breccias and rhyolite ash flows of the Masset Formation, which form a plateau volcanic sequence dipping gently to the north.

Tachylyte occurs as a flow-like mass in rhyolite units of the Tartu Facies. Tachylyte is a black, glassy basalt, with a brilliant lustre, speckled with white, rectangular phenocrysts of feldspar.

BIBLIOGRAPHY

EMPR BULL 54
EMPR FIELDWORK 1997, 19-1-19-14
GSC MAP 1385A; 6-1990
GSC MEM 88, p. 104
GSC P 86-20; 88-1E, pp. 221-227, 269-274; 89-1H, pp. 73-79; 90-10, pp. 305-324

DATE CODED: 1986/06/04
DATE REVISED: 1988/12/06

CODED BY: LDJ
REVISED BY: JNR

FIELD CHECK: N
FIELD CHECK: N

CAPSULE GEOLOGY

ignition (Paulsen 1982, page 3-6). City Resources completed three diamond-drill holes in 1987 to test this limestone as a source of neutralizing medium for the Specogna epithermal gold deposit (103F 034).

BIBLIOGRAPHY

EMPR ASS RPT *16566
EMPR BULL 54, pp. 50,175
EMPR EXPL 1987-C347
EMPR OF 1992-18, pp. 43-45
EMPR PF (*Paulsen, L. (1982): Limestone Study - Preliminary Evaluation
- Queen Charlotte Joint Venture, in 103F General; Geological Map
by McCammon, J.H.)
GSC MAP 1385A
GSC P 86-20; 88-1E; 89-1H, pp. 7-11; 90-10, pp. 163-172
Chevron File

DATE CODED: 1986/06/05
DATE REVISED: 1999/09/24

CODED BY: LDJ
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103F 039**

NATIONAL MINERAL INVENTORY:

NAME(S): **SANDILANDS ISLAND**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103F01E
BC MAP:

UTM ZONE: 08 (NAD 83)

LATITUDE: 53 10 19 N
LONGITUDE: 132 05 16 W
ELEVATION: 1 Metres

NORTHING: 5895177
EASTING: 694756

LOCATION ACCURACY: Within 1 KM

COMMENTS: Limestone unit, Figure 5, Sheet B (Bulletin 54). Southeast tip Sandilands Island, Skidegate Channel.

COMMODITIES: Limestone

MINERALS

SIGNIFICANT: Calcite
ASSOCIATED: Plagioclase
MINERALIZATION AGE: Upper Triassic
ISOTOPIC AGE:

DATING METHOD: Fossil

MATERIAL DATED: Various fossils

DEPOSIT

CHARACTER: Massive
CLASSIFICATION: Sedimentary
TYPE: R09 Limestone
SHAPE: Regular
DIMENSION: 30
COMMENTS: Minimum thickness.

Concordant
Syngenetic Industrial Min.

Metres

STRIKE/DIP: 075/20N

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Upper Triassic

GROUP

Kunga

FORMATION

Sadler

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Limestone
Argillite

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Wrangell

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

CAPSULE GEOLOGY

The lower two members of the Kunga Group, consisting of the Upper Triassic Sadler and Peril formations, represent the main limestone resource of the Queen Charlotte Islands, particularly the basal massive grey limestone comprising the Sadler Formation. Its thickness varies from less than 30 metres to more than 200 metres.

The Kunga Group, consisting of the limestone members and an overlying argillite member, rests conformably on the Karmutsen Formation, and may be overlain conformably by the Jurassic Maude Group or disconformably by the Middle Jurassic Yakoun Group.

Light grey high-calcium limestone of the Sadler Formation outcrops on the southeast tip of Sandilands Island, in Skidegate Channel, just south of Maude Island. The beds strike west-southwest and dip 10 to 30 degrees northwest. The unit is bounded on the north by a northeast trending fault. The limestone is cut by irregular calcite veinlets up to five centimetres thick. The occasional grain of plagioclase is visible in thin section.

BIBLIOGRAPHY

EMPR BULL 54, pp. 50,175
EMPR OF 1992-18, pp. 43-46
GSC MAP 1385A; 4-1990
GSC MEM *88, pp. 88,173
GSC P 86-20; 88-1E, pp. 217-219, 221-227; 89-1H, pp. 7-11; 90-10, pp. 163-172
CANMET RPT *#811, p. 158

DATE CODED: 1986/06/05
DATE REVISED: 1999/09/24

CODED BY: LDJ
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103F 040**

NATIONAL MINERAL INVENTORY:

NAME(S): **MOSQUITO LAKE**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103F01E
BC MAP:

UTM ZONE: 08 (NAD 83)

LATITUDE: 53 04 19 N
LONGITUDE: 132 07 26 W
ELEVATION: 300 Metres

NORTHING: 5883959
EASTING: 692791

LOCATION ACCURACY: Within 1 KM

COMMENTS: Limestone unit, Figure 5, Sheet B (Bulletin 54). Located just north of Mosquito Lake.

COMMODITIES: Limestone

MINERALS

SIGNIFICANT: Calcite
MINERALIZATION AGE: Upper Triassic
ISOTOPIC AGE:

DATING METHOD: Fossil

MATERIAL DATED: Various fossils

DEPOSIT

CHARACTER: Massive
CLASSIFICATION: Sedimentary
TYPE: R09 Limestone
SHAPE: Regular
DIMENSION: 30
COMMENTS: Minimum thickness.

Concordant
Industrial Min.

Metres

STRIKE/DIP: 100/50N

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE: Upper Triassic

GROUP: Kunga

FORMATION: Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Limestone
Argillite

HOSTROCK COMMENTS: Kunga Formation reclassified as Kunga Group (Geological Survey of Canada Paper 88-1E, pages 221-229).

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Wrangell

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

CAPSULE GEOLOGY

The lower two members of the Kunga Group, consisting of the Upper Triassic Sadler and Peril formations, represent the main limestone resource of the Queen Charlotte Islands, particularly the basal massive grey limestone comprising the Sadler Formation. Its thickness varies from less than 30 metres to more than 200 metres.

The Kunga Group, consisting of the limestone members and an overlying argillite member, rests conformably on the Karmutsen Formation, and may be overlain conformably by the Jurassic Maude Group or disconformably by the Middle Jurassic Yakoun Group.

A narrow band of limestone trends west-northwest from Mosquito Lake to Skidegate Channel. The beds dip 50 to 70 degrees to the north. A sample assayed 17.94 per cent CaO, 1.07 per cent MgO, 54.75 per cent SiO₂ and 14.96 per cent loss on ignition (Paulsen, 1982, page 3-8).

This occurrence was briefly evaluated by Consolidated Cinola Mines in 1982 as a source of neutralizing medium for the Specogna epithermal gold prospect (103F 034).

BIBLIOGRAPHY

EMPR BULL 54, pp. 50,175
EMPR OF 1992-18, pp. 43-45
EMPR PF (*Paulsen, L. (1982): Limestone Study - Preliminary Evaluation - Queen Charlotte Joint Venture, in 103F General)
GSC MAP 1385A; 4-1990
GSC P 86-20; 88-1E; 89-1H, pp. 7-11; 90-10, pp. 163-172

DATE CODED: 1986/06/05
DATE REVISED: 1999/10/31

CODED BY: LDJ
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103F 041**

NATIONAL MINERAL INVENTORY:

NAME(S): **GRAHAM ISLAND CLAY**

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103F01W
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 08 (NAD 83)

LATITUDE: 53 13 49 N
LONGITUDE: 132 15 36 W
ELEVATION: 150 Metres

NORTHING: 5901210
EASTING: 682999

LOCATION ACCURACY: Within 1 KM

COMMENTS: Approximate location of adit, "northeast portion of section 14, town-
ship II" (Geological Summary Report 1912, page 30).

COMMODITIES: Clay Coal

MINERALS

SIGNIFICANT: Clay Coal
MINERALIZATION AGE: Eocene
ISOTOPIC AGE:

DATING METHOD: Fossil

MATERIAL DATED: Pollen

DEPOSIT

CHARACTER: Massive Stratiform Stratabound
CLASSIFICATION: Sedimentary Industrial Min.

TYPE: E07 Sedimentary kaolin

DIMENSION: 10 Metres STRIKE/DIP:

TREND/PLUNGE:

COMMENTS: Thickness of clay. Age date from pollen recovered from coal samples
(Geological Survey of Canada Paper 90-10. page 271).

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Eocene	Undefined Group	Undefined Formation	

DATING METHOD: Fossil
MATERIAL DATED: Pollen

LITHOLOGY: Clay
Shale
Coal

HOSTROCK COMMENTS: Age date of pollen from coal float is Lower Eocene to Lower Oligocene
(Geological Survey of Canada Paper 90-10, page 271).

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Wrangell

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

CAPSULE GEOLOGY

A light coloured shale, 10 metres thick, occurs below a coal seam in an unnamed unit of Lower Eocene to Lower Oligocene age (Unit Tsh, Geological Survey of Canada Paper 90-10, pages 31-50, Figure 9). The shale has fair plasticity and is referred to as "fire-clay".

BIBLIOGRAPHY

EMPR BULL 54, pp. 177,178
GSC MAP 1385A; 4-1990
GSC MEM 47, pp. 61,62; *88, pp. 121,172
GSC P 86-20; 88-1E; 89-1H, pp. 7-11, 65-72; 90-10, pp.31-50, 271
GSC SUM RPT 1912, pp. 30,40

DATE CODED: 1987/02/03
DATE REVISED: 1988/12/06

CODED BY: LDJ
REVISED BY: JNR

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103F 042**

NATIONAL MINERAL INVENTORY:

NAME(S): **BATEAUX (C), C**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103F01W
BC MAP:

UTM ZONE: 08 (NAD 83)

LATITUDE: 53 03 39 N
LONGITUDE: 132 29 36 W
ELEVATION: 150 Metres

NORTHING: 5881793
EASTING: 668088

LOCATION ACCURACY: Within 500M
COMMENTS: Drillhole BH-38877, Figure 3 (Assessment Report 10255).

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Pyrite Arsenopyrite
ASSOCIATED: Quartz Calcite
ALTERATION: Silica Epidote Chlorite
ALTERATION TYPE: Silicific'n Propylitic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Breccia Disseminated
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: H EPITHERMAL
SHAPE: Irregular

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Upper Triassic
Triassic-Jurassic
Middle Jurassic

GROUP

Vancouver
Kunga

FORMATION

Karmutsen
Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

San Christoval Plutonic Suite

ISOTOPIC AGE: 170-175 +/- 5 Ma
DATING METHOD: Uranium/Lead
MATERIAL DATED: Zircon

LITHOLOGY: Felsic Volcanic
Basalt
Andesite
Limestone
Tuff
Argillite
Granodiorite
Breccia
Tonalite

HOSTROCK COMMENTS: Karmutsen volcanics, interbedded with Kunga Group limestone are intruded by plutonic rock. Age date- Pers. Comm.: R.G. Anderson, March 1989

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Wrangell

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

INVENTORY

ORE ZONE: DRILLHOLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Drill Core
COMMODITY: Gold

YEAR: 1981

GRADE: 6.5000 Grams per tonne

COMMENTS: The sample width is 1.51 metres.
REFERENCE: Assessment Report 9458.

CAPSULE GEOLOGY

The property is underlain by Upper Triassic Vancouver Group, Karmutsen Formation, basaltic to andesitic flows with intercalations of felsic ashflow tuffs. The volcanics are interbedded with lenses of Triassic to Jurassic Kunga Group limestone and minor argillite. A granodiorite to tonalitic pluton, probably related to the Middle Jurassic San Christoval Plutonic Suite, lies to the south. The prominent structural feature is an east-west trending fault. Two distinct foliations strike northwest, dipping south and north-south, dipping east. Minor northeast trending faults occur on the south part of the property.

CAPSULE GEOLOGY

Gold mineralization, associated with pyrite and arsenopyrite, occurs in variably silicified and epidote-chlorite altered felsic to mafic volcanics. Gold is also localized in brecciated quartz veins and minor calcite-quartz veins cutting the volcanics. The mineralization also occurs in narrow (20-60 centimetres) silicified brecciated zones at the limestone-volcanic contacts, of which one sample assayed 4.53 grams per tonne gold. Subsequent drilling intersected a 1.51 metre silicified shear zone with 6.5 grams per tonne gold (Assessment Report 9458).

Bateaux Resources drilled two diamond drill holes totaling 121.9 metres in 1989.

BIBLIOGRAPHY

EMPR ASS RPT 7625, 8519, *9458, *10255, *18839
EMPR BULL 54
EMPR EXPL 1979-243; 1980-372
EMPR FIELDWORK 1997, p. 19-1-19-14
EMPR PF (Prospectus, Bateaux Resources Inc., April 1988: Includes Summary Report on the Bateaux Property by C.J. Westerman, Sept. 1987)
GSC MAP 1385A
GSC P 86-20; 88-1E; 89-1H; 90-10
Chevron File

DATE CODED: 1986/06/13
DATE REVISED: 1988/12/06

CODED BY: LDJ
REVISED BY: JNR

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103F 043**

NATIONAL MINERAL INVENTORY:

NAME(S): **INCONSPICUOUS 4**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103F14E
BC MAP:

UTM ZONE: 08 (NAD 83)

LATITUDE: 53 58 39 N
LONGITUDE: 133 00 26 W
ELEVATION: 350 Metres

NORTHING: 5982674
EASTING: 630801

LOCATION ACCURACY: Within 500M

COMMENTS: Mineralized zone (Sample P1075), Figure 3 (Assessment Report 11086).

COMMODITIES: Gold Antimony

MINERALS

SIGNIFICANT: Pyrite Pyrrhotite Arsenopyrite Stibnite
ALTERATION: Clay Silica Kaolinite
ALTERATION TYPE: Propylitic Silicific'n Argillic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Breccia Disseminated
CLASSIFICATION: Hydrothermal Epithermal Porphyry Epigenetic
TYPE: H03 Hot spring Au-Ag
SHAPE: Irregular
MODIFIER: Faulted

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Tertiary
Lower Cretaceous

GROUP

Undefined Group
Queen Charlotte

FORMATION

Masset
Haida

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Fine Grained Dacite
Fine Grained Granodiorite
Andesite
Dacitic Porphyry
Hornblende Andesite
Tuff
Rhyolite
Feldspar Porphyry
Sandstone
Shale

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Wrangell

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

INVENTORY

ORE ZONE: DRILLHOLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Drill Core
COMMODITY

YEAR: 1983

Gold

GRADE

4.8500

Grams per tonne

COMMENTS: The sample width is 3.98 metres.

REFERENCE: Assessment Report 12208.

CAPSULE GEOLOGY

The property is underlain by Tertiary Masset Formation rocks consisting of dacite flows and tuffs, andesites, rhyolites, and feldspar porphyries. The volcanic units generally dip to the west and are unconformably underlain by sandstones and shales, probably of the Lower Cretaceous (Albian age), Queen Charlotte Group, Haida Formation.

A major northeast trending fault (Sams fault) and related shears cut the rocks. The shear zones offset the stratified rocks and control mineralization. Associated with the shear zones are strong argillic alteration, kaolinitic clay development, minor silicification, and varying propylitic alteration.

Several fault controlled mineralized zones, up to 6 metres wide, occur in hornblende andesites. The andesites are clay altered, locally silicified, and contain disseminated and fracture filled pyrite and arsenopyrite. A 5 metre wide fault zone assayed

CAPSULE GEOLOGY

0.74 grams per tonne gold, and a 0.5 metre zone assayed 4.46 grams per tonne gold. A clay altered wallrock sample assayed 1.57 grams per tonne gold (Assessment Report 9028).

A drill hole, 700 metres to the south west, intersected gold mineralization associated with a fault zone containing pyrite, stibnite, pyrrhotite and arsenopyrite in strong clay-altered and brecciated dacite/latite porphyry. A 3.98 metre fault zone assayed 4.85 grams per tonne gold (Assessment Report 12208).

Drilling over a 900 metre by 300 metre area between 1983 and 1988 encountered a high-level fine-grained feldspar porphyritic diorite/granodiorite. This intrusive is weakly to moderately clay carbonate altered and, locally, weakly silicified. The body contains disseminated, fracture and fault gouge controlled pyrite, arsenopyrite and possibly stibnite. Higher gold values occur in or near fault zones where sulphide content increases. One of six drill holes returned a weighted average of 1.44 grams per tonne gold over 4.09 metres (Assessment Report 17585).

City Resources Canada Ltd. drilled six diamond drill holes totaling 439.7 metres in 1988.

BIBLIOGRAPHY

EMPR ASS RPT *9028, *10127, 11086, *11878, *12208, *17585
EMPR BULL 54
EMPR EXPL 1980-385; 1982-366; 1983-499,500
EMPR FIELDWORK 1997, p. 19-1-19-14
GSC MAP 1385A; 8-1990
GSC P 86-20; 88-1E, pp. 221-227, 269-274; 89-1H, pp. 73-79;
90-10, pp. 305-324
GCNL #97,#247, 1983; #70, 1984

DATE CODED: 1986/06/16
DATE REVISED: 1999/09/26

CODED BY: LDJ
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103F 044**

NATIONAL MINERAL INVENTORY:

NAME(S): **INCONSPICUOUS 6**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103F14E
BC MAP:

UTM ZONE: 08 (NAD 83)

LATITUDE: 53 59 24 N
LONGITUDE: 133 00 36 W
ELEVATION: 270 Metres

NORTHING: 5984060
EASTING: 630580

LOCATION ACCURACY: Within 500M

COMMENTS: Main showing, Figure 3 (Assessment Report 11086).

COMMODITIES: Gold Antimony

MINERALS

SIGNIFICANT:	Pyrite	Pyrrhotite	Arsenopyrite	Stibnite
ALTERATION:	Clay	Silica	Kaolinite	
ALTERATION TYPE:	Propylitic	Silicific'n		Argillic
MINERALIZATION AGE:	Unknown			

DEPOSIT

CHARACTER:	Vein	Disseminated	
CLASSIFICATION:	Hydrothermal	Epithermal	Epigenetic
TYPE:	H03 Hot spring Au-Ag		
SHAPE:	Irregular		
MODIFIER:	Faulted		

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Tertiary
Lower Cretaceous

GROUP

Undefined Group
Queen Charlotte

FORMATION

Masset
Haida

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Feldspar Porphyry
Dacitic Flow
Tuff
Andesite
Rhyolite
Sandstone
Shale
Dacite

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Wrangell

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Chip

YEAR: 1981

COMMODITY

Gold

GRADE

2.0400

Grams per tonne

COMMENTS: The sample width is 5 metres.

REFERENCE: Assessment Report 9028.

CAPSULE GEOLOGY

The property is underlain by Tertiary Masset Formation rocks consisting of dacite flows and tuffs, andesites, rhyolites, and feldspar porphyries. The volcanic units generally dip to the west and are unconformably underlain by sandstones and shales, probably of the Lower Cretaceous (Albian age) Queen Charlotte Group, Haida Formation.

A major northeast trending fault (Sams fault) and related shears cut the rocks. The shear zones offset the stratified rocks and control mineralization. Associated with the shear zones are strong argillic alteration, kaolinitic clay development, minor silicification and varying propylitic alteration.

A fault zone trending 020 degrees cuts a feldspar porphyry unit. An associated 5 metre wide silicified and mineralized zone contains disseminated and fracture-filled pyrite, arsenopyrite, pyrrhotite and stibnite. A chip sample taken across the 5 metre wide zone assayed 2.0 grams per tonne gold (Assessment Report 9028).

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 250
REPORT: RGEN0100

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EMPR ASS RPT *9028, 10127, 11086, 11878, 12208
EMPR BULL 54
EMPR EXPL 1980-385
EMPR FIELDWORK 1997, pp. 19-1-19-14
GSC MAP 1385A; 8-1990
GSC P 86-20; 88-1E, pp. 221-227, 269-274; 89-1H, pp. 73-79;
90-10, pp. 305-324
GCNL #97,#247, 1983; #70, 1984

DATE CODED: 1986/06/16
DATE REVISED: 1988/12/09

CODED BY: LDJ
REVISED BY: JNR

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103F 045**

NATIONAL MINERAL INVENTORY:

NAME(S): **EL NINO, SEVEN, CANYON,**
AMETHYST, REPE

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103F08E
BC MAP:

UTM ZONE: 08 (NAD 83)

LATITUDE: 53 28 29 N
LONGITUDE: 132 11 46 W
ELEVATION: 360 Metres

NORTHING: 5928560
EASTING: 686194

LOCATION ACCURACY: Within 500M

COMMENTS: Diamond Drill Hole Y7 81-2, Figure 3 (Assessment Report 9863).

COMMODITIES: Gold Zinc Lead Copper Silver

MINERALS

SIGNIFICANT: Pyrite Sphalerite Galena Chalcopyrite
ASSOCIATED: Quartz Calcite
ALTERATION: Clay Quartz
ALTERATION TYPE: Silicific'n Argillic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Breccia Disseminated
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: H05 Epithermal Au-Ag: low sulphidation
SHAPE: Irregular
MODIFIER: Sheared

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Middle Jurassic Yakoun Undefined Formation

LITHOLOGY: Andesite
Agglomerate
Shale
Sandstone

HOSTROCK COMMENTS: Yakoun Formation reclassified as Yakoun Group (Geological Survey of Canada Paper 88-1E, pages 221-229).

GEOLOGICAL SETTING

TECTONIC BELT: Insular PHYSIOGRAPHIC AREA: Queen Charlotte Ranges
TERRANE: Wrangell

INVENTORY

ORE ZONE: DRILLHOLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1981
SAMPLE TYPE: Drill Core
COMMODITY GRADE
Silver 3.0000 Grams per tonne
Gold 0.9300 Grams per tonne

COMMENTS: The sample width is 0.9 metres.
REFERENCE: Assessment Report 9863.

CAPSULE GEOLOGY

The property is underlain by Middle Jurassic Yakoun Group volcanics, composed mainly of andesites and agglomerates, unconformably overlain by Cretaceous (Albian) Queen Charlotte Group, Haida Formation shales and sandstones. These rocks lie southwest of the northwest trending, northeast dipping Sandspit fault. East of the fault are poorly consolidated sediments of the Tertiary Skonun Formation.

The Yakoun volcanics are cut by mineralized shear zones displaying brecciation, clay alteration, silicification, and quartz veining. Mineralization consists of pyrite, sphalerite, galena, and minor chalcopyrite in volcanics and in quartz veins as disseminations and veinlets. A chip sample taken discontinuously across 0.8 metre of quartz veining, cutting silicified volcanics with patches and disseminations of pyrite, along the east bank of Canyon Creek, assayed 1.097 per cent zinc and 0.179 per cent lead (Assessment Report 21814, page 15). Diamond drill hole 81-2 intersected 0.40 per cent zinc, 0.21 per cent lead, 0.03 per cent

CAPSULE GEOLOGY

copper and 0.05 gram per tonne gold over 7 metres at 112 metres depth. At 155 metres the drill hole intersected 90 centimetres of rock grading 0.93 gram per tonne gold and 3.0 grams per tonne silver (Assessment Report 9863). Two kilometres to the south a drill hole intersected rock containing 1.37 grams per tonne gold over 3 metres (Assessment Report 9863).

Umex Ltd. first conducted extensive exploration over this occurrence. The company performed soil, geochemical and ground geophysical surveys and drilled ten diamond drill holes totalling 1268 metres in 1981. Procan Exploration Ltd. completed 45 percussion holes totalling 205.12 metres in 1984. Doromin Resources Ltd. carried out soil and silt sampling and VLF-EM and magnetometer surveys in 1990, followed by prospecting and sampling in 1991. Misty Mountain Gold Ltd. conducted soil sampling, prospecting and flew airborne radiometrics, resistivity, and magnetometer surveys over the showing in 1995. The company also completed an induced polarization survey and conducted additional soil sampling in 1997.

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EMPR ASS RPT 6924, *9863, 10888, 13049, 20336, *21814, 24008, 25064,
25393
EMPR BULL 54
EMPR EXPL 1984-364
EMPR FIELDWORK 1997, p. 19-1-19-14
GSC BULL 365
GSC MAP 1385A
GSC OF 2319
GSC P 86-20; 88-1E, pp. 221-227; 89-1H; 90-10; 91-1A, pp. 353-358

DATE CODED: 1986/06/19
DATE REVISED: 1999/10/20

CODED BY: LDJ
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **103F 046**

NATIONAL MINERAL INVENTORY: 103F8 Btm1

NAME(S): **SHALE** HC

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103F08W
BC MAP:

UTM ZONE: 08 (NAD 83)

LATITUDE: 53 23 02 N
LONGITUDE: 132 16 41 W
ELEVATION: 80 Metres

NORTHING: 5918247
EASTING: 681143

LOCATION ACCURACY: Within 500M

COMMENTS: Junction of Phantom Creek and Yakoun River.

COMMODITIES: Bitumen

MINERALS

SIGNIFICANT: Bitumen
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound
CLASSIFICATION: Fossil Fuel
TYPE: A06 Oil shale
DIMENSION: 90 Metres
COMMENTS: Thickness of section.

Concordant
Sedimentary
Industrial Min.

STRIKE/DIP: 045/15S

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic	Maude	Ghost Creek	

DATING METHOD: Fossil
MATERIAL DATED: Various Fossils

LITHOLOGY: Shale
Argillite
Limestone

HOSTROCK COMMENTS: Maude Formation is reclassified as a Group (Geological Survey of Canada Paper 88-1E, pages 221-229).

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Wrangell

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

CAPSULE GEOLOGY

This area along the Yakoun River is underlain by sediments of the Lower Jurassic Maude Group. The basal formation of the group, the Ghost Creek Formation, consists of dark grey shale and silty shale that is characteristically fetid and bituminous.

A 60 to 90 metre thick section of oil shale is reported to occur on the east side of the Yakoun River, opposite its confluence with Phantom Creek. Mapping by the Geological Survey of Canada (Bulletin 365, Section 10) encountered a 68.5 metre section of Ghost Creek Formation immediately east of the river, 0.7 kilometre south of the confluence with Phantom Creek. This section, designated the type section for the unit, consists of dark to medium grey fetid shale with minor siltstone and argillaceous and fetid limestone. Bitumen is locally present in the lower half of this section. Bedding strikes northeast and dips 15 degrees south.

The Shale and HC claim groups extend across sections of the Yakoun River, and Phantom and Ghost Creeks. Some prospecting, sampling, and test work was reported carried out on these showings by a Nick Clarke and associates in 1921.

Skaist Mines Ltd. by a November 1974 option agreement acquired a 70 per cent interest in 211 claims in the Shale, HC, and HB groups. The claims were optioned from Toni Holdings & Management Ltd., owned by Dieter Ludwig and Susanne Robertson, of Vancouver, and the Hanovarian Syndicate, owned by Hans Buhr & associates, of Vancouver.

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EMPR BULL *54, pp. 60-66,178,179
EMR MP CORPFILE (Skaist Mines Ltd.)
GSC BULL *365, pp. 16-20
GSC MAP 1385A; 5-1990
GSC MEM 88, p. 171

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

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ENERGY AND MINERALS DIVISION

PAGE: 254
REPORT: RGEN0100

BIBLIOGRAPHY

GSC OF 2319
GSC P 86-20; 88-1E, pp. 221-227; 89-1H; pp. 19-22; 90-10, pp. 51-58
GCNL #217, 1975; #173, 1976
N MINER Mar.4, 1982

DATE CODED: 1986/06/24
DATE REVISED: 1999/09/25

CODED BY: LDJ
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103F 047**

NATIONAL MINERAL INVENTORY: 103F14 Btm1

NAME(S): **FREDERICK ISLAND**, OS, PERIL BAY

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103F14E
BC MAP:

UTM ZONE: 08 (NAD 83)

LATITUDE: 53 54 52 N
LONGITUDE: 133 09 16 W
ELEVATION: 5 Metres

NORTHING: 5975398
EASTING: 621330

LOCATION ACCURACY: Within 500M

COMMENTS: Kennecott Point, west side of Graham Island.

COMMODITIES: Bitumen

MINERALS

SIGNIFICANT: Bitumen
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound Concordant
CLASSIFICATION: Fossil Fuel Sedimentary Industrial Min.
TYPE: A06 Oil shale
DIMENSION: Metres STRIKE/DIP: 080/30S TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Triassic-Jurassic	Kunga	Sandilands	
Upper Triassic	Kunga	Peril	

LITHOLOGY: Shale
Limestone
Sandstone

HOSTROCK COMMENTS: Kunga Formation reclassified as Kunga Group (Geological Survey of Canada Paper 88-1E, pages 221-229).

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Wrangell

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

CAPSULE GEOLOGY

Oil shales occur locally on the east side of Frederick Island and on Kennecott Point on the west side of Graham Island, in an area underlain by fine grained sandstone and limestone of the Upper Triassic to Lower Jurassic Sandilands Formation (Kunga Group). Here, the unit rests on or is in fault contact with medium bedded limestone of the Upper Triassic Peril Formation (Kunga Group).

Skaist Mines Ltd. by a November 1974 option agreement acquired a 70 per cent interest in the OS 1-6 claims, which were optioned from Toni Holdings & Management Ltd., owned by Dieter Ludwig and Susanne Robertson of Vancouver, and the Hanovarian Syndicate, owned by Hans Buhr & associates of Vancouver.

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EMPR AR 1918-45
EMPR BULL 54, pp. 50-60
EMPR PF (Report by A. Sutherland Brown, 1971)
EMR MP CORPFILE (Skaist Mines Ltd.)
GSC BULL 365, pp. 11-12
GSC MAP 1385A; 8-1990
GSC MEM 88, p. 162
GSC P 81-25, pp. 49-52; 86-20; 88-1E; 89-1H; 90-10, pp. 31-50, 163-172
GSC SUM RPT 1912, pp. 39,40
GCNL #217, 1975

DATE CODED: 1986/06/24
DATE REVISED: 1999/09/25

CODED BY: LDJ
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103F 048**

NATIONAL MINERAL INVENTORY:

NAME(S): **TIAN POINT**, OTARD BAY

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103F14E
BC MAP:

UTM ZONE: 08 (NAD 83)

LATITUDE: 53 46 39 N
LONGITUDE: 133 07 06 W
ELEVATION: 15 Metres

NORTHING: 5960227
EASTING: 624106

LOCATION ACCURACY: Within 500M
COMMENTS: Tian Head, west side of Graham Island.

COMMODITIES: Bitumen

MINERALS

SIGNIFICANT: Bitumen
ASSOCIATED: Quartz Calcite Chalcedony
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Fossil Fuel Industrial Min.
TYPE: A06 Oil shale
DIMENSION: Metres STRIKE/DIP: 170/ TREND/PLUNGE:
COMMENTS: Moderate west dip.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Tertiary	Undefined Group	Masset	

LITHOLOGY: Amygdaloidal Basalt
Agglomerate
Tuff

GEOLOGICAL SETTING

TECTONIC BELT: Insular PHYSIOGRAPHIC AREA: Queen Charlotte Ranges
TERRANE: Wrangell

CAPSULE GEOLOGY

The area is underlain by basalt flows, agglomerates, and tuffs of the Tertiary Masset Formation. The general strike of the flows is 170 degrees with moderate southwest dips.

Bitumen (tar) occurs in veins and amygdules within the basalts and agglomerates. The cavities commonly contain quartz, chalcedony, calcite and the bitumen. The veins are up to a metre in width and occasionally a few metres long.

J.D. Mackenzie (Geological Survey of Canada Memoir 88) believes that the bitumen has an organic origin being absorbed from underlying sediments such as the bituminous argillites of the Jurassic Maude Group. Athol Sutherland Brown (Bulletin 54) agrees, stating that the Masset flows at Tian Point overlie sandstone or shales that contain much woody matter and therefore the tar has its origin as a wood distillate.

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EMPR AR 1912-111; 1913-104; 1914-163; 1915-75
EMPR BULL 54, pp. 178,179
EMPR FIELDWORK 1997, pp. 19-1-19-14
GSC MAP 1385A; 8-1990
GSC MEM *88, pp. 162-166
GSC P 86-20; 88-1E; 89-1H; 90-10, pp. 305-324
GSC SUM RPT 1912, pp. 39,40

DATE CODED: 1986/06/25
DATE REVISED: 1989/02/23

CODED BY: LDJ
REVISED BY: GJP

FIELD CHECK: N
FIELD CHECK: N

CAPSULE GEOLOGY

silicification in the area.

Zone B, or the Saddle Zone, is located on the topographic saddle along the ridge south of Kitgoro Creek. This northeast trending zone is at least 600 metres long, 150 metres wide and is found along the southern contact of the granodiorite body. The zone is characterized by silicification, quartz veining and disseminated pyrite. The host rocks are felsic volcanics with minor interlayered Karmutsen mafic volcanics.

Rock samples contained up to 0.65 grams per tonne gold (Assessment Report 8519). Three holes drilled in 1981 by Canadian Nickel Ltd. (Inco) failed to intersect rock with significant amounts of gold.

The D Zone occurs along the north margin of the granodiorite stock about 140 metres northwest of the B Zone. This silicified zone occurs in similar rock as the B Zone and samples contained up to 0.61 grams per tonne gold (Assessment Report 8519).

BIBLIOGRAPHY

EMPR ASS RPT 7625, 8519, *9458, 10255
EMPR BULL 54
EMPR EXPL 1979-243; 1980-372; 1981-41,245
EMPR FIELDWORK 1997, pp. 19-1-19-14
EMPR PF (*Prospectus: Bateaux Resources Inc., April 1988: Includes Summary Report on the Bateaux Property by C.J. Westerman, Sept. 1987)
GSC MAP 1385A
GSC P 86-20; 88-1E; 89-1H; 90-10
Chevron File

DATE CODED: 1989/02/26
DATE REVISED: 1989/02/26

CODED BY: GJP
REVISED BY: GJP

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103F 050**

NATIONAL MINERAL INVENTORY:

NAME(S): **BATEAUX (A), A**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103F01W
BC MAP:

UTM ZONE: 08 (NAD 83)

LATITUDE: 53 03 55 N
LONGITUDE: 132 29 50 W
ELEVATION: 100 Metres

NORTHING: 5882278
EASTING: 667811

LOCATION ACCURACY: Within 500M

COMMENTS: Located near Kitgoro Inlet on Moresby Island (Assessment Report 9458).

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Arsenopyrite Pyrite
ASSOCIATED: Quartz
ALTERATION: Silica
ALTERATION TYPE: Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: H EPITHERMAL
DIMENSION: 50 x 20 Metres

STRIKE/DIP: TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Upper Triassic	Vancouver	Karmutsen	
Upper Triassic	Kunga	Sadler	
Middle Jurassic			San Christoval Plutonic Suite

ISOTOPIC AGE: 170-175 +/- 5 Ma
DATING METHOD: Uranium/Lead
MATERIAL DATED: Zircon

LITHOLOGY: Felsic Dike
Basalt
Felsic Volcanic
Granodiorite
Limestone

HOSTROCK COMMENTS: A felsic dike of unknown affinity cuts Karmutsen basalt and hosts anomalous gold. Age date-Personal Communication: R.G. Anderson, 1989.

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Wrangell

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

INVENTORY

ORE ZONE: A

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Grab
COMMODITY: Gold YEAR: 1979
GRADE
6.0000 Grams per tonne

COMMENTS: From a 5 centimetre wide arsenopyrite vein.
REFERENCE: Assessment Report 7625.

CAPSULE GEOLOGY

The property is underlain by Upper Triassic Karmutsen Formation (Vancouver Group) basaltic volcanics overlain by Upper Triassic Sadler Formation limestone. The Karmutsen rocks are interbedded with lenses of limestone and minor argillite. A variety of felsic volcanics occur throughout the area intercalated with Karmutsen mafic volcanics. These felsic rocks may be related to the Karmutsen eruptions or may be later intrusions. A granodiorite to tonalitic pluton, probably related to the Middle Jurassic San Christoval Plutonic Suite, intrudes the strata. The Karmutsen volcanics in this area strike northwest and dip shallowly southwest.

Two major fracture orientations dominate both topography and distribution of alteration and mineralization. A major fault system extends from Buck Point, southeast for 40 kilometres to the head of

CAPSULE GEOLOGY

Peel Inlet, and a major northeast trending fracture zone controls silicification in the area.

Zone A consists of a northwest trending felsic dike on the south side of the main valley creek near the head of Kitgoro Inlet. The dike is locally intensely quartz veined and silicified containing up to 4 per cent pyrite and arsenopyrite as disseminations and veinlets. Mineralized outcrops occur in an area about 50 metres long and 20 metres wide (Westerman, C.J., 1987).

Two rock chip samples taken by Noranda in 1979 contained 6.0 grams per tonne gold and 0.9 gram per tonne gold. The former value was derived from a 5 centimetre wide arsenopyrite vein (Assessment Report 7625).

BIBLIOGRAPHY

EMPR ASS RPT 7625, 8519, 9458, 10255
EMPR BULL 54
EMPR EXPL 1979-243; 1980-372; 1981-41,245
EMPR FIELDWORK 1997, pp. 19-1-19-14
EMPR PF (*Prospectus: Bateaux Resources Inc., April 1988: Includes Summary Report on the Bateaux Property by C.J. Westerman, Sept. 1987)
GSC MAP 1385A
GSC P 86-20; 88-1E; 89-1H, pp. 117-120; 90-10, pp. 465-487
Chevron File

DATE CODED: 1989/02/27
DATE REVISED: / /

CODED BY: GJP
REVISED BY:

FIELD CHECK: N
FIELD CHECK:

MINFILE NUMBER: **103F 051**

NATIONAL MINERAL INVENTORY:

NAME(S): **LOWLAND PEAT**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103F16E
BC MAP:

UTM ZONE: 08 (NAD 83)

LATITUDE: 53 54 59 N
LONGITUDE: 132 05 06 W
ELEVATION: 50 Metres

NORTHING: 5977975
EASTING: 691549

LOCATION ACCURACY: Within 5 KM

COMMENTS: Peat covers large areas of the Queen Charlotte Lowlands. Exact area of mining enterprise was not reported (Bulletin 54).

COMMODITIES: Peat

MINERALS

SIGNIFICANT: Unknown
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated Stratiform
CLASSIFICATION: Fossil Fuel Industrial Min.
TYPE: A01 Peat

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Quaternary

GROUP

Undefined Group

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Peat

HOSTROCK COMMENTS: Quaternary sediments cover large portions of the Queen Charlotte Lowlands where the post-glacial peat occurs.

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Overlap Assemblage

PHYSIOGRAPHIC AREA: Queen Charlotte Lowland

CAPSULE GEOLOGY

The northeast section of Graham Island has very little relief and is covered by Quaternary sediments that overlie the Tertiary Skonun and Masset formations. These sediments consist of recent alluvium, till, marine drift and outwash sands.

Very large reserves of post-glacial peat and peat-moss occur on the Queen Charlotte Lowland. The quality of the peat moss is reported to be excellent. Larger deposits typically exceed 5000 hectares in size and consist mainly of flat and slope bogs of moderate depth (1.6 to 1.9 metres mean depth). Flat bogs consist predominantly of poorly decomposed sphagnum-moss peats overlying well-humified amorphous and sedimentary peats. Slope bogs are comprised mostly of surficial sphagnum-moss peats overlying amorphous sedge and sedimentary layers.

An operation to harvest the peat moss by hydraulic methods started production in 1967 (A. Sutherland Brown, Bulletin 54). No information on the production or location is reported.

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EMPR BULL *54, p. 178
EMPR OF *1988-33, pp. 20-25, 35
GSC MAP 1385A
GSC P 86-20; 88-1E; 89-1H; 90-10

DATE CODED: 1989/03/02
DATE REVISED: 1989/03/29

CODED BY: GJP
REVISED BY: GJP

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103F 052**

NATIONAL MINERAL INVENTORY:

NAME(S): **CIMADORO, MAIN, WEST,**
BARITE, CIMADORO 1-2

STATUS: Prospect
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103F01W 103F01E
BC MAP:
LATITUDE: 53 04 59 N
LONGITUDE: 132 15 06 W
ELEVATION: 300 Metres

MINING DIVISION: Skeena
UTM ZONE: 08 (NAD 83)
NORTHING: 5884859
EASTING: 684185

LOCATION ACCURACY: Within 500M
COMMENTS: Located just north of Security Cove, 35.0 kilometres west of Sandspit on northwest Moresby Island; showings straddle Cimadoro 1 and 2 claims.

COMMODITIES: Zinc Lead Gold Silver Copper
 Barite

MINERALS

SIGNIFICANT: Pyrite Sphalerite Galena Pyrrhotite Chalcopyrite
 Barite
ASSOCIATED: Pyrrhotite Barite
ALTERATION: Chlorite Graphite
ALTERATION TYPE: Chloritic
MINERALIZATION AGE: Paleozoic

DEPOSIT

CHARACTER: Podiform Stratabound Massive
CLASSIFICATION: Exhalative Volcanogenic Syngenetic Industrial Min.
TYPE: G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn
SHAPE: Tabular
MODIFIER: Faulted
DIMENSION: Metres STRIKE/DIP: 150/80N TREND/PLUNGE:
COMMENTS: Galena-lead isotope readings from the main showing (George Cross Newsletter #219, Nov. 13, 1990).

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Pennsylvan.-Permian	Buttle Lake	Cameron River	
Pennsylvan.-Permian	Sicker	Cameron River	

LITHOLOGY: Chert
 Argillite
 Limestone
 Calcareous Siltstone
 Volcanic Rock
 Barite
 Diabase Sill

HOSTROCK COMMENTS: Host unit is possibly the equivalent of the Cameron River Formation of the Buttle Lake/Sicker Group ("sediment-sill unit").

GEOLOGICAL SETTING

TECTONIC BELT: Insular PHYSIOGRAPHIC AREA: Queen Charlotte Ranges
TERRANE: Wrangell
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist
COMMENTS: Metamorphism is pre-, syn-, and post-mineralization.

INVENTORY

ORE ZONE: LOWER MAIN REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1990
SAMPLE TYPE: Drill Core
COMMODITY GRADE
Silver 173.5000 Grams per tonne
Gold 0.2700 Grams per tonne
Copper 0.3900 Per cent
Lead 5.3300 Per cent
Zinc 16.7800 Per cent
COMMENTS: Drill hole intersection over 1.6 metres in Lower (Main) showing.
REFERENCE: Assessment Report 22952, page 3.

CAPSULE GEOLOGY

The region encompassing the headwaters of Deena Creek on

CAPSULE GEOLOGY

northwestern Moresby Island is traversed by a northwest trending belt of steeply dipping chert, argillite, calcareous siltstone, limestone and calc-silicate beds that are intruded by a series of gabbroic and diabase sills. The unit may be equivalent to the Pennsylvanian-Permian Cameron River Formation of the Buttle Lake/Sicker Group ("sediment-sill unit") of Vancouver Island. The belt is flanked to the northeast by Upper Triassic Karmutsen Formation (Vancouver Group) basalts. Karmutsen volcanics and a diorite intrusive, possibly of the Tertiary Kano Plutonic Suite, underlie the area immediately southwest of the Paleozoic belt.

Mineralization at surface is contained in four showings, the Gord (West), Lower(Main), Upper and Cliff showings, which are distributed over a length of 200 metres along the northwest trending faulted contact between the Cameron River Formation and Karmutsen basalts to the northeast. The showings consist of massive to semi-massive sulphide lenses up to 5 metres in length hosted in argillite, chert and limestone. Bedding strikes 150 degrees and dips steeply north. Weak graphitic and chloritic alteration is locally present. The area of the showings is cut by numerous faults that are subparallel and perpendicular to bedding.

Mineralization consists of pyrite, sphalerite, galena, pyrrhotite, and chalcopyrite, occurring in varying amounts in the lenses. The Lower showing consists of crudely banded sulphides with an associated bed of barite. The Upper showing, located farther southeast, consists of fine laminations and wispy discontinuous bands of sphalerite and pyrite.

Sampling of the Upper showing has returned values of up to 12.05 per cent zinc over 2 metres (Assessment Report 22952, page 3). Other metals at this showing averaged 0.6 per cent copper, 0.7 per cent lead, 74 grams per tonne silver and 0.5 gram per tonne gold (Assessment Report 22952, page 3). Drilling on the Lower showing returned up to 16.78 per cent zinc, 5.33 per cent lead, 0.39 per cent copper, 173.5 grams per tonne silver and 0.27 gram per tonne gold over 1.6 metres (Assessment Report 22952, page 3). A sample of oxidized clay fault gouge at the Lower showing assayed 41.55 grams per tonne gold, 1361.6 grams per tonne silver, 2.05 per cent lead and 0.27 per cent copper (Assessment Report 19263, sample G1304).

This prospect was discovered in 1988 by E. Specogna after following up stream sediment samples that contained anomalous copper. Doromin Resources conducted geological mapping and sampling in 1989. Teck Corp. optioned the property shortly afterwards and continued exploration by collecting 38 stream sediment samples in 1989 and drilling six diamond drill holes totaling 956.1 metres in 1990. Doromin Resources continued work with the drilling of nine short holes in 1991. The property was reoptioned to Inco Explorations, which flew airborne VLF and magnetometer surveys in 1992, and drilled four holes totaling 910 metres in 1993.

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GCNL #112(Jun.12), #196(Oct.12), 1989; #112(Jun.11),#219(Nov.13),
1990
N MINER *Supplement March, 1989, pp. 7,8
PERS COMM (Marino Specogna, Mar.31, 1989)

DATE CODED: 1989/03/31
DATE REVISED: 1999/09/25

CODED BY: LLD
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103F 053**

NATIONAL MINERAL INVENTORY:

NAME(S): **FLORENCE CREEK**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103F09W
BC MAP:

UTM ZONE: 08 (NAD 83)

LATITUDE: 53 32 45 N
LONGITUDE: 132 16 11 W
ELEVATION: 300 Metres

NORTHING: 5936279
EASTING: 681006

LOCATION ACCURACY: Within 500M

COMMENTS: Location centred on Site 4 on northwest side of Florence Creek, 16 kilometres southwest of Port Clements (Geological Fieldwork 1989, page 486, Figure 5-1-6).

COMMODITIES: Volcanic Glass Perlite

MINERALS

SIGNIFICANT: Volcanic Glass Perlite

COMMENTS: Glassy dacite.

ASSOCIATED: Feldspar

COMMENTS: As phenocrysts in dacite.

MINERALIZATION AGE: Tertiary

DEPOSIT

CHARACTER: Massive

CLASSIFICATION: Volcanogenic Syngenetic Industrial Min.

TYPE: R12 Volcanic glass - perlite

DIMENSION: 300 Metres

STRIKE/DIP: TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Tertiary

Unnamed/Unknown Group

Masset

LITHOLOGY: Medium Grained Feldspar Porphyry Dacite

HOSTROCK COMMENTS: Tartu member, Unit TMfh (Geological Survey of Canada Map 6-1990).

GEOLOGICAL SETTING

TECTONIC BELT: Insular

TERRANE: Wrangell

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

CAPSULE GEOLOGY

This showing of expandable volcanic glass lies in an area underlain by basaltic flows and breccias and by rhyolite flows of the Tertiary Masset Formation. The entire sequence dips gently to the northwest.

A roadcut northwest of Florence Creek, 15 kilometres southwest of Port Clements, exposes black, medium-grained, feldspar porphyritic glassy dacite for a length of 300 metres. The dacite pops violently when heated with a propane torch, instead of expanding gradually as for a nearby perlite occurrence (103F 022). A sample tested by CANMET exhibited the following characteristics (Geological Fieldwork 1990, pages 265 to 267):

Per cent weight loss when heated to 800 degrees Celsius: 1.2
Softening temperature (degrees Celsius): 1210-1240
Density before heating (kg per cubic metres): 2570
Density after heating to softening temp. (kg per cubic metre): 928

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GSC P 86-20; 88-1E, pp. 269-274; 89-1H, pp. 73-79; 90-10, pp. 305-324

DATE CODED: 1991/05/13
DATE REVISED: 1999/10/31

CODED BY: PSF
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103F 054**

NATIONAL MINERAL INVENTORY:

NAME(S): **MATAJUR (A ZONE)**, BILL

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103F01W
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 08 (NAD 83)

LATITUDE: 53 02 38 N
LONGITUDE: 132 20 47 W
ELEVATION: 30 Metres

NORTHING: 5880446
EASTING: 677887

LOCATION ACCURACY: Within 500M

COMMENTS: Centre of surface trace of "A" Zone, 100 metres northwest of MacKenzie Cove (Assessment Report 20330, Figure 4A).

COMMODITIES: Copper Silver

MINERALS

SIGNIFICANT: Pyrite

MINERALIZATION AGE:

DEPOSIT

CHARACTER: Massive Shear
CLASSIFICATION: Hydrothermal

TYPE: * Unknown

SHAPE: Tabular

MODIFIER: Sheared

DIMENSION: 2 x 1 Metres

STRIKE/DIP: 160/70E

TREND/PLUNGE: /

COMMENTS: Massive sulphide pod hosted in a shear zone.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE GROUP
Upper Triassic Vancouver

FORMATION
Karmutsen

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Basalt

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Wrangell

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

INVENTORY

ORE ZONE: A ZONE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1990

SAMPLE TYPE: Chip

COMMODITY

GRADE

Copper

1.0000

Per cent

COMMENTS: Chip sample taken across 4.5 metres of gossanous outcrop.

REFERENCE: Assessment Report 22952, Figure 3.

CAPSULE GEOLOGY

The area immediately northwest of Mackenzie Cove is underlain by basalts and minor limestone of the Upper Triassic Karmutsen Formation. A diorite intrusion, possibly of the Jurassic San Christoval Plutonic Suite, intrudes the basalts farther to the northwest.

A pod of massive sulphide, 2 by 1.3 metres in size, outcrops in a small steeply plunging gully along a shear zone striking 160 degrees and dipping 70 degrees east. A channel sample taken over 1.3 metres assayed 1.44 per cent copper and 1.1 grams per tonne silver (Assessment Report 20330, Figure 5A, Sample D3). A pyritic zone outcrops over an area 5 by 15 metres in size, 30 metres north-northwest of the massive sulphide pod. The zone appears to continue for some distance to the southwest along a cliff face overlooking the northwest shore of Mackenzie Cove. A chip sample taken across 5 metres assayed 0.37 per cent copper (Sample D4). Another chip sample taken across 4.5 metres of gossanous outcrop assayed 1.0 per cent copper (Assessment Report 22952, Figure 3).

This showing was mapped and sampled by Doromin Resources Ltd. in 1990. The company also completed a VLF-EM and magnetometer survey along one line 170 metres long. Inco Exploration and Technical Services Inc. completed airborne electromagnetic and magnetometer surveys over the showing in 1992.

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 266
REPORT: RGEN0100

BIBLIOGRAPHY

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EMPR BULL 54
GSC P 86-20; 88-1E; 89-1H; 90-10
GSC MAP 1385A

DATE CODED: 1999/10/14
DATE REVISED: 1999/10/15

CODED BY: PSF
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103F 055**

NATIONAL MINERAL INVENTORY:

NAME(S): **HOOD**, NATISONE

STATUS: Showing
REGIONS: Queen Charlotte Islands
NTS MAP: 103F01W
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 08 (NAD 83)

LATITUDE: 53 02 42 N
LONGITUDE: 132 21 41 W

NORTHING: 5880532
EASTING: 676877

ELEVATION: 500 Metres

LOCATION ACCURACY: Within 500M

COMMENTS: Centred on Hood showing, 1.5 kilometres west of the north end of Mackenzie Cove (Assessment Report 22952, Figure 3).

COMMODITIES: Zinc Copper Lead Silver

MINERALS

SIGNIFICANT: Sphalerite Galena Chalcopyrite Pyrite

ASSOCIATED: Quartz Pyrite

MINERALIZATION AGE:

DEPOSIT

CHARACTER: Vein Shear
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
COMMENTS: Shear hosted quartz vein.

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE

Upper Triassic
Jurassic

GROUP

Vancouver

FORMATION

Karmutsen

IGNEOUS/METAMORPHIC/OTHER

San Christoval Plutonic Suite

LITHOLOGY: Basalt

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Wrangell

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

INVENTORY

ORE ZONE: VEIN

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1993

SAMPLE TYPE: Unknown

COMMODITY

GRADE

Silver	78.0000	Grams per tonne
Copper	1.6000	Per cent
Lead	1.5000	Per cent
Zinc	4.4000	Per cent

REFERENCE: Assessment Report 22952, Figure 3.

CAPSULE GEOLOGY

The area west of Mackenzie Cove is underlain by Upper Triassic Karmutsen basalts, metabasalts and minor limestone, which are intruded by diorite possibly related to the Jurassic San Christoval Plutonic Suite.

This showing consists of a shear hosted quartz-pyrite-sphalerite-galena-chalcopyrite vein, 30 to 40 centimetres thick. The vein parallels the foliation of the enclosing metabasalts. A sample of the vein assayed 4.4 per cent zinc, 1.6 per cent copper, 1.5 per cent lead and 78 grams per tonne silver (Assessment Report 22952, Figure 3).

This showing was sampled by Doromin Resources Ltd. in the early 1990s. Inco Exploration and Technical Services Inc. flew airborne electromagnetic and magnetometer surveys over the showing in 1992.

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EMPR BULL 54
GSC MAP 1385A
GSC P 86-20; 88-1E; 89-1H; 90-10

DATE CODED: 1999/10/15
DATE REVISED: 1999/10/31

CODED BY: PSF
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103F 056**

NATIONAL MINERAL INVENTORY:

NAME(S): **ROD**, NATISONE

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: Queen Charlotte Islands
NTS MAP: 103F01W
BC MAP:

UTM ZONE: 08 (NAD 83)

LATITUDE: 53 02 29 N
LONGITUDE: 132 22 49 W
ELEVATION: 600 Metres

NORTHING: 5880084
EASTING: 675625

LOCATION ACCURACY: Within 500M

COMMENTS: Centred on Rod showing, 1.2 kilometres north of Kuper Inlet, 2.3 kilometres west-southwest of the north end of Mackenzie Cove (Assessment Report 22952, Figure 3).

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite Pyrite
ASSOCIATED: Pyrite
ALTERATION: Epidote Clay
ALTERATION TYPE: Epidote Argillic
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Massive
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: * Unknown
COMMENTS: 3 to 75 centimetre thick zone of massive chalcopyrite and pyrite.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Upper Triassic	Vancouver	Karmutsen	San Christoval Plutonic Suite
Jurassic			

LITHOLOGY: Basalt

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Wrangell

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

INVENTORY

ORE ZONE: SHOWING

REPORT ON: N

CATEGORY: Assay/analysis YEAR: 1993
SAMPLE TYPE: Unknown
COMMODITY: Copper GRADE: 10.0000 Per cent

COMMENTS: Massive sulphide zone is reported to assay greater than 10 per cent copper (Assessment Report 22952, Figure 3).

REFERENCE: Assessment Report 22952, Figure 3.

CAPSULE GEOLOGY

The area west of Mackenzie Cove is underlain by Upper Triassic Karmutsen basalts, metabasalts and minor limestone, which are intruded by diorite possibly related to the Jurassic San Christoval Plutonic Suite.

The Rod showing consists of a horizon of massive chalcopyrite and pyrite, 3 to 75 centimetres thick, hosted in epidote and clay altered basalts. Samples from the zone are reported to assay greater than 10 per cent copper (Assessment Report 22952, Figure 3).

This showing was sampled by Doromin Resources Ltd. in the early 1990s. Inco Exploration and Technical Services Inc. flew airborne electromagnetic and magnetometer surveys over the showing in 1992.

BIBLIOGRAPHY

EMPR ASS RPT *22517, *22952
EMPR BULL 54
GSC MAP 1385A
GSC P 86-20; 88-1E; 89-1H; 90-10

DATE CODED: 1999/10/15
DATE REVISED: / /

CODED BY: PSF
REVISED BY:

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103F 057**

NATIONAL MINERAL INVENTORY:

NAME(S): **YAKOUN RIVER OIL SHALE**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: Queen Charlotte Islands
NTS MAP: 103F08W
BC MAP:

UTM ZONE: 08 (NAD 83)

LATITUDE: 53 24 30 N
LONGITUDE: 132 18 16 W
ELEVATION: 140 Metres

NORTHING: 5921081
EASTING: 679169

LOCATION ACCURACY: Within 500M

COMMENTS: Location based on collar of drill hole 179 near MacMillan Bloedel logging road Ghost Main, 3.1 kilometres southwest of the confluence of Ghost Creek and the Yakoun River, 6.4 kilometres north of Yakoun Lake (Geological Survey of Canada Bulletin 365, Figure 5).

COMMODITIES: Bitumen

MINERALS

SIGNIFICANT: Bitumen

ASSOCIATED: Calcite

MINERALIZATION AGE:

DEPOSIT

CHARACTER: Stratabound Concordant
CLASSIFICATION: Fossil Fuel Industrial Min. Sedimentary
TYPE: A06 Oil shale
DIMENSION: 76 Metres STRIKE/DIP: TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Lower Jurassic	Maude	Ghost Creek	
Triassic-Jurassic	Kunga	Sandilands	

LITHOLOGY: Siltstone
Argillaceous Siltstone
Sandstone
Sandy Limestone
Silty Shale

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Wrangell

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

CAPSULE GEOLOGY

The area between the Yakoun River and its northeastward flowing tributary, Ghost Creek, is underlain by sediments of the Upper Triassic to Lower Jurassic Kunga Group and conformably overlying Lower Jurassic Maude Group. The basal formation of the Maude Group, the Ghost Creek Formation, consists of dark grey shale and silty shale that is characteristically fetid and bituminous. The upper most formation of the Kunga Group, the Upper Triassic to Lower Jurassic Sandilands Formation, locally also contains oil-bearing black argillites and shales.

A drill hole collared near MacMillan Bloedel's Ghost Main logging road, 2 kilometres west of the Yakoun River, encountered a 76-metre section of Ghost Creek Formation, comprised of very argillaceous, dark grey siltstone with minor thin interbeds of shale, limestone and sandstone. The unit is overlain by 44 metres of medium grey siltstone and minor sandy limestone of the Rennel Junction Formation (Maude Group) and underlain by 90 metres of interbedded to interlaminated cyclically graded sandstone to siltstone and lesser argillaceous siltstone of the Sandilands Formation (Kunga Group). Bitumen is locally present throughout the Ghost Creek Formation and is somewhat more abundant in the upper two-thirds of the formation at about 62 to 111 metres depth. Here, bitumen and heavy oil seepage occurs in calcite veined, brecciated intervals and fractures. Similar breccia zones and fractures in the underlying Sandilands Formation are locally bituminous and stained with oil.

This showing was drilled by Intercoast Resources some time prior to 1985.

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RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 270
REPORT: RGEN0100

BIBLIOGRAPHY

GSC BULL *365, pp. 16-20
GSC MAP 1385A; 5-1990
GSC OF 2319
GSC P 86-20; 88-1E, pp. 221-227; 89-1H; pp. 19-22; 90-10, pp. 51-58

DATE CODED: 1999/10/30
DATE REVISED: / /

CODED BY: PSF
REVISED BY:

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103F 058**

NATIONAL MINERAL INVENTORY:

NAME(S): **SUPERBABE**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: Queen Charlotte Islands
NTS MAP: 103F08E
BC MAP:

UTM ZONE: 08 (NAD 83)

LATITUDE: 53 16 00 N
LONGITUDE: 132 15 07 W
ELEVATION: 450 Metres

NORTHING: 5905459
EASTING: 683265

LOCATION ACCURACY: Within 500M

COMMENTS: Located on site of rock sample 1 (Assessment Report 24987, Figure 4).

COMMODITIES: Molybdenum

MINERALS

SIGNIFICANT: Molybdenite

ASSOCIATED: Pyrite

MINERALIZATION AGE:

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic Hydrothermal Porphyry
TYPE: L PORPHYRY

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Tertiary	Undefined Group	Masset	

LITHOLOGY: Felsic Intrusive
Granodiorite

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Wrangell

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

CAPSULE GEOLOGY

The area encompassing the showing on the northwest flank of Slatechuck Mountain is underlain by mafic to felsic flows and pyroclastic equivalents of the Tertiary Masset Formation.

Mineralization consists of molybdenite along fractures in a felsic intrusion. Granodiorite with pyrite blebs outcrops 550 metres to the southeast.

This showing was discovered by E. Specogna in 1997, while prospecting the area.

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EMPR BULL 54
GSC MAP 1385A; 5-1990
GSC OF 2319
GSC P 88-1E; 89-1H, pp. 19-22; 90-10

DATE CODED: 1999/09/29
DATE REVISED: / /

CODED BY: PSF
REVISED BY:

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103F 059**

NATIONAL MINERAL INVENTORY:

NAME(S): **STEVEN, VICTORY**

MINING DIVISION: Skeena

STATUS: Showing
 REGIONS: Queen Charlotte Islands
 NTS MAP: 103F08W
 BC MAP:

UTM ZONE: 08 (NAD 83)

LATITUDE: 53 25 51 N
 LONGITUDE: 132 21 52 W
 ELEVATION: 400 Metres

NORTHING: 5923434
 EASTING: 675090

LOCATION ACCURACY: Within 500M

COMMENTS: Located on Victory zone, 600 metres northeast of Ghost Creek
 (Assessment Report 18413, Figure 3).

COMMODITIES: Arsenic Antimony Mercury

MINERALS

SIGNIFICANT: Realgar Stibnite Orpiment Pyrite Cinnabar

ASSOCIATED: Marcasite

ALTERATION: Quartz Chlorite Clay

ALTERATION TYPE: Silicific'n Chloritic Argillic

MINERALIZATION AGE:

DEPOSIT

CHARACTER: Stratabound Stratiform Concordant Disseminated

CLASSIFICATION: Replacement Epigenetic Syngenetic Epithermal

TYPE: H EPITHERMAL

SHAPE: Tabular

DIMENSION: 12 x 3 Metres STRIKE/DIP: 110/46N TREND/PLUNGE:

COMMENTS: Attitude of bedded mineralized horizon.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Cretaceous	Queen Charlotte	Undefined Formation	

LITHOLOGY: Cherty Argillaceous Sandstone
 Argillite
 Tuff
 Wacke

GEOLOGICAL SETTING

TECTONIC BELT: Insular
 TERRANE: Wrangell

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

INVENTORY

ORE ZONE: SHOWING

REPORT ON: N

CATEGORY: Assay/analysis YEAR: 1988

SAMPLE TYPE: Chip

<u>COMMODITY</u>	<u>GRADE</u>	
Arsenic	11.8000	Per cent
Mercury	0.1360	Per cent
Antimony	1.2400	Per cent

COMMENTS: Chip sample of mineralized boulders.

REFERENCE: Assessment Report 18413, page 13.

CAPSULE GEOLOGY

The area along the northeast side of Ghost Creek is underlain by a massive sandstone overlain by thinly bedded turbiditic sandstones and shales, followed by conglomerates of the Cretaceous Honna Formation. The turbiditic unit was previously included with the Cretaceous Haida or Skidegate formations and is now considered an unnamed unit during a revision of the nomenclature for the Cretaceous Queen Charlotte Group (Geological Survey of Canada Paper 91-1A, pp. 367-371).

Mineralization consists of up to 30 per cent realgar, 5 per cent stibnite, 5 per cent orpiment, with lesser pyrite, cinnabar and marcasite, occurring as massive pods, disseminations, veinlets and fracture fillings, within a cherty argillaceous sandstone near the top of the turbidite unit. The mineralized horizon is structurally overlain by silicified argillite, chloritic wacke and chlorite-clay altered sandy tuff. The mineralization is exposed over a width of 2.5 - 3 metres and a length of 10 - 12 metres. It strikes 110

CAPSULE GEOLOGY

degrees and dips 46 degrees north. Realgar, framboidal pyrite and marcasite exhibit bedding, but replacement textures also occur. Mineralization is cut off by a shear striking 11 degrees and dipping 85 degrees southwest. A chip sample of mineralized boulders assayed 11.8 per cent arsenic, 1.24 per cent antimony, 0.136 per cent mercury and less than 0.005 grams per tonne gold (Assessment Report 18413, page 13).

The Victory zone was discovered by Newmont Exploration of Canada Ltd. in 1988, while prospecting along a newly constructed logging road. The zone was geologically mapped and sampled by the company.

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GSC MAP 1385A; 5-1990
GSC OF 2319
GSC P 88-1E, pp. 367-371; 90-10, pp. 253-277, 279-294; 91-1A, pp. 367-371

DATE CODED: 1999/10/02
DATE REVISED: / /

CODED BY: PSF
REVISED BY:

FIELD CHECK: N
FIELD CHECK: N

CAPSULE GEOLOGY

from the erosion of the bluffs and subsequent concentration by wave and wind action, contain magnetite, titaniferous-hematite, ilmenite, rutile, zircon, and gold.

Beach sand and cyanide tailings samples were sent to the Mines Branch in Ottawa, in December 1956 and June 1957 for tests for concentrates of magnetite, ilmenite, rutile and zircon. A chemical analysis of 2 head samples gave averages of 41.48 per cent iron and 8.38 per cent titanium dioxide (CANMET Report MD 3177, 1957).

Recorded production for the Masset Sound and northeast Graham Island beach placers is as follows (See Oeanda - 103G 002):

YEAR	GOLD (GRAMS)
1921-1925	124
1926-1930	871
1931-1935	10,358
1936-1940	8,147
1941-1945	2,737
TOTAL	22,239

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EMR MP CORPFILE (The Queen Charlotte Islands Collieries, Limited; Tretheway-Tough Mining Syndicate, Limited)
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CANMET IR No. MD 3177, Oct., 1957
CMJ Nov.28, 1924, p. 1165
Dawson, G.M. (1879): Queen Charlotte Islands, Reports of Progress, 1878-1879; GSC, p. 33B

DATE CODED: 1986/06/03
DATE REVISED: 1989/02/27

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103G 002**

NATIONAL MINERAL INVENTORY: 103G13 Au2

NAME(S): **OEANDA**, BLACK SANDS, MASSET SOUND

STATUS: Past Producer Open Pit

MINING DIVISION: Skeena

REGIONS: British Columbia, Queen Charlotte Islands

UTM ZONE: 09 (NAD 83)

NTS MAP: 103G13W

BC MAP:

LATITUDE: 53 54 59 N

NORTHING: 5977537

LONGITUDE: 131 45 06 W

EASTING: 319394

ELEVATION: 1 Metres

LOCATION ACCURACY: Within 500M

COMMENTS: Symbol, Figure 34 (Bulletin 54); located on the northeast coast of Graham Island about 4.8 kilometres south of the mouth of the Oeanda River.

COMMODITIES: Gold

Iron

Titanium

Zirconium

MINERALS

SIGNIFICANT:	Gold	Magnetite	Ilmenite	Zircon	Titanite
ASSOCIATED:	Rutile	Hematite	Garnet	Epidote	Staurolite
MINERALIZATION AGE:	Recent				

DEPOSIT

CHARACTER:	Unconsolidated			
CLASSIFICATION:	Placer	Sedimentary	Residual	Industrial Min.
TYPE:	C03 Marine placers			
SHAPE:	Irregular			

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Quaternary			Unnamed/Unknown Informal

LITHOLOGY: Unconsolidated Sandstone
Sandstone
Clay
Gravel
Conglomerate

HOSTROCK COMMENTS: Pleistocene to Recent unconsolidated sediments.

GEOLOGICAL SETTING

TECTONIC BELT: Insular

PHYSIOGRAPHIC AREA: Queen Charlotte Lowland

TERRANE: Overlap Assemblage

CAPSULE GEOLOGY

The gold-bearing black sands of northeast Graham Island have been known since 1877. The Oeanda area is located 4.8 kilometres south of the mouth of the Oeanda River.

The sands were examined in 1906, and in 1910 Sandhurst Gold Mines, Limited, obtained 13 placer leases. In 1918 the company installed a centrifugal action gold amalgamating machine. They had estimated the sand would average 60 cents per yard, with maximum values of \$4 per yard in gold. In the summer of 1924 the area was tested by 57 pits, 0.9 x 1.5 metres and 2 to 3.6 metres deep. The average assay was 77 cents per ton of gold. The following year Tretheway-Tough Mining Syndicate, Limited, financed operations and testing. Twenty-eight assays from pit samples gave an average of \$2.90 per ton of gold and a recovery rate of 81 per cent of gold. In 1930, Hanssen Positive Separation-Mining Co., Limited, recovered \$325 in gold; the company declared bankruptcy on Nov. 27, 1930. In 1932 testing was carried on by Gold Beach Mines, Limited.

Mogul Mining Corporation Limited in about 1956 acquired placer mining leases covering about 17 square kilometres. In June 1957 Lexindin Gold Mines, Limited, acquired from Mogul a 65 per cent interest in the property.

Pleistocene to Recent deposits of unconsolidated to semi-consolidated sands, clays, sandy clays, gravels, conglomerates, and a basal blue-grey glacial clay overlies Tertiary Skonun Formation. The basal formation blue-grey glacial clay ranges up to 69 metres in thickness with 0.3 to 0.6 metre beds of ferruginous gravel which lie above and below the clay beds. Sand and peat lie unconformably on the clay and cemented gravel beds which dip 015 degrees and strike east-west.

Black sand deposits have a lenticular and varying distribution along the base of bordering beach-bluffs. The black sands, derived

CAPSULE GEOLOGY

from the erosion of the bluffs and subsequent concentration by wave and wind action, contain magnetite, titaniferous-hematite, ilmenite, rutile, zircon, and gold.

Beach sand and cyanide tailings samples were sent to the Mines Branch, Ottawa, in December 1956 and June 1957 for tests for concentrates of magnetite, ilmenite, rutile and zircon. A chemical analysis of 2 head samples gave averages of 41.48 per cent iron and 8.38 per cent titanium dioxide (Mines Branch, Ottawa, Investigation Report No. MD 3177, October 1957).

Recorded production for the Masset Sound and northeast Graham Island beach placers is as follows (See Bull Swamp - 103G 001):

YEAR	GRAMS GOLD
1921-1925	124
1926-1930	871
1931-1935	10,358
1936-1940	8,147
1941-1945	2,737
TOTAL	22,239

BIBLIOGRAPHY

EMPR AR 1906-75,77; 1909-72; 1910-85; 1911-78; 1918-37,104; 1922-40; 1924-43; 1925-65; 1926-65,66; 1928-63; *1929-62-65; 1930-63; 1932-38,39; 1933-40; 1935-B27
EMPR BULL 1 (1933), pp. 24-25; 2(1930), pp. 28-31; 21, p. 17; 28, p. 48; *54, p. 174
EMPR OF *1988-28, pp. 138-142
EMPR PF (Thompson, R.H., Howard, H.M., (1957): Testing of Queen Charlotte Sands for Western Canada Steel Ltd., Mar.2, 1957)
EMR MIN BULL MR #31, 1959, p. 142
EMR MP CORPFILE (The Queen Charlotte Islands Collieries, Limited; Tretheway-Tough Mining Syndicate, Limited)
GSC MAP 176A; 177A; 278A; 1385A
GSC MEM 88, pp. 173,174
GSC P 69-54, Table 1; 86-20; 88-1E; 89-1H; 90-10
B.C. MINER Nov., 1933, pp. 714-718
CANMET IR No. MD 3177, Oct., 1957
CMJ Nov.28, 1924, p. 1165
Dawson, G.M. (1879): Queen Charlotte Islands, Reports of Progress, 1878-1879; GSC, p. 33B
Western Canada Mining News, Aug.10, 1930

DATE CODED: 1986/06/03
DATE REVISED: 1989/02/27

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103G 003**

NATIONAL MINERAL INVENTORY:

NAME(S): **CAPE BALL**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103G12W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 42 39 N
LONGITUDE: 131 52 26 W
ELEVATION: 2 Metres

NORTHING: 5954995
EASTING: 310443

LOCATION ACCURACY: Within 1 KM

COMMENTS: Agates along the beach and in bluffs at Cape Ball.

COMMODITIES: Agate Gemstones

MINERALS

SIGNIFICANT: Agate Chalcedony Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual Sedimentary Industrial Min.
TYPE: Q03 Agate
SHAPE: Irregular

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Quaternary			Unnamed/Unknown Informal

LITHOLOGY: Unconsolidated Sediment/Sedimentary
Conglomerate
Sandstone
Clay

HOSTROCK COMMENTS: Pleistocene to Recent unconsolidated sediments.

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Overlap Assemblage

PHYSIOGRAPHIC AREA: Queen Charlotte Lowland

CAPSULE GEOLOGY

Pleistocene to Recent deposits of unconsolidated to semi-consolidated sands, clays, sandy clays, gravels, conglomerates, and a basal blue-grey glacial clay overlies Tertiary Skonun Formation. Agate pebbles, from carnelian to an opaque and banded matrix variety of buff, brown and black shades, occur on the beach from Cape Ball to Fife Point. The agates occur in semi-consolidated conglomerates in bluffs at Cape Ball.

BIBLIOGRAPHY

EMPR AR *1932-40; 1933-40,41
EMPR BULL 54
EMPR FIELDWORK 1997, pp. 19-1-19-14
GSC MAP 176A; 177A; 278A; 1385A
GSC MEM 88
GSC P 86-20; 88-1E; 89-1H; 90-10

DATE CODED: 1986/06/03
DATE REVISED: 1989/02/27

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

CAPSULE GEOLOGY

and Alex Gordon.

In 1915 the property was leased to Messrs. Leighton and Hickey. The lessees sank a 7.6-metre shaft on the main vein. The property was returned to the owner in 1916 and in 1917 the 7 claims were bonded to the South Easter Mining Company, a subsidiary of Northern Customs Concentrators, Limited, of Cobalt, Ont.

In 1918 the company sank a 30-metre shaft with two drift levels. One drift was 38 metres long at the 15-metre level, and another drift was 107 metres long at the 30-metre level. South Easter relinquished the property in 1919.

In 1930 the property was taken over by Kitsault Eagle Silver Mines, Limited. A 13-metre shaft was sunk and from the bottom a crosscut was driven 12 metres west to the vein, which was drifted on for 11 metres north. Five surface samples over widths of 0.7 metre to 2 metres gave assays ranging from 0.6 to 179.7 grams per tonne gold. The original 30-metre shaft on the Southeaster claim was pumped out and exploration continued by crosscutting and drifting for the vertical extension of the ore shoot developed on the 15-metre level. Two adits were driven 177 and 207 metres from the main shaft, proving continuity of the vein for a length of 366 metres.

In 1932 considerable crosscutting was done on the 30-metre level of the main shaft. An open-cut on the northerly segment of the main vein is reported to have returned values of \$2.20 to \$58 across widths of 0.3 to over 1.2 metres. In 1932 reserves from the surface to 20 metres were estimated at 4,750 tons valued at \$12-30 per ton at an average width of 1.8 metres. Operations were suspended early in May of 1933.

The property is underlain by Middle Jurassic Yakoun Group volcanics consisting of agglomerates, andesites, tuffs, and greenstone. North of the property and along the coast, the Yakoun Group is covered by Cretaceous Queen Charlotte Group, Haida Formation sandstones and shales. A diorite pluton intrudes rocks to the north.

Mineralization occurs in a zone of quartz veins and quartz stockworks up to 6 metres wide within a shear zone 0.6 to 9 metres wide and 300 metres long. The shear zone strikes 140 degrees and dips steeply southwest, and is carbonatized and silicified. Quartz veins are often fine grained, banded, vuggy and chalcedonic, occasionally with amethyst, and are typically enveloped by broad zones of white to buff coloured clay. The veins contain scattered grains and blebs to sometimes bands of galena, pyrite, sphalerite, chalcocopyrite, free gold, and an unidentified grey soft metallic mineral (telluride?). The zone is flanked to the west by an area of argillic alteration and to the east by propylitic (chlorite, carbonate, pyrite, sericite) altered volcanic rocks.

An average sample of dump material assayed 76.5 grams per tonne gold, 33.3 grams per tonne silver, 0.058 per cent copper, 7.09 per cent lead, and 13.90 per cent zinc (Assessment Report 9769). A trench sample taken across 3.7 metres of quartz vein and stockwork assayed 4.502 grams per tonne gold (Assessment Report 19941, page 7, Trench 2). Drilling in 1990 encountered 2.7 metres assaying 16.39 grams per tonne gold and 6.27 grams per tonne silver (Assessment Report 20493, page 1, DDH 11).

From 1910 to 1915 approximately 5 tonnes of high grade ore was extracted and from this approximately 653 grams of gold and 249 grams of silver were recovered. From 1919 to 1929 no production took place. From 1930 to 1936 approximately 454 tonnes of ore produced 622 grams gold, 591 grams silver with 117 kilograms of copper and 302 kilograms of lead. Clear Creek Resources conducted soil and rock sampling (423 soils, 114 rocks), VLF-EM and magnetometer surveys (20 line kilometres each), prospecting, geological mapping and trenching in 1989. This was followed by the drilling of 18 holes totaling 939.7 metres and the excavation of four trenches totaling 200 metres in 1990. The company continued work in 1991, with the drilling of 14 holes totaling 534.3 metres and the excavation of 13 trenches totaling 456 metres. Okak Bay Resources Ltd. completed geological mapping, trenching (16 totaling 675 metres) soil geochemistry (811 samples) and induced polarization surveys on the property in 1997 in an attempt to find similar mineralization north of the main zone.

BIBLIOGRAPHY

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- EMPR AR 1910-85; 1911-77; 1912-325; 1914-163,170; 1915-75; 1916-88; 1918-37,105; 1923-42; 1925-65; 1926-66; 1929-55-57; 1930-62,63; 1931-34,35; 1932-39,40; 1933-39; 1935-G48; 1936-B3
- EMPR ASS RPT 8144, *9769, *19941, *20493, 21317, 25549
- EMPR BC METAL MM00796
- EMPR BULL 1, 1932, p. 29; 54, p. 216
- EMPR EXPL 1980-376,377; 1981-114
- EMPR FIELDWORK 1997, pp. 19-1-19-14

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

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ENERGY AND MINERALS DIVISION

PAGE: 281
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR INDEX 3-214
EMPR PF (*Norrie-Loewenthal W.G. (1932): Report on the Skidgate-
Sunrise Mine, British Columbia, Oct., 1932)
EMR MP CORPFILE (Kitsault Eagle Silver Mines, Limited)
GSC MAP 176A; 177A; 278A; 1385A
GSC MEM 88, pp. 174,175
GSC P 86-20; 88-1E; 89-1H; 90-10
GCNL #12, 1987; #105(May 31) 1990; #26(Feb.6), 1991; #125 (June
30), 1997

DATE CODED: 1986/06/23
DATE REVISED: 1999/10/20

CODED BY: LDJ
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103G 005**

NATIONAL MINERAL INVENTORY: 103G4 Cu2

NAME(S): **BAXTER CREEK (SNOW)**, SANDSPIT GOLD, SNOW 2,
IXL, DONNA-LYNNE

STATUS: Prospect
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103G04W
BC MAP:
LATITUDE: 53 11 34 N
LONGITUDE: 131 47 16 W
ELEVATION: 60 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Trench 1, Figure 2 (Assessment Report 8958). Located north of Copper Bay, on northern Moresby Island.

MINING DIVISION: Skeena
UTM ZONE: 09 (NAD 83)
NORTHING: 5897154
EASTING: 313872

COMMODITIES: Gold Silver

MINERALS

SIGNIFICANT: Arsenopyrite Pyrite Pyrrhotite
COMMENTS: Copper mineralization is reported on National Mineral Inventory Card 103G Cu2.
ASSOCIATED: Quartz
ALTERATION: Quartz Clay Sericite Chlorite Epidote
ALTERATION TYPE: Magnetite Argillic Sericitic Propylitic
MINERALIZATION AGE: Silicific'n Unknown

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Epithermal Epigenetic
TYPE: H EPITHERMAL
SHAPE: Bladed
MODIFIER: Sheared
DIMENSION: 300 x 25 x 20 Metres STRIKE/DIP: 055/80N TREND/PLUNGE:
COMMENTS: Baxter Creek mineralized zone.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Middle Jurassic Tertiary	Yakoun	Undefined Formation	Kano Plutonic Suite

LITHOLOGY: Andesitic Lapilli Tuff
Andesitic Agglomerate
Diorite
Quartz Diorite
Rhyolite
Andesite

HOSTROCK COMMENTS: Yakoun Formation has been reclassified as the Yakoun Group (Geological Survey of Canada Paper 88-1E, pages 221-229).

GEOLOGICAL SETTING

TECTONIC BELT: Insular PHYSIOGRAPHIC AREA: Queen Charlotte Lowland
TERRANE: Wrangell

INVENTORY

ORE ZONE: DRILLHOLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1985
SAMPLE TYPE: Drill Core
COMMODITY
Silver 5.8300 Grams per tonne
Gold 3.8400 Grams per tonne
COMMENTS: The sample width is 2.0 metres.
REFERENCE: Assessment Report 14695.

CAPSULE GEOLOGY

The property is located 6.5 kilometres south of Sandspit. The area is underlain predominately by andesitic agglomerates and lapilli tuffs of the Middle Jurassic Yakoun Group, which are in fault contact with Upper Cretaceous Honna Formation (Queen Charlotte Group) conglomerates. The rocks are cut by quartz diorite intrusives of the Tertiary Kano Plutonic Suite and are bounded to the east by the northwest trending Sandspit fault. Gold mineralization occurs in areas of locally intense shearing

CAPSULE GEOLOGY

and silicification in andesite lapilli tuffs and agglomerates, quartz diorite to diorite and rhyolite tuffs along the Sandspit fault and northwest trending orthogonal splays off the Sandspit fault. Mineralization is accompanied by clay-sericite alteration, disseminated pyrite and arsenopyrite and quartz-arsenopyrite veining. The andesites and intrusives exhibit propylitic alteration (chlorite, epidote, magnetite) over a broad zone in the area of mineralization.

The bulk of this mineralization is developed in one zone 300 metres long, 10 to 20 metres wide and at least 25 metres deep along a structure striking 55 degrees and dipping 80 degrees north. This zone is defined by four drill holes and several surface trenches and appears to be open to the northeast/southwest along strike. The Sandspit fault lies about 100 metres northeast of the zone.

The structure contains sheared, brecciated and silicified to propylitically altered diorite, andesitic agglomerate and tuff and rhyolite, with up to 10 per cent disseminated pyrite and pyrrhotite, up to 5 per cent disseminated arsenopyrite and local grey quartz veins. Stronger mineralization is found in siliceous andesite tuff (rhyolite?). One drill hole encountered 9.3 metres grading 3.29 grams per tonne gold (Assessment Report 25433, page 13, hole 85-1, 19.75-29.06 metres). Subsequent drilling intersected 3.84 grams per tonne gold and 5.83 grams per tonne silver over 2.0 metres (Assessment Report 14695). A grab sample assayed 14.7 grams per tonne gold (Assessment Report 10140).

This deposit was first prospected and trenched by R.E. Mickle in 1979. Falconbridge Nickel Ltd. continued trenching and drilled three short holes totaling 17 metres in 1980. The company then collected 295 soil samples and excavated four trenches in 1981. Ventures West Minerals continued soil sampling in 1981. Majorem Minerals Inc., a successor of Ventures West, conducted soil and ground magnetic surveys in 1983, followed by an airborne magnetic and electromagnetic survey totaling 145 line kilometres in 1985. Lornex Mining Corp. drilled five holes totaling 380 metres in 1985. Mondavi Resources Ltd. completed geological mapping, soil sampling, induced polarization surveys in 1987, followed by the drilling of six holes totaling 629 metres in 1988. Jo Shearer prospected and mapped the deposit and vicinity in 1997.

BIBLIOGRAPHY

- EMPR ASS RPT 2343, 2777, *7684, *8958, *10140, 12369, 13535, *14695, *17410, *25433
EMPR BULL 54
EMPR EXPL *1979-251; 1980-386,387; 1984-368; 1985-C365; 1986-C421
EMPR FIELDWORK 1997, pp. 19-1-19-14
EMPR GEM *1970-100
EMPR PF (Fairbank, B.D., (1987): Report on the Snow Property, Sandspit area, Queen Charlotte Islands, Jul.14, 1987 in Modavi Resources Ltd., Prospectus, Dec.17, 1987; Phase I Progress Report for the Snow Property, Sandspit area, Queen Charlotte Islands, Nov.6, 1987 in Modavi Resources Ltd., Prospectus, Dec.17, 1987)
GSC MAP 176A; 177A; 278A; 922; 1385A; 3-1990
GSC MEM 88
GSC P 86-20; 88-1E, pp. 217-219; 89-1H, pp. 7-11; 90-10
GCNL #218, 1982; #88,#147, 1984; #78,#110, 1988
Falconbridge File

DATE CODED: 1986/06/23
DATE REVISED: 1999/10/18

CODED BY: LDJ
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103G 006**

NATIONAL MINERAL INVENTORY: 103G4 Cu1

NAME(S): **COPPER BAY**, OLD SHAFT, MILDRED,
SNOW

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103G04W
BC MAP:
LATITUDE: 53 10 49 N
LONGITUDE: 131 46 46 W
ELEVATION: 30 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Located just north of Copper Bay, South Moresby Island, Symbol, Figure 34 (Bulletin 54).

Underground

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

NORTHING: 5895742
EASTING: 314375

COMMODITIES: Copper Silver

MINERALS

SIGNIFICANT: Chalcopyrite Pyrite
ASSOCIATED: Calcite
ALTERATION: Malachite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Breccia
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I06 Cu±Ag quartz veins

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Middle Jurassic	Yakoun	Undefined Formation	

LITHOLOGY: Andesitic Agglomerate
Conglomerate
Rhyolite Dike
Diorite
Breccia
Tuff
Andesite

HOSTROCK COMMENTS: Yakoun Formation has been reclassified as the Yakoun Group (Geological Survey of Canada Paper 88-1E, pages 221-229).

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Wrangell

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis	YEAR: 1907
SAMPLE TYPE: Rock	
COMMODITY	GRADE
Silver	68.6000 Grams per tonne
Copper	10.0000 Per cent

COMMENTS: The assays were obtained from "selected" samples.
REFERENCE: Minister of Mines Annual Report 1907, page 72.

CAPSULE GEOLOGY

The showing is located on Copper Bay on the east side of Moresby Island.

The showing was discovered in 1862 by a Mr. Waddington. A shaft was sunk only to be abandoned in late 1863.

In 1907 D.R. Young and associates bonded the property from Sheldon and Shabbard. Young unwatered the shaft to a depth of 27 metres and took soundings of 14 metres or more. Two cross cuts were reported just above 27 metres, one to the east and one to the west, extending about 7.6 metres from the shaft. The shaft was located on a fissure a few centimetres wide.

The area is underlain predominately by andesitic agglomerates and tuffs of the Middle Jurassic Yakoun Group with lesser Upper Cretaceous Honna Formation (Queen Charlotte Group) conglomerates. The rocks are cut by rhyolite dikes and diorite intrusives of the Tertiary Kano Plutonic Suite and are bounded to the east by the

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CAPSULE GEOLOGY

northwest trending Sandspit fault.

Disseminated chalcopyrite, pyrite and malachite occur in the Yakoun agglomerate within a calcite cemented breccia vein. Selected samples in 1907 assayed 10 per cent copper and 69 grams per tonne silver (Minister of Mines Annual Report 1907, page 72).

BIBLIOGRAPHY

EMPR AR *1905-81; *1907-59,71,72; 1909-82
EMPR ASS RPT *2343, 2777, 7684, 10140, 14695
EMPR BULL *54, p. 220
EMPR EXPL 1979-251; 1980-386,387; 1984-368
GSC MAP 176A; 177A; 278A; 922; 1385A; 3-1990
GSC P 86-20; 88-1E, pp. 217-219; 89-1H, pp. 7-11; 90-10
GCNL #88, 1984; #110, 1988
Falconbridge File

DATE CODED: 1986/06/23
DATE REVISED: 1989/02/15

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103G 007**

NATIONAL MINERAL INVENTORY:

NAME(S): **CUMSHEWA INLET**, CUMSHEWA LIMESTONE

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103F01E 103G04W
BC MAP:

UTM ZONE: 08 (NAD 83)

LATITUDE: 53 02 16 N
LONGITUDE: 132 00 06 W
ELEVATION: 76 Metres

NORTHING: 5880677
EASTING: 701018

LOCATION ACCURACY: Within 1 KM

COMMENTS: Limestone unit, Figure 5, Sheet B (Bulletin 54).

COMMODITIES: Limestone

MINERALS

SIGNIFICANT: Calcite

MINERALIZATION AGE: Upper Triassic

DEPOSIT

CHARACTER: Stratabound Concordant Massive

CLASSIFICATION: Sedimentary Industrial Min.

TYPE: R09 Limestone

SHAPE: Regular

DIMENSION: 2500 x 600

Metres

STRIKE/DIP: 070/50N

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Upper Triassic

GROUP

Kunga

FORMATION

Sadler

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Limestone

GEOLOGICAL SETTING

TECTONIC BELT: Insular

TERRANE: Wrangell

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

INVENTORY

ORE ZONE: SHOWING

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1982

SAMPLE TYPE: Unknown

COMMODITY

GRADE

Limestone

53.0900

Per cent

COMMENTS: Assay given for CaO.

REFERENCE: Paulsen, 1982, page 3-4

CAPSULE GEOLOGY

The lower two members of the Upper Triassic to Lower Jurassic Kunga Group, the Upper Triassic Sadler and Peril formations, represent the main limestone resource of the Queen Charlotte Islands, particularly the massive grey limestone of the basal Sadler Formation. Its thickness varies from less than 30 metres to more than 200 metres.

A band of limestone 500 - 600 metres wide extends eastward from Gordon Cove along the south shore of Gillatt Arm for 2500 metres. The limestone strikes 070 degrees and dips approximately 50 degrees northwest. The bed contains minor volcanic flows or sills. A sample assayed 53.09 per cent CaO, 1.75 percent MgO, 3.22 per cent SiO₂ and 41.41 per cent loss on ignition (Paulsen 1982, page 3-4).

This occurrence was briefly evaluated by Consolidated Cinola Mines in 1982 as a source of neutralizing medium for the Specogna epithermal gold prospect (103F 034).

BIBLIOGRAPHY

EMPR BULL *54, pp. 50,175

EMPR OF 1992-18, pp. 43-45

EMPR PF (*Paulsen, L. (1982): Limestone Study - Preliminary Site

Evaluation - Queen Charlotte Joint Venture, in 103F General;

Geological Map of Cumshewa Inlet Limestone by McCammon, J.W.)

GSC MAP 176A; 177A; 278A; 1385A; 3-1990

GSC MEM 88

GSC P 86-20; 88-1E, pp. 217-219; 89-1H, pp. 7-11;

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

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BIBLIOGRAPHY

90-10, pp. 163-172

DATE CODED: 1986/06/05
DATE REVISED: 1999/10/30

CODED BY: LDJ
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103G 008**

NATIONAL MINERAL INVENTORY: 103G4 Sb1

NAME(S): **MARINO**, BELLA, MOLY,
MORE

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103G04E
BC MAP:
LATITUDE: 53 04 39 N
LONGITUDE: 131 40 26 W
ELEVATION: 260 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Figure 1 (Assessment Report 5431); Figure 3 (Assessment Report 9306).
See also Bella (103G 028).

MINING DIVISION: Skeena
UTM ZONE: 09 (NAD 83)
NORTHING: 5884044
EASTING: 321000

COMMODITIES: Antimony Gold

MINERALS

SIGNIFICANT: Stibnite Pyrite Arsenopyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Epithermal Hydrothermal Epigenetic
TYPE: H03 Hot spring Au-Ag

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Middle Jurassic	Yakoun	Undefined Formation	

LITHOLOGY: Andesitic Agglomerate
Dacite
Rhyolite
Tuff
Volcanic Sediment/Sedimentary
Mafic Dike
Andesite

HOSTROCK COMMENTS: Yakoun Formation has been reclassified as the Yakoun Group (Geological Survey of Canada Paper 88-1E, pages 221-229).

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Wrangell

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

INVENTORY

ORE ZONE:	SAMPLE	REPORT ON:	N
CATEGORY:	Assay/analysis	YEAR:	1981
SAMPLE TYPE:	Rock		
COMMODITY		GRADE	
Gold		5.1400	Grams per tonne
Antimony		5.2400	Per cent
COMMENTS:	The sample width is 6.1 metres.		
REFERENCE:	Assessment Report 9306.		

CAPSULE GEOLOGY

The property is located 3.2 kilometres north of Cumshewa Inlet.

The area is underlain by Middle Jurassic Yakoun Group rocks consisting of porphyritic andesite agglomerate, tuffs and volcanic sediments that are cut by mafic and felsic dikes. The strata dip gently to the north.

Stibnite and possibly pyrite and arsenopyrite are disseminated within rhyolite, dacite, and andesite. A trench sample assayed 5.24 per cent antimony and 5.14 grams per tonne gold over 6.1 metres (Assessment Report 9306).

This showing was discovered by Efrem Specogna in 1972. The property was optioned by Umex Corp. in 1974 and Chevron Minerals in 1975. Work by these companies included soil and rock sampling and geological mapping. Thunderwood Explorations conducted soil sampling, ground VLF surveys and airborne magnetometer surveys in 1980. The showing was restaked by Cominco Ltd. in 1986. By the end of 1987 the company had completed line cutting, an induced polarization survey (28 kilometres), soil sampling and geological

CAPSULE GEOLOGY

mapping over the showing and surrounding area. Cominco continued work in 1995 with the flying of an airborne electromagnetic and magnetometer survey over the region totaling 228 line kilometres. See also Bella (103G 028).

BIBLIOGRAPHY

EMPR ASS RPT 5000, 5333, *5431, 8855, 8886, *9306, 16127, 17390,
23973
EMPR BULL 54
EMPR EXPL 1975-173; 1980-385; 1981-1,16; 1987-C352
EMPR FIELDWORK 1997, pp. 19-1-19-14
EMPR GEM *1974-323
GSC MAP 176A; 177A; 278A; 1385A; 3-1990
GSC MEM 88
GSC P 86-20; 88-1E, pp. 217-219; 89-1H, pp. 7-11; 90-10
GCNL #239, 1979; #90(May 8), 1980, #66, 1981
N MINER Apr.2, 1981
Chevron File
Falconbridge File

DATE CODED: 1986/06/06
DATE REVISED: 1989/02/25

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

CAPSULE GEOLOGY

development work ceased in 1912 the workings comprised some 366 metres of drifts, 186 metres of crosscuts, and 85 metres of winzes and raises in 2 adits. The main crosscut adit was driven N750E for 111 metres. At this point the adit branches, the southern Go East branch continuing on a similar bearing for 133 metres, while the northern Homestake branch was driven on a bearing of N400E for 73 metres. An upper adit, 20 metres above the main adit, was driven on the Homestake vein for 36 metres.

The Cumshewa Gold Mines, Limited was incorporated in February 1913 to acquire the property but no activity was reported and the company charter was surrendered in 1925. General Exploration Company, Limited examined the property in 1928.

By 1932 ground apparently adjacent to the Crown-grants had been restaked as the Cumshewa 1-3 and Queen Charlotte claims, owned by E.C. Stevens, of Skidgate. Open cutting and stripping was reported in 1932 and 1935.

Kennco Explorations, (Western) Limited in 1974 held the Char 1-32 claims covering these showings. Geological mapping and a geochemical silt survey M3 samples) were carried out.

The area is underlain by Middle Jurassic Yakoun Group rocks consisting of porphyritic andesite agglomerate, tuffs and volcanic sediments that are crosscut by mafic and felsic dikes. Galena, sphalerite, pyrite, and finely disseminated gold and stibnite occur in a quartz vein stockwork and quartz-filled breccia in silicified andesites and argillites.

The Homestake vein, 1.5 metres wide, has been explored for 73 metres along a vertical fault zone, trending 040 degrees. The Go East vein is 1.5 metres wide, strikes 075 degrees for 133 metres, and dips 78 degrees northwest. Mineralization is low grade except in small isolated patches.

The upper adit exposes a brecciated quartz vein 3 metres wide striking 046 degrees and dipping 85 degrees west. A 66 centimetre sample assayed 6.9 grams per tonne gold and 144.0 grams per tonne silver (Minister of Mines Annual Report 1932, page 47).

A small quantity of hand-picked ore was apparently shipped in 1913 but no record of production has been found. Cominco Ltd. flew an electromagnetic and magnetometer survey totaling 228 kilometres over the region in 1995.

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- EMPR AR 1908-62; 1909-72,82; 1910-85; 1911-77,287; 1912-110; 1913-98,104; 1915-75; 1918-41; 1921-38,39,87; 1923-42; 1928-66;
*1932-46-48; 1935-B26
EMPR ASS RPT 23973
EMPR BULL *54, p. 217
EMPR FIELDWORK 1997, pp. 19-1-19-14
EMPR GEM *1974-322
EMPR PF (Armstrong, K.A., (1923): Report of Mineral Claims owned by The Cumshewa Gold Mines Ltd., Cumshewa Inlet, Moresby Island, July 29, 1923)
GSC MAP 176A; 177A; 278A; 1385A; 3-1990
GSC MEM 88
GSC P 86-20; 88-1E, pp. 217-219; 89-1H, pp. 7-11; 90-10

DATE CODED: 1986/06/05
DATE REVISED: 1989/02/27

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103G 010**

NATIONAL MINERAL INVENTORY:

NAME(S): **GURD ISLAND**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103G15E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 53 39 N
LONGITUDE: 130 39 56 W
ELEVATION: 30 Metres

NORTHING: 5973032
EASTING: 390552

LOCATION ACCURACY: Within 500M

COMMENTS: Description - Geological Survey of Canada Paper 70-41, page 21.
Gurd Island.

COMMODITIES: Limestone Silica

MINERALS

SIGNIFICANT: Calcite Silica
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound Massive
CLASSIFICATION: Sedimentary Industrial Min.
TYPE: R09 Limestone R07 Silica sandstone
SHAPE: Tabular
DIMENSION: 0001 Metres STRIKE/DIP: 055/50 TREND/PLUNGE:
COMMENTS: Width.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Permian	Undefined Group	Unnamed/Unknown Formation	

LITHOLOGY: Limestone
Quartzite
Dioritic Gneiss

HOSTROCK COMMENTS: Permian (?) or older metasediments.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline PHYSIOGRAPHIC AREA: Milbanke Strandflat
TERRANE: Alexander
METAMORPHIC TYPE: Regional RELATIONSHIP: Post-mineralization GRADE: Greenschist

CAPSULE GEOLOGY

The underlying Permian (?) or older rocks consist of mainly blackish weathering, dark grey quartzite, interbedded with buff weathering, brown limestone, and light green-grey, well-laminated quartzite. These rocks are concordant with diorite gneiss of the Coast Plutonic Complex.

Most of the limestone beds are less than a metre thick, however a 30 metre bed occurs on the small island (Robert Island?) off the western corner of Gurd Island. Bands of white limestone, 1 to 3 metres thick, occur on the low land at the northwest end of Gurd Island.

BIBLIOGRAPHY

EMPR OF 1987-15, p. 45
GSC MAP 23-1970
GSC P *70-41, p. 21
CANMET RPT #452, pp. 127,172; #811, Part V, 1944, p. 173

DATE CODED: 1986/07/25
DATE REVISED: 1989/02/27

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103G 011**

NATIONAL MINERAL INVENTORY:

NAME(S): **PORCHER ISLAND**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103G16W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 59 39 N
LONGITUDE: 130 28 06 W
ELEVATION: 300 Metres

NORTHING: 5983871
EASTING: 403741

LOCATION ACCURACY: Within 5 KM
COMMENTS: Industrial Minerals File. Porcher Island.

COMMODITIES: Clay

MINERALS

SIGNIFICANT: Clay
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Sedimentary Residual Industrial Min.
TYPE: B06 Fireclay E07 Sedimentary kaolin

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Quaternary	Undefined Group	Unnamed/Unknown Formation	

LITHOLOGY: Clay

HOSTROCK COMMENTS: Pleistocene to recent glacial clay.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Alexander
METAMORPHIC TYPE: Regional
PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)
RELATIONSHIP:
GRADE: Greenschist

CAPSULE GEOLOGY

The area is underlain by Lower Mesozoic greenstone to the east and quartz diorite of the Coast Plutonic Complex to the west. A large deposit of glacial clay is located on Porcher Island (Geological Survey of Canada Memoir 47, page 63).

BIBLIOGRAPHY

EMPR IND MIN FILE (Clay and Shale Occurrences in BC (in Ministry Library))
GSC MAP 23-1970
GSC MEM 47, p. 63
GSC P 70-41

DATE CODED: 1986/07/25
DATE REVISED: 1989/02/27

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103G 012**

NATIONAL MINERAL INVENTORY: 103G16 Mo1

NAME(S): **LOR**, LOR 28, BILLY CREEK

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103G16W
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 53 19 N
LONGITUDE: 130 26 36 W
ELEVATION: 60 Metres

NORTHING: 5972094
EASTING: 405141

LOCATION ACCURACY: Within 500M

COMMENTS: Showing, Figure 1-3, (Assessment Report 2706). Located on southern Porcher Island, on the east side of Porcher Inlet on Billy Creek.

COMMODITIES: Molybdenum Copper

MINERALS

SIGNIFICANT: Molybdenite Pyrite Chalcopyrite Bornite

ASSOCIATED: Quartz Orthoclase

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated Massive
CLASSIFICATION: Hydrothermal Porphyry Epigenetic
TYPE: L05 Porphyry Mo (Low F- type) L01 Subvolcanic Cu-Ag-Au (As-Sb)
SHAPE: Irregular
MODIFIER: Sheared
DIMENSION: 0050 x 0002 Metres STRIKE/DIP: 025/84 TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Triassic-Jurassic	Undefined Group	Unnamed/Unknown Formation	Coast Plutonic Complex
Cretaceous-Tertiary			

LITHOLOGY: Greenstone
Schist
Granite
Quartz Diorite
Meta Volcanic
Meta Sediment/Sedimentary

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline

PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)

TERRANE: Alexander

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1970

SAMPLE TYPE: Rock

COMMODITY

GRADE

Molybdenum

1.0500

Per cent

COMMENTS: The sample width is 61 centimetres.

REFERENCE: Assessment Report 2706.

CAPSULE GEOLOGY

A northwest trending belt of Jurassic to Triassic metasediments and metavolcanics is intruded by a granitic to quartz diorite pluton of the Tertiary to Cretaceous Coast Plutonic Complex. The meta-volcanics, consisting of schists, lie west of a sheared contact with the granite.

Massive and disseminated molybdenite and minor pyrite occur along a 53 metre long, 0.6-2.1 metre wide shear zone in steeply dipping interbedded quartz-hornblende schist and impure micaceous quartzites. A 0.6 metre wide sample assayed 1.05 per cent MoS₂ (Assessment Report 2706).

Scattered occurrences of mineralized quartz veins occur along a 1200 metre trend north of the above main showing. On the eastern shore of Porcher Inlet, about 2.3 kilometres northwest of the molybdenite showing is a one metre wide quartz band, within meta-sediments, containing irregular masses of chalcopyrite and bornite.

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

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BIBLIOGRAPHY

EMPR ASS RPT 2706
EMPR GEM 1970-98
GSC MAP 23-1970
GSC P 70-41

DATE CODED: 1986/07/31
DATE REVISED: 1989/02/27

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103G 013**

NATIONAL MINERAL INVENTORY: 103G16 Mo2

NAME(S): **BLUE JAY**, FAY

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103G16W
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 57 34 N
LONGITUDE: 130 20 06 W
ELEVATION: 60 Metres

NORTHING: 5979835
EASTING: 412409

LOCATION ACCURACY: Within 500M

COMMENTS: Shaft, Figure 2 (Assessment Report 3838). Located on Porcher Island, at the head of Porcher Inlet.

COMMODITIES: Molybdenum

MINERALS

SIGNIFICANT: Molybdenite Pyrite Chalcopyrite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein

CLASSIFICATION: Hydrothermal Porphyry

Epigenetic

TYPE: L05 Porphyry Mo (Low F- type)

L01 Subvolcanic Cu-Ag-Au (As-Sb)

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Permian

GROUP

Undefined Group

FORMATION

Unnamed/Unknown Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY:

Schist
Rhyolite
Andesite
Meta Volcanic

HOSTROCK COMMENTS: Permian (?) or older metasediments.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline

TERRANE: Alexander

METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)

RELATIONSHIP:

GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1966

SAMPLE TYPE: Rock

COMMODITY

GRADE

Molybdenum

0.2000

Per cent

COMMENTS: This is an average of 24 samples.

REFERENCE: Property File (Report by Page, P.E., (1967)).

CAPSULE GEOLOGY

A northwest trending belt of stratified Permian(?) or older metasediments and metavolcanics underlies the eastern part of Porcher Island. The metasediments, consisting of thinly laminated schists derived from argillites, are intruded by sills of metavolcanics derived from rhyolites and andesites. Granite of the Coast Plutonic Complex is noted to the south.

Mineralized quartz veins, up to 0.6 metres wide, occur within the metavolcanics near the contact with the metasediments. Mineralization consists of molybdenite, pyrite and minor chalcopyrite. An average of 24 samples assayed 0.2 per cent MoS₂ (Irwin, J.F., 1966).

BIBLIOGRAPHY

EMPR AR 1966-52

EMPR ASS RPT 3838, 5045, 5817

EMPR EXPL 1979-251,252

EMPR GEM 1972-498; 1974-323,324; 1976-162,163

EMPR PF (Irwin, J.F., (1966): Preliminary Report on Property Examination of the Blue Jay Molybdenum showings, Porcher Island,

British Columbia, for Five Star Petroleum & Mines Ltd., Aug.22,

1966; Page, P.E., (1967): Geological Report on Fifty-Six Mineral

Claims located on Porcher Island, Near Prince Rupert, British

Columbia, for Silver Chief Minerals Ltd., May 31, 1967; (1979):

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

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ENERGY AND MINERALS DIVISION

PAGE: 297
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BIBLIOGRAPHY

Geology and Report on the Fay Mineral Claims, Porcher Island, Mar.
27, 1979)
EMR MP CORPFILE (Five Star Petroleum & Mines Ltd.)
GSC MAP 23-1970
GSC P 70-41, p. 17

DATE CODED: 1986/07/31
DATE REVISED: 1989/02/27

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103G 014**

NATIONAL MINERAL INVENTORY:

NAME(S): **LEWIS ISLAND**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103G16E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 59 49 N
LONGITUDE: 130 14 06 W
ELEVATION: 10 Metres

NORTHING: 5983888
EASTING: 419042

LOCATION ACCURACY: Within 1 KM
COMMENTS: Southeast part of Lewis Island.

COMMODITIES: Limestone Silica

MINERALS

SIGNIFICANT: Calcite Silica
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound Massive
CLASSIFICATION: Sedimentary Industrial Min.
TYPE: R09 Limestone R07 Silica sandstone
SHAPE: Tabular
DIMENSION: 0015 Metres
COMMENTS: Maximum width of band.

STRIKE/DIP: TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Triassic-Jurassic	Undefined Group	Unnamed/Unknown Formation	

LITHOLOGY: Limestone
Greenstone
Chlorite Schist
Quartz

HOSTROCK COMMENTS: Jurassic to Triassic metasediments.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Alexander
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)

RELATIONSHIP: GRADE: Greenschist

CAPSULE GEOLOGY

Lewis Island is underlain mainly by Lower Mesozoic greenstone, and chlorite schist with minor limestone and impure layered quartzite. White, coarse-grained calcium limestone forms a series of lenticular masses, 9 to 15 metres thick, separated by schist. Analysis of a sample gave 94.61 per cent CaCO₃, 2.52 per cent SiO₂, 0.42 per cent Fe₂O₃, 0.39 per cent Al₂O₃, 0.36 per cent MgCO₃, and 0.02 per cent Ca₃(PO₄)₂ - (Pub. 811, 1944).

BIBLIOGRAPHY

GSC MAP 23-1970
GSC P 66-33; 70-41
CANMET RPT *811, Part V, 1944, p. 174

DATE CODED: 1986/07/25
DATE REVISED: 1988/12/28

CODED BY: LDJ
REVISED BY: JNR

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103G 015**

NATIONAL MINERAL INVENTORY: 103G16 Cu1

NAME(S): **GIBSON GIRL**, WILD GOOSE, STANDARD

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 103G16E
BC MAP:
LATITUDE: 53 55 39 N
LONGITUDE: 130 09 06 W
ELEVATION: 50 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Mineralized zone, Figure 2 (Assessment Report 9997). Located on Gibson Island.

MINING DIVISION: Skeena
UTM ZONE: 09 (NAD 83)
NORTHING: 5976070
EASTING: 424379

COMMODITIES: Copper Zinc Lead Silver

MINERALS

SIGNIFICANT: Chalcopyrite Sphalerite Galena Pyrite Marcasite
Pyrrhotite
ASSOCIATED: Quartz Garnet Epidote Calcite Actinolite
ALTERATION: Diopside Epidote Chlorite Silica
ALTERATION TYPE: Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Massive Disseminated Concordant
CLASSIFICATION: Skarn Epigenetic
TYPE: K01 Cu skarn 105 Polymetallic veins Ag-Pb-Zn±Au
SHAPE: Regular
DIMENSION: 0100 x 0020 Metres STRIKE/DIP: 165/90 TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Permian Undefined Group Unnamed/Unknown Formation

LITHOLOGY: Skarn
Limestone
Hornblende Muscovite Garnet Schist
Quartz Feldspar Biotite Schist
Chlorite Schist

HOSTROCK COMMENTS: Permian (?) or older metasediments known informally as the Prince Rupert Formation.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)
TERRANE: Alexander
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist

INVENTORY

ORE ZONE: TRENCH REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1982
SAMPLE TYPE: Rock
COMMODITY GRADE
Silver 25.7000 Grams per tonne
Copper 1.4700 Per cent
Lead 1.0300 Per cent
Zinc 1.4500 Per cent
COMMENTS: This is an unweighted average from 30 trench samples.
REFERENCE: Assessment Report 9997.

CAPSULE GEOLOGY

Gibson Island is underlain by a north-northwest trending, steep to vertical dipping section of Permian (?) or older metasediments consisting of lenses of crystalline limestone interbedded with quartz-feldspar-biotite schist, chlorite schist, and hornblende-muscovite-garnet schist. Tight and locally intense folding and granitic dykes are common in the area.
A 100 by 20 metre discontinuous mineralized zone, along a schist-limestone contact, consists of disseminated and massive chalcopyrite, pyrite, sphalerite, galena, and sparse molybdenite in a siliceous gangue of garnet, epidote, chlorite, calcite, actinolite, and diopside. Thirty trench samples, from 1 to 4 metres wide, gave an unweighted average of 1.47 per cent copper, 1.03 per cent lead, 1.45

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

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CAPSULE GEOLOGY

per cent zinc, and 25.7 grams per tonne silver (Assessment Report 9997).

BIBLIOGRAPHY

EMPR AR 1914-149,150; 1916-50; 1917-44; 1924-47; 1926-71;
*1929-72-74; 1930-69; 1931-35; 1951-108; *1952-79,81, Fig.1, p.80
EMPR ASS RPT *9997
EMPR EXPL 1980-388
GSC MAP 23-1970; 278A
GSC P *70-40, p. 51

DATE CODED: 1986/07/30
DATE REVISED: 1989/02/27

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103G 016**

NATIONAL MINERAL INVENTORY: 103G16 Fe1

NAME(S): **ROYAL**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103G16E
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 51 04 N
LONGITUDE: 130 03 56 W
ELEVATION: 10 Metres

NORTHING: 5967483
EASTING: 429906

LOCATION ACCURACY: Within 500M

COMMENTS: Description (Geological Survey of Canada Economic Geology Series, No. 3, Volume 1), on Bonwick Point, northeast Pitt Island.

COMMODITIES: Iron Magnetite

MINERALS

SIGNIFICANT: Magnetite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Massive
CLASSIFICATION: Replacement Industrial Min.
TYPE: K03 Fe skarn
SHAPE: Regular
DIMENSION: 0100 x 0005 Metres

STRIKE/DIP: 135/80E TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Permian	Undefined Group	Unnamed/Unknown Formation	

LITHOLOGY: Schist

HOSTROCK COMMENTS: Permian (?) or old metasediments known informally as the Prince Rupert Formation.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Alexander
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)

RELATIONSHIP: GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE	REPORT ON: N
CATEGORY: Assay/analysis	YEAR: 1930
SAMPLE TYPE: Rock	
COMMODITY	GRADE
Iron	68.0000 Per cent

COMMENTS: The sample width is 1 metre.
REFERENCE: Minister of Mines Annual Report 1930, page 69.

CAPSULE GEOLOGY

A 100 metre long magnetite ore zone, striking northwest and dipping 80 degrees east, lies concordant with bedding and schistosity of the Permian (?) or older schists. Coast Plutonic Complex rocks lie to the west.

The magnetite occurs as small discontinuous massive bands and irregular lenses up to 4.5 metres wide. A one metre wide sample assayed 68 per cent iron (Minister of Mines Annual Report 1930).

BIBLIOGRAPHY

EMPR AR *1914-150; 1930-69
GSC EC GEOL *Series No. 3, Vol. 1, pp. 24-26
GSC MAP 23-1970; 278A
GSC P 70-41

DATE CODED: 1986/07/30
DATE REVISED: 1989/02/27

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103G 017**

NATIONAL MINERAL INVENTORY:

NAME(S): **DEADMAN INLET**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103G09W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 37 49 N
LONGITUDE: 130 29 26 W
ELEVATION: 5 Metres

NORTHING: 5943420
EASTING: 401434

LOCATION ACCURACY: Within 1 KM
COMMENTS: North end of Banks Island.

COMMODITIES: Limestone Silica

MINERALS

SIGNIFICANT: Calcite Silica
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound Massive
CLASSIFICATION: Sedimentary Industrial Min.
TYPE: R09 Limestone R07 Silica sandstone

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Permian	Undefined Group	Unnamed/Unknown Formation	

LITHOLOGY: Limestone
Quartzite
Hornblende Schist
Chlorite Schist
Calcareous Schist
Granodiorite
Quartz Diorite

HOSTROCK COMMENTS: Permian (?) or older metasediments.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Alexander
METAMORPHIC TYPE: Regional Contact
PHYSIOGRAPHIC AREA: Milbanke Strandflat
RELATIONSHIP:
GRADE: Greenschist

CAPSULE GEOLOGY

The underlying rocks consist of northwest striking Permian (?) or older limestone, quartzite, calcareous schist, hornblende schist, and chloritic schist. Bodies of crystalline limestone are the dominant lithology outcropping along the north end of Banks Island for about 3 kilometres. These rocks are in fault contact with sheared quartz diorite on the east and a 100 metre wide contact zone with granodiorite on the west.

BIBLIOGRAPHY

EMPR OF 1987-15, p. 45
GSC MAP 23-1970; 278A
GSC P 70-41, p. 22

DATE CODED: 1986/07/28
DATE REVISED: 1989/01/20

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103G 018**

NATIONAL MINERAL INVENTORY: 103G9 Cu1

NAME(S): **GREAT WEST**, BAN, MARBLE BAY,
EDD, BAN 1-2

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103G09W
BC MAP:

MINING DIVISION: Skeena

LATITUDE: 53 34 26 N
LONGITUDE: 130 16 26 W
ELEVATION: 2 Metres

UTM ZONE: 09 (NAD 83)

NORTHING: 5936869
EASTING: 415649

LOCATION ACCURACY: Within 500M

COMMENTS: Mineralized skarn, Figure 3 (Assessment Report 8463). Located on the northeast coast of Banks Island, about 6.4 kilometres southeast of Keyarka Cove.

COMMODITIES: Copper Molybdenum Silver

MINERALS

SIGNIFICANT: Chalcopyrite Molybdenite Bornite Pyrite Chalcocite
ASSOCIATED: Epidote Chlorite Garnet
ALTERATION: Silica Pyrite Epidote Chlorite Garnet
ALTERATION TYPE: Silicific'n Pyrite Skarn
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Skarn Igneous-contact Epigenetic
TYPE: K01 Cu skarn K07 Mo skarn
DIMENSION: 0030 Metres STRIKE/DIP: TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Permian
Cretaceous-Tertiary

GROUP

Undefined Group

FORMATION

Unnamed/Unknown Formation

IGNEOUS/METAMORPHIC/OTHER

Coast Plutonic Complex

LITHOLOGY:

Skarn
Limestone
Marble
Quartz Diorite
Granodiorite
Quartz Monzonite
Quartzite
Schist
Slate

HOSTROCK COMMENTS: Permian (?) or older metasediments informally known as the Prince Rupert Formation.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Alexander
METAMORPHIC TYPE: Regional Contact

Plutonic Rocks
RELATIONSHIP:

PHYSIOGRAPHIC AREA: Milbanke Strandflat

GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1971

SAMPLE TYPE: Rock

COMMODITY

GRADE

Copper

0.5500

Per cent

Molybdenum

0.2500

Per cent

COMMENTS: The sample width is 5.2 metres.

REFERENCE: Assessment Report 3465.

CAPSULE GEOLOGY

A narrow belt of northwest striking Permian(?) or older metasediments is surrounded by younger quartz diorite, granodiorite and quartz monzonite of the Coast Plutonic Complex. The metasediments consist of laminated micaceous quartzite and crystalline limestone, epidote-chlorite skarn, schist and slate.

Mineralized skarn occurs near shore at the contact of quartz diorite and limestone/marble. Mineralization consists of disseminations, blebs and fracture fillings of molybdenite, chalcopyrite, pyrite, and minor bornite with some chalcocite. Chalcopyrite and

CAPSULE GEOLOGY

molybdenite also occur within quartz veins up to 0.6 metres wide within the quartz diorite. Skarn minerals include epidote, garnet and chlorite. Pyrite is ubiquitous throughout the contact area.

A 5.2 metre wide sample of the skarn zone assayed 0.55 per cent copper and 0.25 per cent MoS₂ (Assessment Report 3465). A small skarn zone, 450 metres south of the shore skarn, assayed 0.19 per cent copper, 0.10 per cent MoS₂, and 3.4 grams per tonne silver over 6.4 metres (Assessment Report 3465).

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EMPR AR *1920-38; 1929-75
EMPR ASS RPT *3465, 8463, 13101
EMPR EXPL 1980-388; 1984-373
EMPR GEM 1972-498
EMPR PF (Cukor, V., (1971): Report on Ban Group, Banks Island for Quest Mining Corporation Ltd., Jan.18, 1971)
EMR MP CORPFILE (Quested Mining Corporation Ltd.)
GSC MAP 23-70
GSC P *70-41 p. 52
GCNL #137, 1971; #153, 1980

DATE CODED: 1986/07/30
DATE REVISED: 1989/02/27

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103G 019**

NATIONAL MINERAL INVENTORY:

NAME(S): **KINGKOWN LAKE**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103G09W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 30 39 N
LONGITUDE: 130 17 56 W
ELEVATION: 5 Metres

NORTHING: 5929884
EASTING: 413866

LOCATION ACCURACY: Within 500M

COMMENTS: Symbol 4 - Geological Survey of Canada Map 23-1970. Located on Kingkown Lake, north central Banks Island.

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite Pyrite Magnetite Sphalerite Molybdenite
ASSOCIATED: Quartz
ALTERATION: Garnet Epidote Hornblende
ALTERATION TYPE: Skarn
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated Massive
CLASSIFICATION: Skarn Epigenetic
TYPE: K01 Cu skarn

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Permian
Cretaceous-Tertiary

GROUP

Undefined Group

FORMATION

Unnamed/Unknown Formation

IGNEOUS/METAMORPHIC/OTHER

Coast Plutonic Complex

LITHOLOGY:

Skarn
Marble
Pelitic Schist
Calc-silicate
Granodiorite

HOSTROCK COMMENTS: Permian (?) or older metasediments.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Alexander
METAMORPHIC TYPE: Regional

Plutonic Rocks
RELATIONSHIP:

PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)

GRADE: Greenschist

CAPSULE GEOLOGY

A band of Permian (?) or older metasediments, striking 160 degrees, consists of massive to finely bedded marble, calc-silicate, and metapelite, and is flanked by granodiorite of the Coast Plutonic Complex. Near the western contact is a quartz-garnet-epidote-hornblende skarn which is mineralized with chalcopyrite, pyrite, magnetite, and minor sphalerite and molybdenite.

BIBLIOGRAPHY

EMPR AR 1963-21,22
EMPR ASS RPT 13538, 14261
EMPR EXPL 1985-C368
GSC MAP 23-1970
GSC P *70-41 p. 52

DATE CODED: 1986/07/30
DATE REVISED: 1989/02/27

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103G 020**

NATIONAL MINERAL INVENTORY:

NAME(S): **COLBY BAY**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103G09W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 34 19 N
LONGITUDE: 130 15 06 W
ELEVATION: 3 Metres

NORTHING: 5936626
EASTING: 417116

LOCATION ACCURACY: Within 1 KM

COMMENTS: Description and Geological Survey of Canada Map 23-1970.

COMMODITIES: Limestone Silica

MINERALS

SIGNIFICANT: Calcite Silica Pyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound Massive
CLASSIFICATION: Sedimentary Industrial Min.
TYPE: R09 Limestone R07 Silica sandstone
SHAPE: Tabular
DIMENSION: 0300 Metres
COMMENTS: Width of band. STRIKE/DIP: 120/80S TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Permian	Undefined Group	Unnamed/Unknown Formation	

LITHOLOGY: Limestone
Chert
Siltstone
Diorite
Dolomite

HOSTROCK COMMENTS: Permian (?) or older metasediments.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Alexander
METAMORPHIC TYPE: Regional
PHYSIOGRAPHIC AREA: Milbanke Strandflat
RELATIONSHIP:
GRADE: Greenschist

CAPSULE GEOLOGY

Permian (?) or older crystalline limestone, banded and ribbon chert, and minor siltstone form a metasedimentary wedge in diorite. Pyrite is common in the carbonate. The area is faulted and folded and bedding attitudes change quickly from gentle to nearly vertical. A band, 300 metres wide, of intermixed white and pale blue-calcium limestone and dolomite strikes 120 degrees and dips steeply southwest. About 2.4 kilometres to the northwest, a 30 metre band of similar rock strikes 127 degrees for 150 metres, dipping vertically.

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EMPR OF 1987-15, p. 45
GSC MAP 23-1970
GSC P 70-41, p. 22
CANMET RPT *811, Part V, 1944, p. 173

DATE CODED: 1986/07/28
DATE REVISED: 1989/02/24

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103G 021**

NATIONAL MINERAL INVENTORY: 103G8 Au1

NAME(S): **YELLOW GIANT (KIM)**, KIM, BANKS,
TEL

STATUS: Developed Prospect
REGIONS: British Columbia
NTS MAP: 103G08E
BC MAP:
LATITUDE: 53 22 09 N
LONGITUDE: 130 07 41 W
ELEVATION: 30 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: South-central Banks Island (Assessment Report 14171).

MINING DIVISION: Skeena
UTM ZONE: 09 (NAD 83)
NORTHING: 5913932
EASTING: 424944

COMMODITIES: Gold Silver Zinc Lead Molybdenum
Copper

MINERALS

SIGNIFICANT: Pyrite Arsenopyrite Sphalerite Galena Molybdenite
Chalcopyrite
ASSOCIATED: Quartz
ALTERATION: Sericite Quartz Chlorite Calcite Clinocllore
Actinolite
ALTERATION TYPE: Sericitic Propylitic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Shear Podiform Disseminated
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I02 Intrusion-related Au pyrrhotite veins I05 Polymetallic veins Ag-Pb-Zn±Au
K07 Mo skarn
SHAPE: Bladed
MODIFIER: Sheared
DIMENSION: 300 x 180 x 18 Metres STRIKE/DIP: 108/80N TREND/PLUNGE:
COMMENTS: Kim zone is open at length and depth with widths up to sixty metres.

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Permian Unnamed/Unknown Group Unnamed/Unknown Formation Coast Plutonic Complex
Mesozoic-Cenozoic

LITHOLOGY: Quartz Monzonite
Granodiorite
Quartz Diorite
Limestone
Quartzite
Schist
Actinolite Skarn

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline PHYSIOGRAPHIC AREA: Milbanke Strandflat
TERRANE: Plutonic Rocks Alexander

INVENTORY

ORE ZONE: KIM REPORT ON: Y
CATEGORY: Unclassified YEAR: 1988
QUANTITY: 77896 Tonnes
COMMODITY GRADE
Gold 7.1000 Grams per tonne
REFERENCE: Trader Resource Corp., Letter to Shareholders March 28, 1988.

CAPSULE GEOLOGY

Banks Island lies along the western edge of the Tertiary-Jurassic Coast Plutonic Complex characterized by northwest trending granitic bodies, mainly granodiorite-quartz monzonite and quartz diorite, which are separated by narrow, persistent Permian(?) or older metasedimentary belts, mainly crystalline limestone, micaceous quartzite skarn and schist. The metasedimentary rocks generally exhibit a wide range of "granitization" effects and contact metasomatism.

Regional and local faulting, fracturing and folding are common on the island. Two major right-lateral faults, striking 310 degrees, known as the Arseno and Hepler faults, have associated 045 degree

CAPSULE GEOLOGY

linears. Left-lateral faults striking 090 degrees also occur. Many contacts between the plutonic and metasedimentary rocks are faults or drag folds. Some faults have been healed by recrystallization. Structure is the prime factor in ore localization.

The Yellow Giant (Kim) zone is a complex combination of several different groups of mineralized quartz veins plus disseminated sulphide lenses within an intensely altered fracture system, which trends 288 degrees and is hosted by biotite quartz monzonite. Alteration is progressive from weakly sericitic on the margins of the deposit to intense quartz-sericite with minor chlorite, clinocllore and calcite near the higher grade gold mineralization. The alteration zone is offset by numerous strong faults trending 045 degrees with apparent left-lateral movement up to 15 metres. The disseminated sulphides are pyrite, arsenopyrite, sphalerite and galena, mainly in the central quartz-sericite-chlorite alteration zone. Sphalerite averages 1.0 per cent and galena, 0.25 per cent. Molybdenite is sparsely distributed as a halo through all surrounding, less altered siliceous granitic rocks where it is associated with quartz veins. Actinolite skarn near the Kim zone locally contains up to 3 per cent molybdenite.

The deposit is localized within a 1200 metre steeply dipping east-west shear zone. The deposit attains widths of up to 60 metres but averages about 18 metres and has been drilled to a vertical depth of 180 metres and a length of 300 metres. It is open at depth and along strike. A hole drilled in 1963 assayed 12.72 grams per tonne gold and 108.34 grams per tonne silver over 6.10 metres. A 1984 drill hole assayed 3.87 grams per tonne gold and 12.69 grams per tonne silver over 6 metres (Assessment Report 14171).

The Kim zone varies in composition and vein direction from east to west. The East subzone is characterized by erratic gold distribution and mineralized vein systems trending 012 to 031 degrees and dipping west. The Central subzone has higher gold values and veins trend 063 to 084 degrees and dip north. Vein orientation in the West subzone is poorly understood.

The prominent change of mineralized vein orientation in the East subzone could be due to drag folding along the 045 degree faults. However, there is also a strong possibility that the Kim zone rocks represent a semi-solid intrusion of biotite quartz monzonite that has domed or folded the metasedimentary package and in this case, the vein directions are related to their relative axial planar position along the domal structure.

Two hundred metres northeast of the Kim deposit, easterly trending quartz veins and veinlets with pyrite and unidentified manganese mineralization occur near metasediments. A sample assayed 2.12 per cent MnO₂ (Assessment Report 14171).

Extensive diamond drilling was carried out in 1984 and 1985 on four mineralized zones (Kim, Bob, Discovery and Tel) on the Yellow Giant property. Unclassified reserves for the Kim zone are 77,896 tonnes grading 7.1 grams per tonne gold (Trader Resource Corp., Letter to Shareholders March 28, 1988). See Bob (103G 024), Discovery (103G 025) and Tel (103G 026) for additional reserves.

Doublestar Resources Ltd. acquired an interest in the property in 1998.

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- EMPR ASS RPT 5022, 12719, *14171, 15759, 17503
EMPR EXPL 1984-372; 1985-C367
EMPR GEM 1973-323
EMPR GEOLOGY 1977-1981, p. 139
EMPR MAP 58; 65 (1989)
EMPR OF 1992-1
EMPR PF (*Trader Resource Corp., Statement of Material Facts, Jan.13, 1986; Christopher, P.A., (1988): Report on the Isla Mist Property, Banks Island, British Columbia, in Prospectus for Claw Resources Ltd., dated May 10, 1988; Doublestar Resources Ltd., Annual Report, December 1999)
EMR MIN BULL MR 223 B.C. 282
EMR MP CORPFILE (Trader Resource Corp.)
GSC MAP 23-1970
GSC P 70-41
GCNL #128, 1977; #197,#241, 1980; #8,#41,#108,#113,#130,#172,#205, #213,#227,#237, 1984; #45,#142, 1985; #10,#14, 1986; #105(June 2), 1998
N MINER Mar.22,Sept.6,13,Dec.6, 1984; Oct.28,Dec.7, 1985; *Jun.23, Dec.9, 1986; Dec.8, 1987
NAGMIN Jun.7, Oct.11, 1985
PR REL Trader Resource Corp., Sept.5, 1984
WWW <http://www.infomine.com/>

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 309
REPORT: RGEN0100

BIBLIOGRAPHY

Falconbridge File

DATE CODED: 1986/08/07
DATE REVISED: 1989/02/27

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103G 022**

NATIONAL MINERAL INVENTORY:

NAME(S): **BANKS ISLAND**, DONALDSON CREEK, MARGARET (L.110)

STATUS: Developed Prospect
REGIONS: British Columbia
NTS MAP: 103G08E
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 28 10 N
LONGITUDE: 130 02 43 W
ELEVATION: 15 Metres

NORTHING: 5925003
EASTING: 430615

LOCATION ACCURACY: Within 500M

COMMENTS: Located around East Central Banks Island, between Patsey Cove and Donaldson Lake (Open File 1987-15, Figure 31). Occurrence is on reverted Crown Grant Margaret Lot 110.

COMMODITIES: Silica

MINERALS

SIGNIFICANT: Silica
ASSOCIATED: Amphibole Magnetite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Industrial Min.
TYPE: I07 Silica veins
SHAPE: Regular
DIMENSION: 0030 x 0020 Metres

STRIKE/DIP: TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Cretaceous-Tertiary			Coast Plutonic Complex

LITHOLOGY: Hornblende Granodiorite
Hornblende Quartz Biotite Diorite
Migmatite
Gneissic Diorite

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Plutonic Rocks

PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)

INVENTORY

ORE ZONE: BANKS ISLAND

REPORT ON: Y

CATEGORY: Inferred YEAR: 1975
QUANTITY: 9000 Tonnes
COMMODITY GRADE
Silica 98.8000 Per cent

COMMENTS: Estimated grade of silica is 98.8 per cent SiO₂.
REFERENCE: Open File 1987-15, page 34.

CAPSULE GEOLOGY

The area of the occurrence is largely underlain by hornblende granodiorite of the Coast Plutonic Complex. There are also some exposures of Permian and/or older metasediments consisting mainly of laminated micaceous quartzite, crystalline limestone, skarn and schist. The showing is underlain by a gneissic diorite-migmatite complex near the contact with hornblende-biotite quartz diorite. Several outcrops of pure white quartz occur on the northwest side of Donaldson Creek. The outcrops define a northeasterly trending body exposed over an area measuring at least 20 by 30 metres. The quartz is usually massive, coarse-grained and milky white, but minor amounts of smoky quartz are present. Two other small bodies of quartz are exposed in Donaldson Creek to the southwest of the main group of outcrops. This quartz is white weathering, coarse-grained and massive. It contains veinlets of magnetite and amphibolitic inclusions. A chip sample of about seven metres from the main outcrop was collected by the Geological Survey Branch in 1982. It assayed 99.26 per cent silica (Open File 1987-15, page 34). In 1975, reserves were estimated to be at least 9,000 tonnes of silica with a grade of 98.8 per cent SiO₂ (Open File 1987-15, page 34).

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RUN TIME: 12:06:33

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BIBLIOGRAPHY

EMPR AR 1930-68
EMPR ASS RPT 11176
EMPR EXPL 1982-368
EMPR FIELDWORK 1982, p. 198
EMPR OF *1987-15, pp. 33,34
EMPR PF (Letters by J.M. Cummings, A.J. Farquaharson and C.W.
Frank, 1943-1945; Report on Banks Island (1 page) by C.W. Frank))
GSC MAP 23-1970
GSC P 70-41
Falconbridge File

DATE CODED: 1986/07/28
DATE REVISED: 1989/02/01

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **103G 023**

NATIONAL MINERAL INVENTORY: 103G8 Cu1

NAME(S): **DONALDSON CREEK**, HENRIETTA (L.109), MARGARET (L.110)

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103G08E
BC MAP:

MINING DIVISION: Skeena
UTM ZONE: 09 (NAD 83)

LATITUDE: 53 28 09 N
LONGITUDE: 130 02 46 W
ELEVATION: 10 Metres

NORTHING: 5924973
EASTING: 430560

LOCATION ACCURACY: Within 500M

COMMENTS: Shaft location, Map 4 (Assessment Report 11176). Situated about 0.4 kilometres up Donaldson Creek from Patsy Cove, on the northeast side of Banks Island.

COMMODITIES: Copper Silver Tungsten

MINERALS

SIGNIFICANT: Pyrrhotite Chalcopyrite Magnetite Pyrite Scheelite
ASSOCIATED: Quartz Actinolite Calcite
ALTERATION: Quartz
ALTERATION TYPE: Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Podiform Vein Disseminated Massive
CLASSIFICATION: Replacement Epigenetic
TYPE: K01 Cu skarn K03 Fe skarn
SHAPE: Regular
DIMENSION: 0018 x 0006 Metres STRIKE/DIP: 028/90 TREND/PLUNGE:
COMMENTS: Mineralized area in quartz vein.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Permian	Undefined Group	Unnamed/Unknown Formation	Coast Plutonic Complex
Cretaceous-Tertiary			

LITHOLOGY: Limestone
Marble
Quartzite
Quartz Diorite
Schist

HOSTROCK COMMENTS: Permian (?) or older metasediments informally described as the Prince Rupert Formation.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Alexander
METAMORPHIC TYPE: Contact Regional
Plutonic Rocks
RELATIONSHIP:
PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)
GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1982
SAMPLE TYPE: Chip
COMMODITY
Silver 4.1000 Grams per tonne
Copper 1.0500 Per cent
COMMENTS: The sample width is 2.3 metres.
REFERENCE: Assessment Report 11176.

CAPSULE GEOLOGY

An 18 by 6 metre pod of massive sulphide is enclosed by a vertical dipping, 4 to 25 metre wide milky quartz vein, which strikes 028 degrees for 50 metres. The quartz is barren and appears to be a replacement of a large inclusion of metasediments within quartz diorite of the Coast Plutonic Complex. The Permian (?) or older metasediments are a segment of a northwest trending belt of laminated micaceous quartzite and crystalline limestone, marble, and schist.

The massive sulphide pod is a mineral assemblage of mainly magnetite and pyrrhotite with lesser amounts of chalcopyrite and pyrite and very minor scheelite. Actinolite, quartz, and calcite constitute the gangue material. A 2.3 metre chip sample assayed 1.05 per cent copper and 4.1 grams per tonne silver (Assessment

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CAPSULE GEOLOGY

Report 11176). A selected bulk sample taken in 1971 assayed 0.60 per cent copper and 1.12 per cent WO₃ (Assessment Report 11176).
In 1968 a large chip sample was collected and yielded 0.58 per cent copper with traces of gold, silver and nickel (National Mineral Inventory Card 103G8 Cu1).

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EMPR AR *1907-216; 1930-A68
EMPR ASS RPT *11176
EMPR EXPL 1982-368
EMPR OF 1991-17
GSC MAP 23-1970
GSC P *70-41, pp. 48,49
GCNL #152, 1982

DATE CODED: 1986/07/30
DATE REVISED: 1989/02/27

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103G 024**

NATIONAL MINERAL INVENTORY: 103G8 Au1

NAME(S): **YELLOW GIANT (BOB)**, BOB, BANKS,
TEL

STATUS: Developed Prospect
REGIONS: British Columbia
NTS MAP: 103G08E
BC MAP:
LATITUDE: 53 22 44 N
LONGITUDE: 130 10 56 W
ELEVATION: 30 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: West-central Banks Island (Assessment Report 14171).

MINING DIVISION: Skeena
UTM ZONE: 09 (NAD 83)
NORTHING: 5915071
EASTING: 421359

COMMODITIES: Gold Silver Copper Zinc Lead

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Sphalerite Galena Arsenopyrite
ASSOCIATED: Quartz Calcite
ALTERATION: Sericite Chlorite Silica Diopside Epidote
Garnet Zoisite Actinolite
ALTERATION TYPE: Silicific'n Skarn
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Breccia Vein Disseminated Massive
CLASSIFICATION: Skarn Replacement Epigenetic
TYPE: I01 Au-quartz veins I02 Intrusion-related Au pyrrhotite veins
I05 Polymetallic veins Ag-Pb-Zn±Au K07 Mo skarn
SHAPE: Regular
MODIFIER: Faulted Other
DIMENSION: 125 x 44 x 1 Metres STRIKE/DIP: 090/75N TREND/PLUNGE:
COMMENTS: Main ore shoot. Other modifier is brecciated.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE Permian Mesozoic-Cenozoic
GROUP Unnamed/Unknown Group
FORMATION Unnamed/Unknown Formation
IGNEOUS/METAMORPHIC/OTHER Coast Plutonic Complex

LITHOLOGY: Pelite
Marble
Skarn
Quartz Diorite
Granodiorite
Breccia
Greywacke
Pelite

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Alexander
METAMORPHIC TYPE: Regional
Plutonic Rocks
RELATIONSHIP:
PHYSIOGRAPHIC AREA: Milbanke Strandflat
GRADE: Greenschist

INVENTORY

ORE ZONE: BOB REPORT ON: Y
CATEGORY: Indicated YEAR: 1986
QUANTITY: 45350 Tonnes
COMMODITY Gold GRADE 40.1000 Grams per tonne
REFERENCE: MDAP - Prospectus, Trader Resource Corporation, Yellow Giant, 1986.

CAPSULE GEOLOGY

Banks Island lies along the western edge of the Tertiary-Jurassic Coast Plutonic Complex characterized by northwest trending granitic bodies, mainly granodiorite-quartz monzonite and quartz diorite which are separated by narrow, persistent Permian(?) or older metasedimentary belts, mainly crystalline limestone, micaceous quartzite skarn and schist. The metasedimentary rocks generally exhibit a wide range of "granitization" effects and contact metasomatism.
Regional and local faulting, fracturing and folding are common on the Island. Two major right-lateral faults, striking 310 degrees, known as the Arseno and Hepler faults, have associated 045 degree

CAPSULE GEOLOGY

linears. Left-lateral faults striking 090 degrees also occur. Many contacts between the plutonic and metasedimentary rocks are faults or drag folds. Some faults have been healed by recrystallization. Structure is the prime factor in ore localization.

The Yellow Giant (Bob) deposit occurs near the intersection of the northwest trending Bank-Barge lineament and the east trending Survey Bay fault, at the north end of the "Western Metasedimentary Belt". Underlying the deposit is an unusual biotite quartz diorite breccia containing abundant small to very large marble and greywacke fragments.

A marble block or horst associated with high grade gold mineralization averages 12 metres wide and may be related to disrupted drag folding. Skarn development is common along margins of the marble and quartz lenses occur at the outermost phase.

The fault-controlled deposit occurs partially in calcareous pelites, marble and skarn in the upper levels and predominantly in altered quartz diorite in the lower level. The main ore shoot is a sulphide lens over 44 metres long, up to 125 metres in vertical depth, and 1.7 metre average width that dips steeply (75-80 degrees) north and strikes easterly. Subsidiary mineralization lies above (5-10 metres) and below the main deposit.

Mineralization, consisting of abundant auriferous pyrite with lesser chalcopyrite and minor sphalerite, galena, and arsenopyrite, is controlled by the Bob fault, a well-defined steep north dipping, east-northeast striking fault which cuts all rocks and is accompanied by zones of intense brecciation.

Sampling of an underground drift, 40 metres below surface, averaged 31.71 grams per tonne gold and 97.03 grams per tonne silver across 1.69 metres along a 44 metre length. A drill hole intersected 46.63 grams per tonne gold and 168.17 grams per tonne silver over 4.5 metres in a massive pyrite and chalcopyrite zone (Assessment Report 14171).

Additional surface showings occur near the Bob zone. Showing A20, 70 metres north of the Bob deposit, occurs near the West Bank fault within skarnified marble adjacent to diorite. Drilling intersected a zone of sphalerite and galena assaying 1.7 grams per tonne gold, 30.9 grams per tonne silver, 4.68 per cent zinc and 1.84 per cent lead over 0.46 metres (Assessment Report 14171).

Another skarn-associated showing, 240 metres southeast of the main zone, contains pyrite and arsenopyrite and assayed 710 grams per tonne gold in a rock chip sample (Assessment Report 14171).

Extensive diamond drilling was carried out in 1984 and 1985 on four mineralized zones (Kim, Bob, Discovery and Tel). Indicated reserves for the Bob zone are 45,350 tonnes grading 40.1 grams per tonne gold (MDAP - Prospectus, Trader Resource Corporation, Yellow Giant, 1986). See Kim (103G 021), Discovery (103G 025) and Tel (103G 026) for additional reserves.

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EMPR GEM 1973-323
EMPR GEOL *1977-1981 pp. 139-141
EMPR MAP 58; 65 (1989)
EMPR OF 1992-1
EMPR PF (Magee, 1977 in Hecate Gold Corp. Statement of Material Facts); (*Trader Resource Corp., Statement of Material Facts, Jan.13, 1986; Christopher, P.A., (1988): Report on the Isla Mist property, Banks Island, British Columbia, in Prospectus for Claw Resources Ltd., dated May 10, 1988; Doublestar Resources Ltd., Annual Report, December 1999)
GSC MAP 23-1970
GSC P 70-41
GCNL #128,#229,#245,#250, 1977; #2, 1978; #197,#241, 1980; #129, 1983; #8,#41,#108,#113,#172,#213,#237, 1984; #45,#142, 1985; #10,#14, 1986; #105(June 2), 1998
N MINER Aug.10, 1978; Sept.6,13,Dec.13, 1984; Mar.21,Oct.28,Dec.9, 1985; Jun.23,Dec.8, 1986
NAGMIN Jun.7,Oct.11, 1985
PR REL Trader Resource Corp., Sept.5, 1984
Falconbridge File

DATE CODED: 1986/08/08
DATE REVISED: 1989/02/27

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103G 025**

NATIONAL MINERAL INVENTORY: 103G8 Au1

NAME(S): **YELLOW GIANT (DISCOVERY)**, DISCOVERY, BANKS,
HEPLER LAKE

STATUS: Developed Prospect
REGIONS: British Columbia
NTS MAP: 103G08E
BC MAP:
LATITUDE: 53 21 49 N
LONGITUDE: 130 07 36 W
ELEVATION: 35 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: West-central Banks Island (Assessment Report 14171).

MINING DIVISION: Skeena
UTM ZONE: 09 (NAD 83)
NORTHING: 5913312
EASTING: 425027

COMMODITIES: Gold Silver Zinc Copper Lead

MINERALS

SIGNIFICANT: Pyrite Pyrrhotite Arsenopyrite Sphalerite Chalcopyrite
Galena
ASSOCIATED: Quartz
ALTERATION: Garnet Zoisite Actinolite
ALTERATION TYPE: Silicific'n Skarn
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Breccia
CLASSIFICATION: Skarn Replacement Epigenetic
TYPE: I01 Au-quartz veins K04 Au skarn
I02 Intrusion-related Au pyrrhotite veins I05 Polymetallic veins Ag-Pb-Zn±Au
SHAPE: Regular
MODIFIER: Other
DIMENSION: 90 x 76 x 3 Metres STRIKE/DIP: 135/80N TREND/PLUNGE:
COMMENTS: Discovery zone is open at length and depth. Other modifier is
brecciated.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Permian	Unnamed/Unknown Group	Unnamed/Unknown Formation	Coast Plutonic Complex
Mesozoic-Cenozoic			

LITHOLOGY: Marble
Zoisite Actinolite Quartz Skarn
Granodiorite
Biotite Quartz Monzonite
Quartz Diorite
Quartzite

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Alexander
METAMORPHIC TYPE: Regional
PHYSIOGRAPHIC AREA: Milbanke Strandflat
RELATIONSHIP: Plutonic Rocks
GRADE: Greenschist

INVENTORY

ORE ZONE: DISCOVERY REPORT ON: Y
CATEGORY: Unclassified YEAR: 1988
QUANTITY: 58361 Tonnes
COMMODITY: Gold GRADE: 15.5000 Grams per tonne
REFERENCE: Trader Resource Corp., Letter to Shareholders March 28, 1988.

CAPSULE GEOLOGY

Banks Island lies along the western edge of the Tertiary-Jurassic Coast Plutonic Complex characterized by northwest trending granitic bodies, mainly granodiorite-quartz monzonite and quartz diorite which are separated by narrow, persistent Permian(?) or older metasedimentary belts, mainly crystalline limestone, micaceous quartzite skarn and schist. The metasedimentary rocks generally exhibit a wide range of "granitization" effects and contact metasomatism. Regional and local faulting, fracturing and folding are common on the island. Two major right-lateral faults, striking 310 degrees, known as the Arseno and Hepler faults, have associated 045 degree linears. Left-lateral faults striking 090 degrees also occur. Many contacts between the plutonic and metasedimentary rocks

CAPSULE GEOLOGY

are faults or drag folds. Some faults have been healed by recrystallization. Structure is the prime factor in ore localization. The Discovery zone is localized within a northwest trending fault zone that partially crosscuts metasedimentary rocks parallel to the margin of altered biotite quartz monzonite. The mineralized zone occurs between coarsely crystalline grey marble to the south and zoisite-actinolite-quartz skarn to the north. The metasediments are cut by hornblende quartz diorite dykes. The fault structure strikes 315 to 320 degrees and dips steeply (80 degrees) northeast. The mineralization dips less steeply near surface (55 to 65 degrees northeast). Sulphide mineralization consists of pyrite, pyrrhotite, arsenopyrite, sphalerite, and chalcopyrite which replaces the grey marble and brecciated skarn. The mineralized zone averages 3 metres wide and is up to 76 metres long and 90 metres vertical depth. The deposit appears to be a 30 degree southeast plunging shoot open at depth and strike length. A 15.2-metre drill intersection assayed 24.69 grams per tonne gold and 63.77 grams per tonne silver (Assessment Report 14171). Minimal zinc assays show a gold:zinc ratio of 0.55:1.0.

Extensive diamond drilling was carried out in 1984 and 1985 on four mineralized zones (Kim, Bob, Discovery and Tel). Unclassified reserves for the Discovery zone are 58,361 tonnes grading 15.5 grams per tonne gold (Trader Resource Corp., Letter to Shareholders March 28, 1988). See Kim (103G 021), Bob (103G 024) and Tel (103G 026) for additional reserves.

Doublestar Resources Ltd. acquired an interest in the property in 1998.

BIBLIOGRAPHY

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- EMPR GEM 1973-323
- EMPR GEOL 1977-1981, p. 139
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- EMPR OF 1992-1
- EMPR PF (*Trader Resource Corp., Statement of Material Facts, Jan.13, 1986; Christopher, P.A., (1988): Report on the Isla Mist Property, Banks Island, British Columbia, in Prospectus for Claw Resources Ltd., dated May 10, 1988; Doublestar Resources Ltd., Annual Report, December, 1999)
- EMR MIN BULL MR 223 B.C. 282
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- GSC MAP 23-1970
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- GCNL #197,#241, 1980; #8,#41,#108,#113,#130,#172,#205,#213,#237, 1984; #45,#142, 1985; #10,#14, 1986; #105(June 2), 1998
- N MINER Mar.22,Sept.6,13,Oct.28,Nov.15,Dec.9, 1985; Jun.23,Dec.8, 1986
- NAGMIN Jun.7, Oct.11, 1985
- PR REL Trader Resource Corp., Sept.5, 1984
- Falconbridge File

DATE CODED: 1986/08/07
DATE REVISED: 1989/02/27

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103G 026**

NATIONAL MINERAL INVENTORY: 103G8 Au2

NAME(S): **YELLOW GIANT (TEL), TEL, BANKS,**
MAIN TEL, WEST TEL, CENTRAL

STATUS: Developed Prospect
REGIONS: British Columbia
NTS MAP: 103G08E
BC MAP:
LATITUDE: 53 21 54 N
LONGITUDE: 130 09 41 W
ELEVATION: 25 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: West-central Banks Island (Assessment Report 14171).

MINING DIVISION: Skeena
UTM ZONE: 09 (NAD 83)
NORTHING: 5913504
EASTING: 422719

COMMODITIES: Gold Silver Zinc Lead Copper

MINERALS

SIGNIFICANT: Pyrite Pyrrhotite Sphalerite Chalcopyrite Arsenopyrite
Galena
ASSOCIATED: Calcite Quartz
ALTERATION: Garnet Actinolite Chlorite
ALTERATION TYPE: Skarn Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Massive Breccia Vein
CLASSIFICATION: Skarn Replacement Epigenetic
TYPE: I01 Au-quartz veins I02 Intrusion-related Au pyrrhotite veins
K04 Au skarn I05 Polymetallic veins Ag-Pb-Zn±Au
SHAPE: Regular
MODIFIER: Faulted
DIMENSION: 200 x 135 x 7 Metres STRIKE/DIP: 120/65N TREND/PLUNGE:
COMMENTS: Main Tel zone, average width.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE Permian Mesozoic-Cenozoic
GROUP Unnamed/Unknown Group
FORMATION Unnamed/Unknown Formation
IGNEOUS/METAMORPHIC/OTHER Coast Plutonic Complex

LITHOLOGY: Marble
Garnet Actinolite Skarn
Diorite
Granodiorite
Quartz Monzonite
Quartz Diorite
Limestone
Biotite Hornfels

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Alexander
METAMORPHIC TYPE: Contact Regional
PLUTONIC BELT: Plutonic Rocks
RELATIONSHIP:
PHYSIOGRAPHIC AREA: Milbanke Strandflat
GRADE: Hornfels Greenschist

INVENTORY

ORE ZONE: MAIN TEL REPORT ON: Y
CATEGORY: Unclassified YEAR: 1988
QUANTITY: 71349 Tonnes
COMMODITY GRADE
Gold 14.4000 Grams per tonne
REFERENCE: Trader Resource Corp., Letter to Shareholders March 28, 1988.

CAPSULE GEOLOGY

Banks Island lies along the western edge of the Tertiary-Jurassic Coast Plutonic Complex characterized by northwest trending granitic bodies, mainly granodiorite-quartz monzonite and quartz diorite which are separated by narrow, persistent Permian(?) or older metasedimentary belts, mainly crystalline limestone, micaceous quartzite skarn and schist. The metasedimentary rocks generally exhibit a wide range of "granitization" effects and contact metasomatism.

Regional and local faulting, fracturing and folding are common on the island. Two major right-lateral faults, striking 310 degrees,

CAPSULE GEOLOGY

known as the Arseno and Hepler faults, have associated 045 degree linears. Left-lateral faults striking 090 degrees also occur. Many contacts between the plutonic and metasedimentary rocks are faults or drag folds. Some faults have been healed by recrystallization. Structure is the prime factor in ore localization.

The Tel area is underlain by a northwest trending metasedimentary assemblage which dips moderately to steeply (55 to 80 degrees) northeast. The metasediments are mainly crystalline, silty and banded marble, and minor siltstone-biotite hornfels. The rocks are cut by many faults and shears, producing abundant chloritic slickensides, graphitic zones and gouge. All units have variable development of garnet-actinolite skarn and have been intruded by quartz diorite dykes, quartz felsite sills and quartz veins.

Three mineralized zones occurring along a 300 metre strike length are the Main, Central and West Tel zones. Massive sulphide and quartz-sulphide vein mineralization contains pyrite, pyrrhotite, sphalerite, galena and arsenopyrite. Gangue minerals include calcite and brecciated quartz.

The Main Tel zone is 200 metres long, 7.6 metres average width, and 135 metres in vertical depth. The deposit is open along strike and at depth. A 14.33-metre drill intersection assayed 53.40 grams per tonne gold, 34.29 grams per tonne silver, 2.73 per cent zinc and 0.15 per cent copper (Assessment Report 14171). A 1985 drill intersection assayed 20.23 grams per tonne gold, 39.09 grams per tonne silver, 1.49 per cent lead and 1.07 per cent zinc over 22.34 metres (George Cross News Letter #245, 1985).

The West Tel zone, 250 metres to the northwest, has gold in both quartz vein and skarn exposed in surface trenches. A 1.8-metre drill intersection assayed 0.62 grams per tonne gold (Assessment Report 14171). Two of the largest 045 degree cross faults, called the Tel and Sproatt faults, cut through the Main Tel and West Tel zones respectively.

The Central zone, 90 metres southeast of the West Tel zone, has sulphide lenses in diorite and marble. A 2.1-metre drill intersection assayed 9.26 grams per tonne gold, 27.43 grams per tonne silver and 2.65 per cent copper (Assessment Report 14171).

The Tel deposit appears to be a deformed Paleozoic gold deposit that may, in part, have been localized by solution collapse breccias formed in host carbonate lithologies.

Unclassified reserves of the Main Tel deposit are 71,349 tonnes grading 14.4 grams per tonne gold (Trader Resource Corp., Letter to Shareholders March 28, 1988).

Doublestar Resources Ltd. acquired an interest in the property in 1998.

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- EMPR PF (*Trader Resource Corp., Statement of Material Facts, Jan.13, 1986; Christopher, P.A. (1988): Report on the Isla Mist Property, Banks Island, British Columbia, in Prospectus for Claw Resources Ltd., dated May 10, 1988; Notes from CIM District 6 Meeting, Oct. 1986; Doublestar Resources Ltd., Annual Report, December, 1999)
- EMR MP CORPFILE (Hecate Gold Corp; Trader Resource Corp.)
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- GSC P 70-41
- CIM Jul., 1986, p. 36
- GCNL #191,#197,#199,#204,#215, 1975; #8,#41,#108,#113,#172,#213, #237, 1984; #45,#142,#215,#243,#245, 1985; #9,#10,#11,#13,#14, #20,#111,#134,#151,#190, 1986; #32,#42,#54, 1987; #234(Dec.4), 1990; #105(June 2), 1998
- IPDM Feb., 1986
- N MINER Sept.6,13,Oct.28,Nov.18,Dec.9,23, 1985; Jan.27,Feb.10,*Jun. 23,Jul.21,Oct.6,Dec.8, 1986; Apr.13,Sept.14,28, 1987
- NAGMIN Jun.7,Oct.11, 1985
- PR REL Trader Resource Corp., Sept.5, 1984
- V STOCKWATCH Aug.12, 1987
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- Seraphim, R.H. (1975): Report on the Tel Claims, Banks Island in Sproatt Silver Mines Ltd., Statement of Material Facts, Jun., 1975

MINFILE NUMBER: **103G 027**

NATIONAL MINERAL INVENTORY: 103G9 Au1

NAME(S): **ROWE, GOLD BUG, STARBOARD WATCH,
STANDARD WATCH**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103G09E
BC MAP:

MINING DIVISION: Skeena
UTM ZONE: 09 (NAD 83)

LATITUDE: 53 43 59 N
LONGITUDE: 130 11 16 W
ELEVATION: 425 Metres

NORTHING: 5954477
EASTING: 421646

LOCATION ACCURACY: Within 500M
COMMENTS: Symbol #2 (Geological Survey of Canada Map 23-1970), situated on Pitt Island on the west slope of Noble Mountain.

COMMODITIES: Gold Silver Copper

MINERALS

SIGNIFICANT: Gold Chalcopyrite Pyrite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I02 Intrusion-related Au pyrrhotite veins I05 Polymetallic veins Ag-Pb-Zn±Au
SHAPE: Regular
MODIFIER: Sheared
DIMENSION: 0200 x 0001 Metres STRIKE/DIP: 035/25E TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Cretaceous-Tertiary Coast Plutonic Complex

LITHOLOGY: Quartz Diorite

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)
TERRANE: Plutonic Rocks

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1930
SAMPLE TYPE: Grab
COMMODITY GRADE
Silver 27.4000 Grams per tonne
Gold 70.0000 Grams per tonne
REFERENCE: Minister of Mines Annual Report 1930, pages 69,70.

CAPSULE GEOLOGY

A 1.2 to 1.8 metre quartz vein, trending 035 degrees and dipping 15 to 30 degrees east, occurs in quartz diorite of the Coast Plutonic Complex. The vein can be traced for 200 metres and contains lenses of pyrite, variable gold, and minor chalcopyrite. A 1.5 metre sample assayed trace gold, 10.3 grams per tonne silver, and 0.5 per cent copper and a grab sample assayed 70 grams per tonne gold and 27.4 grams per tonne silver (Minister of Mines Annual Report 1930, page 69).

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*1930-69,70; 1931-35; 1932-49
EMPR BULL 1, 1932, pp. 21,29
GSC MAP 23-1970; 278A
GSC P *70-41, p. 49

DATE CODED: 1986/07/31
DATE REVISED: 1989/02/27

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

CAPSULE GEOLOGY

1975. Work by these companies included soil and rock sampling and geological mapping, and the drilling of five holes totaling 350 metres. Thunderwood Explorations completed an airborne magnetometer surveys in 1980. The showing was restaked by Cominco Ltd. in 1986. By the end of 1987 the company had completed line cutting, an induced polarization survey (28 kilometres), soil sampling and geological mapping over the showing and surrounding area. Cominco drilled 33 percussion holes totaling 2500 metres in 1988 to test induced polarization anomalies over the showing. Cominco continued work in 1995 with the flying of an airborne electromagnetic and magnetometer survey over the region totaling 228 kilometres.

See also Marino (103G 008).

BIBLIOGRAPHY

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23973
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EMPR FIELDWORK 1997, pp. 19-1-19-14
EMPR GEM *1974-323
GSC MAP 176A; 177A; 278; 1385A; 3-1990
GSC MEM 88
GSC P 86-20; 88-1E, pp. 217-219; 89-1H, pp. 7-11; 90-10
GCNL #239, 1979; #90(May 8), 1980
Chevron File
Falconbridge File

DATE CODED: 1986/06/06
DATE REVISED: 1999/10/31

CODED BY: LDJ
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103G 029**

NATIONAL MINERAL INVENTORY:

NAME(S): **SNOW 3**, BAXTER CREEK

STATUS: Showing
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103G04W
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 13 29 N
LONGITUDE: 131 49 46 W
ELEVATION: 25 Metres

NORTHING: 5900816
EASTING: 311230

LOCATION ACCURACY: Within 500M

COMMENTS: Showing, Map (Assessment Report 7805); located west of Cape Chroustcheff, Moresby Island.

COMMODITIES: Barite Lead Zinc

MINERALS

SIGNIFICANT: Barite Pyrite Sphalerite Galena
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic Industrial Min.
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au 110 Vein barite

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Middle Jurassic	Yakoun	Undefined Formation	

LITHOLOGY: Tuff
Andesitic Agglomerate
Andesite
Rhyolitic Dike
Diorite

HOSTROCK COMMENTS: Yakoun Formation has been reclassified as the Yakoun Group (Geological Survey of Canada Paper 88-1E, pages 221-229).

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Wrangell

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

CAPSULE GEOLOGY

The area is underlain predominately by andesitic agglomerates and tuffs of the Middle Jurassic Yakoun Group with lesser Upper Cretaceous Honna Formation conglomerates. The rocks are cut by rhyolite dikes and diorite intrusives and are bounded to the east by the northwest trending Sandspit fault.

A barite vein with associated galena and sphalerite occurs in Yakoun volcanics.

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GSC MEM 88
GSC P 86-20; 88-1E, pp. 217-219; 89-1H, pp. 7-11; 90-10
GCNL #88, 1984; #110, 1988
WWW <http://www.infomine.com/>
Falconbridge File

DATE CODED: 1986/06/23
DATE REVISED: 1989/02/27

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103G 030**

NATIONAL MINERAL INVENTORY:

NAME(S): **ENGLISHMAN**, YELLOW GIANT

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 103G08E
BC MAP:

MINING DIVISION: Skeena

LATITUDE: 53 21 54 N
LONGITUDE: 130 07 26 W
ELEVATION: 30 Metres

UTM ZONE: 09 (NAD 83)

NORTHING: 5913464
EASTING: 425214

LOCATION ACCURACY: Within 500M

COMMENTS: Figure 2 (Assessment Report 14171); 250 metres east of Discovery (103G025). West Central Banks Island.

COMMODITIES: Gold Silver Zinc Lead Copper
Molybdenum

MINERALS

SIGNIFICANT: Pyrite Pyrrhotite Sphalerite Galena Chalcopyrite

Molybdenite Arsenopyrite

ASSOCIATED: Quartz

ALTERATION: Sericite Quartz Chlorite Calcite Clinocllore

ALTERATION TYPE: Sericitic Chloritic

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Breccia Vein Disseminated

CLASSIFICATION: Hydrothermal Epigenetic

TYPE: I02 Intrusion-related Au pyrrhotite veins I05 Polymetallic veins Ag-Pb-Zn±Au

SHAPE: Regular

MODIFIER: Faulted

DIMENSION: 0380 x 0090 x 0024 Metres

STRIKE/DIP: 115/80N

TREND/PLUNGE:

COMMENTS: Main zone; open length and depth; maximum width.

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

Cretaceous-Tertiary

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Unnamed/Unknown Informal

LITHOLOGY: Quartz Monzonite
Limestone
Quartzite
Schist
Hornblende Quartz Diorite
Breccia

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline

TERRANE: Alexander

Plutonic Rocks

PHYSIOGRAPHIC AREA: Milbanke Strandflat

INVENTORY

ORE ZONE: MAIN

REPORT ON: N

CATEGORY: Assay/analysis

SAMPLE TYPE: Drill Core

YEAR: 1985

COMMODITY

GRADE

Silver

10.2900

Grams per tonne

Gold

7.5400

Grams per tonne

COMMENTS: Main Zone, 2.44 metre width. Also 4.8 grams per tonne gold on North Zone over 4.0 metres.

REFERENCE: Assessment Report 14171, page 23.

CAPSULE GEOLOGY

Banks Island lies along the western edge of the Coast Plutonic Complex characterized by northwest trending granitic bodies, mainly granodiorite-quartz monzonite and quartz diorite which are separated by narrow, persistent Permian (?) or older metasedimentary belts, mainly crystalline limestone, micaceous quartzite skarn, and schist. The metasedimentary rocks generally exhibit a wide range of "granitization" effects and contact metasomatism.

Regional and local faulting, fracturing, and folding are common on the Island. Two major, right lateral faults, trending 310 degrees known as the Arseno and Hepler faults have associated 045 degree linears. Left lateral faults trending 090 degrees also occur. Many contacts between the plutonic and metasedimentary rocks are faults or

CAPSULE GEOLOGY

drag folds. Some faults have been healed by recrystallization. Structure is the prime factor in ore localization.

The Englishman Zone lies along a major east-west fracture-shear system and is characterized by intense sericite-chlorite-quartz alteration, hosted by biotite quartz monzonite. The Main Zone strikes 115 degrees and dips 80 degrees north and the North Zone strikes 135 degrees and is close to vertical. The two zones are separated by a 20 to 30 metre distinctive hornblende quartz diorite with many intrusive breccia features. Pyrite, pyrrhotite, and arsenopyrite, with minor sphalerite, galena, and molybdenite occur as disseminations.

The east-west trend of the Englishman Zone is displaced by 045 degree cross faults with up to 50 metre left-lateral displacements. The Main Zone strikes 380 metres, has a vertical depth of 90 metres, and widths up to 24 metres. The North Zone strikes a similar length, has a 40 metre vertical depth and widths up to 4 metres. Both zones are open in length and depth.

A 2.44 metre drill intersection in the Main Zone assayed 7.54 grams per tonne gold and 10.29 grams per tonne silver. A 4.0 metre intersection of the North Zone assayed 4.8 grams per tonne gold (Assessment Report 14171).

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EMR MP CORPFILE (Trader Resource Corp.)
GSC MAP 23-1970
GSC P 70-41; 86-20; 88-1E; 89-1H
N MINER Dec.9, 1985
NAGMIN Jun.7, 1985
GCNL #205, 1984; #45, 1985; #14, 1986

DATE CODED: 1986/08/07
DATE REVISED: 1989/02/27

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103G 031**

NATIONAL MINERAL INVENTORY:

NAME(S): **QUARTZ HILL, CLIFF, MEADE,
YELLOW GIANT**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103G08E
BC MAP:

MINING DIVISION: Skeena

LATITUDE: 53 21 49 N
LONGITUDE: 130 07 11 W
ELEVATION: 55 Metres

UTM ZONE: 09 (NAD 83)

NORTHING: 5913305
EASTING: 425489

LOCATION ACCURACY: Within 500M

COMMENTS: Figure 2 (Assessment Report 14171). West Central Banks Island.

COMMODITIES: Gold Silver Zinc Lead Molybdenum

MINERALS

SIGNIFICANT: Pyrite Sphalerite Galena Molybdenite
ASSOCIATED: Quartz
ALTERATION: Chlorite Sericite Silica Actinolite Garnet
ALTERATION TYPE: Silicific'n Chloritic Skarn
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Massive Vein Disseminated
CLASSIFICATION: Skarn Epigenetic
TYPE: K04 Au skarn K02 Pb-Zn skarn
SHAPE: Irregular
MODIFIER: Sheared
DIMENSION: 0250 x 0100 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: Area of quartz masses.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Permian	Undefined Group	Unnamed/Unknown Formation	Coast Plutonic Complex
Cretaceous-Tertiary			

LITHOLOGY: Marble
Actinolite Garnet Skarn
Quartz Monzonite
Granodiorite
Quartz Diorite
Limestone
Schist

HOSTROCK COMMENTS: Permian (?) or older metasediments.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline PHYSIOGRAPHIC AREA: Milbanke Strandflat
TERRANE: Alexander Plutonic Rocks
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1985
SAMPLE TYPE: Chip
COMMODITY GRADE
Gold 34.3000 Grams per tonne
COMMENTS: The sample was taken from a width of 5 to 13 centimetres over 6.1 metres of length.
REFERENCE: Assessment Report 14171.

CAPSULE GEOLOGY

Banks Island lies along the western edge of the Coast Plutonic Complex characterized by northwest trending granitic bodies, mainly granodiorite-quartz monzonite and quartz diorite which are separated by narrow, persistent Permian (?) or older metasedimentary belts, mainly crystalline limestone, micaceous quartzite skarn, and schist. The metasedimentary rocks generally exhibit a wide range of "granitization" effects and contact metasomatism.

Regional and local faulting, fracturing, and folding are common on the Island. Two major, right lateral faults, trending 310 degrees known as the Arseno and Hepler faults have associated 045 degree linears. Left lateral faults trending 090 degrees also occur. Many

CAPSULE GEOLOGY

contacts between the plutonic and metasedimentary rocks are faults or drag folds. Some faults have been healed by recrystallization. Structure is the prime factor in ore localization.

The Quartz Hill area consists of abundant large, irregular quartz veins and masses in a 250 by 100 metre area associated with metasedimentary rocks in contact with quartz monzonite. The quartz masses are at the intersection of a 150 metre long east-west shear and a 240 metre northeast-southwest structural lineament.

The metasedimentary rocks consist of marble and actinolite-garnet skarn. Disseminated sulphide mineralization occurs throughout the area as sparse molybdenite, sphalerite, and pyrite. Galena containing up to 342 grams per tonne silver is occasionally present near vein contacts (Assessment Report 14171).

Trenching of the "Cliff Zone" exposed a heavily manganese oxide-stained contact between hornblende-biotite quartz monzonite and garnet-actinolite skarn with 10 to 15 centimetre widths of massive pyrite and lesser sphalerite. Samples assayed 3.4 grams per tonne gold, 27.4 grams per tonne silver, 2.0 per cent zinc, and 0.71 per cent lead. A 3.0 metre chip sample assayed 1.54 grams per tonne gold. The "Meade vein", 80 metres to the south assayed 34.3 grams per tonne gold from a 5 to 13 centimetre width over a 6.1 metre length (Assesment Report 14171).

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EMPR EXPL 1975-174; 1976-162; 1984-372; 1985-C367
EMPR PF (Trader Resource Corp., Statement of Material Facts, Jan.13, 1986)
EMR MP CORPFILE (Trader Resource Corp.)
GSC MAP 23-1970
GSC P 70-41
GCNL #98,#130,#213, 1984; #14, 1986

DATE CODED: 1986/08/07
DATE REVISED: 1989/02/27

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103G 032**

NATIONAL MINERAL INVENTORY:

NAME(S): **MIDWAY**, YELLOW GIANT

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103G08E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 21 39 N
LONGITUDE: 130 06 36 W
ELEVATION: 65 Metres

NORTHING: 5912986
EASTING: 426131

LOCATION ACCURACY: Within 500M

COMMENTS: Trench, Figures 44, 45 (Assessment Report 14171). West Central Banks Island.

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Pyrite
ASSOCIATED: Quartz
ALTERATION: Sericite Chlorite Silica
ALTERATION TYPE: Silicific'n Chloritic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I02 Intrusion-related Au pyrrhotite veins
DIMENSION: 0040 x 0005 Metres
COMMENTS: Area of quartz veins.

STRIKE/DIP: 130/

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Permian
Cretaceous-Tertiary

GROUP

Undefined Group

FORMATION

Unnamed/Unknown Formation

IGNEOUS/METAMORPHIC/OTHER

Coast Plutonic Complex

LITHOLOGY: Meta Greywacke
Quartz Monzonite
Granodiorite
Quartz Diorite
Limestone
Quartzite
Schist
Meta Greywacke

HOSTROCK COMMENTS: Permian (?) or older metasediments.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Alexander
METAMORPHIC TYPE: Regional

Plutonic Rocks
RELATIONSHIP:

PHYSIOGRAPHIC AREA: Milbanke Strandflat

GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Chip
COMMODITY: Gold

YEAR: 1985

GRADE: 2.2300 Grams per tonne

COMMENTS: The sample width is 2 metres.
REFERENCE: Assessment Report 14171.

CAPSULE GEOLOGY

Banks Island lies along the western edge of the Coast Plutonic Complex characterized by northwest trending granitic bodies, mainly granodiorite-quartz monzonite and quartz diorite which are separated by narrow, persistent Permian (?) or older metasedimentary belts, mainly crystalline limestone, micaceous quartzite skarn, and schist. The metasedimentary rocks generally exhibit a wide range of "granitization" effects and contact metasomatism.

The Midway area is characterized by siliceous, sericite-chlorite altered quartz monzonite in contact with metagreywacke. Trenching uncovered pyritic quartz veins across a 5 metre width trending north-west for about 40 metres. A 2 metre sample averaged 2.23 grams per tonne gold (Assessment Report 14171).

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1986)
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GSC MAP 23-1970
GSC P 70-41
GCNL #45, 1985; #10,#14, 1986
IPDM Feb.,Mar., 1985
NAGMIN Jun.7, 1985

DATE CODED: 1986/08/07
DATE REVISED: 1989/02/27

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103G 033**

NATIONAL MINERAL INVENTORY:

NAME(S): **EX, YELLOW GIANT**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103G08E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 21 24 N
LONGITUDE: 130 06 01 W
ELEVATION: 20 Metres

NORTHING: 5912512
EASTING: 426771

LOCATION ACCURACY: Within 500M

COMMENTS: Figure 2, (Assessment Report 14171). West Central Banks Island.

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Pyrite
ASSOCIATED: Quartz Actinolite Garnet
ALTERATION TYPE: Silicific'n Skarn
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Skarn Hydrothermal Replacement
TYPE: K04 Au skarn I02 Epigenetic
SHAPE: Irregular Intrusion-related Au pyrrhotite veins

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Permian
Cretaceous-Tertiary

GROUP

Undefined Group

FORMATION

Unnamed/Unknown Formation

IGNEOUS/METAMORPHIC/OTHER

Coast Plutonic Complex

LITHOLOGY:

Marble
Garnet Actinolite Skarn
Hornfels
Quartz Monzonite
Granodiorite
Quartzite
Schist
Limestone

HOSTROCK COMMENTS: Permian (?) or older metasediments.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Alexander
METAMORPHIC TYPE: Contact Regional

Plutonic Rocks
RELATIONSHIP:

PHYSIOGRAPHIC AREA: Milbanke Strandflat

GRADE: Hornfels
Greenschist

INVENTORY

ORE ZONE: FLOAT

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Rock

YEAR: 1985

COMMODITY

Gold

GRADE

17.1000 Grams per tonne

COMMENTS: Float sample.

REFERENCE: Assessment Report 14171.

CAPSULE GEOLOGY

Banks Island lies along the western edge of the Coast Plutonic Complex characterized by northwest trending granitic bodies, mainly granodiorite-quartz monzonite and quartz diorite which are separated by narrow, persistent Permian (?) or older metasedimentary belts, mainly crystalline limestone, micaceous quartzite skarn, and schist. The metasedimentary rocks generally exhibit a wide range of "granitization" effects and contact metasomatism.

The Ex Creek area is underlain by metasediments in contact with quartz monzonite. The metasediments, consisting of thin bedded siltstone and white, medium crystalline marble, are altered to rusty, quartz-rich silty hornfels and garnet actinolite skarn. Disseminated pyrite is common and gold occurs in quartz stringers. Numerous mineralized float specimens assayed up to 17.1 grams per tonne gold (Assessment Report 14171).

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RUN TIME: 12:06:33

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1986)
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GSC MAP 23-1970
GSC P 70-41
GCNL #13,#14, 1986
N MINER Jan.27, 1986

DATE CODED: 1986/08/07
DATE REVISED: 1989/02/27

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103G 034**

NATIONAL MINERAL INVENTORY:

NAME(S): **INDIA, YELLOW GIANT**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103G08E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 21 29 N
LONGITUDE: 130 07 11 W
ELEVATION: 50 Metres

NORTHING: 5912687
EASTING: 425480

LOCATION ACCURACY: Within 500M

COMMENTS: Sulfide showing, Figure 48 (Assessment Report 14171). West Central Banks Island.

COMMODITIES: Copper Gold

MINERALS

SIGNIFICANT: Pyrrhotite Chalcopyrite

COMMENTS: Only a trace gold.

ALTERATION: Actinolite Garnet

ALTERATION TYPE: Skarn

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Massive

CLASSIFICATION: Skarn Epigenetic

TYPE: K04 Au skarn

I02 Intrusion-related Au pyrrhotite veins

SHAPE: Irregular

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Permian Undefined Group

Unnamed/Unknown Formation

Coast Plutonic Complex

Cretaceous-Tertiary

LITHOLOGY: Marble
Actinolite Garnet Skarn
Quartz Diorite
Limestone
Quartzite
Schist
Granodiorite
Quartz Monzonite

HOSTROCK COMMENTS: Permian (?) or older metasediments.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline

TERRANE: Alexander

METAMORPHIC TYPE: Regional

Plutonic Rocks

RELATIONSHIP: Regional

PHYSIOGRAPHIC AREA: Milbanke Strandflat

GRADE: Greenschist

CAPSULE GEOLOGY

Banks Island lies along the western edge of the Coast Plutonic Complex characterized by northwest trending granitic bodies, mainly granodiorite-quartz monzonite and quartz diorite which are separated by narrow, persistent Permian (?) or older metasedimentary belts, mainly crystalline limestone, micaceous quartzite skarn, and schist. The metasedimentary rocks generally exhibit a wide range of "granitization" effects and contact metasomatism.

The India area contains sulfide-rich actinolite-garnet skarn along the margins of marble in contact with coarse hornblende diorite. Mineralization consists of massive pyrrhotite with minor chalcopyrite. Only trace gold occurs.

BIBLIOGRAPHY

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EMPR EXPL 1975-174; 1976-162; 1984-372; 1985-C367
EMPR PF (Trader Resource Corp., Statement of Material Facts, Jan.13, 1986)
EMR MP CORPFILE (Trader Resource Corp.)
GSC MAP 23-1970
GSC P 70-41
GCNL #14, 1986

DATE CODED: 1986/08/07
DATE REVISED: 1989/02/27

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103G 034**

MINFILE NUMBER: **103G 035**

NATIONAL MINERAL INVENTORY:

NAME(S): **ISLAND**, YELLOW GIANT

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103G08E
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 21 59 N
LONGITUDE: 130 08 06 W
ELEVATION: 30 Metres

NORTHING: 5913630
EASTING: 424478

LOCATION ACCURACY: Within 500M

COMMENTS: Showing, Figure 49 (Assessment Report 14171), West central Banks Island.

COMMODITIES: Gold Zinc Copper

MINERALS

SIGNIFICANT: Pyrite Pyrrhotite Chalcopyrite Bornite

ASSOCIATED: Graphite Manganite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Podiform

CLASSIFICATION: Skarn Replacement

TYPE: K04 Au skarn K01 Cu skarn

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Permian Undefined Group

Unnamed/Unknown Formation

Coast Plutonic Complex

Cretaceous-Tertiary

LITHOLOGY: Argillite
Skarn
Hornblende Diorite
Quartz
Schist
Limy Argillite
Granodiorite
Quartz Monzonite
Quartz Diorite

HOSTROCK COMMENTS: Permian (?) or older metasediments.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline

TERRANE: Alexander

METAMORPHIC TYPE: Regional

Plutonic Rocks

RELATIONSHIP:

PHYSIOGRAPHIC AREA: Milbanke Strandflat

GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1985

SAMPLE TYPE: Chip

COMMODITY

GRADE

Gold	2.0600	Grams per tonne
Copper	1.7300	Per cent
Zinc	0.3700	Per cent

COMMENTS: The sample width is 1.2 metres.

REFERENCE: Assessment Report 14171.

CAPSULE GEOLOGY

Banks Island lies along the western edge of the Coast Plutonic Complex characterized by northwest trending granitic bodies, mainly granodiorite-quartz monzonite and quartz diorite which are separated by narrow, persistent Permian (?) or older metasedimentary belts, mainly crystalline limestone, micaceous quartzite skarn, and schist. The metasedimentary rocks generally exhibit a wide range of "granitization" effects and contact metasomatism.

The Island showing consists of pyrrhotite-chalcopyrite lenses in skarn and limy argillite adjacent to hornblende diorite. A 1.2 metre sample assayed 2.06 grams per tonne gold, 0.37 per cent zinc and 1.73 per cent copper (Assessment Report 14171).

BIBLIOGRAPHY

EMPR ASS RPT 12719, *14171, 15759, 17503

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BIBLIOGRAPHY

EMPR EXPL 1984-372; 1985-C367
EMPR PF (Trader Resource Corp., Statement of Material Facts, Jan.13,
1986)
EMR MP CORPFILE (Trader Resource Corp.)
GSC MAP 23-1970
GSC P 70-41
GCNL #14, 1986

DATE CODED: 1986/08/08
DATE REVISED: 1989/02/27

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103G 036**

NATIONAL MINERAL INVENTORY:

NAME(S): **CRACK**, YELLOW GIANT

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103G08E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 21 34 N
LONGITUDE: 130 09 11 W
ELEVATION: 20 Metres

NORTHING: 5912877
EASTING: 423264

LOCATION ACCURACY: Within 500M

COMMENTS: Diamond-Drill Hole 6-76, Figure 81 (Assessment Report 14171), West central Banks Island.

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Pyrite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound
CLASSIFICATION: Magmatic
TYPE: I02 Intrusion-related Au pyrrhotite veins
SHAPE: Tabular
DIMENSION: 0080 x 0006 Metres
COMMENTS: Mineralized felsic sills.

STRIKE/DIP: 155/75E

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Permian	Undefined Group	Unnamed/Unknown Formation	Coast Plutonic Complex
Cretaceous-Tertiary			

LITHOLOGY: Marble
Hornfels
Granodiorite
Siltstone
Quartzite
Limestone
Schist
Granodiorite
Quartz Monzonite
Hornblende Tremolite Hornfels

HOSTROCK COMMENTS: Also includes quartz diorite. Permian (?) or older metasediments.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Alexander
METAMORPHIC TYPE: Contact Regional
PHYSIOGRAPHIC AREA: Milbanke Strandflat
RELATIONSHIP: Plutonic Rocks
GRADE: Hornfels Greenschist

INVENTORY

ORE ZONE: DRILLHOLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Drill Core
COMMODITY: Gold

YEAR: 1985

GRADE: 0.9000 Grams per tonne

COMMENTS: The sample width is 6.1 metres.
REFERENCE: Assessment Report 14171.

CAPSULE GEOLOGY

Banks Island lies along the western edge of the Coast Plutonic Complex characterized by northwest trending granitic bodies, mainly granodiorite-quartz monzonite and quartz diorite which are separated by narrow, persistent Permian (?) or older metasedimentary belts, mainly crystalline limestone, micaceous quartzite skarn, and schist. The metasedimentary rocks generally exhibit a wide range of "granitization" effects and contact metasomatism. Stratabound pyritic quartz felsite sills are folded along with enclosing metasediments, which consist of marble and siltstone. The sills are a mixture of several plutonic types and at least one meta-sedimentary hornfels. Granodiorite is most common with quartz

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CAPSULE GEOLOGY

diorite, quartz monzonite, and hornblende-tremolite hornfels. Cataclastic textures and quartz granulations are common.

A drill hole intersected 0.9 grams per tonne gold over 6.1 metres (Assessment Report 14171).

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GSC MAP 23-1970
GSC P 70-41
GCNL #13,#14, 1986
N MINER Jan.27, 1986

DATE CODED: 1986/08/11
DATE REVISED: 1989/02/27

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103G 037**

NATIONAL MINERAL INVENTORY:

NAME(S): **CROSSBREAK**, YELLOW GIANT

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103G08E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 22 09 N
LONGITUDE: 130 10 06 W
ELEVATION: 30 Metres

NORTHING: 5913975
EASTING: 422265

LOCATION ACCURACY: Within 500M

COMMENTS: Showing, Figure 82 (Assessment Report 14171), West central Banks Island.

COMMODITIES: Gold Silver Zinc Lead

MINERALS

SIGNIFICANT: Pyrite Arsenopyrite Sphalerite Galena
ASSOCIATED: Quartz
ALTERATION TYPE: Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Replacement
TYPE: K04 Au skarn I02 Intrusion-related Au pyrrhotite veins

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE: Permian GROUP: Undefined Group FORMATION: Unnamed/Unknown Formation IGNEOUS/METAMORPHIC/OTHER:

LITHOLOGY: Quartzite
Marble
Granodiorite
Quartz Monzonite
Quartz Diorite
Limestone
Quartzite
Schist
Biotite Feldspar Hornfels

HOSTROCK COMMENTS: Permian (?) or older metasediments.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Alexander Plutonic Rocks PHYSIOGRAPHIC AREA: Milbanke Strandflat
METAMORPHIC TYPE: Contact Regional RELATIONSHIP: GRADE: Hornfels
Greenschist

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1985
SAMPLE TYPE: Drill Core
COMMODITY: GRADE
Silver 17.8300 Grams per tonne
Gold 3.7700 Grams per tonne

COMMENTS: The sample width is 2.3 metres.
REFERENCE: Assessment Report 14171.

CAPSULE GEOLOGY

Banks Island lies along the western edge of the Coast Plutonic Complex characterized by northwest trending granitic bodies, mainly granodiorite-quartz monzonite and quartz diorite which are separated by narrow, persistent Permian (?) or older metasedimentary belts, mainly crystalline limestone, micaceous quartzite skarn, and schist. The metasedimentary rocks generally exhibit a wide range of "granitization" effects and contact metasomatism. The Crossbreak Zone occurs near the intersection of the east-northeast trending Crossbreak fault and the northwest trending Bank-Barge Lineament. Argillaceous quartzite, marble, and siltstone with graphitic horizons strike northwest and are displaced left laterally south of the Crossbreak fault. The rocks are complexly folded. Disseminated pyrite, arsenopyrite, and minor sphalerite and galena occur in a distinctive argillaceous quartzite unit within

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CAPSULE GEOLOGY

a thick marble unit. The quartzite grades into biotite feldspar hornfels toward the fault. A 7 metre chip sample assayed 2.61 grams per tonne gold and a 2.3 metre drill intersection assayed 3.77 grams per tonne gold and 17.83 grams per tonne silver (Assessment Report 14171).

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EMPR PF (Trader Resource Corp., Statement of Material Facts, Jan.13, 1986)
EMR MP CORPFILE (Trader Resource Corp.)
GSC MAP 23-1970
GSC P 70-41
GCNL #14, 1986

DATE CODED: 1986/08/08
DATE REVISED: 1989/02/27

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103G 038**

NATIONAL MINERAL INVENTORY:

NAME(S): **WEST BANKS LAKE**, YELLOW GIANT

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103G08E
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 22 49 N
LONGITUDE: 130 09 51 W
ELEVATION: 10 Metres

NORTHING: 5915206
EASTING: 422562

LOCATION ACCURACY: Within 500M

COMMENTS: Description Page 32; Contact zone, Figure 6 (Assessment Report 14171).
West central Banks Island.

COMMODITIES: Gold Silver

MINERALS

SIGNIFICANT: Pyrite
COMMENTS: Auriferous pyrite.
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I02 Intrusion-related Au pyrrhotite veins

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Permian
Cretaceous-Tertiary

GROUP

Undefined Group

FORMATION

Unnamed/Unknown Formation

IGNEOUS/METAMORPHIC/OTHER

Coast Plutonic Complex

LITHOLOGY: Marble
Argillite
Quartz Diorite
Quartz Monzonite
Granodiorite
Quartzite
Schist

HOSTROCK COMMENTS: Permian (?) or older metasediments.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline

TERRANE: Alexander

METAMORPHIC TYPE: Regional

Plutonic Rocks
RELATIONSHIP:

PHYSIOGRAPHIC AREA: Milbanke Strandflat

GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

SAMPLE TYPE: Rock

YEAR: 1985

COMMODITY

Silver

Gold

GRADE

75.4000

100.0000

Grams per tonne

Grams per tonne

REFERENCE: Assessment Report 14171.

CAPSULE GEOLOGY

Banks Island lies along the western edge of the Coast Plutonic Complex characterized by northwest trending granitic bodies, mainly granodiorite-quartz monzonite and quartz diorite which are separated by narrow, persistent Permian (?) or older metasedimentary belts, mainly crystalline limestone, micaceous quartzite skarn, and schist. The metasedimentary rocks generally exhibit a wide range of "granitization" effects and contact metasomatism.

Narrow gold bearing quartz veins occur near the contact area between metasediments consisting of argillites and marble and plutonics consisting of quartz diorite and quartz monzonite. Samples from a trench below water level in the lake assayed 100 grams per tonne gold and 75.4 grams per tonne silver (Assessment Report 14171).

BIBLIOGRAPHY

EMPR ASS RPT 12719, *14171, 15759, 17503

EMPR EXPL 1984-372; 1985-C367

EMPR PF (Trader Resource Corp., Statement of Material Facts, Jan.13,

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 340
REPORT: RGEN0100

BIBLIOGRAPHY

1986)
EMR MP CORPFILE (Trader Resource Corp.)
GSC MAP 23-1970
GSC P 70-41
GCNL #14, 1986

DATE CODED: 1986/08/11
DATE REVISED: 1989/02/27

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103G 039**

NATIONAL MINERAL INVENTORY:

NAME(S): **SKARN**

MINING DIVISION: Skeena

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 103G08E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 26 59 N
LONGITUDE: 130 00 06 W
ELEVATION: 300 Metres

NORTHING: 5922767
EASTING: 433479

LOCATION ACCURACY: Within 500M

COMMENTS: Centre of skarn gabbro body, Figure 4/84 (Assessment Report 12346).
East central Banks Island.

COMMODITIES: Iron Titanium Vanadium Magnetite

MINERALS

SIGNIFICANT: Magnetite Ilmenite
COMMENTS: Minor anomalies in platinum, palladium, and gold.
ASSOCIATED: Hornblende Plagioclase Pyroxene
ALTERATION: Epidote Chlorite
ALTERATION TYPE: Propylitic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Layered Disseminated Massive
CLASSIFICATION: Magmatic Hydrothermal Industrial Min.
TYPE: M05 Alaskan-type Pt±Os±Rh±Ir
SHAPE: Regular
DIMENSION: 300 x 60 Metres STRIKE/DIP: 130/75E TREND/PLUNGE:
COMMENTS: Magnetite band.

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Cretaceous-Tertiary Coast Plutonic Complex

LITHOLOGY: Gabbro
Skarn
Dioritic Gneiss
Quartz Diorite

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)
TERRANE: Plutonic Rocks

INVENTORY

ORE ZONE: HIGH-GRADE REPORT ON: N

CATEGORY: Assay/analysis YEAR: 1984
SAMPLE TYPE: Grab
COMMODITY GRADE
Iron 49.0000 Per cent
Titanium 7.0000 Per cent
Vanadium 1.2000 Per cent

COMMENTS: The sample was taken from high grade material.
REFERENCE: Assessment Report 12346.

CAPSULE GEOLOGY

A gabbro complex of the Coast Plutonic Complex is in fault contact with gneissic diorite to the north, hornblende-biotite quartz diorite to the southwest, and a skarn-metasediment unit to the northeast. The gabbro body is up to 500 metres wide and 1000 metres long and is composed largely of hornblende, plagioclase and pyroxene. The gabbro carries disseminations and bands of vanadium-rich titanomagnetite up to 60 metres wide and over 300 metres along north trends with steep east dips. A sample of the higher grade material assayed 49 per cent iron, 7.0 per cent titanium and 1.2 per cent vanadium (Assessment Report 12346). Minor anomalies in platinum, palladium and gold are also reported.

BIBLIOGRAPHY

EMPR ASS RPT *12346, 13737, *16100, 17450
EMPR EXPL 1984-372; 1985-C366; 1987-C354
EMPR OF *1988-28, pp. 125,126

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 342
REPORT: RGEN0100

BIBLIOGRAPHY

GSC EC GEOL *No. 27, pp. 57,116
GSC MAP 23-1970
GSC P 69-54, Table 1; 70-41, p. 27
GSC RPT OF ACTIVITIES 1970, p. 57

DATE CODED: 1986/08/12
DATE REVISED: 1989/02/27

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103G 040**

NATIONAL MINERAL INVENTORY:

NAME(S): **KOOR**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103G08E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 20 34 N
LONGITUDE: 130 02 56 W
ELEVATION: 30 Metres

NORTHING: 5910916
EASTING: 430169

LOCATION ACCURACY: Within 500M

COMMENTS: Skarn, figure 1, Assessment Report 13958, Central Banks Island.

COMMODITIES: Copper Silver Zinc

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Bornite Sphalerite
ALTERATION: Garnet Actinolite
ALTERATION TYPE: Skarn Pyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Skarn Epigenetic
TYPE: K01 Cu skarn K02 Pb-Zn skarn

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Permian	Undefined Group	Unnamed/Unknown Formation	Coast Plutonic Complex
Cretaceous-Tertiary			

LITHOLOGY: Garnet Actinolite Skarn
Marble
Biotite Quartz Diorite
Siltstone
Argillaceous Quartzite
Calc-silicate

HOSTROCK COMMENTS: Permian (?) or older metasediments.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Alexander
METAMORPHIC TYPE: Contact Regional
PHYSIOGRAPHIC AREA: Milbanke Strandflat
RELATIONSHIP: Plutonic Rocks
GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1983
SAMPLE TYPE: Rock
COMMODITY
Silver 0.6000 Grams per tonne
Copper 0.0350 Per cent
REFERENCE: Assessment Report 13958.

CAPSULE GEOLOGY

A northwest trending Permian (?) or older metasedimentary sequence of rocks are flanked by Tertiary-Cretaceous Coast Plutonic Complex. The metasediments, which consist of pyrite-rich argillaceous quartzite, massive marble, skarn, calc-silicate and siltstone, strike at least 1.5 kilometres and are up to 150 metres wide. They are in contact with biotite quartz monzonite to the east and hornblende quartz diorite to the west.

A 1.0 metre wide, rusty garnet-actinolite skarn occurs at the marble quartz diorite contact. It contains disseminated pyrite, chalcopyrite, bornite, and sphalerite. A rock sample assayed 0.035 per cent copper, trace lead, 0.003 per cent zinc, 0.6 grams per tonne silver and 0.005 grams per tonne gold (Assessment Report 13958).

BIBLIOGRAPHY

EMPR ASS RPT 13958
EMPR EXPL 1985-366
GSC MAP 23-1970
GSC MEM 394

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 344
REPORT: RGEN0100

BIBLIOGRAPHY

GSC P 70-41

DATE CODED: 1987/12/30
DATE REVISED: 1989/02/27

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103G 042**

NATIONAL MINERAL INVENTORY:

NAME(S): **BANKS ISLAND GARNET**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103G08E 103G01E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 15 29 N
LONGITUDE: 130 04 06 W
ELEVATION: 75 Metres

NORTHING: 5901510
EASTING: 428733

LOCATION ACCURACY: Within 1 KM

COMMENTS: Located on the west coast of Banks Island, southeast of Grief Point
(Area 4, Figure 10, Open File 1988-26).

COMMODITIES: Garnet

MINERALS

SIGNIFICANT: Garnet
ASSOCIATED: Biotite Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Layered Stratabound
CLASSIFICATION: Metamorphic Syngenetic Industrial Min.
TYPE: P02 Kyanite-sillimanite schists
SHAPE: Tabular
MODIFIER: Folded

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Permian			Unnamed/Unknown Informal

LITHOLOGY: Garnet Biotite Quartz Schist
Garnet Schist
Quartz
Crystal Limestone

HOSTROCK COMMENTS: Permian (?) and/or older metasediments.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Plutonic Rocks Alexander
METAMORPHIC TYPE: Regional RELATIONSHIP: Syn-mineralization GRADE: Amphibolite

CAPSULE GEOLOGY

On the west coast of Banks Island, south of Grief Point, garnet occurs in Permian (?) and/or older metasediments which are comprised mainly of laminated micaceous quartzite, crystalline limestone, skarn and schist. The garnet-biotite-quartz schists host garnets which range up to 2.5 centimetres in length and are strongly flattened parallel to the schistosity (Geological Survey of Canada Paper 70-41).

BIBLIOGRAPHY

EMPR OF *1988-26, p. 15
GSC MAP 23-1970
GSC P *70-41

DATE CODED: 1988/03/30
DATE REVISED: 1989/02/01

CODED BY: JP
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

CAPSULE GEOLOGY

associated silica-sericite alteration with stockwork and sheeted veining. Majority of the veins strike between 110 degrees and 140 degrees but the strong "Boutwell Vein" subparallels a 090 degree structural trend.

Veins vary from 1 to 2 centimetres to over 1 metre and several generations of veins are present. Early veins are barren and later veins host chalcopyrite, pyrite and molybdenite with local scheelite concentrations (refer to Tungsten 103G 044 and Isla Mist 103G 045).

Mineralization in the Boutwell vein was exposed in 1985. Chalcopyrite is concentrated near the centre of the quartz vein with molybdenite occurring mainly on slickensided vein margins. Magnetite and pyrite are present and account for the oxidation and abundant limonite staining.

In 1987, a chip sample across 1.2 metres of the Boutwell vein assayed 0.037 per cent molybdenum, 1.6 per cent copper, 0.11 per cent zinc, 40.4 grams per tonne silver and 0.08 grams per tonne gold (Property File: Christopher, P.A., 1988).

BIBLIOGRAPHY

EMPR ASS RPT 14297, *14706
EMPR EXPL 1985-C366; 1986-C422
EMPR PF (Christopher, P.A., (1988): *Report on the Isla Mist
Property, Banks Island, British Columbia, for Claw Resources Ltd.,
Prospectus dated May 10, 1988)
GSC MAP 23-1970
GSC P 70-41
GCNL #72, 1987; #50, 1989

DATE CODED: 1989/02/28
DATE REVISED: //

CODED BY: LLD
REVISED BY:

FIELD CHECK: N
FIELD CHECK:

MINFILE NUMBER: **103G 044**

NATIONAL MINERAL INVENTORY:

NAME(S): **TUNGSTEN**, ISLA 3, ISLA MIST

STATUS: Showing
 REGIONS: British Columbia
 NTS MAP: 103G08E
 BC MAP:

MINING DIVISION: Skeena

LATITUDE: 53 23 07 N
 LONGITUDE: 130 06 15 W
 ELEVATION: 155 Metres

UTM ZONE: 09 (NAD 83)

NORTHING: 5915699
 EASTING: 426562

LOCATION ACCURACY:

COMMENTS: Located west of Foul Bay on Banks Island. Mineralized location in Figure 6 (Property File: Christopher, P.A., 1988).

COMMODITIES: Tungsten Zinc Silver

MINERALS

SIGNIFICANT: Scheelite Sphalerite Pyrite
 ASSOCIATED: Quartz
 ALTERATION: Sericite Chlorite Feldspar
 ALTERATION TYPE: Silicific'n Propylitic Potassic
 MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Stockwork
 CLASSIFICATION: Hydrothermal Epigenetic
 TYPE: I12 W veins

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Cretaceous-Tertiary			Coast Plutonic Complex

LITHOLOGY: Quartz Monzonite
 Biotite Quartz Monzonite
 Granodiorite
 Quartz Vein

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline	PHYSIOGRAPHIC AREA: Teslin Plateau
TERRANE: Alexander	Plutonic Rocks
METAMORPHIC TYPE: Regional	RELATIONSHIP: Syn-mineralization Post-mineralization
	GRADE: Greenschist

INVENTORY

ORE ZONE: VEIN	REPORT ON: N
CATEGORY: Assay/analysis	YEAR: 1987
SAMPLE TYPE: Chip	
COMMODITY	GRADE
Silver	1.9000 Grams per tonne
Tungsten	0.0389 Per cent
Zinc	0.0834 Per cent
COMMENTS: Sample R87-19, 1.0 metre chip sample from centre of vein.	
REFERENCE: Property File: Christopher, P.A., 1988.	

CAPSULE GEOLOGY

Banks Island is situated near the western margin of the Coast Plutonic Complex. The island is underlain by Tertiary to Cretaceous granitic rocks that vary in composition from gabbro to quartz monzonite. The granitic rocks host roof pendants of Permian (?) or older metasediments consisting of crystalline limestone/marble, pelites and skarn.

The Isla Mist property is underlain by granodiorite and quartz monzonite phases of the Coast Plutonic Complex. Locally, the biotite quartz monzonite or granodiorite is fine-grained, light colored and hosts abundant quartz veins infilling a strong fracture pattern. Many light-colored dykes, characterized by muscovite, quartz and white feldspars, cut the fine quartz monzonite unit.

Major fault directions on the property are 295 degrees and 045 to 050 degrees, with extensive fracturing controlling sheeted and stockwork veining.

Three mineralized areas are known to occur on the property and all are hosted by the fine quartz monzonite unit. The unit has associated silica-sericite alteration with stockwork and sheeted

CAPSULE GEOLOGY

veining. Majority of the veins strike between 110 degrees and 140 degrees.

The Tungsten vein consists of scheelite bearing quartz stringers and stockwork mineralization. In 1985 a trench exposed this mineralized zone which ranges up to 4.0 metres in width, strikes about 120 degrees and is traceable for approximately 55 metres. Mineralization consists of pyrite and rare blebs of dark brown sphalerite and scheelite. Silicification, sericite, chlorite and pink feldspar alteration occur within the mineralized stringers.

In 1987, a 1.0 metre chip sample collected from the centre of the vein assayed 1.9 grams per tonne silver, 0.083 per cent zinc and 0.039 per cent tungsten (Property File: Christopher, P.A., 1988).

BIBLIOGRAPHY

EMPR ASS RPT 14297, *14706
EMPR EXPL 1985-C366; 1986-C442
EMPR OF 1991-17
EMPR PF (Christopher, P.A., (1988): *Report on the Isla Mist Property, Banks Island, British Columbia, for Claw Resources Ltd., Prospectus dated May 10, 1988)
GSC MAP 23-1970
GSC P 70-41
GCNL #72, 1987; #50, 1989

DATE CODED: 1989/02/28
DATE REVISED: / /

CODED BY: LLD
REVISED BY:

FIELD CHECK: N
FIELD CHECK:

MINFILE NUMBER: **103G 045**

NATIONAL MINERAL INVENTORY:

NAME(S): **ISLA MIST**, PETE'S, ISLA

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103G08E
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 22 43 N
LONGITUDE: 130 05 20 W
ELEVATION: 290 Metres

NORTHING: 5914942
EASTING: 427566

LOCATION ACCURACY: Within 500M

COMMENTS: Located west of Foul Bay on Banks Island. Mineralized location in Figure 7 (Property File: Christopher, P.A., 1988).

COMMODITIES: Silver Copper Molybdenum Tungsten Gold

MINERALS

SIGNIFICANT: Molybdenite Scheelite Chalcopyrite Pyrite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein

CLASSIFICATION: Hydrothermal Epigenetic

TYPE: L05 Porphyry Mo (Low F- type) I05 Polymetallic veins Ag-Pb-Zn±Au
I12 W veins I02 Intrusion-related Au pyrrhotite veins

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Cretaceous-Tertiary

Coast Plutonic Complex

LITHOLOGY: Quartz Monzonite
Biotite Quartz Monzonite
Granodiorite
Quartz Vein

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline

TERRANE: Alexander

METAMORPHIC TYPE: Regional

Plutonic Rocks

RELATIONSHIP: Syn-mineralization
Post-mineralization

PHYSIOGRAPHIC AREA: Teslin Plateau

GRADE: Greenschist

INVENTORY

ORE ZONE: PETE'S VEIN

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1987

SAMPLE TYPE: Grab

COMMODITY

GRADE

Silver	40.5000	Grams per tonne
Gold	0.0880	Grams per tonne
Copper	0.7100	Per cent
Molybdenum	0.0134	Per cent
Tungsten	0.0096	Per cent

COMMENTS: Grab sample P87-36 from Pete's vein.

REFERENCE: Property File: Christopher, P.A., 1988.

CAPSULE GEOLOGY

Banks Island is situated near the western margin of the Coast Plutonic Complex. The island is underlain by Tertiary to Cretaceous granitic rocks that vary in composition from gabbro to quartz monzonite. The granitic rocks host roof pendants of Permian (?) or older metasediments consisting of crystalline limestone/marble, pelites and skarn.

The Isla Mist property is underlain by granodiorite and quartz monzonite phases of the Coast Plutonic Complex. Locally, the biotite quartz monzonite or granodiorite is fine-grained, light colored and hosts abundant quartz veins infilling a strong fracture pattern. Many light-colored dykes, characterized by muscovite, quartz and white feldspars, cut the fine quartz monzonite unit.

Major fault directions on the property are 295 degrees and 045 to 050 degrees, with extensive fracturing controlling sheeted and stock-work veining.

Three mineralized areas are known to occur on the property and all are hosted by the fine quartz monzonite unit. The unit has

CAPSULE GEOLOGY

associated silica-sericite alteration with stockwork and sheeted veining. Majority of the veins strike between 110 degrees and 140 degrees.

The Pete's vein mineralization consists of quartz stringers and veins which host minor chalcopyrite, pyrite, molybdenite and scheelite. The main zone vein averaged about 1.0 metres width. In 1987, a sample from this zone assayed 0.088 grams per tone gold, 40.5 grams per tonne silver, 0.71 per cent copper, 0.0134 per cent molybdenum and 0.0096 per cent tungsten (Property File: Christopher, P.A., 1988).

BIBLIOGRAPHY

EMPR ASS RPT 14297, *14706
EMPR EXPL 1985-C366; *1986-C422
EMPR OF 1991-17
EMPR PF (Christopher, P.A., (1988): *Report on the Isla Mist
Property, Banks Island, British Columbia, for Claw Resources Ltd.,
Prospectus dated May 10, 1988)
GSC MAP 23-1970
GSC P 70-41
GCNL #72, 1987; #50, 1989

DATE CODED: 1989/02/28
DATE REVISED: 1989/02/28

CODED BY: LLD
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103G 046**

NATIONAL MINERAL INVENTORY:

NAME(S): **COLBY BAY LIMESTONE**, BANKS ISLAND

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103G09W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 34 26 N
LONGITUDE: 130 15 39 W
ELEVATION: 1 Metres

NORTHING: 5936853
EASTING: 416513

LOCATION ACCURACY: Within 1 KM

COMMENTS: Location on northeast shore of Banks Island, 8.0 kilometres northwest of Colby Bay (Canmet Report 811, page 173).

COMMODITIES: Limestone

MINERALS

SIGNIFICANT: Calcite
ASSOCIATED: Dolomite Silica
MINERALIZATION AGE: Paleozoic

DEPOSIT

CHARACTER: Stratiform Massive
CLASSIFICATION: Sedimentary Evaporite Industrial Min.
DIMENSION: STRIKE/DIP: 120/
COMMENTS: Limestone strikes 120 degrees, dips steeply southwest.

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Unknown			Coast Plutonic Complex

LITHOLOGY: Limestone
Chert
Siltstone

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Alexander
METAMORPHIC TYPE: Contact

PHYSIOGRAPHIC AREA: Milbanke Strandflat

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

A band of white intermixed high calcium limestone and dolomite at least 270 metres wide outcrops on the northeast shore of Banks Island, 8 kilometres northwest of Colby Bay, and continues inland for some distance. The band and associated chert and siltstone lie in an 8 kilometre long, northwest trending metasedimentary wedge enclosed in diorite of the Coast Plutonic Complex. The limestone bed strikes 120 degrees and dips steeply southwest. The rock is relatively free of dykes. Much of the dolomite was found to be siliceous.

Various other occurrences of white and rose coloured limestone, sometimes containing wavy lenses of diorite, are reported in this wedge of metasediments.

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EM ASS RPT 23873, 25494
GSC MAP 23-70; 278A
GSC P 70-41, p. 22
CANMET RPT 811, Part 5, p. 173

DATE CODED: 1989/07/28
DATE REVISED: / /

CODED BY: PSF
REVISED BY:

FIELD CHECK: N
FIELD CHECK:

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 355
REPORT: RGEN0100

BIBLIOGRAPHY

GSC MAP 1385A; 3-1990
GSC P 86-20; 88-1E; 89-1H, pp. 7-11; 90-10, pp. 163-172

DATE CODED: 1999/10/31
DATE REVISED: / /

CODED BY: PSF
REVISED BY:

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103G 048**

NATIONAL MINERAL INVENTORY:

NAME(S): **SKIDEGATE LAKE NORTH**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: Queen Charlotte Islands
NTS MAP: 103G04W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 06 08 N
LONGITUDE: 131 55 52 W
ELEVATION: 50 Metres

NORTHING: 5887657
EASTING: 303781

LOCATION ACCURACY: Within 500M

COMMENTS: Location centered on limestone outcrop on north side of Skidegate Lake, four kilometres west of the east end of the lake (Geological Survey of Canada Map 3-1990).

COMMODITIES: Limestone

MINERALS

SIGNIFICANT: Calcite
MINERALIZATION AGE: Upper Triassic

DEPOSIT

CHARACTER: Massive
CLASSIFICATION: Sedimentary
TYPE: R09 Limestone
DIMENSION: 900 x 500

Concordant
Syngenetic
Industrial Min.
Metres

STRIKE/DIP: TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Upper Triassic
DATING METHOD: Fossil
MATERIAL DATED: Various fossils

GROUP

Kunga

FORMATION

Sadler

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Limestone

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Wrangell

PHYSIOGRAPHIC AREA: Queen Charlotte Ranges

CAPSULE GEOLOGY

The lower two members of the Kunga Group, consisting of the Upper Triassic Sadler and Peril formations, represent the main limestone resource of the Queen Charlotte Islands, particularly the basal massive grey limestone comprising the Sadler Formation. Its thickness varies from less than 30 metres to more than 200 metres.

The Kunga Group, consisting of the limestone members and an overlying argillite member, rests conformably on the Karmutsen Formation, and may be overlain conformably by the Jurassic Maude Group or disconformably by the Middle Jurassic Yakoun Group.

Limestone of the Sadler Formation outcrops over a broad peninsula extending from the north side of Skidegate Lake, 4 kilometres west of the east end of the lake. The limestone is exposed discontinuously over a length of 0.9 kilometre and width of up to 0.5 kilometre. The quality of the limestone is reported to be high and to be of similar character as the limestone comprising Skidegate Lake South (103G 047) on the south side of the lake (Paulsen, 1982, page 3-3).

Consolidated Cinola Mines Ltd. briefly evaluated this occurrence as a source of neutralizing medium for its Specogna epithermal gold prospect (103F 034).

BIBLIOGRAPHY

EMPR BULL 54, pp. 50, 175
EMPR OF 1992-18, pp. 43-45
EMPR PF (*Paulsen, L. (1982): Limestone Study - Preliminary Evaluation - Queen Charlotte Joint Venture; in 103F General)
GSC MAP 1385A; 3-1990
GSC P 86-20; 88-1E; 89-1H, pp. 7-11; 90-10, pp. 163-172

DATE CODED: 1999/10/31
DATE REVISED: / /

CODED BY: PSF
REVISED BY:

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 357
REPORT: RGEN0100

MINFILE NUMBER: **103H 001**

NATIONAL MINERAL INVENTORY:

NAME(S): **WEEWANIE**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103H10W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 41 34 N
LONGITUDE: 128 47 31 W
ELEVATION: 30 Metres

NORTHING: 5949361
EASTING: 513738

LOCATION ACCURACY: Within 500M
COMMENTS: Mineral Inventory Map.

COMMODITIES: Hotspring

MINERALS

SIGNIFICANT: Salts
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Hydrothermal Industrial Min.
TYPE: T02 Geothermal spring

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic	Undefined Group	Unnamed/Unknown Formation	Coast Plutonic Complex
Paleozoic-Mesozoic			

LITHOLOGY: Biotite Gneiss
Granodiorite

HOSTROCK COMMENTS: Includes Tertiary plutons.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline	PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)
TERRANE: Undivided Metamorphic Assembl. Plutonic Rocks	
METAMORPHIC TYPE: Regional	RELATIONSHIP: GRADE: Amphibolite

CAPSULE GEOLOGY

The area is underlain by a northwest trending belt of biotite and banded gneiss along the southwest flank of the Foch Antiform, the core of which is granodiorite of the Coast Plutonic Complex. The hotspring issues at 60 litres per minute and 47.5 degrees Celsius.

BIBLIOGRAPHY

GSC MAP 23-1970; 1385A
GSC P 70-41
GSC SUM RPT 1921A, Fig. 6
McDonald, J., (1978): *Hotsprings of Western Canada, A Complete Guide; Labrador Tea Company, Vancouver, pp. 114,115

DATE CODED: 1986/08/28
DATE REVISED: 1988/12/30

CODED BY: LDJ
REVISED BY: JNR

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103H 001**

MINFILE NUMBER: **103H 002**

NATIONAL MINERAL INVENTORY:

NAME(S): **BRIM RIVER**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103H09W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 30 59 N
LONGITUDE: 128 21 36 W
ELEVATION: 50 Metres

NORTHING: 5929908
EASTING: 542436

LOCATION ACCURACY: Within 500M

COMMENTS: Symbol - Geological Survey of Canada, Map 23-1970.

COMMODITIES: Hotspring

MINERALS

SIGNIFICANT: Salts
COMMENTS: Sodium sulphate.

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Hydrothermal Industrial Min.
TYPE: T02 Geothermal spring

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic-Mesozoic			Coast Plutonic Complex

LITHOLOGY: Hornblende Biotite Quartz Diorite
Hornblende Biotite Granodiorite

HOSTROCK COMMENTS: Owyacumish Creek Pluton. Includes Tertiary plutons.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Plutonic Rocks

PHYSIOGRAPHIC AREA: Kitimat Ranges

CAPSULE GEOLOGY

The area is underlain by hornblende biotite quartz diorite of the Owyacumish Creek pluton, gradational to the east with hornblende biotite granodiorite.

The hotspring issues from near the contact between the quartz diorite and granodiorite. It is about 38 degrees Celcius and contains the following constituents, in parts per million: Cl-52, Na-43, SO4-78, Mg-12, Ca-17, HCO3-40, SiO2-35.5. Total dissolved solids are 281 parts per million.

BIBLIOGRAPHY

EMPR AR 1929-76
GSC MAP *23-1970; 1385A
GSC P 70-41, pp. 54,55; 73-18, pp. 231,233
GSC SUM RPT 1921A, pp. 41,48,49, Fig. 6
CANMET RPT 669, pp. 26-28
McDonald, J., (1978): *Hotsprings of Western Canada, A Complete Guide; Labrador Tea Company, Vancouver, pp. 118,119

DATE CODED: 1986/08/28
DATE REVISED: 1989/08/10

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103H 003**

NATIONAL MINERAL INVENTORY:

NAME(S): **GARDNER CANAL**, SHEARWATER POINT

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103H07E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 26 59 N
LONGITUDE: 128 33 06 W
ELEVATION: 3 Metres

NORTHING: 5922394
EASTING: 529774

LOCATION ACCURACY: Within 500M

COMMENTS: Symbol - Geological Survey of Canada, Map 23-1970.

COMMODITIES: Hotspring

MINERALS

SIGNIFICANT: Salts
COMMENTS: Sodium sulphate.

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Hydrothermal Industrial Min.
TYPE: T02 Geothermal spring

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Paleozoic

GROUP

Undefined Group

FORMATION

Unnamed/Unknown Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Chlorite Schist

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Undivided Metamorphic Assembl.
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Kitimat Ranges

RELATIONSHIP:

GRADE: Greenschist

CAPSULE GEOLOGY

The hotspring issues at 484 litres per minute from a crevice about 5 centimetres wide and several metres long in Paleozoic chloritic schist. It is well over 45 degrees Celsius and consists of the following, in parts per million: Cl-60, Na-259, SO4-546, Mg-5, Ca-67, K-29, HCO3-167, SiO2-90. Total dissolved solids are 1228 parts per million.

BIBLIOGRAPHY

EMPR AR 1929-76
GSC MAP *23-1970; 1385A
GSC P 70-41, pp. 54,55; 73-18, pp. 231,232
GSC SUM RPT 1921A, pp. 41,46,47, Fig. 6
CANMET RPT 669, pp. 26-28
McDonald, J., (1978): *Hotsprings of Western Canada, A Complete Guide; Labrador Tea Company, Vancouver, pp. 116,117

DATE CODED: 1986/08/28
DATE REVISED: 1989/08/10

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103H 004**

NATIONAL MINERAL INVENTORY: 103H13 Fe1

NAME(S): **KUMEALON**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103H13W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 51 39 N
LONGITUDE: 129 58 26 W
ELEVATION: 5 Metres

NORTHING: 5968478
EASTING: 435950

LOCATION ACCURACY: Within 500M

COMMENTS: Located on Kumealon Inlet at the north end of Grenville Channel.

COMMODITIES: Iron Sillimanite Magnetite

MINERALS

SIGNIFICANT: Ilmenite Sillimanite Pyrite Marcasite Magnetite

 Corundum Emery
ASSOCIATED: Hornblende Cordierite Orthopyroxene

ALTERATION TYPE: Sericitic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Metamorphic Industrial Min.

 TYPE: R09 Limestone

DIMENSION: 0500 Metres STRIKE/DIP: 120/60

COMMENTS: Limestone band width. TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic	Undefined Group	Unnamed/Unknown Formation	

LITHOLOGY: Limestone
 Hornblende Schist
 Sillimanite Schist

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline

PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)

TERRANE: Alexander

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Amphibolite

CAPSULE GEOLOGY

A 500 metre wide blue and white limestone band, striking 120 degrees and dipping about 60 degrees southwest, lies conformable with hornblende and sillimanite schist. The schists are mineralized in places with disseminated marcasite and pyrite and narrow bands of sillimanite and ilmenite.

Within the schists are narrow-banded streaks of very hard, greyish-black minerals resembling emery (magnetite and corundum). Analysis of the rock gave 30 per cent silica, 35 per cent magnetic iron oxide, 30 per cent alumina, and 1.2 per cent lime (Annual Report 1929). A qualitative analysis of the rock showed sillimanite and ilmenite.

BIBLIOGRAPHY

EMPR AR *1912-99; 1917-43; *1929-74-75; 1930-68-69
EMPR OF 1988-28 p.136
GSC EC GEOL Series #3, Vol. 1, p. 26
GSC MAP 23-1970; 1385A, 1868A

DATE CODED: 1986/08/01
DATE REVISED: 1989/08/02

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103H 005**

NATIONAL MINERAL INVENTORY:

NAME(S): **BISHOP BAY**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103H07W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 28 29 N
LONGITUDE: 128 50 06 W
ELEVATION: 3 Metres

NORTHING: 5925094
EASTING: 510951

LOCATION ACCURACY: Within 500M

COMMENTS:

COMMODITIES: Hotspring

MINERALS

SIGNIFICANT: Salts
COMMENTS: Sodium sulphate.

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Hydrothermal Industrial Min.
TYPE: T02 Geothermal spring

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Upper Cretaceous			Butedale Pluton

LITHOLOGY: Granodiorite

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Plutonic Rocks

PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)

CAPSULE GEOLOGY

The hot spring issues at 60 litres per minute from a crevice in granodiorite of the Late Cretaceous Butedale Pluton. It is over 45 degrees Celsius and consists of the following, in parts per million: Cl-32, Na-92, SO4-179, Ca-18, HCO3-4, CO3-7, SiO2-62. Total dissolved solids are 402 parts per million.

BIBLIOGRAPHY

EMPR AR 1929-76
GSC MAP 23-1970; 1385A
GSC P 70-41, pp. 54,55; 73-18, pp. 231,232
GSC SUM RPT 1921A, pp. 41,45,46, Fig. 6
CANMET RPT 669, pp. 26-28
McDonald, J., (1978): *Hotsprings of Western Canada, A Complete Guide; Labrador Tea Company, Vancouver, pp. 120,121

DATE CODED: 1986/08/28
DATE REVISED: 1989/08/10

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103H 006**

NATIONAL MINERAL INVENTORY:

NAME(S): **URSULA CHANNEL**, GOAT HARBOUR

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103H07W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 21 32 N
LONGITUDE: 128 53 04 W
ELEVATION: 5 Metres

NORTHING: 5912201
EASTING: 507691

LOCATION ACCURACY: Within 1 KM

COMMENTS: Figure 6 - Geological Survey of Canada, Summary Report 1921A.

COMMODITIES: Hotspring

MINERALS

SIGNIFICANT: Salts
COMMENTS: Sodium sulphate.

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Hydrothermal Industrial Min.
TYPE: T02 Geothermal spring

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE GROUP
Upper Cretaceous

FORMATION

IGNEOUS/METAMORPHIC/OTHER
Butedale Pluton

LITHOLOGY: Granodiorite

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Plutonic Rocks

PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)

CAPSULE GEOLOGY

The hot spring issues from a 2.5 centimetre wide crevice, 1.8 metres long in granodiorite of the Late Cretaceous Butedale Pluton. It is above 45 degrees Celsius and consists of the following, in part per million: Cl-24, Na-81, SO4-174, Ca-22, HCO3-2, CO3-10, SiO3-59, FeO+Al2O3-23. Total dissolved solids are 395 parts per million.

BIBLIOGRAPHY

EMPR AR 1929-76
GSC MAP 23-1970; 1385A
GSC P 70-41, pp. 54,55; 73-18, pp. 231,233
GSC SUM RPT *1921A, pp. 41,44,45, Fig. 6
CANMET RPT 669, pp. 26-28
McDonald, J., (1978): Hotsprings of Western Canada, A Complete Guide; Labrador Tea Company, Vancouver, p. 121

DATE CODED: 1986/08/28
DATE REVISED: 1989/08/28

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
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MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 363
REPORT: RGEN0100

MINFILE NUMBER: **103H 007**

NATIONAL MINERAL INVENTORY:

NAME(S): **KLEKANE INLET**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103H02E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 14 49 N
LONGITUDE: 128 41 06 W
ELEVATION: 6 Metres

NORTHING: 5899788
EASTING: 521019

LOCATION ACCURACY: Within 500M

COMMENTS: Symbol - Geological Survey of Canada, Map 23-1970.

COMMODITIES: Hotspring

MINERALS

SIGNIFICANT: Salts
COMMENTS: Sodium chloride.

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Hydrothermal Industrial Min.
TYPE: T02 Geothermal spring

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Upper Cretaceous			Butedale Pluton

LITHOLOGY: Granodiorite

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Plutonic Rocks

PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)

CAPSULE GEOLOGY

The hot spring issues at 264 litres per minute from a crevice in granodiorite of the Late Cretaceous Butedale Pluton. It is over 45 degrees Celsius and consists of the following, in parts per million: Cl-4600, Na-2523, SiO₂-38, SO₄-717, Mg-179, Ca-385, K-82, HCO₃-58, FeO+Al₂O₃-58. Total dissolved solids are 8640 parts per million. Contamination of the meteoric water by sea water is likely.

BIBLIOGRAPHY

EMPR AR 1929-76
EMPR OF 2002-03
GSC MAP *23-1970; 1385A
GSC P 70-41, pp. 54,55; 73-18, pp. 231,233
GSC SUM RPT *1921A, pp. 41,43,44, Fig. 6
CANMET RPT 669, pp. 26-28
McDonald, J., (1978): Hotsprings of Western Canada, A Complete Guide; Labrador Tea Company, Vancouver, p. 122,123

DATE CODED: 1986/08/28
DATE REVISED: 1989/08/10

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103H 007**

MINFILE NUMBER: **103H 008**

NATIONAL MINERAL INVENTORY:

NAME(S): **JIMMY**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103H05W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 18 49 N
LONGITUDE: 129 51 01 W
ELEVATION: 55 Metres

NORTHING: 5907495
EASTING: 443352

LOCATION ACCURACY: Within 500M

COMMENTS: Skarn, Figure 5 (Assessment Report 14312).

COMMODITIES: Molybdenum

MINERALS

SIGNIFICANT: Molybdenite Pyrite Pyrrhotite

COMMENTS: Minor tungsten.

ASSOCIATED: Garnet Actinolite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown

CLASSIFICATION: Skarn Replacement

TYPE: K07 Mo skarn K05 W skarn

SHAPE: Regular

DIMENSION: 0008 Metres

COMMENTS: Width of skarn.

STRIKE/DIP: 160/75W TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Paleozoic Undefined Group
Paleozoic-Mesozoic

Unnamed/Unknown Formation

Coast Plutonic Complex

LITHOLOGY: Marble
Granodiorite
Quartz Monzonite
Meta Pelite
Dioritic Sill
Dioritic Dike
Hornblende Hornfels
Biotite Hornfels

HOSTROCK COMMENTS: The Coast Plutonic Complex includes rocks as young as Tertiary.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline

TERRANE: Alexander

METAMORPHIC TYPE: Contact Regional

Plutonic Rocks

RELATIONSHIP:

PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)

GRADE: Hornfels
Greenschist

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1985

SAMPLE TYPE: Grab

COMMODITY

GRADE

Molybdenum

0.0170 Per cent

COMMENTS: Minor tungsten.

REFERENCE: Assessment Report 14312.

CAPSULE GEOLOGY

A metasedimentary unit of interbedded marble and metapelite, striking 160 degrees for 2.5 kilometres and having a 700 metre width is bounded to the west by quartz monzonite and granodiorite of the Juro-Cretaceous Coast Plutonic Complex. Northwest trending dykes and sills of diorite and quartz diorite occur throughout the metasediments. Local contact metamorphic and metasomatic effects include skarn in calcareous units and hornblende and biotite hornfels in more pelitic units.

A rusty molybdenite and pyrite-bearing garnet actinolite skarn occurs within marble in contact with granodiorite. The unit is at least 8 metres wide and undeterminable strike length. A grab sample assayed 0.017 per cent molybdenum and minor tungsten (Assessment Report 14312).

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 365
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR ASS RPT *14312, 15951
EMPR EXPL 1987-C354
EMPR OF 2002-03
GSC MAP 23-1970; 1385A
GSC P 70-41, p. 20

DATE CODED: 1986/08/12
DATE REVISED: 1989/08/11

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103H 009**

NATIONAL MINERAL INVENTORY:

NAME(S): **VG**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103H05W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 16 24 N
LONGITUDE: 129 55 46 W
ELEVATION: 90 Metres

NORTHING: 5903080
EASTING: 438020

LOCATION ACCURACY: Within 500M

COMMENTS: Showing, Figure 5 (Assessment Report 14537).

COMMODITIES: Tungsten Zinc

MINERALS

SIGNIFICANT: Scheelite
COMMENTS: Zinc bearing mineral not known.
ASSOCIATED: Diopside
ALTERATION TYPE: Skarn
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Skarn Replacement
TYPE: K05 W skarn
SHAPE: Irregular
MODIFIER: Folded Faulted
DIMENSION: 0005 Metres
COMMENTS: Length of skarn zone.

STRIKE/DIP: TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic	Undefined Group	Unnamed/Unknown Formation	
Paleozoic-Mesozoic			Coast Plutonic Complex

LITHOLOGY: Limestone
Granodiorite
Micaceous Quartzite

HOSTROCK COMMENTS: The Coast Plutonic Complex includes rocks as young as Tertiary.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline	PHYSIOGRAPHIC AREA: Milbanke Strandflat
TERRANE: Alexander	
METAMORPHIC TYPE: Contact Regional	Plutonic Rocks RELATIONSHIP:
	GRADE: Hornfels Greenschist

INVENTORY

ORE ZONE: SAMPLE	REPORT ON: N
CATEGORY: Assay/analysis	YEAR: 1985
SAMPLE TYPE: Grab	
COMMODITY	GRADE
Tungsten	0.3600 Per cent
Zinc	0.7200 Per cent
REFERENCE: Assessment Report 14537.	

CAPSULE GEOLOGY

A northwest trending narrow belt of Paleozoic metasedimentary rocks consisting of micaceous quartzite and crystalline limestone is bounded to the east by granodiorite and to the west by diorite of the Coast Plutonic Complex. The metasediments are highly folded and faulted.

A scheelite-bearing zone in skarn occurs near the limestone-granodiorite contact. Disseminated scheelite grains occur in a steep dipping diopside-bearing skarn which is several metres wide and trends for about 5 metres. A sample assayed 0.36 per cent tungsten oxide and 0.72 per cent zinc (Assessment Report 14537).

BIBLIOGRAPHY

EMPR ASS RPT *14537, 17332
EMPR OF 1991-17
GSC MAP 23-1970; 1385A

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 367
REPORT: RGEN0100

BIBLIOGRAPHY

GSC P 70-41

DATE CODED: 1986/08/12
DATE REVISED: 1989/08/12

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103H 010**

NATIONAL MINERAL INVENTORY:

NAME(S): **KEECHA CREEK**, KEECH, ZINC

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103H05W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 18 09 N
LONGITUDE: 129 58 26 W
ELEVATION: 45 Metres

NORTHING: 5906364
EASTING: 435101

LOCATION ACCURACY: Within 500M

COMMENTS: Showing, Map 2 (Assessment Report 656). Near the northwestern tip of Keecha Lake.

COMMODITIES: Zinc Gold Silver

MINERALS

SIGNIFICANT:	Pyrrhotite	Pyrite	Sphalerite	Chalcopyrite
ASSOCIATED:	Quartz	Graphite		
ALTERATION:	Chlorite	Sericite		
ALTERATION TYPE:	Chloritic	Sericitic		
MINERALIZATION AGE:	Unknown			

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Hydrothermal Epigenetic

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Paleozoic
Paleozoic-Mesozoic

GROUP

Undefined Group

FORMATION

Unnamed/Unknown Formation

IGNEOUS/METAMORPHIC/OTHER

Coast Plutonic Complex

LITHOLOGY: Biotite Quartz Monzonite
Graphitic Rock
Altered Siltstone
Calc-silicate
Micaceous Quartzite
Limestone
Diorite

HOSTROCK COMMENTS: The Coast Plutonic Complex includes rocks as young as Tertiary.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Alexander

Plutonic Rocks

PHYSIOGRAPHIC AREA: Milbanke Strandflat

CAPSULE GEOLOGY

A northwest trending Paleozoic metasedimentary belt consisting of micaceous quartzite, crystalline limestone and calc-silicate altered siltstone is bounded by diorite and quartz monzonite of the Coast Plutonic Complex.

Drilling intersected chalcopyrite, sphalerite, pyrite, and pyrrhotite with accompanying graphitic rock. Mineralization is associated with shearing in sericite-chlorite alteration zones hosted by the "Kim" biotite quartz monzonite. Stronger mineralization is associated with auriferous veins or veinlets such as those seen on Bushy Creek (103H 042). Assays ranged 2-4 per cent zinc and minor gold and silver (Assessment Report 656).

BIBLIOGRAPHY

EMPR AR 1963-21
EMPR ASS RPT *656, 657, *15301, 16707, *17180
EMPR EXPL 1986-C424; 1987-A15
GSC MAP 23-1970; 1385A
GSC P 70-41
Falconbridge File

DATE CODED: 1986/08/12
DATE REVISED: 1989/08/23

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

CAPSULE GEOLOGY

Victoria purchased the property in 1900 and in March 1901 incorporated The British Columbia Pyrites Company, Limited. The above 4 claims and the Queen claim (Lots 111-115 respectively) were Crown-granted to the company in 1902. Underground work was begun in 1901. A crosscut adit was driven 20 metres to the mineralized zone and drifts totalling about 12 metres were run to the north and south. Diamond drilling totalled 21 metres. A tramline was built 720 metres to the river in 1902. A bulk sample of about 90 tonnes from the mineralized zone was shipped to the Victoria Chemical Works, probably in 1903.

No further activity was reported until late in 1916 when the property was optioned to New York agents for The Granby Consolidated Mining, Smelting and Power Company, Limited. Diamond drilling by the company during the period 1917-1920 totalled about 3350 metres. The option was given up in the summer of 1920. Granby optioned the property again in 1923. Further diamond drilling and metallurgical studies were reported. The option was given up later in the year and the property reverted to British Columbia Pyrites. Based on diamond drilling to that date the two main mineralized lenses were indicated to contain about 4,536,000 tonnes averaging 49.35 per cent sulphur, 42.75 per cent iron, 0.2 per cent lead, 2.30 per cent zinc, 0.80 per cent copper, 0.69 gram per tonne gold and 24.3 grams per tonne silver. Included in the above is a section in the west part of the north lens containing an indicated 589,670 tonnes averaging 1.91 per cent copper, 2.30 per cent zinc, 1.0 gram per tonne gold and 34 grams per tonne silver (W.B. Maxwell 16/04/1942 - for Metals Controller - British Columbia Pyrites Company, Limited).

The Sulphide group of 16 claims (Lots 2661-2676) were staked surrounding the original group and extending south across the Ecstall River; the dates of staking and Crown-granting are not available.

Texas Gulf Sulphur Company purchased the property from British Columbia Pyrites in 1937. A geophysical survey was carried out and some diamond drilling was done to check prior work. An operating company Northern Pyrites, Limited was incorporated in December 1937. A new crosscut adit was begun on the west side of Red Gulch creek at about the 30-metre elevation in 1938. The adit was extended to a length of 847 metres in 1940. Seven crosscuts totalling 263 metres were driven across the mineralized zone from the adit and a 60 degree raise was driven about 180 metres to the surface.

The property was transferred to another Texas Gulf subsidiary, Sulgas Properties Ltd., which was incorporated in 1951; Northern Pyrites, Limited was wound up voluntarily in 1952. During 1952 Sulgas carried out 420 metres of surface diamond drilling, 2707 metres of underground diamond drilling, and a low frequency electromagnetic survey. Reserves were reported to be at least 8,000,000 tons, no grade stated (EMPR Bull 39, page 41, 1957).

The assets of Ecstall Mining Company Ltd. were transferred to the parent company, Texas Gulf Sulphur Company, in 1960 and Ecstall was placed in voluntarily liquidation in August of that year. In 1966 a ten ton bulk sample was shipped for metallurgical testing.

The company name (Texas Gulf) was changed in 1972 to Texas Gulf, Inc., and in 1973 to Texasgulf Inc. A horizontal loop electromagnetic survey was carried out over 8.7 line kilometres covering Jungle 101 claim (units 1-3, 14-19) in 1975. Texas Gulf back in 1965 incorporated a new subsidiary Ecstall Mining Limited to hold the property; the latter name was changed in 1975 to Texasgulf Canada Ltd. This company was acquired in 1981 by Canada Development Corporation, at that time 87.7 per cent owned by the Government of Canada. The name (Texasgulf Canada) was changed in 1981 to Kidd Creek Mines Ltd. They dropped the claims and they were re-staked by Mr. C.W. Graf. In 1981, the property was optioned by a joint venture of E & B Explorations Inc. and Welcome North Mines Ltd. who did airborne geophysics, geology and geochemistry. After the property was dropped, Noranda Exploration Company Limited optioned the property in 1985. They staked more claims and carried out airborne EM surveys, ground geophysics, geology and rock geochemistry. Noranda dropped the property in 1987 and the claims were transferred to Mr. Graf. In 1988, Ecstall Mining Corporation purchased the property consisting of 15 claims including Ecstall 8, 9, 10, 15; Tall 1, 3, 6, 13; Fall 10-11 and Fall 12-13 Fr. In 1989, Cominco Ltd. optioned the deposit.

The Ecstall deposit, and a cluster of three spatially associated showings; the Third Outcrop (103H 012), the East Plateau (103H 050) and the Trench (103H 051), lie within the Scotia-Quaal metamorphic belt, which extends from Hawkesbury Island north to Work Channel. The belt consists of a ?Proterozoic-Paleozoic metasedimentary and metavolcanic sequence that includes the Middle Devonian Big Falls orthogneiss, Early Jurassic orthogneiss, and Jurassic or Cretaceous mafic and ultramafic intrusive rocks. The

CAPSULE GEOLOGY

assemblage may be correlative with the Nisling terrane. The metamorphic belt is intruded by the Late Cretaceous Ecstall pluton on the west, and the Paleogene Quottoon plutons to the east.

The rocks dip about 80 degrees east and consist of quartz-biotite-chlorite schists, quartz-hornblende-chlorite schist, quartzite grading to quartz-mica schist, minor black argillite and granitic gneiss. The VMS in the Ecstall Belt are part of a mid Devonian volcanic and intrusive event (Fieldwork 2000, p. 269-278). The quartz diorite gives a minimum age to the VMS. A felsic metavolcanic associated with the deposit gives 393 Ma and the Big Falls tonalite gives 385 Ma. These are indistinguishable in age at stated accuracies. Of interest are local quartzites with detrital zircons of Precambrian age (Fieldwork 2000, pages 269-278).

The Ecstall deposit occurs in a hydrothermally altered sequence of volcanic/volcaniclastic rocks, close to a felsic volcanic centre. Two tabular concordant bodies, known as the North Lens and South Lens, have an en echelon relationship. Mineralization consists largely of pyrite with minor chalcopyrite and sphalerite and lesser pyrrhotite, marcasite and galena.

The North Lens measures about 300 by 150 by 30 metres and the South Lens measures about 400 by 360 by 7 metres. A 6.1-metre sample of the South Lens assayed 3.02 per cent zinc, 0.18 per cent copper, 20.6 grams per tonne silver and 0.69 gram per tonne gold (Minister of Mines Annual Report 1952).

The two lenticular bodies of massive pyrite strike north, dip steeply east and plunge steeply south. The North Lens contains 3.1 million tonnes grading 0.80 per cent copper, 2.0 per cent zinc, 43.5 per cent iron, 49.5 per cent sulphur, 17.1 grams per tonne silver and 0.5 grams per tonne gold. The South Lens contains 3.8 million tonnes grading 0.5 per cent copper, 3.0 per cent zinc, 41.3 per cent iron and 47.6 per cent sulphur. The upper 1.3 million tonnes grades 20.2 grams per tonne silver and 0.5 grams per tonne gold (Assessment Report 15488). Unclassified reserves in 1993 for the Ecstall deposit (North and South lenses) are 6,349,700 tonnes grading 0.6 per cent copper, 2.5 per cent zinc, 0.5 gram per tonne gold and 20.0 grams per tonne silver (George Cross News Letter No.26 (February 8), 1994).

A smaller deposit occurs 760 metres north of the North Lens, where 30 by 2.4 metres of massive pyrite is exposed.

Results of property-scale exploration by Falconbridge in 1986/87 indicated the presence of significant stockwork copper mineralization in felsic rocks, occurring south of the Ecstall River in Thirteen Creek area. The stockwork mineralization was interpreted as a possible feeder zone to a volcanogenic massive sulphide deposit. This area was explored by Atna Resources Ltd. in 1994, confirming stockwork copper mineralization and outlining disseminated copper mineralization over a large area, including a previously unexplored area at the north end of the grid. The work by Atna outlined disseminated and vein copper mineralization over a 2000 by 150 metre area on Thirteen Creek grid. Results of a systematic chip sampling program across the zone yielded values of 0.198 per cent copper over 124 metres across one of the better exposures (Assessment Report 24605).

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EMPR AR 1900-788-789; 1901-991; 1902-47,308; 1916-50; 1917-45; 1918-47; 1919-42; 1920-40; 1923-46; 1938-B28; 1939-100; 1940-86; *1952-81-84; 1958-7; 1966-54
EMPR ASS RPT 5859, 10007, *15488, *15756, 16600, 16711, *24605, 25862
EMPR BULL 39, p. 41
EMPR EXPL 1975-E175; 1987-C355
EMPR MAP 65 (1989)
EMPR OF 1992-1; 1992-3; 1992-9; 1998-10; 1999-2; 2002-03
EMPR PF (Mr. Robert Swinerton's Pyrite Mine; Atna Resources Limited Website, (June 2000))
EMR MIN BULL MR 223 B.C. 285
EMR MP CORPFILE (The British Columbia Pyrites Company, Limited; Northern Pyrites, Limited; Ecstall Mining Company Ltd.; Texasgulf Inc.)
EMR MP RESFILE (Ecstall River)
GSC MAP 23-1970; 1385A; 1868A
GSC P *70-41, pp. 15,50,51
GSC SUM RPT 1924 Part A, p. 43
CANMET IR 2297 (1948); Memorandum Series 118 (1952), p. 78
CANMET RPT 167 (1912), p. 86
CJES Vol. 28 (1991), pp. 870-880
CMJ Feb.29, 1924, p. 209

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 372
REPORT: RGEN0100

BIBLIOGRAPHY

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unpublished Texas Gulf Sulphur report

DATE CODED: 1986/08/13
DATE REVISED: 1999/10/21

CODED BY: LDJ
REVISED BY: JMR

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103H 012**

NATIONAL MINERAL INVENTORY:

NAME(S): **THIRD OUTCROP**, ECSTALL

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103H13E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 52 54 N
LONGITUDE: 129 30 36 W
ELEVATION: 415 Metres

NORTHING: 5970476
EASTING: 466475

LOCATION ACCURACY: Within 500M

COMMENTS: Showing, Figure 6 (Assessment Report 15488).

COMMODITIES: Copper Zinc

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Sphalerite
ASSOCIATED: Quartz
ALTERATION: Silica Chlorite
ALTERATION TYPE: Silicific'n Chloritic Sericitic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound Massive
CLASSIFICATION: Volcanogenic
TYPE: G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn
SHAPE: Tabular
DIMENSION: 0030 x 0002 Metres STRIKE/DIP: 165/80E TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic			Central Gneiss Complex

LITHOLOGY: Quartz Sericite Schist
Granodiorite

HOSTROCK COMMENTS: Hosted in the Ecstall Pendant, consisting of metasedimentary and meta-volcanic rocks, within the Central Gneiss Complex.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline PHYSIOGRAPHIC AREA: Kitimat Ranges
TERRANE: Undivided Metamorphic Assembl.
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist

INVENTORY

ORE ZONE: DRILLHOLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1987
SAMPLE TYPE: Drill Core
COMMODITY GRADE
Copper 0.6300 Per cent
Zinc 2.3000 Per cent

COMMENTS: The sample width is 5.18 metres.
REFERENCE: Assessment Report 15488.

CAPSULE GEOLOGY

The showing is one of a cluster of showings around the Ecstall deposit (103H 011). The north-northwest trending Paleozoic Ecstall Pendant, a metasedimentary-metavolcanic belt within the Central Gneiss Complex, is flanked by granodiorite of the Coast Range Intrusive Complex.

The Third Outcrop showing is a bed of pyrite, 1.5 to 2.0 metres wide and 30 metres long, hosted by quartz-sericite schist. Drilling in 1952 intersected 5.18 metres of massive sulphide grading 0.63 per cent copper and 2.30 per cent zinc (Assessment Report 15488).

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EMPR AR 1952-81,84
EMPR ASS RPT *15488, *15756
EMPR EXPL 1987-C355
EMPR OF 1999-2; 2002-03
GSC MAP 23-1970; 1385A, 1868A

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 374
REPORT: RGEN0100

BIBLIOGRAPHY

GSC P 70-41

DATE CODED: 1987/07/21
DATE REVISED: 1989/08/11

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103H 013**

NATIONAL MINERAL INVENTORY: 103H14 CU2, Pyr2

NAME(S): **PACKSACK**, GUNNYSACK, ECSTALL,
TALL, FALL

STATUS: Developed Prospect
REGIONS: British Columbia
NTS MAP: 103H14W
BC MAP:
LATITUDE: 53 47 09 N
LONGITUDE: 129 26 16 W
ELEVATION: 240 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Centre of showings, Map 2 (Assessment Report 4509).

MINING DIVISION: Skeena
UTM ZONE: 09 (NAD 83)
NORTHING: 5959783
EASTING: 471157

COMMODITIES: Copper Zinc Silver Gold Lead
 Iron

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Chalcocite Sphalerite
ASSOCIATED: Quartz
ALTERATION: Sericite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Massive Concordant Disseminated
CLASSIFICATION: Volcanogenic Syngenetic Industrial Min.
TYPE: G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn
SHAPE: Tabular
MODIFIER: Sheared
DIMENSION: 365 x 6 Metres STRIKE/DIP: 165/85 TREND/PLUNGE:
COMMENTS: South body; foliation of host rock.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic			Central Gneiss Complex

LITHOLOGY: Quartz Sericite Schist
Hornblende Lamprophyre Dike
Phyllite
Quartz Schist
Meta Siltstone

HOSTROCK COMMENTS: Hosted in the Ecstall Pendant, consisting of metasedimentary and meta-volcanic rocks, within the Central Gneiss Complex.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline PHYSIOGRAPHIC AREA: Kitimat Ranges
TERRANE: Undivided Metamorphic Assembl.
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist

INVENTORY

ORE ZONE: PACKSACK REPORT ON: Y
CATEGORY: Unclassified YEAR: 1986
QUANTITY: 2700000 Tonnes
COMMODITY GRADE
Silver 34.0000 Grams per tonne
Gold 0.3000 Grams per tonne
Copper 0.5000 Per cent
Lead 0.0100 Per cent
Zinc 0.2000 Per cent

REFERENCE: Assessment Report 15756.

CAPSULE GEOLOGY

The Packsack deposit is located 12 kilometres from tidewater on Douglas Channel about halfway between Prince Rupert and Kitimat. The claims lie on the east side of the ridge at the bend of the Ecstall River, 10 kilometres south of Johnston Lake. The Steelhead (103H 036) and Horsefly (103H 014) showings occur on the same property.

Ecstall Mining Company Ltd. carried out a reconnaissance geological survey in this vicinity in 1957 under the direction of W.R. Bacon. Sulphide showings were discovered at an elevation of about 800 feet in the beds of two intermittent streams on the east slope of what came to be known locally as Prospect Hill. Sixteen

CAPSULE GEOLOGY

claims in two rows of eight (Packsack 1-8 and Gunnysack 1-8) were staked in a north-south direction. An electromagnetic survey was carried out over the showings in 1958.

The assets of Ecstall were transferred to the parent company, Texas Gulf Sulphur Company, in 1960 and Ecstall was placed in voluntary liquidation in August of that year. Work during 1960 included 881 metres of diamond drilling in 11 holes. All the holes are reported to have cut pyrite mineralization, much of which is massive.

The company name (Texas Gulf) was changed in 1972 to Texas Gulf, Inc. and in 1973 to Texasgulf Inc. During 1973 geological mapping, and a geochemical soil survey (119 samples) over 2 line-miles were carried out over Packsack 1-4 and Gunnysack 1-8. In 1975 a shootback electromagnetic survey was carried out over 9.75 line-kilometres on Packsack 1 and 2 and Gunnysack 1-6. Texasgulf Inc. dropped the claims and they were restaked by Mr. C.W. Graf. In 1981, the property was optioned by a joint venture of E & B Explorations Inc. and Welcome North Mines Ltd. who did airborne geophysics, geology and geochemistry. After the property was dropped, Noranda Exploration Company Limited optioned the property in 1985. They staked more claims and carried out airborne EM surveys, ground geophysics, geology and rock geochemistry. Noranda dropped the property in 1987 and the claims were transferred to Mr. Graf. In 1988, Ecstall Mining Corporation purchased the property consisting of 15 claims including Ecstall 8, 9, 10, 15; Tall 1, 3, 6, 13; Fall 10, 11; Fall 12-13 Fr. In 1989, Cominco Ltd. optioned the deposit. In 1990, they drilled 3 holes totalling 934 metres.

A north trending, steep easterly dipping belt of metavolcanics and metasediments consisting of chlorite-sericite schist, quartz-sericite schist, mixed dacitic to rhyolitic rocks, phyllite, and meta-siltstone are bounded by altered hornblende diorite of the Coast Plutonic Complex. All rocks are cut by hornblende lamprophyre dikes.

Two massive sulphide bodies, 170 metres apart, occur within the quartz-sericite schist and are associated with a 600-metre long, 34 metre wide shear zone. The deposit averages 3.8 metres in thickness and has been traced continuously for 600 metres.

The mineralization is similar to that at the Ecstall deposit (103H 011), about 13 kilometres to the north-northeast.

The southern body, up to 6 metres wide and traced for 365 metres, consists of massive pyrite with minor chalcopyrite, chalcocite and sphalerite. The mineralized body is open at depth and along strike in both directions and appears to be thickening and becoming more zinc rich (relative to copper) with depth. The northern body is up to 0.6 metres wide. Disseminated pyrite is common in the quartz-sericite schist. In 1986, unclassified reserves were 2.7 million tonnes grading 0.5 per cent copper, 0.2 per cent zinc, 0.01 per cent lead, 34 grams per tonne silver and 0.3 grams per tonne gold (Assessment Report 15756).

The property is held by Ecstall Mining Corporation.

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- EMPR AR 1957-9; 1958-9,73; *1960-12
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- EMPR EXPL 1975-E175; 1986-C426; 1987-C356
- EMPR GEM 1973-484-485
- EMPR OF 1998-10; 1999-2; 2002-03
- EMPR PF (*Ecstall Mining Corp. Prospectus, May 1989)
- EMR MP CORPFILE (Ecstall Mining Corporation)
- GSC MAP 23-1970; 1385A, 1868A
- GSC P 70-41
- CJES Vol. 28 (1991), pp. 870-880
- GCNL #51 (Mar.13),66, 1990
- WWW <http://www.ecstall.com>; <http://www.infomine.com/>

DATE CODED: 1986/08/14
DATE REVISED: 1999/10/21

CODED BY: LDJ
REVISED BY: JMR

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103H 014**

NATIONAL MINERAL INVENTORY: 103H14 Pyr1

NAME(S): **HORSEFLY**

MINING DIVISION: Skeena

STATUS: Showing
 REGIONS: British Columbia
 NTS MAP: 103H14W
 BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 46 04 N
 LONGITUDE: 129 22 46 W
 ELEVATION: 680 Metres

NORTHING: 5957752
 EASTING: 474989

LOCATION ACCURACY: Within 500M

COMMENTS: Mineralized zone, Map 2 (Assessment Report 15306). See also Packsack (103H 013) and Steelhead (103H 036).

COMMODITIES: Zinc Copper Lead Silver Gold

MINERALS

SIGNIFICANT: Pyrite Sphalerite Chalcocopyrite Pyrrhotite
 ASSOCIATED: Quartz Chlorite
 ALTERATION: Sericite Pyrite
 ALTERATION TYPE: Sericitic
 MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Massive Disseminated
 CLASSIFICATION: Volcanogenic
 TYPE: G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn
 SHAPE: Tabular
 MODIFIER: Sheared
 DIMENSION: 1500 x 60 Metres STRIKE/DIP: 150/90 TREND/PLUNGE:
 COMMENTS: Mineralized zone.

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic			Central Gneiss Complex

LITHOLOGY: Chlorite Schist
 Quartz Sericite Schist
 Andesite
 Rhyolite

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)
 TERRANE: Undivided Metamorphic Assembl.
 METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE	REPORT ON: N
CATEGORY: Assay/analysis	YEAR: 1986
SAMPLE TYPE: Rock	
COMMODITY	GRADE
Silver	33.0000 Grams per tonne
Gold	0.5000 Grams per tonne
Copper	0.4000 Per cent
Lead	0.0800 Per cent
Zinc	3.8000 Per cent

REFERENCE: Assessment Report 15014.

CAPSULE GEOLOGY

The area is underlain by northwest trending metavolcanics and metasediments of the Central Gneiss Complex, intruded by granitic rocks of the Coast Plutonic Complex.

Massive and disseminated pyrite and minor sphalerite, chalcocopyrite, and pyrrhotite occur along a shear zone within highly metamorphosed felsic volcanics, consisting of chloritic schists and weakly foliated andesite flows. These rocks lie adjacent to a pyritic quartz sericite schist horizon which contains anomalous copper-zinc values. The mineralized area measures intermittently over 1500 metres by 60 metres along a 150 degree trend.

A rock sample assayed 0.4 per cent copper, 3.8 per cent zinc, 0.08 per cent lead, 33.0 grams per tonne silver, and 0.5 grams per tonne gold (Assessment Report 15306). A sample 900 metres to the southeast, on the Steelhead grid (103H 036), assayed 1.08 per cent

CAPSULE GEOLOGY

copper, 0.974 per cent zinc, 0.0018 per cent lead, 28 grams per tonne silver, and 0.42 grams per tonne gold (Assessment Report 15306).

In 1995, with support from the Explore B.C. Program, Atna Resources Ltd. under joint venture with Ecstall Mining Corporation conducted an electromagnetic survey and diamond drilling (1075 metres in 8 holes) on the Horsefly and Steelhead (103H 036) showings. A 20 metre wide zone of disseminated massive sulphides was located by two of the drillholes and traced for 90 metres. It is open in all directions. Three other targets located by EM survey remain to be drill tested (Explore B.C. Program 95/96 - M59). See also Packsack (103H 013).

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EMPR B.C. Explore Program 95/96 - M59
EMPR EXPL 1986-C425; 1987-C356
EMPR GEM 1969-369
EMPR INF CIRC 1995-19, p. 25; 1996-1, p. 25
EMPR OF 1999-2; 2002-03
EMPR PF (Ecstall Mining Corp., Prospectus, May 1989 in 103H 013;
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GSC MAP 23-1970; 1385A, 1868A
GSC P 70-41
GCNL #51(Mar.13), #66, 1990; #200 (Oct.18), #217(Nov.10), 1995;
#217(Nov.10), 1997
N MINER June 5, 1995
WWW <http://www.ecstall.com>

DATE CODED: 1986/08/14
DATE REVISED: 1996/11/04

CODED BY: LDJ
REVISED BY: VAP

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103H 015**

NATIONAL MINERAL INVENTORY: 103H11 Cu1

NAME(S): **KISKOSH INLET**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103H11E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 32 59 N
LONGITUDE: 129 14 16 W
ELEVATION: 1 Metres

NORTHING: 5933452
EASTING: 484246

LOCATION ACCURACY: Within 5 KM

COMMENTS: Occurrence (Geological Survey of Canada, Map 278A). Contact area (Geological Survey of Canada, Map 23-1970).

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Unknown
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Unknown

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic			Unnamed/Unknown Informal

LITHOLOGY: Schist
Biotite Quartz Monzonite

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Undivided Metamorphic Assembl.
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)

RELATIONSHIP:

GRADE: Amphibolite

CAPSULE GEOLOGY

The area is underlain by metasediments consisting mainly of schists intruded by biotite quartz monzonite.

A copper occurrence is noted on GSC Map 278A. No other information is available.

BIBLIOGRAPHY

EM FIELDWORK 2001, pp. 151-170
GSC MAP 23-1970; *278A; 1385A, 1868A
GSC P 70-41

DATE CODED: 1986/08/14
DATE REVISED: 1989/08/02

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103H 016**

NATIONAL MINERAL INVENTORY: 103H11 Zn1

NAME(S): **DECAIRE**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103H11E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 40 44 N
LONGITUDE: 129 11 46 W
ELEVATION: 170 Metres

NORTHING: 5947814
EASTING: 487046

LOCATION ACCURACY: Within 1 KM

COMMENTS: Descriptions in Annual Report 1929 p. 70.

COMMODITIES: Zinc Lead

MINERALS

SIGNIFICANT: Sphalerite Pyrite Galena

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic

SHAPE: Irregular

DIMENSION: 0018 x 0003 Metres

STRIKE/DIP:

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic			Unnamed/Unknown Informal

LITHOLOGY: Granitic Gneiss

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline

PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)

TERRANE: Undivided Metamorphic Assembl.

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Amphibolite

CAPSULE GEOLOGY

A quartz vein, 1.8 to 3.6 metres wide and 18 metres long, mineralized with sphalerite, pyrite, and minor galena, occurs in granite gneiss.

BIBLIOGRAPHY

EM FIELDWORK 2000, pp. 279-306; 2001, pp. 151-170
EMPR AR *1929-70; 1930-66
ENPR OF 2002-03
GSC MAP 23-1970; 1385A, 1868A
GSC P 70-41

DATE CODED: 1986/08/14
DATE REVISED: 1989/08/11

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103H 017**

NATIONAL MINERAL INVENTORY: 103H11 Cu2

NAME(S): **ABRUZZI**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103H11E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 40 29 N
LONGITUDE: 129 09 06 W
ELEVATION: 1 Metres

NORTHING: 5947343
EASTING: 489981

LOCATION ACCURACY: Within 1 KM

COMMENTS: Location from descriptions in Annual Reports 1929 p.70 and 1930 p.66.

COMMODITIES: Copper Silver

MINERALS

SIGNIFICANT: Chalcopyrite Pyrrhotite
ASSOCIATED: Mica Garnet
ALTERATION: Chlorite
ALTERATION TYPE: Chloritic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Concordant Disseminated Massive
CLASSIFICATION: Replacement
SHAPE: Irregular
MODIFIER: Folded
DIMENSION: 0003 Metres STRIKE/DIP: 150/80S TREND/PLUNGE:
COMMENTS: Mineralized lens. Attitude of host rock.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic			Unnamed/Unknown Informal

LITHOLOGY: Altered Schist
Quartz Diorite

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)
TERRANE: Undivided Metamorphic Assembl.
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1930
SAMPLE TYPE: Rock
COMMODITY GRADE
Silver 10.2900 Grams per tonne
Copper 1.4000 Per cent
COMMENTS: The sample width is 2.3 metres.
REFERENCE: Minister of Mines, Annual Report 1930, page 66.

CAPSULE GEOLOGY

A 10 metre wide band of folded, altered schist, trending 150 degrees and dipping 80 degrees south occurs in quartz diorite of the Coast Plutonic Complex. The schist is micaceous, garnetiferous, and chloritic.
Mineralization consists of disseminated and massive chalcopyrite and pyrrhotite. One lens measured 3 metres long and 23 centimetres wide. A 2.3 metre sample assayed 1.4 per cent copper and 10.29 grams per tonne silver (Minister of Mines, Annual Report 1930).

BIBLIOGRAPHY

EM FIELDWORK 2000, pp. 279-306; 2001, pp. 151-170
EMPR AR *1929-70, *1930-66
EMPR OF 2002-03
GSC MAP 23-1970; 1385A, 1868A
GSC P 70-41

DATE CODED: 1986/08/14
DATE REVISED: 1989/08/12

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103H 018**

NATIONAL MINERAL INVENTORY: 103H14 Cu1

NAME(S): **DRUM LUMMON**, CALEDONIA, PAISLEY POINT,
LOS ANGELES-VANCOUVER

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 103H14E
BC MAP:
LATITUDE: 53 46 49 N
LONGITUDE: 129 01 36 W
ELEVATION: 150 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Adits and showings.

Underground
MINING DIVISION: Skeena
UTM ZONE: 09 (NAD 83)
NORTHING: 5959076
EASTING: 498243

COMMODITIES: Copper Silver Gold

MINERALS

SIGNIFICANT: Chalcocite Bornite Covellite Chalcopyrite Gold
Silver
ASSOCIATED: Quartz Orthoclase Microcline Biotite Magnetite
Hematite
ALTERATION: Clay Epidote Hematite Silica
ALTERATION TYPE: Sericitic
MINERALIZATION AGE: Unknown
Silicific'n

DEPOSIT

CHARACTER: Podiform
CLASSIFICATION: Pegmatite Epigenetic
SHAPE: Irregular
DIMENSION: 0100 x 0030 x 0015 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: Pegmatite mass.

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Paleozoic-Mesozoic Coast Plutonic Complex

LITHOLOGY: Quartz Diorite
Pegmatite

HOSTROCK COMMENTS: The Coast Plutonic Complex includes same Tertiary intrusions.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)
TERRANE: Plutonic Rocks

CAPSULE GEOLOGY

Irregular shaped pegmatite masses of feldspar and quartz occur in quartz diorite of the Coast Plutonic Complex. Erratically distributed and irregular shaped pods of chalcocite, bornite and covellite with minor chalcopyrite, gold and silver occur mainly with the feldspar near the margins of the pegmatite and locally within the country rock. A large pegmatite mass, measuring at least 100 by 30 by 15 metres, which has been explored by underground workings contains lenses of bornite and chalcocite up to 1.2 metres wide. A 4.5 tonne sample assayed 50.6 per cent copper, 606.9 grams per tonne silver and 57.3 grams per tonne gold (Minister of Mines, Annual Report 1921).

Recorded production for 1918 to 1926 totals 1,773 grams of gold, 49,018 grams of silver and 33,423 kilograms of copper.

BIBLIOGRAPHY

EMPR AR 1908-58; 1909-56-57; 1916-50,436; 1917-37,42-43; 1918-35, 46; 1919-41-42; 1920-35,39,260; 1921-41; 1922-45-46; 1923-46,300; 1924-46; 1925-67; 1926-64,71; 1928-70; *1929-70-71; *1930-66-67;
EMPR ASS RPT 15885
EMPR EXPL 1979-252; 1987-C357
EMPR INDEX 3-194
EMPR OF 2002-03
EMR MP CORPFILE (Drum Lummon Mines Limited; Douglas Channel Mines, Limited; Los Angelas-Vancouver Mines, Ltd.)
EMR MRD Metals Committee File: 167-C3-2-41
GSC MAP 23-1970, 278A, 1868A
GSC P *70-41, p. 53

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BIBLIOGRAPHY

GSC SUM RPT *1921A, pp. 26,29,35-38

DATE CODED: 1986/08/15
DATE REVISED: 1989/08/12

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103H 019**

NATIONAL MINERAL INVENTORY: 103H15 Au1

NAME(S): **GOLDEN CROWN**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 103H15E
BC MAP:

Underground

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 59 09 N
LONGITUDE: 128 32 36 W
ELEVATION: 200 Metres

NORTHING: 5982042
EASTING: 529944

LOCATION ACCURACY: Within 1 KM

COMMENTS: Descriptions and Map 23-1970 (Geological Survey of Canada, Paper 70-41).

COMMODITIES: Copper Gold Silver

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite

COMMENTS: Probable minerals present.

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal
DIMENSION: 0006
COMMENTS: Width of vein.

Epigenetic
Metres

STRIKE/DIP:

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Paleozoic-Mesozoic Coast Plutonic Complex

LITHOLOGY: Quartz Diorite

HOSTROCK COMMENTS: Includes Tertiary plutons.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Plutonic Rocks

PHYSIOGRAPHIC AREA: Kitimat Ranges

CAPSULE GEOLOGY

A 6 metre wide quartz vein containing copper, gold and silver values occurs in quartz diorite of the Coast Plutonic Complex. In 1904, 5 tonnes of mined ore produced 93 grams of gold.

BIBLIOGRAPHY

EMPR AR 1899-656; 1900-787; 1901-992; 1902-47; 1903-51; 1904-102;
1905-82; 1907-74; 1909-57; 1928-69
EMPR BC METAL MM00745
EMPR INDEX 3-198
GSC MAP 23-1970; 1385A
GSC P 70-41, p. 49

DATE CODED: 1986/08/15
DATE REVISED: 1989/08/12

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103H 020**

NATIONAL MINERAL INVENTORY: 103H16 Cu1,Cu2

NAME(S): **KILDALA**, BOLTON

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103H16W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 49 14 N
LONGITUDE: 128 29 06 W
ELEVATION: 1 Metres

NORTHING: 5963680
EASTING: 533903

LOCATION ACCURACY: Within 500M

COMMENTS: Description from Annual Reports.

COMMODITIES: Copper Tin

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite
ALTERATION: Garnet Epidote
COMMENTS: Probable skarn.
ALTERATION TYPE: Skarn
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Skarn

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic-Mesozoic			Coast Plutonic Complex

LITHOLOGY: Limestone
Greenstone
Granodiorite

HOSTROCK COMMENTS: Includes Tertiary plutons.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Undivided Metamorphic Assembl.
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Kitimat Ranges

RELATIONSHIP:

GRADE: Greenschist

CAPSULE GEOLOGY

The area is underlain by greenstones and crystalline limestone near granodiorite of the Coast Plutonic Complex. Irregular patches of pyrite and chalcopyrite occur in the meta-sediments on a point jutting from the north side of Kildala River flats. The mineralization is probably hosted in a skarn as evidenced by the presence of garnet and epidote. About 2.8 kilometres to the north and at elevation 120 metres, similar mineralization occurs which assayed trace gold, silver and copper across 3 metres. Earlier reports of 1.7 per cent tin could not be confirmed (Geological Survey of Canada, Paper 70-41).

BIBLIOGRAPHY

EMPR AR 1928-69-70; 1929-70
GSC MAP 23-1970; 1385A
GSC P 70-41, pp. 52,53

DATE CODED: 1986/08/15
DATE REVISED: 1989/08/12

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103H 021**

NATIONAL MINERAL INVENTORY: 103H7 Cu2

NAME(S): **KEN, COPPER CLIFF, BLUEBELL,
BLUE BELL**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103H07W
BC MAP:
LATITUDE: 53 20 39 N
LONGITUDE: 128 59 36 W
ELEVATION: 350 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Showing, Figure 2 (Assessment Report 3347).

Underground

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

NORTHING: 5910557
EASTING: 500444

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite Bornite Chalcocite Covellite
COMMENTS: Trace gold and silver.
ALTERATION: Quartz Garnet Diopside
ALTERATION TYPE: Skarn
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Skarn Replacement
TYPE: K01 Cu skarn
SHAPE: Irregular
DIMENSION: 1000 Metres
COMMENTS: Length of showings, strata generally strikes 135 degrees and dips to the northeast.

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic	Undefined Group	Unnamed/Unknown Formation	Coast Plutonic Complex
Paleozoic-Mesozoic			

LITHOLOGY: Diopside Garnet Skarn
Quartz Diorite

HOSTROCK COMMENTS: Includes plutons of Tertiary age.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Undivided Metamorphic Assembl.
METAMORPHIC TYPE: Regional
PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)
RELATIONSHIP: Plutonic Rocks
GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1971
SAMPLE TYPE: Chip
COMMODITY: Copper GRADE: 0.2800 Per cent
COMMENTS: The 7.6 centimetre sample also contained trace silver and gold.
REFERENCE: Property File Report by Sevensma, 1971.

CAPSULE GEOLOGY

Quartz diorite of the Coast Plutonic Complex contains zones of diopside-garnet-quartz skarn with small lenses of disseminated chalcopyrite, bornite, chalcocite and covellite. Showings occur in a northwest trending, northeast-dipping structure over a 1000-metre length. A 7.6 centimetre sample of a lens assayed 0.28 per cent copper, trace gold and trace silver (Sevensma, 1971).

The property was first staked in 1900 as the Copper Cliff Group, and was owned by Gribbell Island Copper Company. During that year development included three open cuts, each accompanied by short adits. Between then and 1905, several more adits were driven, including one 108 metres in length, and more shallow pits, open cuts and two shallow prospect shafts. Eight Crown Grants were issued to Gribbell Island Copper Company on the Copper Cliff Group in June 1910.

Phelps Dodge Corporation of Canada did some further work 1964. The property was then restaked as the Ken 1-12. In 1970 Balfour Mining Limited acquired the rights and conducted exploration until

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CAPSULE GEOLOGY

1973, including geochemical surveying, trenching, and some diamond drilling.

BIBLIOGRAPHY

EMPR AR 1899-656; 1900-787; 1901-992; 1902-47; 1903-51; 1904-102;
*1905-85-88; 1910-246
EMPR ASS RPT 3347
EMPR GEM 1971-112
EMPR PF (Reports by W.M Brewer, 1905; *P.H. Sevensma, 1971)
EMR MP CORPFILE (Balfour Mining Ltd. (N.P.L.))
GSC MAP 23-1970; 1385A
GSC P 70-41, p. 522
GSC SUM RPT 1921A, p. 39

DATE CODED: 1986/08/25
DATE REVISED: 1999/07/25

CODED BY: LDJ
REVISED BY: JMR

FIELD CHECK: N
FIELD CHECK: N

CAPSULE GEOLOGY

(previously known as the New Whatcom Mining Company). During that year development included trail-making, and four short adits. In 1901 the company drove a 91-metre adit at 366 metres elevation to tap the main ledge. In 1903 a wharf and tramway were built. A 58-metre adit was driven in 1904. During 1905 and 1906, the 1901 adit was continued to a length of 220 metres, and 35 tonnes of ore were removed, from which 31 grams of gold, 1306 grams of silver, and 372 kilograms of copper were recovered. The company was issued 6 Crown Grants (Lots 580R4-585R4) in 1911.

Phelps Dodge did some further work in 1964. The property was restaked under the Ox name by Balfour Mining Limited in 1970. They conducted geochemical surveying, trenching, and drilling of three diamond drill holes between 1970 and 1973.

Smaller showings occur in an easterly direction over a 152 metre length and 84 metre vertical depth.

BIBLIOGRAPHY

EMPR AR 1899-656; 1900-787; 1901-992; 1902-47; 1903-51; 1904-102;
*1905-85-88; 1910-246; 1911-287
EMPR ASS RPT 3347
EMPR GEM 1971-112
EMPR INDEX 3-195
EMPR PF (Reports by W.M. Brewer, 1905; *P.H. Sevensma, 1971)
EMR MP CORPFILE (Balfour Mining Ltd. (N.P.L.))
GSC MAP 23-1970; 1385A
GSC P 70-41, p. 52
GSC SUM RPT 1921A, p. 39

DATE CODED: 1986/08/25
DATE REVISED: 1999/08/13

CODED BY: LDJ
REVISED BY: JMR

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103H 023**

NATIONAL MINERAL INVENTORY: 103H3 Cu2

NAME(S): **RIVER BIGHT**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103H03E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 12 39 N
LONGITUDE: 129 01 56 W
ELEVATION: 100 Metres

NORTHING: 5895725
EASTING: 497848

LOCATION ACCURACY: Within 1 KM
COMMENTS: Geological Survey of Canada, Map 278A.

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Pyrite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic-Mesozoic			Coast Plutonic Complex

LITHOLOGY: Schist
Gneiss

HOSTROCK COMMENTS: Includes Tertiary plutons.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Plutonic Rocks
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)

RELATIONSHIP:

GRADE: Amphibolite

CAPSULE GEOLOGY

Pyritized quartz veins occur in schist and gneiss of the Coast Plutonic Complex.

BIBLIOGRAPHY

EMPR AR 1920-38
GSC MAP 23-1970; *278A; 1385A
GSC P 70-41

DATE CODED: 1986/08/25
DATE REVISED: 1989/08/12

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103H 024**

NATIONAL MINERAL INVENTORY: 103H3 Cu1

NAME(S): **CAMPANIA**, MOOSE

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103H03E
BC MAP:

Underground

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 10 20 N
LONGITUDE: 129 05 02 W
ELEVATION: 300 Metres

NORTHING: 5891432
EASTING: 494393

LOCATION ACCURACY: Within 500M

COMMENTS: Location of Reverted Crown Grants (Lots 1804-1806).

COMMODITIES: Copper Gold Silver

MINERALS

SIGNIFICANT: Marcasite Chalcopyrite Magnetite Pyrite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I06 Cu±Ag quartz veins

SHAPE: Irregular

DIMENSION: 365 x 2 Metres STRIKE/DIP: 070/50N

TREND/PLUNGE:

COMMENTS: Quartz vein.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic-Mesozoic			Coast Plutonic Complex

LITHOLOGY: Hornblende Schist
Gneissic Diorite

HOSTROCK COMMENTS: Includes Tertiary plutons.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline

TERRANE: Plutonic Rocks

METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)

RELATIONSHIP:

GRADE: Amphibolite

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1935

SAMPLE TYPE: Rock

COMMODITY

GRADE

Silver 3.4000 Grams per tonne

Gold 3.4000 Grams per tonne

Copper 0.2000 Per cent

COMMENTS: The assays were obtained from a composite sample.

REFERENCE: Minister of Mines Annual Report 1935, page B2.

CAPSULE GEOLOGY

The property is located approximately 1.6 kilometres south-southeast of Leading Point, on the northwestern end of Princess Royal Island.

In January 1920, Whale Channel Mines, Limited, was incorporated. The company holdings at that time included the Moose 1-3. Prior to 1920 work on this property included a 21-metre adit crossing the vein, and a 3.5 to 4.3-metre deep shaft on the vein. During 1920 two trenches were cut on the vein. It is reported that Belmont-Surf Inlet Mines worked the above group of claims during 1923. In 1934, the showing was restaked as the Campania group. In 1935, the regional geologist, reporting property assessment work, found a 366 metre adit along the strike of the vein, which appeared to have been driven prior to 1934, but for which there is no report.

The area is underlain by hornblende schist and gneissic diorite of the Coast Plutonic Complex. A quartz vein 365 metres long and 2.4 metres wide and trending east with a 40 to 60 degree north dip occurs in the hornblende schist. Sparsely distributed mineralization in the quartz vein consists of marcasite, chalcopyrite, magnetite and pyrite. A composite sample assayed 3.4 grams per tonne gold, 3.4 grams per tonne silver, and 0.2 per cent copper (Minister of Mines

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CAPSULE GEOLOGY

Annual Report 1935, p. B2).

BIBLIOGRAPHY

EMPR AR 1919-41; *1920-38; *1935-B2
GSC MAP 23-1970; 1385A
GSC P 70-41

DATE CODED: 1986/08/25
DATE REVISED: 1999/08/19

CODED BY: LDJ
REVISED BY: JMR

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103H 025**

NATIONAL MINERAL INVENTORY: 103H2 Au4

NAME(S): **CORDILLA**, MOUNTAIN VIEW, ROYAL,
LANDSLIDE, BIGHT, COUNDER,
PRESENT

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103H02W
BC MAP:
LATITUDE: 53 09 59 N
LONGITUDE: 128 59 36 W
ELEVATION: 5 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Symbol #13, Map 23-1970 (Geological Survey of Canada, Paper 70-51).

Underground
MINING DIVISION: Skeena
UTM ZONE: 09 (NAD 83)
NORTHING: 5890780
EASTING: 500446

COMMODITIES: Gold Silver

MINERALS

SIGNIFICANT: Pyrite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I01 Au-quartz veins
SHAPE: Irregular
MODIFIER: Sheared
DIMENSION:
COMMENTS: Shear zone.

STRIKE/DIP: 155/90
TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Paleozoic-Mesozoic Coast Plutonic Complex

LITHOLOGY: Quartz Diorite

HOSTROCK COMMENTS: Includes Tertiary plutons.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Plutonic Rocks
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)
RELATIONSHIP:
GRADE: Amphibolite

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1922
SAMPLE TYPE: Rock
COMMODITY GRADE
Silver 69.0000 Grams per tonne
Gold 4.1100 Grams per tonne

REFERENCE: Minister of Mines, Annual Report 1922, page 43.

CAPSULE GEOLOGY

The showings are situated on the west side of Drake Inlet (Princess Royal Island) near the adjoining Cornwall Inlet (referred to in older reports as Rivers Bight).

In July 1920, the Cordilla group, consisting of six claims, the Mountain View, Royal, Landslide, Bight, Counder and Present, was staked by Cordilla and Koski. The claims were bonded in 1921 to the Rivers Bight Syndicate.

During 1921-22, a 91-metre adit was driven along the mineralized shear zone but the results were unsatisfactory, and the bond lapsed in 1922. In 1926 the owners extended the adit a short distance.

Pyritized quartz veins occur in a shear zone, striking 155 degrees and dipping vertical, in quartz diorite of the Coast Plutonic Complex. A sample assayed 4.11 grams per tonne gold and 69 grams per tonne silver (Minister of Mines, Annual Report 1922, p.43).

BIBLIOGRAPHY

EMPR AR 1920-35; 1921-40; *1922-43; 1923-45; 1926-71
EMPR BULL 1, 1932, pp. 21,29
GSC MAP 23-1970; 278A; 1385A
GSC P 70-41, p. 50

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RUN TIME: 12:06:33

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REPORT: RGEN0100

BIBLIOGRAPHY

GSC SUM RPT 1921A, p. 35

DATE CODED: 1986/08/22
DATE REVISED: 1999/08/19

CODED BY: LDJ
REVISED BY: JMR

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103H 026**

NATIONAL MINERAL INVENTORY: 103H2 Au3

NAME(S): **WELLS**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103H02W
BC MAP:
LATITUDE: 53 05 44 N
LONGITUDE: 128 53 56 W
ELEVATION: 700 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Descriptions.

Underground

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

NORTHING: 5882905
EASTING: 506771

COMMODITIES: Gold Silver

MINERALS

SIGNIFICANT: Pyrite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I01 Au-quartz veins
SHAPE: Irregular
MODIFIER: Sheared
DIMENSION: 18 x 1 Metres
COMMENTS: Vein.

STRIKE/DIP:

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic-Mesozoic			Coast Plutonic Complex

LITHOLOGY: Quartz Diorite

HOSTROCK COMMENTS: Includes Tertiary plutons.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Plutonic Rocks
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)

RELATIONSHIP:

GRADE: Amphibolite

CAPSULE GEOLOGY

This group was owned by F. Wells in 1921. The property is located on the steep side of the precipitous mountain which stands just north of the point where Paradise Creek enters Bear Lake, at about 610 metres elevation.

During the years 1920 and 1921, Mr. Wells' work mainly involved driving a drift adit for over 90 metres, just below the surface showing. He also did some surface stripping.

Drilling near the Wells property in 1942 intersected 3 metres of 6.5 grams per tonne gold, and one metre of 21.6 grams per tonne gold (George Cross Newsletter Number 108). In 1997 Rupert Resources drilled the down dip extension of the Surf orebody (103H 027). This extension occurs on the Wells property.

A quartz vein containing auriferous pyrite occurs in sheared quartz diorite of the Coast Plutonic Complex. The vein is 1.2 to 1.5 metres wide for 18.2 metres.

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GSC P 70-41
GSC SUM RPT *1921A, p. 35

DATE CODED: 1986/08/22
DATE REVISED: 1999/08/13

CODED BY: LDJ
REVISED BY: JMR

FIELD CHECK: N
FIELD CHECK: N

CAPSULE GEOLOGY

The area is underlain by hornblende-biotite quartz diorite with diorite gneiss bands of the Tertiary-Jurassic Coast Plutonic Complex. A large, complex fault zone, traced for about 4.5 kilometres in a north-south direction, hosts the ore zones of the Surf Inlet and Pugsley mines. In the mine area the fault zone is convex toward the west and consists of several shear zones up to 9 metres thick and 45 to 60 metres apart with average dips of 45 degrees west.

Mineralized quartz veins parallel or subparallel the shear zones. The veins, 30 to 50 metres apart and up to 12 metres wide, contain mainly auriferous pyrite with minor chalcopyrite, silver, chalcocite, bornite, covellite and molybdenite. Gangue minerals include quartz, ankerite and minor calcite. Sericite and chlorite alteration are common near the veins.

Distribution of ore shoots within the veins depends on late-stage fault adjustments and flexures during which veins along certain shear surfaces and zones were fractured and mineralized (Assessment Report 15377).

The Surf Inlet mine veins lie near the east side of a north trending inclusion of hornblende gneiss, which is 300 to 600 metres wide. The veins are up to 300 metres long, 12 metres wide and 350 metres in vertical depth. They appear to fill subsidiary tension fractures, opened by movement along the main shears, resulting in a left-hand offset in which the west or hanging wall moved upward and southward. In 1981, reserves of the 550 level mine dump from the Surf Inlet mine were calculated to be 362,880 tonnes of 2.98 grams per tonne gold (Assessment Report 16092).

A 1.1-metre sample of a quartz vein (Bluff showing) near the 200 level adit area assayed 30.0 grams per tonne gold, 97.7 grams per tonne silver, 0.02 per cent copper and .003 per cent tellurium. A sample of the 200 level adit dump assayed 136.5 grams per tonne gold, 172 grams per tonne silver, 0.021 per cent tellurium and 0.02 per cent molybdenum (Assessment Report 15377). An 80-centimetre sample of a quartz vein on Sadie Creek, at 145 metres elevation, assayed 45.0 grams per tonne gold, 15.1 grams per tonne silver, 1.02 per cent copper and 0.0033 per cent tellurium. A 2.5-metre channel sample of quartz vein and shear in the 900 level adit assayed 14.0 grams per tonne gold, 29.9 grams per tonne silver, 0.234 per cent copper and 0.0018 per cent tellurium. A diamond-drill hole (81-2), 800 metres to the south-southeast, intersected 10.4 grams per tonne gold, 69.7 grams per tonne silver over 60 centimetres. This hole is the sample location for a potassium/argon age date of 80 Ma plus or minus 1 Ma from a mineralized, altered diorite porphyry (Assessment Report 15377).

The Pugsley mine, 1700 metres south of the Surf mine, occurs mainly in quartz diorite porphyry. The main veins, about 45 metres apart, are up to 500 metres long and 300 metres vertical depth. Proven and probable reserves, estimated in 1961, at the Pugsley mine are 47,250 tonnes grading 0.6 per cent copper, 11.34 grams per tonne gold, and 9.5 grams per tonne silver (CIM Special Volume 37, page 184 and Northern Miner, Jan. 24, 1974).

Reserves of the tailings site located at the confluence of Paradise Creek and Bear Lake were calculated in 1988 to be 169,500 tonnes grading 1.131 grams per tonne gold (Assessment Report 17275). Reserves of the waste dumps range from 270,000 to 360,000 tonnes grading 3.43 grams per tonne gold (MDAP - Prospectus, Surf Inlet Mines Ltd. 1986).

Mining of nearly 1 million tonnes of rock from both mines averaged 13.0 grams per tonne gold, 6.8 grams per tonne silver and 0.31 per cent copper. The mines were in operation from 1915 to 1925 and again from 1935 to 1941.

The Surf One and Surf Two claims are held in good standing until February 28, 2007 by Rupert Resources Limited of Vancouver. Fifteen other claims in the same area on mapsheet 103H02W are held by the same owner until various dates in 2007.

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EMPR ASS RPT 5393, 9904, 10071, *15369, *15377, 16092, *17275, 22169
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GSC EC GEOL 10, pp. 33,37
GSC MAP 23-1970; 278A; 1385A
GSC P *70-41, pp. 46-47
GSC SUM RPT *1912, pp. 63-67; 1921 Part A, pp. 29-35
CANMET IR 617 (No. 190), 1923; 776 (No. 687), 1936
CIM Jubilee *Vol. 1948, pp. 99-104
GCNL #101, 1988; #184(Sept.24), 1990; #79(Apr.24), #108(June 5), 1997; #158(Aug.17), #177(Sept.15), 2000
N MINER Jan.24, 1974; Nov.2, 1987
V STOCKWATCH Nov.30, 1987
WWW <http://www.infomine.com/>
Placer Dome File
EMPR OF 1998-10

DATE CODED: 1986/08/18
DATE REVISED: 1998/08/05

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103H 028**

NATIONAL MINERAL INVENTORY: 103H2 Cu1

NAME(S): **BUTE**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103H02E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 09 39 N
LONGITUDE: 128 41 31 W
ELEVATION: 5 Metres

NORTHING: 5890206
EASTING: 520597

LOCATION ACCURACY: Within 500M
COMMENTS: Description.

COMMODITIES: Copper Molybdenum Tungsten

MINERALS

SIGNIFICANT: Chalcopyrite Molybdenite Scheelite Pyrite
ASSOCIATED: Hornblende
ALTERATION: Epidote Garnet Silica
ALTERATION TYPE: Silicific'n Skarn
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: L04 Porphyry Cu ± Mo ± Au
SHAPE: Irregular
MODIFIER: Sheared
DIMENSION: Metres STRIKE/DIP: 005/75E TREND/PLUNGE:
COMMENTS: Mineralized width up to 60 centimetres.

HOST ROCK

DOMINANT HOSTROCK: Metaplutonic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Paleozoic-Mesozoic Coast Plutonic Complex

LITHOLOGY: Granodiorite
Hornblende Gneiss

HOSTROCK COMMENTS: Includes Tertiary plutons.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)
TERRANE: Plutonic Rocks
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Amphibolite

CAPSULE GEOLOGY

The showings are situated opposite Butedale on the south side of Butedale Bay, off Fraser Reach, about 144 kilometres south of Prince Rupert.

This property consisted of the Bute and Bute No. 2 claims, owned in 1930 by A. Land and G. Knutson of Butedale.

In an open cut made in 1930, about 4.5 metres above high-tide mark, a width of about 0.6 metre of rock well mineralized with chalcopyrite was exposed. No tracing back from the shore was done.

Veinlets and patches of chalcopyrite and pyrite with minor molybdenite and scheelite occur in slightly sheared hornblende gneissic bands in granodiorite of the Coast Plutonic Complex. The bands strike north and dip 75 degrees east and are altered to epidote, garnet, and quartz. Mineralized widths are about 0.6 metre with estimates of up to 7 per cent copper over 0.3 metre.

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EMPR BULL 10, p. 57
EMPR OF 1991-17
GSC EC GEOL Series No. 17, p. 42
GSC MAP 23-1970; 278A; 1385A
GSC P 70-41

DATE CODED: 1986/08/25
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FIELD CHECK: N

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MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 402
REPORT: RGEN0100

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1924-45; 1925-66,67; 1926-70; 1929-69; 1930-66
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GSC P 70-41
GSC SUM RPT *1921A, pp. 38-39

DATE CODED: 1986/08/26
DATE REVISED: 1999/08/18

CODED BY: LDJ
REVISED BY: JMR

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103H 030**

NATIONAL MINERAL INVENTORY: 103H2 Au2

NAME(S): **MALCOLM**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103H02E
BC MAP:
LATITUDE: 53 05 19 N
LONGITUDE: 128 34 46 W
ELEVATION: 150 Metres
LOCATION ACCURACY: Within 1 KM
COMMENTS: Description.

Underground

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

NORTHING: 5882211
EASTING: 528166

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Pyrrhotite Pyrite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I01 Au-quartz veins
SHAPE: Regular
DIMENSION: 2 Metres
COMMENTS: Average width of quartz vein.

STRIKE/DIP: 160/36N

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Paleozoic
Cretaceous

GROUP

Undefined Group

FORMATION

Unnamed/Unknown Formation

IGNEOUS/METAMORPHIC/OTHER

Butedale Pluton

LITHOLOGY: Biotite Sericite Schist
Granodiorite

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Plutonic Rocks
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)

RELATIONSHIP:

GRADE: Amphibolite

CAPSULE GEOLOGY

This property is located on the northeastern corner of Princess Royal Island, about 9 kilometres north-northwest of the tip of Swanson Point. The vein itself is situated at an elevation of about 146 metres.

The Malcolm claim was Crown-granted in 1916 to J. Falkner. Some tunneling was done on the property.

A quartz vein, 1.2 to 3.6 metres wide, occurs in biotite-sericite schist within granodiorite of the Butedale Pluton. The vein strikes parallel to the schist 160 degrees, and dips 36 degrees northeast. It is mineralized with abundant pyrrhotite and minor pyrite. Anomalous gold occurs with sulphide mineralization.

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GSC MAP 23-1970; 1385A
GSC P 70-41
GSC SUM RPT *1921A, p. 35

DATE CODED: 1986/08/26
DATE REVISED: 1999/08/20

CODED BY: LDJ
REVISED BY: JMR

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103H 031**

NATIONAL MINERAL INVENTORY: 103H2 Au5

NAME(S): **MILLBANK, PLATTENBERGER, CRAWFORD,
CLAWHAMMER, PIE, GOLDEN ORE,
BIG SLIDE, SLIDE TWO, SUMMIT**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103H02E
BC MAP:
LATITUDE: 53 02 39 N
LONGITUDE: 128 31 36 W
ELEVATION: 18 Metres
LOCATION ACCURACY: Within 1 KM
COMMENTS: Descriptions.

Underground

MINING DIVISION: Skeena
UTM ZONE: 09 (NAD 83)
NORTHING: 5877288
EASTING: 531733

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Pyrite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I01 Au-quartz veins
SHAPE: Regular
DIMENSION: 300 x 3 Metres
COMMENTS: Quartz vein.

STRIKE/DIP: 170/54E

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic			Unnamed/Unknown Informal

LITHOLOGY: Sericite Schist

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Alexander
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)

RELATIONSHIP:

GRADE: Greenschist

CAPSULE GEOLOGY

The showing is located about 3.2 kilometres north of Swanson Bay, at an approximate elevation of 183 metres. The showing was owned by J. Plattenberger, of Swanson Bay, prior to the 1920s. Considerable surface work was done on the showings and a 49-metre crosscut adit was driven.

In 1923 the showing was restaked by E.H. Crawford as the Millbank Group, consisting of the Millbank, Clawhammer, Pie, Golden Ore, Big Slide, and Slide Two claims. During 1924 the crosscut was extended to a length of about 122 metres, cutting the vein at a depth of 94.5 metres below the surface. The Summit claim was staked, possibly covering in part the Big Slide and Slide Two claims.

An auriferous pyritic quartz vein, 1.8 to 3.6 metres wide and traceable for 300 metres, occurs in sericite schist. The vein strikes 170 degrees and dips 54 degrees northeast.

BIBLIOGRAPHY

EMPR AR 1923-46; 1924-45
GSC MAP 23-1970; 1385A
GSC P 70-41
GSC SUM RPT 1921A, p. 35

DATE CODED: 1986/08/26
DATE REVISED: 1999/08/23

CODED BY: LDJ
REVISED BY: JMR

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103H 032**

NATIONAL MINERAL INVENTORY: 103H1 Pb1,103H2Pb1

NAME(S): **SWANSON BAY**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103H01W 103H02E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 00 39 N
LONGITUDE: 128 29 56 W
ELEVATION: 300 Metres

NORTHING: 5873593
EASTING: 533621

LOCATION ACCURACY: Within 1 KM
COMMENTS: Description.

COMMODITIES: Lead Zinc

MINERALS

SIGNIFICANT: Galena Pyrite Pyrrhotite Sphalerite Chalcopyrite
ASSOCIATED: Quartz
ALTERATION: Silica
ALTERATION TYPE: Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Concordant
CLASSIFICATION: Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
SHAPE: Irregular
MODIFIER: Faulted
DIMENSION: Metres STRIKE/DIP: 150/70N TREND/PLUNGE:
COMMENTS: Schistosity.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Paleozoic Unnamed/Unknown Informal

LITHOLOGY: Mica Schist

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)
TERRANE: Alexander
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist

CAPSULE GEOLOGY

The occurrence lies approximately 800 metres south of Swanson Bay, on the southwest side of a creek which flow northwest into Swanson Bay.
In 1918, ownership of these claims belonged to J. C. McNichols of Swanson Bay, and associates. A small amount of rock trenching was done by the owners that year.
Quartz stringers containing pyrite and minor galena occur in silicified micaceous schist. The mineralized zone lies in a faulted zone parallel to the schistosity which strikes 150 degrees and dips 65 to 75 degrees northeast. Microscopic minerals include pyrrhotite, sphalerite, and chalcopyrite.

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GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 407
REPORT: RGEN0100

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EMR MP Metals File Cu 301.00
GSC MAP 23-1970; 1385A
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GSC SUM RPT 1921A, p. 40

DATE CODED: 1986/08/26
DATE REVISED: 1989/08/06

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103H 034**

NATIONAL MINERAL INVENTORY: 103H1 Au1

NAME(S): **HUNTER, GRIZZLY, BEAR,
HEATHER, CRAIG, RUBY 1-7,
JUBILEE 1-8, BEE FRACTION, JAY FRACTION,
MAIN, PARALLEL, CROSS,
BURNT TREE, NO. 4, RIVER,
HUNTER GROUP**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 103H01W
BC MAP:
LATITUDE: 53 11 39 N
LONGITUDE: 128 23 06 W
ELEVATION: 690 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Main vein; the River vein is 1400 metres northeast.

Underground
MINING DIVISION: Skeena
UTM ZONE: 09 (NAD 83)
NORTHING: 5894047
EASTING: 541087

COMMODITIES: Gold Silver Copper

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Gold Tetradymite
ASSOCIATED: Quartz Ankerite Orthoclase
ALTERATION: Pyrite Chlorite Sericite
ALTERATION TYPE: Chloritic Sericitic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I01 Au-quartz veins
SHAPE: Tabular
MODIFIER: Fractured
DIMENSION: 130 x 70 Metres
COMMENTS: Main vein

STRIKE/DIP: 021/55E
TREND/PLUNGE: 210/35

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic Mesozoic-Cenozoic	Unnamed/Unknown Group	Unnamed/Unknown Formation	Coast Plutonic Complex

LITHOLOGY: Granitic Gneiss
Biotite Quartz Dioritic Gneiss
Pegmatite Dike
Felsic Dike
Aplite Dike
Meta Volcanic

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Undivided Metamorphic Assembl. Plutonic Rocks
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Amphibolite
PHYSIOGRAPHIC AREA: Kitimat Ranges

INVENTORY

ORE ZONE: HUNTER REPORT ON: Y
CATEGORY: Unclassified YEAR: 1980
QUANTITY: 94338 Tonnes
COMMODITY: Gold GRADE: 12.0000 Grams per tonne
COMMENTS: Diluted to a 1.2-metre mining width.
REFERENCE: George Cross News Letter #114 (June 13), 1984.

CAPSULE GEOLOGY

The property is located on the Khutze River about 19 kilometres from the head of Khutze Inlet, some 95 kilometres south of Kitimat. The initial discovery, on the east side of the river, was staked in 1927. Further discoveries were made in 1929 and 1930 on the west side of the river between elevations of 365 and 838 metres. C.W. Meldrum and Associates of Vancouver, optioned the property late in the 1930 season. Trenching and sampling was reported on the Hunter, Grizzly, Bear, Heather, and Craig claims in the following years, and a 3-tonne shipment of ore was made in 1933 from surface outcrops, from which 373 grams of silver, 933 grams of gold, and 40 kilograms

CAPSULE GEOLOGY

of copper were recovered.

In 1939 owners G.M. Meldrum and J.G. Campbell optioned the property to P.W. Racey and Associates of Seattle, and work continued into 1941. The workings at that time included a 143.5-metre long adit on the Main vein, and a 45-metre long inclined shaft, with 54.5 metres of drifts on the River Vein. The ground was restaked as the Ruby 1-7, Jubilee 1-8, Bee Fraction, and Jay Fraction (Lots 2977-2993) and these claims were Crown-granted in 1949 to Campbell and Associates.

In 1980 the property was owned by J.M. and K.D. Meldrum. A project of geological mapping, trenching, and sampling was carried out by Dejour Mines Limited. The consulting firm of Derry, Mitchener and Booth sampled underground in 1980 and estimated reserves at 94,338 tonnes grading 12 grams per tonne gold, diluted to a 1.2-metre mining width (George Cross News Letter June 13, 1984).

Associate companies Arnhem Resources Incorporated and Enfield Resources Incorporated acquired a 50-50 option on the property in 1982; the Enfield interest was transferred to Arnhem in July 1983. Work by Arnhem that year included geological mapping and a geochemical soil, silt and rock survey (217 samples). The Crown-grants were overstaked as the Hunter 1-4 claims.

Du-well Resources Limited optioned the property in 1984 and carried out geological mapping, a geochemical soil survey (86 samples) and 735 metres of diamond drilling in seven holes; the option was terminated.

Biotite granitoid gneiss occurs as part of a northwest trending roof pendant of metavolcanics, between cupolas of a granitic pluton consisting of biotite quartz diorite gneiss belonging to the Tertiary-Jurassic Coast Plutonic Complex. The rocks are cut by numerous pegmatite, aplite and felsic dikes.

Six gold-bearing, quartz-pyrite veins lie primarily within the roof pendant of metavolcanics of which the best exposed are the Main and River veins. Mineralization consists of pyrite, chalcopyrite, gold and tetradymite with ankerite and orthoclase gangue. Chloritic and sericitic alteration are associated with the veins.

The Main vein, at 690 metres elevation, cuts across all rocks and has been exposed along surface for 130 metres and to a vertical depth of 70 metres by underground workings. The vein has a 021 degree strike, dips of 30 to 80 degrees east and an average width of 23 centimetres. Six samples taken across this width over a 17.4 metre length averaged 35.35 grams per tonne gold and 87.1 grams per tonne silver (Assessment Report 13398). An ore shoot within the Main vein has an apparent plunge of 035 degrees towards 210 degrees.

Quartz veins intermittently exposed 200 to 500 metres northeast of the Main vein include the Parallel veins, 15 centimetres wide and 0.3 metre apart with moderate southeast dips, and the Cross Vein, striking 165 degrees for 200 metres and up to 40 centimetres wide. The Burnt Tree vein and No. 4 vein, about 500 metres apart, lie 600 metres east of the Main vein. The No. 4 vein occurs in a 1-metre wide, 050 degree striking fault zone.

The River vein, 1400 metres northeast of the Main vein and 300 metres elevation, occurs within all rock types and partly within a quartz-orthoclase pegmatite dike. The vein strikes 020 to 035 degrees for 150 metres and dips 55 to 70 degrees east for a known 42 metres downdip. The vein is commonly 8 to 20 centimetres thick and 6 samples along a 12.5-metre length averaged 67.0 grams per tonne gold, 32.57 grams per tonne silver and 0.67 per cent copper over an average width of 0.19 metre (Assessment Report 11937).

The No. 2 vein, 50 metres west of the River vein, is in excess of 43 metres within a narrow pegmatite dike striking 032 degrees and dipping 80 degrees east in biotite gneiss.

Unclassified reserves for the Hunter property are 94,338 tonnes grading 12 grams per tonne gold, diluted to a 1.2 metre mining width (George Cross News Letter June 13, 1984).

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- EMPR BC METAL MM00753
- EMPR BULL *1 (1932), pp. 34-37
- EMPR EXPL 1980-388; 1983-501; 1984-373
- EMPR INDEX 3-200
- EMPR MAP 58; 65 (1989)
- EMPR OF 1992-1
- EMPR PF (*Reports by Parrish, 1980; Fawley, 1963; Warren and Cummings, 1936; Dolmage, 1931)
- EMR MIN BULL MR 223 B.C. 283

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ENERGY AND MINERALS DIVISION

PAGE: 410
REPORT: RGEN0100

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GSC SUM RPT 1921 Part A, p. 27
GCNL #249, 1982; #27,#28, 1983; Apr.30, #83,#114,#137, 1984
IPDM Jan./Feb., 1983; Aug./Sept., Nov./Dec., 1984
N MINER Feb.24, 1983; Sept.13, 1984

DATE CODED: 1986/08/27
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REVISED BY: JMR

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103H 035**

NATIONAL MINERAL INVENTORY: 103H8 Cu1

NAME(S): **PAYROLL**, HIGH TIDE

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103H08W
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 19 57 N
LONGITUDE: 128 29 28 W
ELEVATION: 1 Metres

NORTHING: 5909380
EASTING: 533889

LOCATION ACCURACY: Within 1 KM

COMMENTS: Symbol #12 on Geological Survey of Canada Map 23-1970.

COMMODITIES: Copper Graphite

MINERALS

SIGNIFICANT: Pyrrhotite Pyrite Chalcopyrite Graphite

COMMENTS: Trace gold and silver.

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein

CLASSIFICATION: Hydrothermal Epigenetic Industrial Min.

SHAPE: Regular

DIMENSION: 0003 Metres STRIKE/DIP: 165/90

TREND/PLUNGE:

COMMENTS: A 3.0 metre wide quartz vein.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Paleozoic

Unnamed/Unknown Informal

LITHOLOGY: Hornblende Schist

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline

PHYSIOGRAPHIC AREA: Kitimat Ranges

TERRANE: Undivided Metamorphic Assembl.

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Amphibolite

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1929

SAMPLE TYPE: Rock

COMMODITY

GRADE

Copper 0.2000 Per cent

COMMENTS: The sample also contains trace gold and silver; sample width is 3 metres.

REFERENCE: Minister of Mines, Annual Report 1929, page 69.

CAPSULE GEOLOGY

A 3 metre wide quartz vein, trending 165 degrees and dipping near vertical, mineralized with pyrrhotite, pyrite, and minor chalcopyrite, occurs in hornblende schist. A 3 metre sample assayed 0.2 per cent copper and trace gold and silver (Minister of Mines, Annual Report 1929).

One hundred fifty metres above the vein, a 3 to 4.5 metre wide graphite horizon lies concordant with the schists.

BIBLIOGRAPHY

EMPR AR *1920-38; 1921-40; 1922-45; *1929-69

GSC MAP 23-1970; 1385A

GSC P *70-41, p. 49

DATE CODED: 1986/08/27

CODED BY: LDJ

FIELD CHECK: N

DATE REVISED: 1989/08/14

REVISED BY: LDJ

FIELD CHECK: N

MINFILE NUMBER: **103H 036**

NATIONAL MINERAL INVENTORY:

NAME(S): **STEELHEAD**, HORSEFLY

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103H14W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 45 44 N
LONGITUDE: 129 22 16 W
ELEVATION: 1070 Metres

NORTHING: 5957131
EASTING: 475535

LOCATION ACCURACY: Within 500M

COMMENTS: Sample location, Map 2 (Assessment Report 15491). See also
Packsack (103H 013) and Horsefly (103H 014).

COMMODITIES: Copper Zinc Silver

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Sphalerite
ASSOCIATED: Quartz
ALTERATION: Sericite Chlorite
ALTERATION TYPE: Sericitic Chloritic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Massive Stratabound
CLASSIFICATION: Volcanogenic
TYPE: G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic			Central Gneiss Complex

LITHOLOGY: Pyrite Quartz Sericite Schist
Chlorite Schist
Sericite Schist
Quartz Sericite Schist
Andesite
Tuff
Greywacke
Siltstone
Argillite

HOSTROCK COMMENTS: Hosted by the Ecstall Pendant, consisting of metasedimentary and meta-volcanic rocks, within the Central Gneiss Complex.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Undivided Metamorphic Assembl.
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)

RELATIONSHIP:

GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Rock

YEAR: 1986

COMMODITY	GRADE	
Silver	5.8000	Grams per tonne
Copper	0.3000	Per cent
Zinc	3.8000	Per cent

COMMENTS: These are the best assays obtained from a pyritic horizon.
REFERENCE: Assessment Report 15491.

CAPSULE GEOLOGY

The north-northwest trending Ecstall Pendant, a metasedimentary-metavolcanic belt within the Central Gneiss Complex, is flanked by granodiorite of the Coast Range Intrusive Complex.

The Steelhead showing, about 12 kilometres from tidewater on Douglas Channel, is underlain by intercalated felsic and intermediate volcanics and fine clastic sediments. The rocks include sericite schist, quartz sericite schist, pyritic quartz sericite schist, chlorite schist, andesite, tuff, greywacke, siltstone, and argillite.

Pyrite, sphalerite, and chalcopyrite occur in the pyritic quartz sericite schist. Sampling of a pyritic horizon gave assays up to 0.3 per cent copper, 3.8 per cent zinc, and 5.8 grams per tonne silver (Assessment Report 15491).

CAPSULE GEOLOGY

In 1995, Atna Resources Ltd., under joint venture with Ecstall Mining Corporation, conducted an electromagnetic survey and diamond drilling (1075 metres in 8 holes) on the Horsefly (103H 014) and Steelhead showings.

See also Packsack (103H 013).

BIBLIOGRAPHY

EM FIELDWORK 1999, pp. 249-265; 2000, pp. 279-306; 2001, pp. 151-170
EMPR ASS RPT *15306, *15491, 24368
EMPR EXPL 1986-C425; 1987-C356
EMPR INF CIRC 1995-19, p. 25; 1996-1, p. 25
EMPR OF 1999-2; 2002-03
EMPR PF (Ecstall Mining Corp., Prospectus, May 1989 in 103H 013)
GSC MAP 23-1970; 1385A, 1868A
GSC P 70-41
GCNL #51(Mar.13) #66, #127(Jul.3), 1990; #190(Oct.3), #200
(Oct.18), #217(Nov.10), 1995
N MINER June 5, 1995
WWW <http://www.ecstall.com>

DATE CODED: 1987/07/22
DATE REVISED: 1989/08/12

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

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PAGE: 414
REPORT: RGEN0100

MINFILE NUMBER: **103H 037**

NATIONAL MINERAL INVENTORY:

NAME(S): **CAL**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103H04W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 13 09 N
LONGITUDE: 129 51 16 W
ELEVATION: 50 Metres

NORTHING: 5896992
EASTING: 442949

LOCATION ACCURACY: Within 500M
COMMENTS: Skarn (Assessment Report 14296).

COMMODITIES: Copper Gold

MINERALS

SIGNIFICANT: Pyrite Pyrrhotite Sphalerite
ASSOCIATED: Epidote Garnet Quartz
ALTERATION TYPE: Skarn
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Skarn Replacement
TYPE: K02 Pb-Zn skarn
SHAPE: Irregular
DIMENSION: 0200 x 0050 Metres

STRIKE/DIP: TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Paleozoic-Mesozoic Coast Plutonic Complex

LITHOLOGY: Limestone
Granodiorite

HOSTROCK COMMENTS: Includes plutons of Tertiary age. Limy metasediments occur as pendant within granodiorite.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Alexander
METAMORPHIC TYPE: Regional
PHYSIOGRAPHIC AREA: Milbanke Strandflat
Plutonic Rocks
RELATIONSHIP: GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1985
SAMPLE TYPE: Rock
COMMODITY GRADE
Gold 0.2160 Grams per tonne
Copper 1.0000 Per cent
COMMENTS: The reference states "Over 1 per cent copper".
REFERENCE: Assessment Report 14296.

CAPSULE GEOLOGY

A skarn body, trending irregularly northward and measuring 200 by 50 metres, occurs within limy metasediments as a pendant in granodioritic rock. Mineralization consists of disseminated pyrite, pyrrhotite, and sphalerite. A sample assayed over 1 per cent copper and 0.216 grams per tonne gold (Assessment Report 14296).

BIBLIOGRAPHY

EMPR ASS RPT *14296
GSC MAP 23-1970; 1385A
GSC P 70-41

DATE CODED: 1986/08/12
DATE REVISED: 1989/08/06

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103H 037**

MINFILE NUMBER: **103H 038**

NATIONAL MINERAL INVENTORY:

NAME(S): **LIMESTONE BAY**, DESPAIR POINT, BANKS ISLAND

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103H05W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 26 30 N
LONGITUDE: 129 58 41 W
ELEVATION: 7 Metres

NORTHING: 5921850
EASTING: 435035

LOCATION ACCURACY: Within 500M

COMMENTS: Location centered on Despair Point on the northeast coast of Banks Island as shown on NTS topographic map 103H/05W.

COMMODITIES: Limestone Marble Dolomite Building Stone

MINERALS

SIGNIFICANT: Calcite Pyrrhotite
ASSOCIATED: Quartz Dolomite
ALTERATION: Silica
ALTERATION TYPE: Silicific'n
MINERALIZATION AGE: Paleozoic

DEPOSIT

CHARACTER: Stratabound Massive
CLASSIFICATION: Sedimentary Industrial Min.
TYPE: R09 Limestone R10 Dolomite
SHAPE: Tabular
DIMENSION: 1200 x 300 Metres STRIKE/DIP: 100/90 TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Paleozoic Coast Plutonic Complex

LITHOLOGY: Limestone
Dolomite
Gneissic Diorite
Migmatite
Quartz Diorite
Quartzite
Schist

HOSTROCK COMMENTS: Situated within a metasedimentary roof pendant in the Coast Plutonic Complex.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)
TERRANE: Alexander
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1944
SAMPLE TYPE: Chip
COMMODITY GRADE
Limestone 94.2400 Per cent
COMMENTS: Chip sample over 15.2 metres, equivalent to 52.8 per cent CaO.
REFERENCE: Canmet Report 811, Part 5, page 176.

CAPSULE GEOLOGY

A 240 to 300 metre wide band of limestone outcrops on Despair Point on the northeast coast of Banks Island and continues southeastward for 1.2 kilometers. The band contacts gneissic diorite and migmatite to the northwest and quartz diorite to the west. The limestone strikes 100 degrees and dips vertically. It is occasionally split into two bands by pyrrhotized quartzite and banded silicified schist.

The deposit is comprised mostly of white, coarse-grained limestone and minor grey, medium-grained limestone with irregular interbeds and masses of dolomite. A 15.2 metre chip sample taken across light grey limestone on the northeast side of the deposit contained 52.80% CaO, 0.85% MgO, 1.66% SiO₂, 0.53% Al₂O₃, 0.20% Fe₂O₃ and 0.03% sulphur, while a sample taken across a 4.6 metre thick bed of coarse-grained white dolomite near the southwestern edge of the

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CAPSULE GEOLOGY

deposit contained 31.72% CaO, 20.62% MgO, 0.78% SiO₂, 0.15% Al₂O₃, 0.08% Fe₂O₃ and nil sulphur (Canmet Report 811, page 176 - Samples 35 and 35A).

BIBLIOGRAPHY

EMPR AR *1930-68
EMPR ASS RPT 12346
GSC MAP 23-1970; 1385A
GSC P 70-41
CANMET RPT *452, Vol. 5, pp. 172,173; *811, Part 5, 1944,
pp. 173,176

DATE CODED: 1986/08/01
DATE REVISED: 1989/07/28

CODED BY: LDJ
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103H 039**

NATIONAL MINERAL INVENTORY:

NAME(S): **BANKS ISLAND (L.2224)**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103H05W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 23 58 N
LONGITUDE: 129 55 09 W
ELEVATION: 3 Metres

NORTHING: 5917100
EASTING: 438886

LOCATION ACCURACY: Within 500M

COMMENTS: Location is centre of Lot 2224, on the northeast coast of Banks Island as shown on NTS topographic map 103H/05W.

COMMODITIES: Limestone Dolomite

MINERALS

SIGNIFICANT: Calcite
ASSOCIATED: Dolomite
MINERALIZATION AGE: Paleozoic

DEPOSIT

CHARACTER: Stratabound Massive
CLASSIFICATION: Sedimentary Industrial Min.
TYPE: R09 Limestone
SHAPE: Tabular
DIMENSION: 0200 Metres STRIKE/DIP: 135/90
COMMENTS: Limestone band 200 metres wide strikes at 130 to 140 degrees and dips steeply.

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Cretaceous-Tertiary			Coast Plutonic Complex

LITHOLOGY: Limestone
Dolomite
Schist
Quartz Diorite

HOSTROCK COMMENTS: Situated in a metasedimentary roof pendant within the Coast Plutonic Complex.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline	PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)
TERRANE: Alexander	
METAMORPHIC TYPE: Regional	RELATIONSHIP: GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1944
SAMPLE TYPE: Chip
COMMODITY Limestone GRADE 97.3800 Per cent
COMMENTS: Chip sample across 30 metres, equivalent to 54.56 per cent CaO.
REFERENCE: Canmet Report 811, Part 5, page 173.

CAPSULE GEOLOGY

A 180 metre thick steeply dipping bed of limestone striking 130 to 140 degrees outcrops on Lot 2224 on the north coast of Banks Island, 12 kilometres northwest of Keecha Point. The limestone lies within quartz diorite of the Coast Plutonic Complex. It contains interbeds of schist that become numerous towards the edges of the deposit.

The bed consists of erratically intermingled white high calcium limestone and dolomite. The dolomite occurs as thin beds to large lenses that become more frequent near the margins of the bed. A chip sample taken across 30 metres of high calcium limestone contained 54.56% CaO, 0.72% MgO, 0.24% SiO₂, 0.18% Al₂O₃, 0.07% Fe₂O₃ and nil sulphur, while a sample across a 9 metre thick dolomite lens assayed 31.84% CaO, 20.77% MgO, 0.24% SiO₂, 0.08% Al₂O₃, 0.23% Fe₂O₃ and a trace of sulphur (Canmet Report 811, p.176, Samples 34 and 34A).

BIBLIOGRAPHY

GSC MAP 23-1970; 1385A

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BIBLIOGRAPHY

GSC P 70-41, p. 20
CANMET RPT 452, Vol.5, pp. 172,173; *811, Part 5, 1944,
pp. 173,176

DATE CODED: 1986/08/01
DATE REVISED: 1989/07/28

CODED BY: LDJ
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103H 040**

NATIONAL MINERAL INVENTORY:

NAME(S): **ATNA PEAK**, ATNA ANDALUSITE, ATAN PEAK

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103H16E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 53 19 N
LONGITUDE: 128 05 06 W
ELEVATION: 1500 Metres

NORTHING: 5971517
EASTING: 560137

LOCATION ACCURACY: Within 5 KM

COMMENTS: Coordinates for centre of zone southwest of Atna Peak (Area 5, Fig.10, Open File 1988-26).

COMMODITIES: Andalusite

MINERALS

SIGNIFICANT: Andalusite

ASSOCIATED: Quartz Biotite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Layered Stratabound
CLASSIFICATION: Metamorphic Syngenetic Industrial Min.
TYPE: P01 Andalusite hornfels
SHAPE: Tabular
MODIFIER: Folded

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic			Central Gneiss Complex

LITHOLOGY: Quartz Biotite Schist
Meta Sediment/Sedimentary

HOSTROCK COMMENTS: Permian (?) and older metasediments.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline

TERRANE: Plutonic Rocks

METAMORPHIC TYPE: Contact Regional

PHYSIOGRAPHIC AREA: Kitimat Ranges

Undivided Metamorphic Assembl.

RELATIONSHIP: Syn-mineralization

GRADE: Amphibolite

CAPSULE GEOLOGY

The Atna Peak area is underlain by Permian (?) and older meta-sediments which are part of the Central Gneiss Complex. Andalusite is present near Atna Peak within quartz-biotite schists adjacent to intrusive rocks (Open File 1988-26, Figure 10). Locally, the andalusite forms porphyroblasts which range up to 10 centimetres in length and comprises a major constituent of the schists (Evenchick, 1979).

BIBLIOGRAPHY

EMPR OF *1988-26, p. 15

GSC MAP 23-1970

GSC P 70-41

Evenchick, C.A., (1979): *Stratigraphy, Structure and Metamorphism of the Atna Peak area, British Columbia, unpublished B.Sc. Thesis, Carleton University, Ottawa, Ontario, 54 pgs.

DATE CODED: 1988/03/28
DATE REVISED: 1989/01/31

CODED BY: JP
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103H 041**

NATIONAL MINERAL INVENTORY:

NAME(S): **CAMPANIA ISLAND**, QUARTZ DOME

STATUS: Developed Prospect

MINING DIVISION: Skeena

REGIONS: British Columbia

NTS MAP: 103H03W

BC MAP:

LATITUDE: 53 01 25 N

LONGITUDE: 129 25 14 W

ELEVATION: 25 Metres

UTM ZONE: 09 (NAD 83)

NORTHING: 5874980

EASTING: 471792

LOCATION ACCURACY: Within 500M

COMMENTS: Deposit located about 0.5 kilometre from the west shore of Campania Island in Hectate Strait (Open File 1987-15, Figure 28).

COMMODITIES: Silica

MINERALS

SIGNIFICANT: Silica Quartz

ASSOCIATED: Muscovite

COMMENTS: Minor muscovite.

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Stockwork

CLASSIFICATION: Hydrothermal Epigenetic

Industrial Min.

TYPE: 107 Silica veins

DIMENSION: 105 x 35 Metres

STRIKE/DIP:

TREND/PLUNGE:

COMMENTS: Quartz Dome vein.

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Paleozoic-Mesozoic

Coast Plutonic Complex

LITHOLOGY: Granite
Quartz Diorite

HOSTROCK COMMENTS: Includes Tertiary plutons.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline

PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)

TERRANE: Plutonic Rocks

INVENTORY

ORE ZONE: QUARTZ DOME

REPORT ON: Y

CATEGORY: Inferred

YEAR: 1975

QUANTITY: 270000 Tonnes

COMMODITY

GRADE

Silica

98.0000 Per cent

COMMENTS: Estimated open pit reserves at about 98 per cent silica (SiO₂).

REFERENCE: Open File 1987-15, page 33.

CAPSULE GEOLOGY

Campania Island is underlain by granitic rocks of the Jurassic to Tertiary Coast Plutonic Complex. In the vicinity of the silica occurrence the rocks are comprised mainly of medium to coarse-grained granites and quartz diorites that are generally well-jointed in an east-west direction.

Three showings comprise the silica occurrence. The central and main outcrop is referred to as the Quartz Dome. It measures approximately 105 by 35 metres and consists of a vein of coarse anhedral milky white quartz. Impurities consist of minor muscovite and very local rusty stains along fractures. Two chip samples from the vein, collected in 1982 by the Geological Survey Branch, assayed 99.73 and 99.84 per cent silica (Open File 1987-15, page 33). Three outcrops aligned north-south occur 160 metres east of the Quartz Dome. The two northern outcrops contain only narrow quartz-stockwork veining, but a quartz vein with an outcrop area of 10 by 31 metres cuts the southern outcrop. The third showing lies 70 metres west of the Quartz Dome and consists of an outcrop cut by quartz stockwork veining. Open-pit reserves of the Quartz Dome were estimated in 1975 at more than 270,000 tonnes at about 98 per cent silica (Open File 1987-15, page 33).

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EMPR ASS RPT *17559
EMPR FIELDWORK 1982, p. 198
EMPR OF *1987-15, pp. 32,33
EMPR PF (*McDougall, J.J., (1961): Preliminary Report on
Campania Silica, Campana Island; *Allen, A.R., (1963): Report
on the Campana Island Silica Deposits, British Columbia)
GSC MAP 23-1970; 1385A
GSC P 70-41, p. 40
Falconbridge File

DATE CODED: 1986/08/01
DATE REVISED: 1989/02/01

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **103H 042**

NATIONAL MINERAL INVENTORY:

NAME(S): **BUSHY CREEK, KEECH**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103H05W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 18 29 N
LONGITUDE: 129 58 26 W
ELEVATION: 150 Metres

NORTHING: 5906982
EASTING: 435109

LOCATION ACCURACY: Within 500M

COMMENTS: Mineralized zone (Assessment Report 15301). Several showings occur in the Bushy Creek area, which is located near the northwestern tip of Keecha Lake.

COMMODITIES: Gold Zinc Copper

MINERALS

SIGNIFICANT: Pyrite Sphalerite Chalcopyrite Pyrrhotite Galena

Molybdenite

ASSOCIATED: Quartz

ALTERATION: Sericite Chlorite

ALTERATION TYPE: Sericitic Chloritic

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated

CLASSIFICATION: Epigenetic Hydrothermal

TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

DIMENSION:

STRIKE/DIP: 343/75E

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

Paleozoic-Mesozoic

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Coast Plutonic Complex

LITHOLOGY: Biotite Quartz Monzonite
Granite

HOSTROCK COMMENTS: Includes Tertiary plutons. Veins are hosted by "Kim" quartz monzonite.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline

TERRANE: Plutonic Rocks

PHYSIOGRAPHIC AREA: Milbanke Strandflat

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1987

SAMPLE TYPE: Channel

COMMODITY

GRADE

Gold

21.9700

Grams per tonne

COMMENTS: Sample #74901 over 1.5 metres.

REFERENCE: Assessment Report 16707.

CAPSULE GEOLOGY

The Bushy Creek showing is located north of the Keecha Creek showing (103H 010) near the northwestern tip of Keecha Lake on Banks Island.

Mineralized quartz veins and sericite-chlorite alteration zones occur over a 75 metre distance within the "Kim" biotite quartz monzonite of the Coast Plutonic Complex. The "Kim" quartz monzonite hosts the Yellow Giant deposit to the north (103G 021-024).

The parallel veins, ranging from 0.2 to 1.2 metres in width, strike 343 degrees and dip 75 degrees northeast. The veins contain varying amounts of pyrite, sphalerite, and chalcopyrite with associated gold values. Minor disseminated pyrrhotite, galena and molybdenite occur in the alteration zones.

In 1987 a channel sample over 1.5 metres from a newly discovered vein assayed 21.97 grams per tonne gold (Assessment Report 16707, Sample #74901). Drilling on a different vein in 1986 resulted in a best assay of 81.6 grams per tonne gold over a 76 centimetre inter-section (Assessment Report 15301).

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EMPR ASS RPT 13071, *15301, *16707, *17180

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

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BIBLIOGRAPHY

EMPR EXPL 1986-C424
GSC MAP 23-1970; 1385A
GSC P 70-41

DATE CODED: 1987/02/09
DATE REVISED: 1989/08/04

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103H 043**

NATIONAL MINERAL INVENTORY:

NAME(S): **CAMPANIA IS. MICA**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103H03W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 03 41 N
LONGITUDE: 129 27 24 W
ELEVATION: 10 Metres

NORTHING: 5879197
EASTING: 469397

LOCATION ACCURACY: Within 1 KM

COMMENTS: Description. Pre 1986 103H-G043.

COMMODITIES: Mica

MINERALS

SIGNIFICANT: Mica
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Pegmatite Industrial Min.
TYPE: O03 Muscovite pegmatite
SHAPE: Irregular
DIMENSION: 0020 Metres
COMMENTS: Average length of pegmatite bands.

STRIKE/DIP:

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Plutonic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Lower Cretaceous			Coast Plutonic Complex

ISOTOPIC AGE: 115 +/- 6 Ma

DATING METHOD: Potassium/Argon

MATERIAL DATED: Biotite

LITHOLOGY: Biotite Quartz Monzonite
Granodiorite
Pegmatite

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline

TERRANE: Plutonic Rocks

METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)

RELATIONSHIP:

GRADE: Amphibolite

CAPSULE GEOLOGY

The core of Campania Island consists of clean, massive medium to coarse-grained biotite quartz monzonite of the Coast Plutonic Complex. To the west of a northwest trending fault is granodiorite.

Mica, resembling coarse muscovite crystals, occurs in 15 to 60 centimetre wide bands of coarse pegmatite within the quartz monzonite. These bands are irregular and discontinuous and are 7 to 30 metres in extent. Belts and streaky zones of fine crystalline mica, up to 100 metres length, are widely distributed in finer-textured pegmatites.

The coarser-grained mica constitutes about 10 to 25 per cent of the bands and the finer mica composes 25 to 50 per cent of the zones.

BIBLIOGRAPHY

EMPR AR *1930-67,68
GSC MAP 23-1970; 1385A
GSC P *70-41, p. 40

DATE CODED: 1986/08/01
DATE REVISED: 1989/08/03

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103H 044**

NATIONAL MINERAL INVENTORY:

NAME(S): **BAKER INLET, MICA MAID, MICA BOY, SERICITE, BAKER MICA, BAKA-MICA**

STATUS: Past Producer
 REGIONS: British Columbia
 NTS MAP: 103H13W
 BC MAP:
 LATITUDE: 53 49 19 N
 LONGITUDE: 129 54 06 W
 ELEVATION: 120 Metres
 LOCATION ACCURACY: Within 500M
 COMMENTS: Located on north side of Baker Inlet, 60 kilometres south-southeast of Prince Rupert (Minister of Mines Annual Report 1934).

MINING DIVISION: Skeena
 UTM ZONE: 09 (NAD 83)
 NORTHING: 5964088
 EASTING: 440645

COMMODITIES: Mica

MINERALS

SIGNIFICANT: Mica Sericite
 MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
 CLASSIFICATION: Pegmatite Industrial Min.
 TYPE: O03 Muscovite pegmatite
 SHAPE: Irregular
 DIMENSION: 3 x 1 Metres
 COMMENTS: Pockets and lenses of good grade mica in pegmatitic zone.
 STRIKE/DIP: 360/17W
 TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic			Coast Plutonic Complex

LITHOLOGY: Mica Schist
 Pegmatite
 Quartz Monzonite

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
 TERRANE: Alexander
 METAMORPHIC TYPE: Regional
 PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)
 RELATIONSHIP:
 GRADE: Greenschist

CAPSULE GEOLOGY

A small amount of mica was mined from the north shore of Baker Inlet, east of Grenville Channel, 60 kilometres south-southeast of Prince Rupert.

A belt of metasediments of the Alexander Terrane, up to 1 kilometre wide, extends southeast from Telegraph Passage along the east side of Grenville Channel for 60 kilometres. The belt is locally intruded and bounded to the northeast by quartz monzonites of the Coast Plutonic Complex.

A pegmatitic zone outcrops along a bluff at 88 metres elevation, 300 metres north of Baker Inlet, within northwest trending mica schists. The zone strikes north, dips 17 degrees west and has been traced along strike for 60 metres. Trenching has uncovered pockets and lenses of good grade mica within the pegmatite up to 3 metres long and 1.5 metres wide. Pulverizing tests carried out by ore testing labs in Ottawa are as follows (Minister of Mines Annual Report 1934, page B10):

Size fraction	Per cent of raw feed	Mica grade (per cent)
+100 mesh	77	99
-100 to +200	88	99
-200 mesh	68	80

A second deposit of mica outcrops in the vicinity, at 120 metres elevation, 180 metres from Baker Inlet. A micaceous zone in altered mica schists has been traced for 200 metres and contains 10 to 90 per cent sericite across widths of 0.6 to 2.1 metres (Minister of Mines Annual Report 1940, page 99). In 1940, 73 tonnes of crude sericite mica were shipped from this deposit by P.M. Ray to Fairey & Company in Vancouver. About 71 tonnes was also shipped in 1941.

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RUN TIME: 12:06:33

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BIBLIOGRAPHY

EMPR AR 1932-50; 1933-45; *1934-B10; *1940-99; 1941-93-94;
1947-A220
EMPR PF (Synopsis-description of Mica deposit, Baker Inlet, by
J.T. Mandy, 1937; Spectrographic analysis of Baker Inlet Mica,
May, 1939; Analysis of Baker Inlet Mica, July 1939)
GSC MAP 23-1970; 1385A, 1868A
GSC P 70-41
Mits Development Co. Ltd., June, 1978 Report (source unavailable)

DATE CODED: 1986/08/01
DATE REVISED: 1991/06/12

CODED BY: LDJ
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103H 045**

NATIONAL MINERAL INVENTORY:

NAME(S): **INDEPENDENCE** SURF INLET

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103H02W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 04 39 N
LONGITUDE: 128 52 36 W
ELEVATION: 300 Metres

NORTHING: 5880899
EASTING: 508262

LOCATION ACCURACY: Within 500M

COMMENTS: Showing, plate 3 (Assessment Report 15377). Located 1800 metres south of the Surf Inlet Mine (103H 027).

COMMODITIES: Copper Gold Silver

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite
ASSOCIATED: Quartz
ALTERATION: Quartz Sericite Ankerite
ALTERATION TYPE: Sericitic Quartz-Carb.
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I01 Au-quartz veins
SHAPE: Regular
MODIFIER: Sheared

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Paleozoic-Mesozoic Coast Plutonic Complex

LITHOLOGY: Diorite
Gneissic Volcanic
Gneissic Meta Sediment/Sedimentary

HOSTROCK COMMENTS: Includes Tertiary plutons.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Plutonic Rocks
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)

RELATIONSHIP: Pre-mineralization GRADE: Amphibolite

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1986
SAMPLE TYPE: Chip
COMMODITY GRADE
Silver 3.6000 Grams per tonne
Gold 0.4600 Grams per tonne
Copper 0.9350 Per cent

COMMENTS: The sample width is 30 centimetres.
REFERENCE: Assessment Report 15377.

CAPSULE GEOLOGY

An extensive complex shear system occurs in intrusive and gneissic volcanics and metasediments of the Coast Plutonic Complex. Gold associated with pyrite occurs in quartz-ankerite-sericite-sulphide veins within the shear zone.

The Independence showings are located in the southern part of the north-south trending shear system, about 1800 metres south of the Surf Inlet Mine (103H 027) and just east of the Pugsley Mine. A north trending quartz vein, with chalcopyrite, occurs in sheared and altered diorite. A 30 centimetre sample across the vein assayed 0.935 per cent copper, 0.46 grams per tonne gold, and 3.6 grams per tonne silver (Assessment Report 15377).

BIBLIOGRAPHY

EMPR AR 1904-103; 1905-82; 1909-275
EMPR ASS RPT 9904, 10071, 15369, *15377
EMPR EXPL 1986-C423
EMPR PF (Surf Inlet Mines Ltd., Prospectus, Aug.27, 1987 in

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BIBLIOGRAPHY

103H 027)
GSC MAP 23-1970; 1385A
GSC P 70-41
V STOCKWATCH Nov.30, 1987

DATE CODED: 1987/02/18
DATE REVISED: 1989/08/05

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103H 046**

NATIONAL MINERAL INVENTORY:

NAME(S): **DIABASE** SURF INLET

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103H02W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 04 09 N
LONGITUDE: 128 52 16 W
ELEVATION: 760 Metres

NORTHING: 5879973
EASTING: 508636

LOCATION ACCURACY: Within 500M

COMMENTS: Showing, plate 3 (Assessment Report 15377). Located 2700 metres south of the Surf Inlet Mine (103H 027).

COMMODITIES: Gold Silver Tellurium

MINERALS

SIGNIFICANT: Pyrite
ASSOCIATED: Quartz
ALTERATION: Quartz Sericite Ankerite
ALTERATION TYPE: Sericitic Quartz-Carb.
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I01 Au-quartz veins
SHAPE: Regular
MODIFIER: Sheared

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Paleozoic-Mesozoic Coast Plutonic Complex

LITHOLOGY: Diorite
Diabase Dike
Gneissic Volcanic
Meta Sediment/Sedimentary

HOSTROCK COMMENTS: Includes Tertiary plutons.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)
TERRANE: Plutonic Rocks
METAMORPHIC TYPE: Regional RELATIONSHIP: Pre-mineralization GRADE: Amphibolite

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1986
SAMPLE TYPE: Chip
COMMODITY GRADE
Silver 24.4000 Grams per tonne
Gold 4.4000 Grams per tonne
Tellurium 0.0015 Per cent

COMMENTS: The sample width is 70 centimetres.
REFERENCE: Assessment Report 15377.

CAPSULE GEOLOGY

An extensive, complex shear system occurs in intrusive and gneissic volcanics and metasediments of the Coast Plutonic Complex. Gold associated with pyrite occurs in quartz-ankerite-sericite-sulphide veins within the shear zone.
The Diabase showing is located in the southern part of the north-south trending shear system, about 2700 metres south of the Surf Inlet Mine (103H 027). A 1 metre wide quartz vein, occurring within sheared and altered diorite, is cut by a 3 metre wide diabase dyke. A 70 centimetre sample across the vein assayed 4.4 grams per tonne gold, 24.4 grams per tonne silver and 0.0015 per cent tellurium (Assessment Report 15377).

BIBLIOGRAPHY

EMPR ASS RPT 10071, 15369, *15377
EMPR EXPL 1986-C423
EMPR PF (Surf Inlet Mines Ltd., Prospectus, Aug.27, 1987, in

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RUN TIME: 12:06:33

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BIBLIOGRAPHY

103H 027)
GSC MAP 23-1970; 1385A
GSC P 70-41
V STOCKWATCH Nov.30, 1987

DATE CODED: 1987/02/18
DATE REVISED: 1989/08/05

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103H 047**

NATIONAL MINERAL INVENTORY:

NAME(S): **BONANZA**, SURF INLET

MINING DIVISION: Skeena

STATUS: Showing
 REGIONS: British Columbia
 NTS MAP: 103H02W
 BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 04 09 N
 LONGITUDE: 128 52 06 W
 ELEVATION: 800 Metres

NORTHING: 5879973
 EASTING: 508822

LOCATION ACCURACY: Within 500M

COMMENTS: Showing, plate 3 (Assessment Report 15377). Located 2700 metres south of the Surf Inlet Mine (103H 027).

COMMODITIES: Gold Silver Copper Tellurium

MINERALS

SIGNIFICANT: Pyrite
 ASSOCIATED: Quartz
 ALTERATION: Quartz Sericite Chlorite Ankerite
 ALTERATION TYPE: Sericitic Quartz-Carb.
 MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
 CLASSIFICATION: Hydrothermal Epigenetic
 TYPE: I01 Au-quartz veins
 SHAPE: Regular
 MODIFIER: Sheared

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic-Mesozoic			Coast Plutonic Complex

LITHOLOGY: Diorite
 Quartz Feldspar Biotite Gneiss
 Gneiss
 Gneissic Volcanic
 Meta Sediment/Sedimentary

HOSTROCK COMMENTS: Includes Tertiary plutons.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline	PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)
TERRANE: Plutonic Rocks	
METAMORPHIC TYPE: Regional	RELATIONSHIP: Pre-mineralization GRADE: Amphibolite

INVENTORY

ORE ZONE: SAMPLE	REPORT ON: N
CATEGORY: Assay/analysis	YEAR: 1986
SAMPLE TYPE: Chip	
COMMODITY	GRADE
Silver	86.0000 Grams per tonne
Gold	12.8000 Grams per tonne
Copper	1.7200 Per cent
Tellurium	0.0033 Per cent

COMMENTS: The sample width is 1.2 metres.
 REFERENCE: Assessment Report 15377.

CAPSULE GEOLOGY

An extensive, complex shear system occurs in intrusive and gneissic volcanics and metasediments of the Coast Plutonic Complex. Gold associated with pyrite occurs in quartz-ankerite-sericite-sulphide veins within the shear zone.

The Bonanza showing is located in the southern part of the north-south trending shear system, about 2700 metres south of the Surf Inlet Mine (103H 027). Two parallel north-northwest trending quartz veins occur along the contact between diorite and quartz-feldspar-biotite-hornblende gneiss. The contact zone is altered with chlorite, sericite, ankerite and quartz. A 1.2 metre sample across a quartz vein assayed 12.8 grams per tonne gold, 86.0 grams per tonne silver, 1.72 per cent copper and 0.0033 grams per tonne tellurium (Assessment Report 15377).

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BIBLIOGRAPHY

EMPR AR 1900-788; 1901-993; 1902-53; 1908-249
EMPR ASS RPT 10071, 15369, *15377
EMPR EXPL 1986-C423
EMPR PF (Surf Inlet Mines Ltd., Prospectus, Aug.27, 1987 in
103H 027)
GSC MAP 23-1970; 1385A
GSC P 70-41
V STOCKWATCH Nov.30, 1987

DATE CODED: 1987/02/18
DATE REVISED: 1989/07/23

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103H 048**

NATIONAL MINERAL INVENTORY:

NAME(S): **SUMMIT**, SURF INLET

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103H02W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 03 49 N
LONGITUDE: 128 52 06 W
ELEVATION: 725 Metres

NORTHING: 5879355
EASTING: 508823

LOCATION ACCURACY: Within 500M

COMMENTS: Showing, plate 3 (Assessment Report 15377). Located 3400 metres south of the Surf Inlet Mine (103H 027).

COMMODITIES: Gold Silver Copper Tellurium

MINERALS

SIGNIFICANT: Pyrite
ASSOCIATED: Quartz
ALTERATION: Quartz Chlorite Sericite Ankerite
ALTERATION TYPE: Quartz-Carb. Sericitic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I01 Au-quartz veins
SHAPE: Regular
MODIFIER: Sheared

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Paleozoic-Mesozoic Coast Plutonic Complex

LITHOLOGY: Diorite
Feldspar Biotite Hornblende Gneiss
Gneissic Volcanic
Meta Sediment/Sedimentary

HOSTROCK COMMENTS: Includes Tertiary plutons.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)
TERRANE: Plutonic Rocks
METAMORPHIC TYPE: Regional RELATIONSHIP: Pre-mineralization GRADE: Amphibolite

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1986
SAMPLE TYPE: Chip
COMMODITY GRADE
Silver 14.5000 Grams per tonne
Gold 6.6700 Grams per tonne
Copper 0.0150 Per cent
Tellurium 0.0015 Per cent

COMMENTS: The sample width is 90 centimetres.
REFERENCE: Assessment Report 15377.

CAPSULE GEOLOGY

An extensive, complex shear system occurs in intrusive and gneissic volcanics and metasediments of the Coast Plutonic Complex. Gold associated with pyrite occurs in quartz-ankerite-sericite-sulphide veins within the shear zone.

The Summit showing is located in the southern end of the north-south trending shear system, about 3400 metres south of the Surf Inlet Mine (103H 027). A narrow northeast trending quartz vein occurs along the contact between diorite and quartz-feldspar-biotite-hornblende gneiss. The contact zone is altered with chlorite, sericite, ankerite and quartz. A 90 centimetre sample across the quartz vein assayed 6.67 grams per tonne gold, 14.5 grams per tonne silver, 0.015 per cent copper and 0.0015 per cent tellurium (Assessment Report 15377).

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BIBLIOGRAPHY

EMPR AR 1900-788; 1902-53; 1908-249
EMPR ASS RPT 10071, *15377
EMPR EXPL 1986-C423
EMPR PF (Surf Inlet Mines Ltd., Prospectus, Aug.27, 1987 in
103H 027)
GSC MAP 23-1970; 1385A
GSC P 70-41
V STOCKWATCH Nov.30, 1987

DATE CODED: 1987/02/18
DATE REVISED: 1989/08/07

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103H 049**

NATIONAL MINERAL INVENTORY:

NAME(S): **CASSIE**, SURF INLET

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103H02W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 03 39 N
LONGITUDE: 128 52 06 W
ELEVATION: 500 Metres

NORTHING: 5879046
EASTING: 508824

LOCATION ACCURACY: Within 500M

COMMENTS: Showing, plate 3 (Assessment Report 15377). Located 3700 metres south of the Surf Inlet Mine (103H 027).

COMMODITIES: Gold Silver Tellurium

MINERALS

SIGNIFICANT: Pyrite
ASSOCIATED: Quartz Chalcopyrite Chalcocite Bornite Covellite
Molybdenite

ALTERATION: Chlorite Quartz Sericite Ankerite
ALTERATION TYPE: Quartz-Carb. Sericitic

MINERALIZATION AGE: Unknown
ISOTOPIC AGE: 104.9 +/- 0.3 Ma
DATING METHOD: Uranium/Lead
MATERIAL DATED: Zircon

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I01 Au-quartz veins
SHAPE: Regular
MODIFIER: Sheared
COMMENTS: Strongly foliated diorite. EM Fieldwork 2001, pp. 135-149.

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Paleozoic-Mesozoic Coast Plutonic Complex

LITHOLOGY: Diorite
Feldspar Biotite Hornblende Gneiss
Gneissic Volcanic
Meta Sediment/Sedimentary

HOSTROCK COMMENTS: Includes Tertiary plutons.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)

TERRANE: Plutonic Rocks

METAMORPHIC TYPE: Regional

RELATIONSHIP: Pre-mineralization

GRADE: Amphibolite

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1986

SAMPLE TYPE: Grab

COMMODITY

GRADE

Silver

93.2000

Grams per tonne

Gold

63.0000

Grams per tonne

Tellurium

0.0022

Per cent

COMMENTS: The sample was taken from an ore dump.

REFERENCE: Assessment Report 15377.

CAPSULE GEOLOGY

An extensive, complex shear system occurs in intrusive and gneissic volcanics and metasediments of the Coast Plutonic Complex. Gold associated with pyrite occurs in quartz-ankerite-sericite-sulphide veins.

The Cassie showing is located in the southern part of the north-south trending shear system, about 3700 metres south of the Surf Inlet Mine (103H 027). Two parallel northwest trending quartz veins occur along the contact between diorite and quartz-feldspar-biotite-hornblende gneiss. The contact zone is altered with chlorite, sericite, ankerite and quartz. Grab samples from an ore dump assayed 63.0 grams per tonne gold, 93.2 grams per tonne silver and 0.0022 per cent tellurium (Assessment Report 15377).

The zircon date shows that the host is 105 Ma. A previous K/Ar

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RUN TIME: 12:06:33

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CAPSULE GEOLOGY

from Dawson is a cooling date of 80 Ma. Thus the mineralization is between 80 and 105 Ma in age.(op cit).

BIBLIOGRAPHY

EM FIELDWORK 2001, pp. 135-149
EMPR AR 1905-82; 1913-422
EMPR ASS RPT 10071, *15377
EMPR EXPL 1986-C423
EMPR PF (Surf Inlet Mines Ltd., Prospectus, Aug.27, 1987 in
103H 027)
GSC MAP 23-1970; 1385A
GSC P 70-41
V STOCKWATCH Nov.30, 1987

DATE CODED: 1987/02/18
DATE REVISED: 1989/08/07

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103H 050**

NATIONAL MINERAL INVENTORY:

NAME(S): **EAST PLATEAU**, ECSTALL

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103H13E 103H14W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 52 44 N
LONGITUDE: 129 30 06 W
ELEVATION: 665 Metres

NORTHING: 5970164
EASTING: 467021

LOCATION ACCURACY: Within 500M

COMMENTS: Showing, Figure 6 (Assessment Report 15488).

COMMODITIES: Zinc Copper

MINERALS

SIGNIFICANT: Pyrite Sphalerite
ASSOCIATED: Chlorite
ALTERATION: Sericite
ALTERATION TYPE: Sericitic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound Disseminated
CLASSIFICATION: Volcanogenic
TYPE: G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn
SHAPE: Tabular
MODIFIER: Sheared
DIMENSION: 0001 Metres STRIKE/DIP: 175/85W TREND/PLUNGE:
COMMENTS: Width of shear zone.

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Paleozoic _____ Central Gneiss Complex

LITHOLOGY: Chlorite Schist
Granodiorite

HOSTROCK COMMENTS: Hosted by Ecstall Pendant, consisting of metasedimentary and meta-volcanic rocks, within the Central Gneiss Complex.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline PHYSIOGRAPHIC AREA: Kitimat Ranges
TERRANE: Undivided Metamorphic Assembl.
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1986
SAMPLE TYPE: Chip
COMMODITY GRADE
Copper 0.0320 Per cent
Zinc 0.1840 Per cent
REFERENCE: Assessment Report 15488.

CAPSULE GEOLOGY

The showing is one of a cluster of showings around the Ecstall deposit (103H 011). The north-northwest trending Ecstall Pendant, a metasedimentary-metavolcanic belt within the Central Gneiss Complex, is flanked by granodiorite of the Coast Range Intrusive Complex. A heavily pyritized, sericitic shear zone, 1.0 metre wide, occurs in chlorite schist. The shear zone strikes 175 degrees and dips 85 degrees west, and contains trace amounts of sphalerite. A sample assayed 0.184 per cent zinc and 0.032 per cent copper (Assessment Report 15488).

BIBLIOGRAPHY

EM FIELDWORK 1999, pp. 249-265; 2000, pp. 279-306; 2001, pp. 151-170
EMPR ASS RPT *15488, *15756
EMPR EXPL 1987-C355
EMPR OF 1999-2; 2002-03
GSC MAP 23-1970; 1385A; 1868A

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

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REPORT: RGEN0100

BIBLIOGRAPHY

GSC P 70-41

DATE CODED: 1987/07/22
DATE REVISED: 1989/08/07

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103H 051**

NATIONAL MINERAL INVENTORY:

NAME(S): **TRENCH**, ECSTALL, DUNSMUIR,
SOUTH LENS, SOUTHWEST SHEAR

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103H13E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 52 09 N
LONGITUDE: 129 30 56 W
ELEVATION: 105 Metres

NORTHING: 5969088
EASTING: 466100

LOCATION ACCURACY: Within 500M
COMMENTS: Showing, Figure 6 (Assessment Report 15488). See Ecstall (103H 011).

COMMODITIES: Copper Zinc Silver

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Sphalerite
ASSOCIATED: Quartz Sericite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Concordant Massive
CLASSIFICATION: Volcanogenic Exhalative
TYPE: G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic			Central Gneiss Complex

LITHOLOGY: Quartz Sericite Schist
Granodiorite

HOSTROCK COMMENTS: Hosted by the Ecstall Pendant, consisting of metasedimentary and meta-volcanic rocks, within the Central Gneiss Complex.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Undivided Metamorphic Assembl.
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Kitimat Ranges

RELATIONSHIP: GRADE: Greenschist

INVENTORY

ORE ZONE:	TRENCH	REPORT ON:	N
CATEGORY:	Assay/analysis	YEAR:	1986
SAMPLE TYPE:	Chip		
COMMODITY		GRADE	
Silver		4.5000	Grams per tonne
Copper		0.0330	Per cent
Zinc		0.1200	Per cent

REFERENCE: Assessment Report 15488.

CAPSULE GEOLOGY

The Trench prospect crops out immediately southwest of the Ecstall South Lens (1) (See Ecstall 103H 011). The showing is exposed by a large open cut near the base of the hill immediately north of the old mining camp, and 140 metres east of the Main Adit portal (Hassard et al., 1987a, Figure 6). In the exploration trench, quartz-sericite schist hosts a north-trending 10-centimetre thick sulphide bed. A sample assayed 330 ppm copper, 1200 ppm zinc, 46 ppm lead, 4.5 ppm silver and 70 ppb gold (Hassard et al., 1987a, p. 26).

This same thin massive sulphide bed crops out again uphill directly to the north of this trench where it was termed the Southwest Shear (Douglas, 1953, p. 21 and 28). This showing is a 25-centimetre wide band of massive pyrite hosted in quartz-sericite schist, and was investigated by a cluster of small prospecting pits to the west of the South Lens, 120 metres south-southwest of the portal of the Dunsmuir Tunnel, along the claim boundary between the Bluestone and the Red Gulch mineral claims. This same sulphide zone was intersected again in the Main Adit, mid-way between the portal and the No. 1 crosscut, and was also intersected in underground drillholes 60 and 60a, which were drilled southward from the east end of the No. 1 crosscut (Douglas, 1953, p. 21). The Trench/Southwest Shear prospect is significant because it indicates good potential for an en echelon lens of mineralization to the southwest of the South

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CAPSULE GEOLOGY

Lens .

BIBLIOGRAPHY

EM FIELDWORK 1999, pp. 249-265; 2000, pp. 279-306; 2001, pp. 151-170
EMPR ASS RPT *15488, *15756, 24605
EMPR EXPL 1987-C355
EMPR OF 1999-2; 2002-03
GSC MAP 23-1970; 1385A; 1868A
GSC P 70-41
Douglas, H. (1953): Geology of the Ecstall Mine, Ecstall River, B.C.;
unpublished Texas Gulf Sulphur Report

DATE CODED: 1987/07/21
DATE REVISED: 2000/10/30

CODED BY: LDJ
REVISED BY: DJA

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103H 051**

MINFILE NUMBER: **103H 052**

NATIONAL MINERAL INVENTORY:

NAME(S): **MARIPOSITE** ECSTALL

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103H13E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 51 04 N
LONGITUDE: 129 30 36 W
ELEVATION: 300 Metres

NORTHING: 5967077
EASTING: 466451

LOCATION ACCURACY: Within 500M

COMMENTS: Sample location, Figure 7 (Assessment Report 15488).

COMMODITIES: Zinc

MINERALS

SIGNIFICANT: Pyrite Mariposite
ASSOCIATED: Quartz
ALTERATION: Sericite Chlorite
ALTERATION TYPE: Chloritic Sericitic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound Massive
CLASSIFICATION: Volcanogenic Exhalative
TYPE: G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE

Paleozoic

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Central Gneiss Complex

LITHOLOGY: Quartz Sericite Schist

HOSTROCK COMMENTS: Hosted by the Ecstall Pendant, consisting of metasedimentary and meta-volcanic rocks, within the Central Gneiss Complex.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Undivided Metamorphic Assembl.
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)

RELATIONSHIP:

GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Chip
COMMODITY

YEAR: 1986

Zinc

GRADE

0.2200

Per cent

COMMENTS: Heavily mineralized sample.

REFERENCE: Assessment Report 15488.

CAPSULE GEOLOGY

The north-northwest trending Ecstall Pendant, a metasedimentary-metavolcanic belt within the Central Gneiss Complex, is flanked by granodiorite of the Coast Range Intrusive Complex.

Massive pyrite, up to 50 per cent, and mariposite occurs in an 80 metre wide belt of quartz-sericite schist. The schist is strongly chloritized and sericitized. A heavily mineralized sample assayed 0.22 per cent zinc (Assessment Report 15488).

BIBLIOGRAPHY

EM FIELDWORK 1999, pp. 249-265; 2000, pp. 279-306; 2001, pp. 151-170
EMPR ASS RPT 15328, *15488, *15756, 16711
EMPR EXPL 1986-C424; 1987-C355
EMPR OF 1999-2; 2002-03
GSC MAP 23-1970; 1385A; 1868A
GSC P 70-41

DATE CODED: 1987/07/22
DATE REVISED: 1989/08/07

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103H 053**

NATIONAL MINERAL INVENTORY:

NAME(S): **WEST GRID**, ELAINE CREEK, ECSTALL

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103H13E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 50 44 N
LONGITUDE: 129 31 41 W
ELEVATION: 420 Metres

NORTHING: 5966468
EASTING: 465258

LOCATION ACCURACY: Within 500M

COMMENTS: Sample location, Figure 7 (Assessment Report 15488).

COMMODITIES: Copper Zinc Silver Gold

MINERALS

SIGNIFICANT: Chalcopyrite Pyrite Pyrrhotite
ALTERATION: Silica Malachite
ALTERATION TYPE: Chloritic Sericitic Silicific'n Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound Disseminated Vein
CLASSIFICATION: Volcanogenic Exhalative Hydrothermal
TYPE: G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn
SHAPE: Tabular
MODIFIER: Sheared
DIMENSION: 0900 x 0120 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: Belt of disseminated chalcopyrite.

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Paleozoic Central Gneiss Complex

LITHOLOGY: Quartz Sericite Kyanite Schist
Amphibolite
Granodiorite

HOSTROCK COMMENTS: Hosted in the Ecstall Pendant, consisting of metasedimentary and meta-volcanic rocks, within the Central Gneiss Complex.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)
TERRANE: Undivided Metamorphic Assembl.
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE:

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1986
SAMPLE TYPE: Chip
COMMODITY GRADE
Copper 0.2700 Per cent
COMMENTS: This is the average of 12 samples taken within a 120 metre wide belt.
REFERENCE: Assessment Report 15488.

CAPSULE GEOLOGY

The north-northwest trending Ecstall Pendant, a metasedimentary-metavolcanic belt within the Central Gneiss Complex, is flanked by granodiorite of the Coast Range Intrusive Complex. The West Grid occurrence, which is located about 4 kilometres southwest of the Ecstall deposit (103H 011), lies within a zone of strong hydrothermal alteration including chloritization, sericitization, and silicification.

Disseminated and stringer chalcopyrite and malachite occur in a 120 metre wide belt of quartz-sericite-kyanite schist for about 900 metres. Twelve samples taken along the belt averaged 0.27 per cent copper, with one assaying 1.5 per cent copper (Assessment Report 15488).

Seven grab samples of stringer material averaged 3.04 per cent copper, 0.0695 per cent zinc, 11.7 grams per tonne silver, and 1.525 grams per tonne gold (Assessment Report 16711).

The area also contains mineralized quartz veins in small shear zones within amphibolite. Mineralization consists of pyrite, chalcopyrite, and pyrrhotite.

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BIBLIOGRAPHY

EM FIELDWORK 1999, pp. 249-265; 2000, pp. 279-306; 2001, pp. 151-170
EMPR ASS RPT *15488, *15756, 16600, *16711
EMPR EXPL 1987-C355,C356
EMPR OF 1999-2; 2002-03
GSC MAP 23-1970; 1385A, 1868A
GSC P 70-41

DATE CODED: 1987/07/22
DATE REVISED: 1989/08/12

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103H 054**

NATIONAL MINERAL INVENTORY:

NAME(S): **THIRTEEN CREEK CIRQUE**, ECSTALL, RED GULCH

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103H13E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 49 59 N
LONGITUDE: 129 31 36 W
ELEVATION: 700 Metres

NORTHING: 5965076
EASTING: 465339

LOCATION ACCURACY: Within 500M

COMMENTS: Showing, Figure 7 (Assessment Report 15488).

COMMODITIES: Copper Zinc Silver Gold

MINERALS

SIGNIFICANT: Chalcopyrite Pyrite Sphalerite Pyrrhotite Galena

COMMENTS: Pyrrhotite and galena found in boulders.

ASSOCIATED: Quartz

ALTERATION TYPE: Chloritic Sericitic Silicific'n

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound Massive
CLASSIFICATION: Volcanogenic Exhalative
TYPE: G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn
SHAPE: Tabular

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic			Central Gneiss Complex

LITHOLOGY: Chert
Quartz Biotite Chlorite Schist
Argillite
Granodiorite

HOSTROCK COMMENTS: Hosted in Ecstall Pendant, consisting of metasedimentary and meta-volcanic rocks, within the Central Gneiss Complex.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Undivided Metamorphic Assembl.
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)

RELATIONSHIP: GRADE: Greenschist

INVENTORY

ORE ZONE:	SAMPLE	REPORT ON:	N
CATEGORY:	Assay/analysis	YEAR:	1986
SAMPLE TYPE:	Grab		
COMMODITY		GRADE	
Silver		350.0000	Grams per tonne
Gold		2.4000	Grams per tonne
Copper		8.0600	Per cent
Zinc		0.5300	Per cent

REFERENCE: Assessment Report 15488.

CAPSULE GEOLOGY

The north-northwest trending Ecstall Pendant, a metasedimentary-metavolcanic belt within the Central Gneiss Complex, is flanked by granodiorite of the Coast Range Intrusive Complex.

The Thirteen Creek occurrence, located about 4 kilometres southwest of the Ecstall deposit (103H 011), occurs in a zone of strong hydrothermal alteration, including chloritization, sericitization, and silicification.

A 30 centimetre wide, 100-metre long chert bed with pods of massive pyrite-chalcopyrite mineralization occurs in quartz-biotite-chlorite schist. A grab sample taken at 640 metres elevation assayed 8.06 per cent copper, 0.53 per cent zinc, 350 grams per tonne silver, and 2.4 grams per tonne gold (Assessment Report 15488). Several boulders found within the cirque contain pyrrhotite-pyrite-chalcopyrite-galena mineralization.

A drill hole, 350 metres to the north intersected a 10 centimetre section of argillite with sphalerite and pyrite containing 0.98 per cent zinc.

CAPSULE GEOLOGY

A 200-metre wide succession, containing disseminated and stringer copper mineralization and local banded zinc mineralization is reported (GCNL #26, February 8, 1994).

A belt of vertically dipping sericitic quartzofeldspathic gneiss 150 metres wide and 2.5 kilometres long contains widespread disseminated chalcopyrite, minor pyrite and traces of bornite. The longest chip sample assayed 0.20 per cent copper over 119 metres; the highest grade sample returned 0.65 per cent copper over 7.5 metres (Exploration 1994).

BIBLIOGRAPHY

EM FIELDWORK 1999, pp. 249-265; 2000, pp. 279-306;
2001, pp. 151-170
EMPR ASS RPT *15488, *15756, 16600, 16711
EMPR EXPL 1987-C355,356; 1994-34
EMPR OF 1999-2; 2002-03
GSC MAP 23-1970; 1385A; 1868A
GSC P 70-41
GCNL #26, (Feb.8), 1994
N MINER June 5, 1995

DATE CODED: 1987/07/22
DATE REVISED: 1989/08/10

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103H 055**

NATIONAL MINERAL INVENTORY:

NAME(S): **SOUTH GRID EAST**, ECSTALL

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103H14W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 49 19 N
LONGITUDE: 129 29 36 W
ELEVATION: 980 Metres

NORTHING: 5963824
EASTING: 467525

LOCATION ACCURACY: Within 500M

COMMENTS: Sample location (Assessment Report 15488).

COMMODITIES: Copper Zinc

MINERALS

SIGNIFICANT: Pyrite
ASSOCIATED: Quartz
ALTERATION: Sericite
ALTERATION TYPE: Sericitic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound Massive
CLASSIFICATION: Volcanogenic
SHAPE: Tabular
MODIFIER: Sheared
DIMENSION: 0003 Metres STRIKE/DIP: 172/85E TREND/PLUNGE:
COMMENTS: Width of shear zone.

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Paleozoic Central Gneiss Complex

LITHOLOGY: Quartz Sericite Schist

HOSTROCK COMMENTS: Hosted in Ecstall Pendant, consisting of metasedimentary and meta-volcanic rocks, within the Central Gneiss Complex.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)
TERRANE: Undivided Metamorphic Assembl.
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1986
SAMPLE TYPE: Chip
COMMODITY GRADE
Copper 0.1200 Per cent
Zinc 0.0240 Per cent

REFERENCE: Assessment Report 15488.

CAPSULE GEOLOGY

The north-northwest trending Ecstall Pendant, a metasedimentary-metavolcanic belt within the Central Gneiss Complex, is flanked by granodiorite of the Coast Range Intrusive Complex.

A 3 metre wide pyritic shear zone occurs in a quartz-sericite belt. The zone strikes 172 degrees and dips 85 degrees east. A sample assayed 0.12 per cent copper and 0.024 per cent zinc (Assessment Report 15488).

BIBLIOGRAPHY

EM FIELDWORK 1999, pp. 249-265; 2000, pp. 279-306; 2001, pp. 151-170
EMPR ASS RPT *15488, *15756
EMPR EXPL 1987-C355
EMPR OF 2002-03
GSC MAP 23-1970; 1385A, 1868A
GSC P 70-40

DATE CODED: 1987/07/22
DATE REVISED: 1989/08/10

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103H 056**

NATIONAL MINERAL INVENTORY:

NAME(S): **BEAR**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103H14W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 46 59 N
LONGITUDE: 129 29 46 W
ELEVATION: 510 Metres

NORTHING: 5959499
EASTING: 467311

LOCATION ACCURACY: Within 500M

COMMENTS: Sample location, Map 11 (Assessment Report 15491).

COMMODITIES: Copper Zinc Silver

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite
ASSOCIATED: Quartz
ALTERATION: Malachite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound Massive
CLASSIFICATION: Volcanogenic

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic			Central Gneiss Complex

LITHOLOGY: Pyrite Quartz Sericite Schist
Greywacke
Siltstone
Quartzite
Argillite
Granodiorite

HOSTROCK COMMENTS: Hosted in the Ecstall Pendant, consisting of metasedimentary and meta volcanic rocks, within the Central Gneiss Complex.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Undivided Metamorphic Assembl.
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)

RELATIONSHIP: GRADE: Greenschist

INVENTORY

ORE ZONE:	SAMPLE	REPORT ON:	N
CATEGORY:	Assay/analysis	YEAR:	1987
SAMPLE TYPE:	Chip		
COMMODITY		GRADE	
Silver		12.0000	Grams per tonne
Copper		0.1200	Per cent
Zinc		0.6800	Per cent

REFERENCE: Assessment Report 15491.

CAPSULE GEOLOGY

The north-northwest trending Ecstall Pendant, a meta-sedimentary-metavolcanic belt within the Central Gneiss Complex, is flanked by granodiorite of the Coast Range Intrusive Complex. The Bear grid is underlain mainly by sediments which include greywacke, laminated siltstone, banded quartzite, and argillite. A pyritic quartz sericite schist horizon contains pyrite, chalcopyrite, and malachite. A sample assayed 0.54 per cent copper. Six hundred metres to the southwest, a sample in banded quartzite assayed 0.68 per cent zinc, 0.12 per cent copper, and 12 grams per tonne silver (Assessment Report 15491).

BIBLIOGRAPHY

EM FIELDWORK 1999, pp. 249-265; 2000, pp. 279-306; 2001, pp. 151-170
EMPR ASS RPT *15491
EMPR EXPL 1987-C356
EMPR OF 1999-2; 2002-03
GSC MAP 23-1970; 1385A, 1868A

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GSC P 70-41

DATE CODED: 1987/07/22
DATE REVISED: 1989/08/17

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103H 057**

NATIONAL MINERAL INVENTORY:

NAME(S): **HAWKSURBY ISLAND GARNET**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103H10W 103H11E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 38 19 N
LONGITUDE: 129 00 06 W
ELEVATION: 300 Metres

NORTHING: 5943315
EASTING: 499890

LOCATION ACCURACY: Within 5 KM

COMMENTS: A 7 to 8 kilometre long zone striking approximately east-west.
Coordinates for centre of zone (Area 2, figure 10, Open File 1988-26).

COMMODITIES: Garnet Kyanite

MINERALS

SIGNIFICANT: Garnet Kyanite

COMMENTS: Almandine garnet.

ASSOCIATED: Staurolite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Layered Stratabound
CLASSIFICATION: Metamorphic Syngenetic Industrial Min.
TYPE: P02 Kyanite-sillimanite schists

SHAPE: Tabular

MODIFIER: Folded

DIMENSION: 2000 x 0030 Metres

STRIKE/DIP:

TREND/PLUNGE:

COMMENTS: Dimension of kyanite-staurolite-garnet schist.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Paleozoic

Central Gneiss Complex

LITHOLOGY: Kyanite Staurolite Garnet Schist
Sericite Epidote Schist
Gneiss
Amphibolite

HOSTROCK COMMENTS: Permian (?) and/or older metasediments.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline

PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)

TERRANE: Undivided Metamorphic Assembl.

METAMORPHIC TYPE: Regional

RELATIONSHIP: Syn-mineralization

GRADE: Amphibolite

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1959

SAMPLE TYPE: Grab

COMMODITY

GRADE

Garnet

20.0000

Per cent

Kyanite

20.0000

Per cent

COMMENTS: Schists contain 20 per cent almandine garnet and 20 per cent kyanite, visually.

REFERENCE: Money, 1959.

CAPSULE GEOLOGY

Hawkesbury Island is underlain mainly by Permian (?) and/or older metasediments within the Central Gneiss Complex. On Hawkesbury Island, south of Prince Rupert, kyanite-staurolite-almandine schists are exposed with sericite-epidote schist, gneiss and amphibolite. The individual kyanite-staurolite-almandine garnet schists may vary from one metre to over 30 metres in thickness and are traceable along strike for up to 2 kilometres (Area 2, Figure 10, Open File 1988-26). These schists contain up to 20 per cent almandine garnet and up to 20 per cent kyanite (Money, 1959). The garnet is present as subhedral to euhedral grains ranging up to 5 centimetres in diameter or as anhedral rounded aggregates about 7.5 centimetres in size. The kyanite may be extremely coarse with blades that reach 20 centimetres by 1 centimetre in size. Sillimanite is reported from only one locality on Hawkesbury Island (refer to 103H 058).

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BIBLIOGRAPHY

EMPR FIELDWORK 1987-424
EMPR OF *1988-26, p. 15
GSC MAP 23-1970; 1385A, 1868A
GSC P 70-41
Money, P.L., (1959): *The Geology of Hawksbury Island, Skeen Mining
Division, British Columbia, unpublished M.Sc. Thesis, University
of British Columbia, Vancouver, British Columbia, 159 pgs.

DATE CODED: 1988/03/30
DATE REVISED: 1989/01/31

CODED BY: JP
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103H 058**

NATIONAL MINERAL INVENTORY:

NAME(S): **HAWKESBURY ISLAND KYANITE** HAWKESBURY SILLIMANITE, FISHTRAP BAY

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103H11E
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 34 29 N
LONGITUDE: 129 02 36 W
ELEVATION: 760 Metres

NORTHING: 5936208
EASTING: 497131

LOCATION ACCURACY: Within 1 KM

COMMENTS: Location of sillimanite occurrence (Area 2, Figure 10, Open File 1988-26).

COMMODITIES: Kyanite Sillimanite

MINERALS

SIGNIFICANT: Kyanite Sillimanite
ASSOCIATED: Quartz Plagioclase Staurolite Mica
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratiform
CLASSIFICATION: Metamorphic Industrial Min.
TYPE: P02 Kyanite-sillimanite schists

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic			Central Gneiss Complex

LITHOLOGY: Sillimanite Quartz Plagioclase Gneiss
Kyanite Staurolite Garnet Schist
Biotite Schist
Amphibolite
Schist
Sericite Epidote Schist
Graphitic Plagioclase Schist
Quartzite
Limestone

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Undivided Metamorphic Assembl.
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)

RELATIONSHIP: GRADE: Amphibolite

CAPSULE GEOLOGY

The central part of Hawkesbury Island is underlain by amphibolite, biotite schist, kyanite-staurolite-almandine mica schist, sericite-epidote schist, fine-grained sillimanite-quartz-plagioclase gneiss, graphitic plagioclase schists, quartzite, and crystalline limestone.

On Hawkesbury Island the kyanite-staurolite-almandine schists exposed contain up to 20 per cent almandine garnet and up to 20 per cent kyanite (Money, 1959). The kyanite may be extremely coarse with blades that reach 20 centimetres by 1 centimetre in size. The individual kyanite-staurolite-almandine schist units vary from a metre to over 30 metres in thickness and are traceable along strike for up to 2 kilometres (refer to Hawkesbury Island Garnet, 103H 057).

Sillimanite is reported from only one locality on Hawkesbury Island near Fishtrap Bay (refer to Area 2, Figure 10, Open File 1988-26). At this locality, the sillimanite is present as rounded knots in gneiss and comprises up to 15 per cent of the rock (Money, 1959).

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EMPR IND MIN FILE (Andalusite, Kyanite, and Sillimanite Occurrences in BC (in Ministry Library))
EMPR OF 1988-26, p. 15
GSC MAP 23-1970; 1385A, 1868A
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Money, P.L., (1959): The Geology of Hawkesbury Island, Skeena Mining Division, British Columbia, unpublished M.Sc. Thesis, University of

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DATE CODED: 1986/08/05
DATE REVISED: 1989/01/31

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103H 059**

NATIONAL MINERAL INVENTORY:

NAME(S): **WORK ISLAND**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103H02E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 10 37 N
LONGITUDE: 128 41 04 W
ELEVATION: 5 Metres

NORTHING: 5892001
EASTING: 521090

LOCATION ACCURACY: Within 1 KM

COMMENTS: West end of Work Island. Pre 1986 103H-G059.

COMMODITIES: Limestone Marble Building Stone

MINERALS

SIGNIFICANT: Calcite
ASSOCIATED: Quartz
MINERALIZATION AGE: Paleozoic

DEPOSIT

CHARACTER: Stratabound Massive
CLASSIFICATION: Sedimentary Industrial Min.
TYPE: R09 Limestone R04 Dimension stone - marble

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic			Unnamed/Unknown Informal

LITHOLOGY: Biotite Quartz Schist
Marble

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)
TERRANE: Alexander
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Amphibolite

CAPSULE GEOLOGY

Work Island is underlain by metasedimentary rocks consisting mainly of thinly layered biotite-quartz schist with interlayered marble near the western end.

BIBLIOGRAPHY

GSC MAP 23-1970; 1385A
GSC P *70-41, p. 18

DATE CODED: 1986/08/01
DATE REVISED: 1989/08/01

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103H 060**

NATIONAL MINERAL INVENTORY:

NAME(S): **GIL ISLAND**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103H03W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 04 59 N
LONGITUDE: 129 16 36 W
ELEVATION: 5 Metres

NORTHING: 5881546
EASTING: 481468

LOCATION ACCURACY: Within 1 KM
COMMENTS: Fawcett Point. Pre 1986 103H-G060.

COMMODITIES: Limestone

MINERALS

SIGNIFICANT: Calcite
ASSOCIATED: Quartz
MINERALIZATION AGE: Paleozoic

DEPOSIT

CHARACTER: Stratabound Massive
CLASSIFICATION: Sedimentary Industrial Min.

TYPE: R09 Limestone
SHAPE: Tabular

DIMENSION:
COMMENTS: General attitude of metasediments.

STRIKE/DIP: 050/70S

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic			Unnamed/Unknown Informal

LITHOLOGY: Limestone
 Quartzite
 Garnet Biotite Schist
 Skarn

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Alexander

PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)

CAPSULE GEOLOGY

Metasedimentary rocks, consisting mainly of grey quartzite, include intercalated beds of crystalline limestone, skarn, and garnet-biotite schist. A 30 metre wide white crystalline limestone bed and a wider zone of ribbon limestone occur with a general north-east strike and moderate to steep southeast dip.

BIBLIOGRAPHY

GSC MAP 23-1970; 1385A
GSC P 70-41, pp. 18,19

DATE CODED: 1986/08/01
DATE REVISED: 1989/08/03

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MINFILE NUMBER: **103H 061**

NATIONAL MINERAL INVENTORY:

NAME(S): **DEWDNEY ISLAND**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103H04E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 01 07 N
LONGITUDE: 129 37 36 W
ELEVATION: 5 Metres

NORTHING: 5874525
EASTING: 457962

LOCATION ACCURACY: Within 1 KM

COMMENTS: Description. Pre 1986 103H-G061.

COMMODITIES: Marble Dimension Stone Building Stone

MINERALS

SIGNIFICANT: Calcite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound Massive
CLASSIFICATION: Sedimentary Industrial Min.
TYPE: R09 Limestone R04 Dimension stone - marble
SHAPE: Tabular

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Unknown			Unnamed/Unknown Informal

LITHOLOGY: Marble
Quartzite
Quartz Diorite

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Alexander
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Milbanke Strandflat

RELATIONSHIP:

GRADE: Greenschist

CAPSULE GEOLOGY

A well-bedded series of intercalated quartzite and marble are in sharp contact with quartz diorite of the Coast Plutonic Complex.

BIBLIOGRAPHY

GSC MAP 23-1970; 1385A
GSC P *70-41, p. 19

DATE CODED: 1986/08/01
DATE REVISED: 1989/08/03

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103H 061**

MINFILE NUMBER: **103H 062**

NATIONAL MINERAL INVENTORY:

NAME(S): **BANKS ISLAND (L.797)**, GALE POINT

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103H05W
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 15 39 N
LONGITUDE: 129 48 15 W
ELEVATION: 46 Metres

NORTHING: 5901588
EASTING: 446358

LOCATION ACCURACY: Within 1 KM

COMMENTS: Location centered on Lot 797, on east coast of Banks Island as shown on NTS topographic map 103H/05W.

COMMODITIES: Limestone Dolomite

MINERALS

SIGNIFICANT: Calcite
ASSOCIATED: Quartz Dolomite
MINERALIZATION AGE: Paleozoic

DEPOSIT

CHARACTER: Stratabound Massive
CLASSIFICATION: Sedimentary Industrial Min.
TYPE: R09 Limestone
SHAPE: Tabular
DIMENSION: 0180 Metres STRIKE/DIP: 125/90
COMMENTS: Band is 180 metres wide and is vertical to steeply northeast dipping.

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Cretaceous-Tertiary			Coast Plutonic Complex

LITHOLOGY: Limestone
Dolomite
Gneissic Diorite
Migmatite
Granodiorite

HOSTROCK COMMENTS: Situated in a metasedimentary roof pendant within the Coast Plutonic Complex.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)
TERRANE: Alexander
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist

CAPSULE GEOLOGY

A 180 metre wide band of white, coarse-grained limestone and dolomite outcrops on Lot 797 on the east coast of Banks Island, 2.5 kilometres south of Gale Point. The bed is contained in a roof pendant of gneissic diorite and migmatite within granodiorite of the Coast Plutonic Complex. The deposit strikes 125 degrees and dips steeply northeast to vertical. Numerous inclusions of country rock are present along the northeast edge of the band. Sinuous quartzite fragments are sometimes found floating in the limestone. The dolomite commonly contains veins of white quartz.

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GSC P 70-41, p. 20
CANMET RPT 452, Vol. 5, p. 172; *811, Part 5, 1944, pp. 171-173

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DATE REVISED: 1989/07/28

CODED BY: LDJ
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103H 063**

NATIONAL MINERAL INVENTORY:

NAME(S): **MARMOR**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103H01W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 06 28 N
LONGITUDE: 128 12 29 W
ELEVATION: 914 Metres

NORTHING: 5884553
EASTING: 553015

LOCATION ACCURACY: Within 500M

COMMENTS: Location centered on surface trace of limestone band as shown on GSC Map 23-1970. Pre-1986 103H-G063.

COMMODITIES: Limestone

Marble

Building Stone

MINERALS

SIGNIFICANT: Calcite

ASSOCIATED: Quartz

ALTERATION: Epidote

ALTERATION TYPE: Skarn

MINERALIZATION AGE: Paleozoic

Chlorite

Garnet

Epidote

Muscovite

Garnet

DEPOSIT

CHARACTER: Massive

CLASSIFICATION: Sedimentary

TYPE: R09 Limestone

SHAPE: Tabular

MODIFIER: Folded

DIMENSION: 9999 x 900

COMMENTS: Dimensions of northwest trending crystalline limestone unit (over 16 kilometres long and up to 900 metres wide).

Stratabound

Industrial Min.

Metres

STRIKE/DIP: 160/55

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Paleozoic

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Coast Plutonic Complex

LITHOLOGY: Limestone

Marble

Garnet Schist

Garnet Gneiss

Hornblende Plagioclase Amphibolite

Hornblende Epidote Gneissic Skarn

Pegmatite

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline

TERRANE: Undivided Metamorphic Assembl.

METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Kitimat Ranges

RELATIONSHIP:

GRADE: Amphibolite

CAPSULE GEOLOGY

A 16-kilometre long northwestward trending mass of thickly bedded coarse grained grey limestone up to 900 metres wide outcrops between Marmor Peak and the headwaters of the Mussel River, 110 kilometres south-southeast of Kitimat. The deposit is enclosed in hornblende and epidote rich gneissic skarn flanked by garnet bearing schists, gneisses and hornblende plagioclase amphibolites. The limestone is intercalated with quartz zones commonly containing chlorite, epidote and muscovite. An extensive stockwork of pegmatite cuts the limestone.

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EMPR OF 1992-18, p. 61

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GSC P *70-41, pp. 11,22

DATE CODED: 1986/08/01
DATE REVISED: 1990/04/27

CODED BY: LDJ
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103H 064**

NATIONAL MINERAL INVENTORY:

NAME(S): **DOUGLAS CHANNEL GARNET**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103H11E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 39 29 N
LONGITUDE: 129 12 36 W
ELEVATION: 225 Metres

NORTHING: 5945498
EASTING: 486122

LOCATION ACCURACY: Within 5 KM

COMMENTS: An 8 kilometre zone parallel to shore of Douglas Channel, extending from Gertrude Point to the northeast. Coordinates are for southwest end of zone (Area 1, figure 10, Open File 1988-26).

COMMODITIES: Garnet

MINERALS

SIGNIFICANT: Garnet
ASSOCIATED: Biotite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Layered Stratabound
CLASSIFICATION: Metamorphic Syngenetic Industrial Min.
TYPE: P02 Kyanite-sillimanite schists
SHAPE: Tabular
MODIFIER: Folded

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic			Central Gneiss Complex

LITHOLOGY: Garnet Biotite Schist
Garnet Biotite Gneiss

HOSTROCK COMMENTS: Permian and/or older metasediments and gneisses.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)
TERRANE: Plutonic Rocks
METAMORPHIC TYPE: Regional RELATIONSHIP: Syn-mineralization GRADE: Amphibolite

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1958
SAMPLE TYPE: Grab
COMMODITY GRADE
Garnet 50.0000 Per cent
COMMENTS: Biotite-garnet schists along the shores of Douglas Channel.
REFERENCE: Padgham, 1958.

CAPSULE GEOLOGY

In the Douglas Channel-Kitkiata area south of Prince Rupert, extremely garnetiferous schists and gneisses have been reported (Area 1, Figure 10, Open File 1988-26). These garnet-bearing rocks are comprised of Permian (?) and/or older metasediments and granatoid gneisses which are related to the Central Gneiss Complex.

The biotite-garnet schists and biotite-garnet gneisses host euhedral garnets which range from 0.25 to 2.0 centimetres in length and locally, comprise from 10 to 15 per cent of the rocks. Biotite-garnet schists along the shores of Douglas Channel often contain up to 50 per cent garnet (Padgham, 1958).

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Padgham, W.A. (1958): *The Geology of the Ecstall-Quall Rivers area, British Columbia, unpublished M.Sc. Thesis, University of British

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BIBLIOGRAPHY

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DATE CODED: 1988/03/30
DATE REVISED: 1989/01/31

CODED BY: JP
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103H 065**

NATIONAL MINERAL INVENTORY:

NAME(S): **DOUGLAS CHANNEL**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103H11E 103H11W 103H06E 103H06W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 29 59 N
LONGITUDE: 129 15 06 W
ELEVATION: 10 Metres

NORTHING: 5927892
EASTING: 483306

LOCATION ACCURACY: Within 5 KM

COMMENTS: Between Hartley Bay and Helen Point, location just south of Kiskosh Inlet.

COMMODITIES: Gemstones

MINERALS

SIGNIFICANT: Microcline Orthoclase Biotite
ASSOCIATED: Anorthite Oligoclase Albite Perthite Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Pipe Vein
CLASSIFICATION: Pegmatite Hydrothermal Epigenetic Industrial Min.
SHAPE: Irregular

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Upper Cretaceous			Ecstall Pluton

LITHOLOGY: Pegmatite
Granodiorite
Quartz Diorite

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Plutonic Rocks
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)

RELATIONSHIP:

GRADE: Amphibolite

CAPSULE GEOLOGY

Pegmatite dykes and pipe-like masses of pegmatite are numerous along the northwest shore of Douglas Channel between Hartley Bay and Helen Point. The area is underlain by the southeast end of the Ecstall Pluton consisting of granodiorite and quartz diorite.

The pegmatites are composed of microcline, orthoclase, oligoclase, albite, perthite, micropegmatite, quartz, and biotite. The microcline, orthoclase, and biotite form crystals up to 45 centimetres in size.

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GSC MAP 23-1970: 1385A, 1868A
GSC P 70-41, pp. 31,36
GSC SUM RPT *1921, Part A, p. 26A

DATE CODED: 1986/08/05
DATE REVISED: 1989/01/31

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103H 066**

NATIONAL MINERAL INVENTORY:

NAME(S): **PIT, TRINITY, GRENVILLE,
PITT ISLAND, TEAM, MEADOW CREEK,
SOUTH PYRITE CREEK**

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 103H12W
BC MAP:
LATITUDE: 53 42 04 N
LONGITUDE: 129 52 36 W
ELEVATION: 520 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Centre of main showing, Figure 3 (Assessment Report 10713); Figure 4 (Assessment Report 11207). Pre 1986 103H-G066 (Assessment Report 10713, 11207).

MINING DIVISION: Skeena
UTM ZONE: 09 (NAD 83)
NORTHING: 5950625
EASTING: 442125

COMMODITIES: Copper Lead Zinc Silver Gold

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Sphalerite Galena Pyrrhotite
Covellite
ASSOCIATED: Biotite Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Stratiform Disseminated Massive
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn
SHAPE: Tabular
MODIFIER: Sheared Faulted
DIMENSION: 0300 x 0170 x 0001 Metres STRIKE/DIP: 140/70S TREND/PLUNGE:
COMMENTS: Host schist unit.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Unknown Coast Plutonic Complex

LITHOLOGY: Pyritic Quartz Muscovite Schist
Mica Quartz
Biotite Schist
Meta Rhyolite
Amphibolite
Granodiorite
Quartzite
Phyllite
Conglomerate

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline PHYSIOGRAPHIC AREA: Milbanke Strandflat
TERRANE: Alexander
METAMORPHIC TYPE: Regional RELATIONSHIP: Post-mineralization GRADE: Amphibolite

INVENTORY

ORE ZONE: MAIN REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1987
SAMPLE TYPE: Channel
COMMODITY GRADE
Silver 52.0000 Grams per tonne
Gold 0.4800 Grams per tonne
Copper 2.3200 Per cent
Lead 0.5700 Per cent
Zinc 2.5300 Per cent
COMMENTS: Average of 10 channel samples over average thickness of 1.2 metres.
REFERENCE: Assessment Report 15674.

CAPSULE GEOLOGY

A narrow northwest trending metasediment-metavolcanic belt lies west of the Grenville Channel fault and east of rocks consisting of diorite to quartz diorite of the Coast Plutonic Complex. The metamorphic rocks consist of quartzite, quartz-muscovite schist, phyllite, conglomerate, and biotite schist.

The main showing occurs as a concordant, steeply dipping zone,

CAPSULE GEOLOGY

between micaceous quartzite and quartz-muscovite schist, 20 to 30 metres from the intrusive contact. The massive sulphide schist band is exposed along Pyrite Creek for 300 metres, over a vertical range of 170 metres, at an average width of one metre. It strikes about 140 degrees and dips about 70 degrees southwest. The "conglomerate" texture of the sulphide schist is likely the result of tectonic fragmentation. The zone coincides with a major fault and is cross-cut by shears and faults with left lateral displacements. Mineralization, consisting of pyrite, chalcopyrite, sphalerite, pyrrhotite, galena, and covellite is most intense in the cross structures and occurs as fracture fillings, discrete euhedral grains, and stringers within the laminae of the schist. An average of 10 channel samples collected across the thicker (1.2 metre) central section of the zone assayed 2.32 per cent copper, 0.57 per cent lead, 2.53 per cent zinc, 52.0 grams per tonne silver, and 0.48 gram per tonne gold (Assessment Report 15674).

In 1992, Inco conducted airborne geophysics, geological mapping, sampling, prospecting and drilling on the Team zone, chip sampling across 1.2 metres gave 4.6 per cent copper, 1 per cent lead, 7.1 per cent zinc, 102.9 grams per tonne silver and 1.85 grams per tonne gold. The zone also contains up to 4 per cent barium (Northern Miner, August 24, 1992). Other zones along a 1700-metre strike include the Meadow Creek and the South Pyrite Creek.

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GSC P 70-41
N MINER Jul.3, 1989; Aug.24, 1992
PERS COMM P. Wodjak, June 1993
Placer Dome File

DATE CODED: 1986/08/13
DATE REVISED: 1989/08/05

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103H 067**

NATIONAL MINERAL INVENTORY:

NAME(S): **BANK**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103H05W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 19 29 N
LONGITUDE: 129 58 01 W
ELEVATION: 320 Metres

NORTHING: 5908830
EASTING: 435597

LOCATION ACCURACY: Within 500M

COMMENTS: Largest vein (Assessment Report 13071).

COMMODITIES: Gold Lead Zinc Copper

MINERALS

SIGNIFICANT: Pyrite Galena Sphalerite Chalcopyrite Bornite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

SHAPE: Irregular

DIMENSION: 800 x 300 Metres

STRIKE/DIP:

TREND/PLUNGE:

COMMENTS: Area of erratic quartz veining.

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Cretaceous

Coast Plutonic Complex

LITHOLOGY: Quartz Monzonite
Granodiorite
Quartz Diorite
Limestone
Micaceous Quartzitic/Quartzose Skarn
Schist

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline

TERRANE: Plutonic Rocks

METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)

RELATIONSHIP:

GRADE: Amphibolite

INVENTORY

ORE ZONE: VEIN

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1984

SAMPLE TYPE: Chip

COMMODITY

GRADE

Gold

15.7700

Grams per tonne

COMMENTS: The sample is from a 8 centimetre wide vein.

REFERENCE: Assessment Report 13071.

CAPSULE GEOLOGY

Banks Island lies along the western edge of the Coast Plutonic Complex characterized by northwest trending granitic bodies, mainly granodiorite-quartz monzonite and quartz diorite which are separated by narrow (100 to 200 metres) persistent metasedimentary belts, mainly crystalline limestone, micaceous quartzite skarn, and schist. The metasedimentary rocks generally exhibit a wide range of "granitization" effects and contact metasomatism.

In an area 800 metres by 300 metres, six areas of mineralized, east trending, quartz veins occur in quartz monzonite. Minerals include pyrite, galena, sphalerite, chalcopyrite, and minor bornite. The veins occur either as small swarms over areas approximately 2 by 2 metres or as single veins.

The largest vein, 2 by 0.38 metres, assayed 1.37 grams per tonne gold over 0.38 metres. A pyritic quartz vein 200 metres to the south assayed 5.07 grams per tonne gold over 0.50 metres and a 0.08 metre chip sample of a vein, 700 metres to the north, assayed 15.77 grams per tonne gold (Assessment Report 13071).

The quartz monzonite is generally fresh unfractured and unmineralized.

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GSC P 70-41

DATE CODED: 1986/08/11
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FIELD CHECK: N
FIELD CHECK: N

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MINFILE NUMBER: **103H 068**

NATIONAL MINERAL INVENTORY:

NAME(S): **KILTUIISH INLET GARNET**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103H08W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 20 29 N
LONGITUDE: 128 29 06 W
ELEVATION: 175 Metres

NORTHING: 5910372
EASTING: 534288

LOCATION ACCURACY: Within 5 KM

COMMENTS: An 8 kilometre long zone, striking north-northwest. Coordinates for north end of zone on the east side of Kiltuish Inlet (Area 3, Figure 10, Open File 1988-26).

COMMODITIES: Garnet

MINERALS

SIGNIFICANT: Garnet
ASSOCIATED: Sillimanite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Layered
CLASSIFICATION: Metamorphic
TYPE: K08 Garnet skarn
SHAPE: Tabular
MODIFIER: Folded

Stratabound
Syngenetic
Industrial Min.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic			Central Gneiss Complex

LITHOLOGY: Garnet Sillimanite Schist
Meta Sediment/Sedimentary

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Undivided Metamorphic Assembl.
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Kitimat Ranges
RELATIONSHIP: Syn-mineralization
GRADE: Amphibolite

CAPSULE GEOLOGY

Garnet and sillimanite occur in a number of localities in the Douglas Channel-Hectate Strait area (Geological Survey of Canada, Paper 70-41, Figure 10). In particular, garnet and sillimanite occur east of Kiltuish Inlet and along the Kiltuish River. The strata is part of the Central Gneiss Complex and is comprised mainly of Permian and/or older metasediments. Along the east side of the Kiltuish Inlet is an 8 kilometre long zone, striking north-northwest, which is underlain by schists which host abundant garnet and commonly sillimanite (Area 3, Figure 10, Open File 1988-26).

BIBLIOGRAPHY

EMPR OF *1988-26, p. 15
GSC MAP 23-1970; 1385A
GSC P *70-41

DATE CODED: 1988/03/30
DATE REVISED: 1989/01/31

CODED BY: JP
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103H 068**

MINFILE NUMBER: **103H 069**

NATIONAL MINERAL INVENTORY:

NAME(S): **PHOEBE CREEK**, ECSTALL

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103H13E
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 51 23 N
LONGITUDE: 129 31 53 W
ELEVATION: 240 Metres

NORTHING: 5967675
EASTING: 465048

LOCATION ACCURACY: Within 500M

COMMENTS: Location of sample ADO1939, Figure 7 (Assessment Report 16711).

COMMODITIES: Copper Zinc Silver Gold

MINERALS

SIGNIFICANT: Chalcopyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Volcanogenic Hydrothermal Epigenetic
TYPE: G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn
DIMENSION: 0006 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: Disseminated chalcopyrite zone.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic			Central Gneiss Complex
Paleozoic-Mesozoic			Unnamed/Unknown Informal

LITHOLOGY: Quartz Sericite Kyanite Schist
Gneiss
Meta Sediment/Sedimentary

HOSTROCK COMMENTS: Hosted in the Ecstall Pendant, consisting of metasedimentary and meta-volcanic rocks, within the Central Gneiss Complex.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Undivided Metamorphic Assembl.
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Kitimat Ranges

RELATIONSHIP:

GRADE: Amphibolite

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N

CATEGORY:	Assay/analysis	YEAR:	1987
SAMPLE TYPE:	Grab		
COMMODITY	GRADE		
Silver	19.1000	Grams per tonne	
Gold	0.1500	Grams per tonne	
Copper	6.5600	Per cent	
Zinc	0.0296	Per cent	

REFERENCE: Assessment Report 16711.

CAPSULE GEOLOGY

The area is underlain by part of the north trending Ecstall Pendant, a metavolcanic-metasedimentary belt within the Central Gneiss Complex. The belt is approximately 8 kilometres wide and trends 170 degrees. It is bounded to the west by the Ecstall Pluton and to the east by the Quottoon Pluton, which are part of the extensive Coast Range Intrusive Complex.

The Ecstall Pendant consists mainly of hornblende-plagioclase amphibolites with lesser amounts of quartzite, marble, migmatite and granitoid rocks of late Paleozoic or early Mesozoic age. These rocks have been metamorphosed to the amphibolite facies and are locally migmatitic along pluton margins.

Mineralization in the Phoebe Creek area consists of stringer and disseminated chalcopyrite within quartz-sericite-kyanite schist and mixed gneiss. The stringers are 1 to 3 centimetres wide and a few metres long. A grab sample (AD01939) contained 6.56 per cent copper, 0.0296 per cent zinc, 19.1 grams per tonne silver and 0.15 grams per tonne gold (Assessment Report 16711). The disseminated chalcopyrite occurs in a zone 6.5 metres wide. Seven composite chip samples, taken across 1 metre intervals, indicate that the mineralization is

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RUN TIME: 12:06:33

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PAGE: 467
REPORT: RGEN0100

CAPSULE GEOLOGY

fairly consistent and averages 0.69 per cent copper, 2.22 grams per tonne silver and 0.25 grams per tonne gold (Assessment Report 16711).

BIBLIOGRAPHY

EM FIELDWORK 1999, pp. 249-265; 2000, pp. 279-306; 2001,
pp. 151-170
EMPR ASS RPT *16711
EMPR OF 1999-2; 2002-03
GSC MAP 23-1970; 1385A, 1868A
GSC P 70-41

DATE CODED: 1989/08/01
DATE REVISED: / /

CODED BY: LDJ
REVISED BY:

FIELD CHECK: N
FIELD CHECK:

MINFILE NUMBER: **103H 070**

NATIONAL MINERAL INVENTORY:

NAME(S): **SPHALERITE ECSTALL**

MINING DIVISION: Skeena

STATUS: Showing
 REGIONS: British Columbia
 NTS MAP: 103H13E
 BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 50 32 N
 LONGITUDE: 129 31 36 W
 ELEVATION: 465 Metres

NORTHING: 5966096
 EASTING: 465347

LOCATION ACCURACY: Within 500M

COMMENTS: Location of sample AD01700, Figure 8 (Assessment Report 16711).

COMMODITIES: Zinc Copper Cadmium

MINERALS

SIGNIFICANT: Sphalerite
 MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Layered
 CLASSIFICATION: Hydrothermal Metamorphic
 TYPE: K02 Pb-Zn skarn

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic			Central Gneiss Complex
Paleozoic-Mesozoic			Unnamed/Unknown Informal

LITHOLOGY: Calc-silicate
 Quartz Chlorite Biotite Schist
 Marble

HOSTROCK COMMENTS: Hosted in the Ecstall Pendant, consisting of metasedimentary and meta-volcanic rocks, within the Central Gneiss Complex.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
 TERRANE: Undivided Metamorphic Assembl.
 METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Kitimat Ranges

RELATIONSHIP: GRADE: Amphibolite

INVENTORY

ORE ZONE: SAMPLE	REPORT ON: N
CATEGORY: Assay/analysis	YEAR: 1987
SAMPLE TYPE: Grab	
COMMODITY	<u>GRADE</u>
Cadmium	0.0746 Per cent
Copper	0.0600 Per cent
Zinc	6.0000 Per cent

REFERENCE: Assessment Report 16711.

CAPSULE GEOLOGY

The area is underlain by part of the north trending Ecstall Pendant, a metavolcanic-metasedimentary belt within the Central Gneiss Complex. The belt is approximately 8 kilometres wide and trends 170 degrees. It is bounded to the west by the Ecstall Pluton and to the east by the Quottoon Pluton, which are part of the extensive Coast Range Intrusive Complex.

The Ecstall Pendant consists mainly of hornblende-plagioclase amphibolites with lesser amounts of quartzite, marble, migmatite and granitoid rocks of late Paleozoic or early Mesozoic age. These rocks have been metamorphosed to the amphibolite facies and are locally migmatitic along pluton margins.

Mineralization at the Sphalerite occurrence consists of a 4 centimetre wide by 2.2 metre long band of sphalerite within a green, medium-grained, calc-silicate horizon at the contact between quartz-chlorite-biotite schist and marble. A grab sample (AD01700) contained 6.00 per cent zinc, 0.06 per cent copper, 1.5 grams per tonne silver and 0.0746 per cent cadmium (Assessment Report 16711).

BIBLIOGRAPHY

EM FIELDWORK 1999, pp. 249-265; 2000, pp. 279-306; 2001, pp. 151-170
 EMPR ASS RPT *16711

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

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ENERGY AND MINERALS DIVISION

PAGE: 469
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR OF 2002-03
GSC MAP 23-1970; 1385A, 1868A
GSC P 70-41

DATE CODED: 1989/08/01
DATE REVISED: / /

CODED BY: LDJ
REVISED BY:

FIELD CHECK: N
FIELD CHECK:

MINFILE NUMBER: **103H 071**

NATIONAL MINERAL INVENTORY:

NAME(S): **EL AMINO**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103H13E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 48 28 N
LONGITUDE: 129 33 38 W
ELEVATION: 730 Metres

NORTHING: 5962281
EASTING: 463087

LOCATION ACCURACY: Within 500M

COMMENTS: Location of sulphide lens (Fig.5, Assessment Report 17682) in the El Amino valley on Sulphide Creek.

COMMODITIES: Copper Zinc Silver

MINERALS

SIGNIFICANT: Pyrrhotite Chalcopyrite Pyrite Sphalerite Galena

ASSOCIATED: Quartz Calcite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Massive Disseminated

CLASSIFICATION: Volcanogenic

SHAPE: Regular

MODIFIER: Folded

DIMENSION: 0030 x 0001 x 0003 Metres STRIKE/DIP: 258/70E

TREND/PLUNGE:

COMMENTS: Outcrop containing sulphide lens is folded in a tight antiform.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Paleozoic

Paleozoic-Mesozoic

Central Gneiss Complex

Unnamed/Unknown Informal

LITHOLOGY: Quartzite
Limy Siltstone

HOSTROCK COMMENTS: Hosted in the Ecstall Pendant, consisting of metasedimentary and meta-volcanic rocks, within the Central Gneiss Complex.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline

TERRANE: Undivided Metamorphic Assembl. Alexander

PHYSIOGRAPHIC AREA: Kitimat Ranges

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1988

SAMPLE TYPE: Grab

COMMODITY

GRADE

Silver 15.9000 Grams per tonne

Copper 0.8880 Per cent

Zinc 0.5000 Per cent

COMMENTS: Sample containing massive sulphides, pyrrhotite, minor chalcopyrite taken from fold nose (#74158). Over 1.4 metres.

REFERENCE: Assessment Report 17682.

CAPSULE GEOLOGY

The El Amino showing is located south of the Ecstall sulphide deposit (103H 011), on Sulphide Creek.

The area is underlain by part of the north trending Ecstall Pendant, a metavolcanic-metasedimentary belt within the Central Gneiss Complex. The belt is approximately 8 kilometres wide and trends 170 degrees. It is bounded to the west by the Ecstall Pluton and to the east by the Quottoon Pluton, which are part of the extensive Coast Range Intrusive Complex.

The Ecstall Pendant consists mainly of hornblende-plagioclase amphibolites with lesser amounts of quartzite, marble, migmatite and granitoid rocks of late Paleozoic or early Mesozoic age. These rocks have been metamorphosed to the amphibolite facies and are locally migmatitic along pluton margins.

A massive sulphide horizon outcrops on Sulphide Creek. Mineralization is hosted by quartzite and limy siltstone which has been folded into a tight antiform. Stratigraphy strikes at 258 degrees and dips 70 degrees east. The lensoid horizon measures 30 by

CAPSULE GEOLOGY

1.4 by 3 metres.

Mineralization consists of pyrrhotite, chalcopyrite, minor sphalerite, galena and disseminated pyrite. The gangue consists of either calcite or silica.

A sample containing massive sulphides, pyrrhotite and chalcopyrite taken over 1.4 metres from the fold-nose in 1988 assayed 0.888 per cent copper, 0.5 per cent zinc and 15.9 grams per tonne silver (Assessment Report 17682 p.8).

A 60 centimetre wide mineralized zone, hosted in dark quartzite, was discovered in 1991 approximately 700 metres north of the original showing. Sphalerite, chalcopyrite, pyrite and galena are reported exposed along a 1.5-metre strike length (Assessment Report 22391).

BIBLIOGRAPHY

EM FIELDWORK 1999, pp. 249-265; 2000, pp. 279-312; 2001, pp. 151-170
EMPR ASS RPT *17682, 20958, 22391
EMPR OF 1999-2; 2002-03
GSC MAP 23-1970; 1385A; 1868A
GSC P 70-41

DATE CODED: 1989/08/01
DATE REVISED: / /

CODED BY: LDJ
REVISED BY:

FIELD CHECK: N
FIELD CHECK:

MINFILE NUMBER: **103H 072**

NATIONAL MINERAL INVENTORY:

NAME(S): **VG-2**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103H05W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 16 20 N
LONGITUDE: 129 57 47 W
ELEVATION: 125 Metres

NORTHING: 5902986
EASTING: 435777

LOCATION ACCURACY: Within 5 KM

COMMENTS: Location of sample VMR 88066 (Assessment Report 17332).

COMMODITIES: Copper Silver Gold

MINERALS

SIGNIFICANT: Pyrite
ASSOCIATED: Epidote
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Unknown

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Paleozoic-Mesozoic

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Coast Plutonic Complex

LITHOLOGY: Sediment/Sedimentary
Granodiorite

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Alexander

PHYSIOGRAPHIC AREA: Milbanke Strandflat

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Grab

YEAR: 1988

COMMODITY

GRADE

Silver	19.8000	Grams per tonne
Gold	0.1980	Grams per tonne
Copper	1.3600	Per cent

REFERENCE: Assessment Report 17332.

CAPSULE GEOLOGY

The area is underlain by granodiorite of the Coast Plutonic Complex. Disseminated pyrite, with some epidote occurs in a rock of probable sedimentary composition, within granodiorite. A sample assayed 1.36 per cent copper, 19.8 grams per tonne silver and 0.198 grams per tonne gold (Assessment Report 17332).

BIBLIOGRAPHY

EMPR ASS RPT *17332
GSC MAP 23-1970; 1385A
GSC P 70-41

DATE CODED: 1989/08/01
DATE REVISED: 1989/08/31

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103H 073**

NATIONAL MINERAL INVENTORY:

NAME(S): **KUMEALON INLET LIMESTONE**, KUMEALON LAGOON

STATUS: Developed Prospect
REGIONS: British Columbia
NTS MAP: 103H13W 103G16E
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 52 48 N
LONGITUDE: 129 59 52 W
ELEVATION: 61 Metres

NORTHING: 5970632
EASTING: 434409

LOCATION ACCURACY: Within 5 KM

COMMENTS: Centre of the surface trace for the pure zone of limestone on the southwest shore of Kumealon Lagoon (Industrial Mineral File - Reyes, F.A., 1985).

COMMODITIES: Limestone

MINERALS

SIGNIFICANT: Calcite
ASSOCIATED: Dolomite Pyrite
MINERALIZATION AGE: Paleozoic

DEPOSIT

CHARACTER: Stratiform Massive
CLASSIFICATION: Sedimentary Industrial Min.
TYPE: R09 Limestone
DIMENSION: 6500 x 520 Metres STRIKE/DIP: 120/60W TREND/PLUNGE:
COMMENTS: The limestone deposit dips 55 to 90 degrees southwest.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic-Mesozoic			Coast Plutonic Complex

LITHOLOGY: Limestone
Schist
Biotite Schist
Greenstone Schist
Granodiorite

HOSTROCK COMMENTS: Situated in a roof pendant within the Jurassic to Tertiary Coast Plutonic Complex.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)
TERRANE: Alexander
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Amphibolite

INVENTORY

ORE ZONE: KUMEALON LAGOON (PURE) REPORT ON: Y
CATEGORY: Inferred YEAR: 1958
QUANTITY: 19000000 Tonnes
COMMODITY Limestone GRADE 55.0600 Per cent

COMMENTS: Grade determined from chip sampling over a 24.4-metre section.
Reserves calculated for a deposit 1200 by 180 by 30 metres.
REFERENCE: Industrial Mineral File - Bown, C.D., 1958, page 7.

CAPSULE GEOLOGY

A 520-metre thick bed of limestone outcrops on either side of the head of Kumealon Inlet, on the east side of Grenville Channel, 54 kilometres south-southeast of Prince Rupert.

The limestone is situated in a sequence of metasediments comprising a roof pendant within the Jurassic to Tertiary Coast Plutonic Complex. The bed is bounded to the southwest by fine grained biotite schist and to the northeast by locally dioritized greenstone schist. The deposit strikes 120 degrees for at least 6.5 kilometres and dips 55 to 90 degrees southwest.

The bed is composed mostly of fine to coarse grained, white and bluish grey, high calcium limestone with some thin beds and lenticular masses of dolomite. The limestone becomes pyritic and interbedded with schist, over a 9-metre width, on the southwest margin of the deposit. Several inclusions of mica schist and igneous rock, up to 9-metres thick, occur within the limestone. A chip sample, taken over a 27.4-metre thick band of coarse grained, white

CAPSULE GEOLOGY

limestone near the northeast edge of the deposit, assayed 52.35 per cent CaO, 2.07 per cent MgO, 1.04 per cent SiO₂, 0.18 per cent Al₂O₃, 0.14 per cent Fe₂O₃ and 0.04 per cent sulphur (CANMET Report 811, p. 176, Sample 36A).

Previous prospecting outlined a zone of purer limestone outcropping along the southwest shore of Kumealon Lagoon, 1000 to 2200 metres northwest of the head of Kumealon Inlet. The zone is comprised mostly of white, recrystallized, fine to coarse grained limestone with some blue to grey, coarse grained limestone and minor dolomite as lenses, streaks and beds up to 0.3 metre thick. The zone strikes 150 degrees for at least 1200 metres and dips vertically to steeply southwest. The bed is estimated to have an average stratigraphic thickness of 180 metres. The limestone contains minor fine grained, disseminated pyrite and rare tremolite. No dykes are evident within this zone. Eight, 3.05-metre, chip samples, taken in succession across a face parallel to the shore, averaged 55.06 per cent CaO, 2.11 per cent insolubles and 43.51 per cent ignition loss (Industrial Mineral File - C.D. Bown, 1958, Samples A to H). The zone is estimated to contain 19 million tonnes of limestone over a strike length of 1200 metres, with an average width of 180 metres and an average height above water of 30 metres (Industrial Mineral File - C.D. Bown, 1958, p. 7).

The deposit was examined by Columbia Cellulose Co. Ltd. of Prince Rupert in 1958, during a search for local limestone sources.

BIBLIOGRAPHY

EMPR PF (Rae, D.H., (1958): untitled report; *Bown, C.D.
(1958): Limestone Deposit, Kumealon Lagoon; Reyes, Felix, (1985):
Grenville Channel
GSC MAP 23-1970; 1385A, 1868A
GSC P 70-41, pp. 16-17,21
CANMET RPT 452, Vol. 5, pp. 172-173; *811, Part 5, pp. 174,176

DATE CODED: 1989/07/28
DATE REVISED: 1989/12/04

CODED BY: PSF
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103H 074**

NATIONAL MINERAL INVENTORY:

NAME(S): **SABLE** SABLE BLACK GRANITE, PRINCESS ROYAL

STATUS: Developed Prospect

MINING DIVISION: Skeena

REGIONS: British Columbia

NTS MAP: 103H03E

BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 04 59 N

LONGITUDE: 129 06 06 W

ELEVATION: 100 Metres

NORTHING: 5881515

EASTING: 493190

LOCATION ACCURACY: Within 500M

COMMENTS: The claims surround Barnard Harbour and cover Borde Island. Location taken from approximate centre of claim block, Assessment Report 22734.

COMMODITIES: Granite

Dimension Stone

Building Stone

MINERALS

SIGNIFICANT: Albite Anorthite Hypersthene Diopside
ASSOCIATED: Olivine Orthoclase Magnetite Ilmenite Apatite
MINERALIZATION AGE: Mesozoic

DEPOSIT

CHARACTER: Massive
CLASSIFICATION: Magmatic Industrial Min.
TYPE: R03 Dimension stone - granite

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Mesozoic

Coast Plutonic Complex

LITHOLOGY: Melanocratic Anorthosite

HOSTROCK COMMENTS: The dimension stone prospect is an anorthosite phase within an area mapped as "gabbro-diorite migmatite complex".

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Alexander

PHYSIOGRAPHIC AREA: Hecate Depression

CAPSULE GEOLOGY

The Sable is a dimension stone prospect located around Barnard Harbour on Princess Royal Island. The stone is melanocratic anorthosite, a minor phase of the Mesozoic Coast Plutonic Complex, and is marketed as 'black granite'. The target anorthosite is to minor to appear on the 1:250,000 scale map of Roddick (GSC MAP 23-1970); it falls within an area mapped as gabbro-diorite migmatite complex. Mineralogy of the anorthosite is fresh albite, anorthite, hypersthene, diopside, minor olivine and orthoclase, and accessory magnetite, ilmenite and apatite. The Sable 3-12 claims were staked and prospected in 1989 by A. Karup and F. Ayres while they were investigating a high magnetic anomaly. Samples were taken and polished for promotional material. They contracted Granitic Contacts in 1992 to evaluate the potential of the claims as a dimension stone property. Two zones of rock with favourable attributes (low fracture and joint density, quarryability, attractive texture, and absence of inclusions) were identified. The target rock, when broken, has a fresh sparkly black appearance with white speckles. The material polishes to dark black with a greenish hue. Samples were submitted for testing, and met the physical requirements as prescribed in ASTM C615 'Standard Specifications for Granitic Dimension Stone' for: Absorption and Density, Compressive Strength, Flexural Strength, and Modulus of Rupture.

The Sable III to IX claims are held in good standing until the end of February 2001 by Frank Ayres of Anaheim Lake and Anthony Karup of Bella Coola.

BIBLIOGRAPHY

EMPR ASS RPT 22734
GSC MAP 23-1970

DATE CODED: 1999/07/02
DATE REVISED: 1999/09/15

CODED BY: JMR
REVISED BY: JMR

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 476
REPORT: RGEN0100

MINFILE NUMBER: **103H 075**

NATIONAL MINERAL INVENTORY:

NAME(S): **BUNCH**

MINING DIVISION: Skeena

STATUS: Anomaly
REGIONS: British Columbia
NTS MAP: 103H03E 103H03W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 06 59 N
LONGITUDE: 129 15 06 W
ELEVATION: 0 Metres

NORTHING: 5885248
EASTING: 483156

LOCATION ACCURACY: Within 500M

COMMENTS: Location from southwest corner of claim block on Fish Bay, Gil Island (Assessment Report 17987).

COMMODITIES: Copper Lead Zinc

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Sphalerite Galena

COMMENTS: Mineralization found in float only.

ASSOCIATED: Quartz

MINERALIZATION AGE:

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Unknown			Coast Plutonic Complex

LITHOLOGY: Quartz

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Alexander

PHYSIOGRAPHIC AREA: Hecate Depression

CAPSULE GEOLOGY

The Bunch claim was staked in 1988 by United Pacific Gold Ltd. to cover a 500,000 nanogram gold anomaly in a pan concentrate. A float sample of smokey grey vitreous quartz mineralized with chalcopyrite, galena, and sphalerite was assayed and returned 0.997 gram per tonne gold and 0.424 per cent zinc.

BIBLIOGRAPHY

EMPR ASS RPT 17987

DATE CODED: 1999/07/13
DATE REVISED: / /

CODED BY: JMR
REVISED BY:

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103H 075**

MINFILE NUMBER: **103H 076**

NATIONAL MINERAL INVENTORY:

NAME(S): **CROWN OF THE SEA**, COTS

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103H06W
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 21 50 N
LONGITUDE: 129 16 20 W
ELEVATION: 0 Metres

NORTHING: 5912786
EASTING: 481885

LOCATION ACCURACY: Within 500M

COMMENTS: Located 6 kilometres south of Hartley Bay on the west side of Waterman Point.

COMMODITIES: Copper Molybdenum Gold Silver

MINERALS

SIGNIFICANT: Chalcopyrite Molybdenite Pyrite

ASSOCIATED: Quartz Chlorite Pyrite

ALTERATION: Pyrite

COMMENTS: Wallrock alteration is not obvious although disseminated pyrite occurs adjacent to the vein.

MINERALIZATION AGE:

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic
DIMENSION: 20

Metres

STRIKE/DIP: 231/46

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metaplutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Mesozoic			Coast Plutonic Complex

LITHOLOGY: Dioritic Gneiss

HOSTROCK COMMENTS: Migmatitic.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Alexander

PHYSIOGRAPHIC AREA: Kitimat Ranges

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1988

SAMPLE TYPE: Grab

COMMODITY

GRADE

COMMODITY	GRADE	UNIT
Copper	1.4200	Per cent
Molybdenum	0.0138	Per cent
Gold	0.3100	Grams per tonne
Silver	3.0000	Grams per tonne

COMMENTS: Patch of chalcopyrite in quartz (DVL 88044).

REFERENCE: EMPR Exploration 1988, p. B143.

CAPSULE GEOLOGY

The showing is located about 6 kilometres south of Hartley Bay on the west side of Camp Point which is also known as Waterman Point.

The showing is underlain by dioritic gneiss belonging to a migmatitic complex which is part of the Coast Complex. Gneissic layering trends northwesterly, dips steeply east and is cut by numerous pegmatitic veinlets. A single quartz vein crops out on the shoreline and extends laterally for approximately 20 metres. The vein width varies from more than 60 centimetres to less than 1 centimetre near the western termination. The vein trends approximately 231 degrees and dips moderately to the north. A minor northwest-trending left hand fault displaces the vein by 1.5 metres at one point. Patches of pyrite, chalcopyrite and dark green chlorite occur scattered throughout the white quartz. Flakes of molybdenite coat some fractures within the vein. Two out of four grab samples taken from the vein material assayed over 1 per cent copper and were anomalous in molybdenum and gold.

BIBLIOGRAPHY

EMPR EXPL *1988, p. B143

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 478
REPORT: RGEN0100

BIBLIOGRAPHY

GSC P 70-41, 56 pages

DATE CODED: 2000/05/25
DATE REVISED: 2000/05/25

CODED BY: IW
REVISED BY: IW

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **103H 077**

NATIONAL MINERAL INVENTORY:

NAME(S): **FRIDAY THE 13TH**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103H13W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 59 07 N
LONGITUDE: 129 38 33 W
ELEVATION: 61 Metres

NORTHING: 5982075
EASTING: 457870

LOCATION ACCURACY: Within 500M

COMMENTS:

COMMODITIES: Zinc Copper

MINERALS

SIGNIFICANT: Unknown
COMMENTS: Reported as a highly gossanous band.

MINERALIZATION AGE:

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Unknown
DIMENSION: 50

Metres

STRIKE/DIP:

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Unknown

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Devonian

Unnamed/Unknown Group

Unnamed/Unknown Formation

LITHOLOGY: Quartz Muscovite Schist
Hornblende Biotite Plagioclase Schist

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Undivided Metamorphic Assembl.

PHYSIOGRAPHIC AREA: Kitimat Ranges

CAPSULE GEOLOGY

The Friday the 13th occurrence is exposed in a logging road cut through an approximately 300-metre wide by a 3-kilometre long north trending belt of Devonian felsic quartz muscovite schist contained within an extensive package of mafic hornblende biotite plagioclase schist. A 50-metre long highly gossanous zone is reported to contain copper and zinc mineralization.

BIBLIOGRAPHY

EM FIELDWORK *1999, p. 263; 2000, pp. 279-306; 2001, pp. 151-170
EMPR ASS RPT 26168
EMPR OF 2002-03
GSC MAP 23-1970; 1385A
GSC P 70-41

DATE CODED: 2000/07/04
DATE REVISED: / /

CODED BY: IW
REVISED BY:

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103H 078**

NATIONAL MINERAL INVENTORY:

NAME(S): **DANI**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103H11E 103H10W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 35 44 N
LONGITUDE: 129 00 36 W
ELEVATION: 160 Metres

NORTHING: 5938525
EASTING: 499338

LOCATION ACCURACY: Within 1 KM
COMMENTS: Centre of Dani 1-4 claims.

COMMODITIES: Zinc Lead Silver Gold

MINERALS

SIGNIFICANT: Sphalerite Galena
ASSOCIATED: Pyrite

MINERALIZATION AGE:

DEPOSIT

CHARACTER: Stratiform Massive
CLASSIFICATION: Volcanogenic

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Paleozoic Central Gneiss Complex

LITHOLOGY: Felsic Schist

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Undivided Metamorphic Assembl.

PHYSIOGRAPHIC AREA: Kitimat Ranges

INVENTORY

ORE ZONE: MAIN

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Grab

YEAR: 2002

COMMODITY	GRADE	
Zinc	10.2000	Per cent
Silver	203.0000	Grams per tonne
Gold	1.2600	Grams per tonne
Lead	5.7000	Per cent

REFERENCE: PR REL Southern Rio Resources Ltd., August 20, 2002.

CAPSULE GEOLOGY

The Dani prospect is located 3.7 kilometres west-northwest of the head of Danube Bay on the east side of Hawkesbury Island, Douglas Channel, at elevations between 80 metres and 480 metres. Prospectors Sean Turford, Ralph Keefe and Brian Remander made the discovery in August 2000 and optioned it to Southern Rio Resources Ltd. in 2002. The property covers a polymetallic massive sulphide occurrence, at the south end of the Ecstall volcanic belt (EMPR FIELDWORK 200, pp. 279-305), and is hosted by mid-Cretaceous, pyrite bearing, felsic schist. Two samples of massive sulphide boulders collected assayed 10.2 per cent zinc, 5.7 per cent lead, 203 grams per tonne silver and 1.26 grams per tonne gold; and 6.1 per cent zinc, 1.9 per cent lead, 71 grams per tonne silver and 1.26 grams per tonne gold, respectively (Press Release, Southern Rio Resources Ltd., August 20, 2002). The massive sulphides occur as bands within a 50-metre to 100-metre wide zone.

BIBLIOGRAPHY

EMPR FIELDWORK 2000, pp. 279-305
EMPR OF 1994-14
PR REL Southern Rio Resources Ltd., Aug.20, Sept.9, 2002
WWW <http://www.southernrio.com>

DATE CODED: 2002/09/01
DATE REVISED: 2002/09/19

CODED BY: IW
REVISED BY: IW

FIELD CHECK: N
FIELD CHECK: N

CAPSULE GEOLOGY

marl assuming a moisture content of 30 to 50 per cent for the crude marl (Fieldwork 1988, p. 495).

The deposit is comprised of white to light grey to medium green-grey laminated marl containing abundant fragments of roots, wood and aquatic mosses. Pelecypod and gastropod shells are also present. The average analysis of eight grab samples is as follows in per cent (Fieldwork 1989, p. 496):

CaO	45.88
MgO	0.63
SiO2	7.94
Al2O3	1.79
Fe2O3	0.70
MnO	0.01
TiO2	0.09
K2O	0.34
Na2O	0.55
P2O5	0.06
BaO	0.03
Sulphur	0.03
L.O.I.	40.45

A total of 111 tonnes of marl were produced by Anderson and Johnson in 1936 and 1939.

BIBLIOGRAPHY

- EMPR AR 1931-72; 1932-90; 1935-C34
EMPR FIELDWORK *1989, pp. 493-499
EMPR MAP 8; 69-1
EMPR PF (*Lay, D., (1935): Map; *Equity Silver Mines Ltd.
(1988): Map, Assays; Energy, Mines and Petroleum Resources
(1989): Assays)
GSC MAP 11-1956; 1136A; 1385A
GSC MEM *212, pp. 54,55; 329, p. 98

DATE CODED: 1986/09/30
DATE REVISED: 1991/03/29

CODED BY: LDJ
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 002**

NATIONAL MINERAL INVENTORY:

NAME(S): **NASS-SKEENA**, CEDAR RIVER

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103115W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 56 19 N
LONGITUDE: 128 51 17 W
ELEVATION: 300 Metres

NORTHING: 6087970
EASTING: 509307

LOCATION ACCURACY: Within 1 KM
COMMENTS: Description.

COMMODITIES: Coal

MINERALS

SIGNIFICANT: Coal
MINERALIZATION AGE: Jurassic-Cretaceous

DEPOSIT

CHARACTER: Stratabound Concordant Massive
CLASSIFICATION: Sedimentary Fossil Fuel
TYPE: A03 Sub-bituminous coal
SHAPE: Irregular
DIMENSION: STRIKE/DIP: 070/50N TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Jurassic-Cretaceous	Bowser Lake	Undefined Formation	

LITHOLOGY: Coal
Graphitic Slate
Sandstone

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Bowser Lake

PHYSIOGRAPHIC AREA: Kitimat Trench

CAPSULE GEOLOGY

Several coal seams, striking 070 degrees and dipping 50 degrees north, are concordant with sandstone and black graphitic slate of the Jurassic to Cretaceous Bowser Lake Group. The seams vary from 0.9 to 1.2 metres wide. A 0.76 metre sample from Coal-seam No. 1 analysed 4.0 per cent moisture, 2.0 per cent volatile combustible matter, 45.0 per cent fixed carbon, and 49.0 per cent ash (Minister of Mines Annual Report 1914).

A 0.9 metre sample, 240 metres northeast of No. 1 seam, analysed 5.8 per cent moisture, 4.2 per cent volatile combustible, 67.3 per cent fixed carbon, and 22.7 per cent ash (Minister of Mines Annual Report 1914).

BIBLIOGRAPHY

EMPR AR *1914-108,109; 1919-43; 1922-47
EMPR COAL ASS RPT 229
EMPR P 1986-5, p. 26
GSC MAP 11-1956; 1136A; 1385A
GSC MEM 205, p. 7; 329
GSC SUM RPT 1922A, p. 49

DATE CODED: 1986/09/29
DATE REVISED: 1986/09/29

CODED BY: LDJ
REVISED BY: CB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 003**

NATIONAL MINERAL INVENTORY:

NAME(S): **BURTON CREEK**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103I13W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 57 04 N
LONGITUDE: 129 50 41 W
ELEVATION: 100 Metres

NORTHING: 6089678
EASTING: 445899

LOCATION ACCURACY: Within 500M
COMMENTS: Map VIII.4 (McDonald, 1978).

COMMODITIES: Hotspring

MINERALS

SIGNIFICANT: Unknown
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Hydrothermal Industrial Min.
TYPE: T02 Geothermal spring

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleocene			Ponder Pluton

LITHOLOGY: Granodiorite

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Plutonic Rocks

PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)

CAPSULE GEOLOGY

The area is underlain by granodiorite of the Tertiary Ponder pluton. A small volume of water issues at 45.0 degrees Celsius and with a pH of 6.62.

BIBLIOGRAPHY

GSC MAP 1136A; 1385A
GSC MEM 329
McDonald, J. (1978): Hotsprings of Western Canada, A Complete Guide; Labrador Tea Company, Vancouver, pp. 109,110

DATE CODED: 1986/09/22
DATE REVISED: 1989/08/11

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 004**

NATIONAL MINERAL INVENTORY:

NAME(S): **LAKELSE**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103107E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 21 34 N
LONGITUDE: 128 32 26 W
ELEVATION: 75 Metres

NORTHING: 6023612
EASTING: 529856

LOCATION ACCURACY: Within 500M

COMMENTS:

COMMODITIES: Hotspring Lithium

MINERALS

SIGNIFICANT: Unknown
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Hydrothermal Industrial Min.
TYPE: T02 Geothermal spring

HOST ROCK

DOMINANT HOSTROCK: Plutonic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Cretaceous-Tertiary			Coast Plutonic Complex

LITHOLOGY: Granodiorite
Sediment/Sedimentary

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Plutonic Rocks

PHYSIOGRAPHIC AREA: Kitimat Trench

CAPSULE GEOLOGY

Quaternary sediments overlie granodiorite of the Cretaceous to Tertiary Coast Plutonic Complex. The hot springs flow at a rate of 457 litres per minute, are 52.0 degrees to 73.5 degrees Celsius, and have a pH of 7.96 to 6.52. The springs have a continuous gas discharge. Chemical analysis of the springs is as follows (in parts per million): 46.6 Ca, 0.5 Mg, 320.1 Na, 15.6 CO₃, 457.0 SO₄, 215.9 Cl, 3.3 F, 50.6 SiO₂ and 1186 total dissolved solids (*Property File, Leach, 1951). A high content of lithium has been reported to be 10.2 parts per million (Geological Survey of Canada Paper 73-18).

BIBLIOGRAPHY

EMPR AR 1914-111; 1930-80
EMPR PF (*Leach, T.A.J. (1951): Survey of Lakelse Hot Springs)
GSC MAP 1136A; 1385A
GSC MEM 329, p. 100
GSC P 73-18, pp. 231,232
GSC SUM RPT 1926A, p. 44
McDonald, J., (1978): Hotsprings of Western Canada, A Complete Guide; Labrador Tea Company, Vancouver, pp. 102,103

DATE CODED: 1986/09/22
DATE REVISED: 1989/08/11

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 486
REPORT: RGEN0100

MINFILE NUMBER: **1031 005**

NATIONAL MINERAL INVENTORY:

NAME(S): **FRIZZELL**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103104W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 12 19 N
LONGITUDE: 129 52 16 W
ELEVATION: 30 Metres

NORTHING: 6006712
EASTING: 443181

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Hotspring

MINERALS

SIGNIFICANT: Unknown
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Hydrothermal Industrial Min.
TYPE: T02 Geothermal spring

HOST ROCK

DOMINANT HOSTROCK: Plutonic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Cretaceous-Tertiary			Ecstall Pluton

LITHOLOGY: Quartz Diorite

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Plutonic Rocks

PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)

CAPSULE GEOLOGY

The area is underlain by quartz diorite of the Cretaceous to Tertiary Ecstall pluton. The hot springs flow at 915 litres per minute, are 38.0 to 46.0 degrees Celsius and have a pH from 7.66 to 7.86. They have a slight gas discharge. Analysis of the water gave the following results, in "grains per gallon": total solids 64, chlorine 1.7, sulphur 11.2, and sodium chloride 44.8 (Minister of Mines Annual Report 1901).

BIBLIOGRAPHY

EMPR AR 1901-996; 1930-80
EMPR MAP 8
GSC MAP 1472A; 12-1966; 1136A; 1385A; 1868A
GSC MEM 329; 394
McDonald, J. (1978): Hotsprings of Western Canada, A Complete Guide; Labrador Tea Company, Vancouver, pp. 104,105

DATE CODED: 1986/09/22
DATE REVISED: 1989/08/11

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 005**

MINFILE NUMBER: **1031 006**

NATIONAL MINERAL INVENTORY:

NAME(S): **LA PORTE**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103104W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 10 19 N
LONGITUDE: 129 56 06 W
ELEVATION: 100 Metres

NORTHING: 6003056
EASTING: 438965

LOCATION ACCURACY: Within 1 KM

COMMENTS: Description from Minister of Mines Annual Report 1934, page B9.

COMMODITIES: Gold Silver Copper

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Unknown

TYPE: I02 Intrusion-related Au pyrrhotite veins

L01 Subvolcanic Cu-Ag-Au (As-Sb)

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

Cretaceous-Tertiary

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Ecstall Pluton

LITHOLOGY: Quartz Diorite
Pegmatite
Aplite Dike

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Plutonic Rocks

PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)

INVENTORY

ORE ZONE: LENS

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1934

SAMPLE TYPE: Chip

COMMODITY

GRADE

Silver	51.4000	Grams per tonne
Gold	8.2000	Grams per tonne
Copper	4.4000	Per cent

COMMENTS: This is from a composite sample from a 1.5 by 0.4 metre lens.

REFERENCE: Minister of Mines Annual Report 1934, pages B9,B10.

CAPSULE GEOLOGY

The area is underlain by quartz diorite of the northern part of the Cretaceous to Tertiary Ecstall pluton. Quartz veins with auriferous pyrite and chalcopyrite lenses are associated with pegmatite and aplite dykes. Erratic mineralization occurs along a 60.0 metre, northwest strike, dipping about 15 degrees northeast. A composite sample of a 1.5 by 0.4 metre lens, assayed 8.2 grams per tonne gold, 51.4 grams per tonne silver and 4.4 per cent copper (Minister of Mines Annual Report 1934).

BIBLIOGRAPHY

EMPR AR *1934-B9,B10; 1935-B26
EMPR MAP 8
GSC MAP 12-1966; 1136A; 1385A; 1472A; 1868A
GSC MEM 329; 394

DATE CODED: 1986/09/15
DATE REVISED: 1989/08/11

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 007**

NATIONAL MINERAL INVENTORY: 10314 Zn1

NAME(S): **SCOTIA**, ALBERE

STATUS: Developed Prospect
 REGIONS: British Columbia
 NTS MAP: 103104E
 BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 04 54 N
 LONGITUDE: 129 40 26 W
 ELEVATION: 847 Metres

NORTHING: 5992818
 EASTING: 455914

LOCATION ACCURACY: Within 500M

COMMENTS: Massive sphalerite zone (Assessment Report 10332).

COMMODITIES: Zinc Lead Silver Copper Gold

MINERALS

SIGNIFICANT: Sphalerite Galena Pyrite Pyrrhotite Bornite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Massive Stratabound
 CLASSIFICATION: Volcanogenic
 TYPE: G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn
 SHAPE: Tabular
 MODIFIER: Folded

DIMENSION: 228 x 25 x 20 Metres STRIKE/DIP: 160/40W TREND/PLUNGE:

COMMENTS: Three ore zones, of varying width, strike 160 degrees for 228 metres, dip 40 degrees southwest and plunge 9 degrees south. The zones occur within a 25 metre thickness and about a 20 metre width.

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic			Central Gneiss Complex

LITHOLOGY: Felsic Gneiss
 Mafic Gneiss
 Amphibolite

HOSTROCK COMMENTS: Unit 1C - Geological Survey of Canada Map 1472A.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
 TERRANE: Undivided Metamorphic Assembl.
 METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)

RELATIONSHIP: GRADE: Amphibolite

INVENTORY

ORE ZONE: ALBERE REPORT ON: Y

CATEGORY:	Combined	YEAR: 1998
QUANTITY:	224000 Tonnes	
COMMODITY	GRADE	
Silver	23.0000	Grams per tonne
Gold	0.5500	Grams per tonne
Copper	0.2000	Per cent
Lead	1.2000	Per cent
Zinc	12.2000	Per cent

COMMENTS: Measured drill indicated and probable resource, using a cut-off of 4 to 5 per cent zinc over a 1.8-metre width.

REFERENCE: GCNL #7 (January 12), 1998.

ORE ZONE: ALBERE REPORT ON: Y

CATEGORY:	Indicated	YEAR: 1998
QUANTITY:	1340000 Tonnes	
COMMODITY	GRADE	
Silver	13.0000	Grams per tonne
Gold	0.2500	Grams per tonne
Lead	0.4000	Per cent
Zinc	3.8000	Per cent
Copper	0.1000	Per cent

COMMENTS: Global drill indicated resource calculated using 1 per cent zinc over a 0.5-metre width.

REFERENCE: GCNL #7 (January 12), 1998.

INVENTORY

ORE ZONE: SCOTIA

REPORT ON: Y

CATEGORY:	Inferred	YEAR:	1984
QUANTITY:	150000 Tonnes		
COMMODITY		GRADE	
Silver		25.0000	Grams per tonne
Lead		1.4000	Per cent
Zinc		13.3000	Per cent

COMMENTS: Indicated potential.

REFERENCE: SMF - Andarex Resources Inc., August 29, 1984.

CAPSULE GEOLOGY

The Scotia property is situated on the east side of the Ecstall pluton and is underlain by an assemblage of gneissic rocks which are part of the Paleozoic(?) Central Gneiss Complex. The gneissic rocks include felsic gneiss, mafic gneiss and amphibolite. Severely deformed volcanogenic massive sulphide mineralization occurs mainly within the felsic gneiss.

Zinc, silver, lead and gold mineralization occur within an Upper-Middle-Lower zone striking 160 degrees for 228 metres, dipping 40 degrees southwest and plunging 9 degrees south. The ore zones are interpreted to lie within an overturned fold with related drag folding caused by shearing (Assessment Report 13794). Sulphide minerals include sphalerite, galena, pyrite, pyrrhotite, bornite and chalcocite. Massive sulphide widths range up to 11 metres as indicated by diamond drilling. A 9.02 metre intersection assayed 20.55 per cent zinc, 2.70 per cent lead, 41.5 grams per tonne silver and 0.58 grams per tonne gold (Assessment Report 13794).

Indicated potential reserves for the Scotia volcanogenic massive sulphide deposit are 150,000 tonnes grading 13.3 per cent zinc, 1.4 per cent lead and 25.0 grams per tonne silver (Statement of Material Facts, Andarex Resources Inc., August 29, 1984).

Bishop Resources Inc. conducted a 10-hole drilling program in 1997. The drilling was conducted within a north-south strike length of 310 metres. A global resource is contained within an east-west dimension of about 100 metres while a drill indicated resource is within a 50-metre width. Resource calculations are for the Albere Zone. The measured drill indicated and probable resource was 224,000 tonnes grading 12.2 per cent zinc, 1.2 per cent lead, 0.2 per cent copper, 23 grams per tonne silver and 0.55 grams per tonne gold. This resource was calculated using a cut-off of 4 to 5 per cent zinc over a 1.8-metre width (GCNL #7(January 12), 1998).

The global resource was calculated using 1 per cent zinc over a 0.5-metre width. This global drill indicated resource is calculated to be 1,240,000 tonnes grading 3.8 per cent zinc, 0.4 per cent lead, 0.1 per cent copper, 13 grams per tonne silver and 0.25 grams per tonne gold. The alteration zone hosting sulphide mineralization is considered to be open down-dip to the west and along strike to the north.

In 1999, Doublestar Resources Ltd. plans to acquire the property from Falconbridge Limited.

BIBLIOGRAPHY

EM FIELDWORK 1999, pp. 249-265; 2000, pp. 269-306; 2001, pp. 151-170
EM PF Bishop Resources Website (May 2000)
EMPR AR 1960-12
EMPR ASS RPT *9302, 10332, 13794, 16795, 25862, 25612
EMPR EXPL 1980-391; 1985-C372; 1988-C201; 1997-14; 1999-19-31
EMPR MAP 58; 65 (1989)
EMPR OF 1992-1; 1999-2; 1998-10
EMR MIN BULL MR 223 B.C. 286
EMR MP CORPFILE (Andarex Resources Inc.)
GSC MAP 12-1966; *1472A; 11-1956; 1136A; 1385A; 1868A
GSC MEM 329; 394, p. 98
GSC P 66-33, p. 23
GCNL #180, #186, #219, 1984; #189 (Oct.1), #240 (Dec.15), #241 (Dec.16), 1997; *#7 (Jan. 12), 1998; #189(Oct.1), 1999
N MINER May 3,10, Sept.20,Nov.22, 1984; Aug.22, 1985; Feb.17, 1986
WWW <http://www.bishopresources.com/>; <http://www.infomine.com/>
McLeod, J.W. (1984): Report on West Scotia Property in Statement of Material Facts for Andarex Resources Inc., Aug. 29, 1984

DATE CODED: 1986/09/15
DATE REVISED: 1989/08/23

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 008**

NATIONAL MINERAL INVENTORY:

NAME(S): **KWINITSA**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103104E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 13 29 N
LONGITUDE: 129 34 56 W
ELEVATION: 10 Metres

NORTHING: 6008681
EASTING: 462042

LOCATION ACCURACY: Within 500M
COMMENTS: Salt deposit (Minister of Mines Annual Report 1913).

COMMODITIES: Clay Sodium Chloride

MINERALS

SIGNIFICANT: Clay
ASSOCIATED: Clay
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound
CLASSIFICATION: Sedimentary Industrial Min.
TYPE: F09 Playa and Alkaline Lake Evaporites B06 Fireclay
E07 Sedimentary kaolin
SHAPE: Tabular

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Recent			Unnamed/Unknown Informal

LITHOLOGY: Salts
Clay
Quartz Diorite
Biotite Garnet Sillimanite Gneiss

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Undivided Metamorphic Assembl. Plutonic Rocks
PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1913
SAMPLE TYPE: Rock
COMMODITY Sodium Chloride GRADE 98.1500 Per cent

COMMENTS: Analysis is of a dry sample which is sodium chloride and includes 1.82 per cent calcium sulphate.
REFERENCE: Minister of Mines Annual Report 1913, pages 85-87.

CAPSULE GEOLOGY

A basin, about 2.7 kilometres wide, contains a 50 metre thick layer of salt and mud below a 30 metre thick layer of clay. The basin is bounded to the west by quartz diorite and to the east by biotite-garnet-sillimanite-hornblende gneiss. Analysis of a dry sample gave 98.15 per cent sodium chloride and 1.82 per cent calcium sulphate (Minister of Mines Annual Report 1913).

BIBLIOGRAPHY

EMPR AR *1913-85-87; 1930-80
GSC MAP 12-1966; 1472A; 1136A; 1385A; 1868A
GSC MEM 329; 394, p. 98
GSC P 66-33, p. 23
GSC SUM RPT 1912, p. 57

DATE CODED: 1986/09/15
DATE REVISED: 1989/08/15

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

CAPSULE GEOLOGY

percent CaO, 1.6 percent MgO, 1.2 percent acid insolubles and 0.14 percent Fe₂O₃ (EMPR Annual Report 1954, p. 181 - Sample 4).

Limestone was produced from a quarry on Lot 4510, 650 metres northeast of the Shames River between 1953 and 1956 for the Columbia Cellulose pulp mill at Port Edward. A total of 15,664 tonnes of limestone was quarried.

BIBLIOGRAPHY

EMPR AR 1914-152; 1916-97; 1953-191; *1954-180,181; 1955-94
EMPR MAP 8

EMPR PF (Map of workings and sample locations, 1965)

GSC MAP 1136A; 278A; 11-1956; 1385A

GSC MEM *329, pp. 16,98,99

GSC OF 1136

CANMET RPT *452, Vol.5 pp. 175-177; 811, Part 5 p.218, Map 812; 719,
p. 64

DATE CODED: 1986/09/30
DATE REVISED: 1989/08/15

CODED BY: LDJ
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 010**

NATIONAL MINERAL INVENTORY:

NAME(S): **AUTUMN**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103107W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 26 24 N
LONGITUDE: 128 50 16 W
ELEVATION: 120 Metres

NORTHING: 6032490
EASTING: 510521

LOCATION ACCURACY: Within 500M

COMMENTS: Symbol 58, Map 1136A (Geological Survey of Canada Memoir 329).

COMMODITIES: Copper Silver Gold Iron Limestone

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Bornite Magnetite Calcite
ALTERATION: Epidote Silica
ALTERATION TYPE: Silicific'n Propylitic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Replacement Industrial Min.
TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb)
SHAPE: Irregular
MODIFIER: Sheared
DIMENSION:

STRIKE/DIP: 050/65N

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Permian	Undefined Group	Unnamed/Unknown Formation	Coast Plutonic Complex
Cretaceous-Tertiary			

LITHOLOGY: Greenstone
Limestone
Granodiorite

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Stikine
METAMORPHIC TYPE: Contact

Plutonic Rocks
RELATIONSHIP:

PHYSIOGRAPHIC AREA: Kitimat Ranges

GRADE:

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Chip

YEAR: 1929

COMMODITY	GRADE	
Silver	6.9000	Grams per tonne
Copper	1.3000	Per cent

COMMENTS: The sample width is 1.7 metres.
REFERENCE: Minister of Mines Annual Report 1929.

CAPSULE GEOLOGY

Greenstones and recrystallized limestones, of probable Permian age, strike 050 degrees and dip 65 degrees northwest. These rocks are sheared and metamorphosed by the emplacement of granodiorite of the Cretaceous to Tertiary Coast Plutonic Complex.

Silicified and epidotized shear zones contain sparse pyrite, chalcopyrite, bornite and magnetite. A 1.7 metre chip sample of the main shear zone assayed 1.3 per cent copper, 6.9 grams per tonne silver and trace gold (Minister of Mines Annual Report 1929).

BIBLIOGRAPHY

EMPR AR *1916-97,98; 1917-45; 1922-47; 1923-46; 1924-47; 1926-72; 1927-62,63; *1929-76,77; 1930-73
EMPR ASS RPT 1202
EMPR MAP 8
GSC MAP 278A; 1136A; 11-1956; 1385A
GSC MEM *205, pp. 5,24; 329, p. 77; 212, p. 5
GSC P 36-17, pp. 39,40

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 494
REPORT: RGEN0100

BIBLIOGRAPHY

GSC SUM RPT 1925A, pp. 118,119

DATE CODED: 1986/10/01
DATE REVISED: 1989/08/11

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 011**

NATIONAL MINERAL INVENTORY: 10314 Sil1

NAME(S): **KWINITSA SILLIMANITE** KWINITSA GARNET, FEAK CREEK,
SNAG POINT

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103104E 103103W
BC MAP:
LATITUDE: 54 13 49 N
LONGITUDE: 129 32 29 W
ELEVATION: 150 Metres
LOCATION ACCURACY: Within 1 KM
COMMENTS: Part of a 20 kilometre zone, striking northwest; location given is at north end of zone, along Highway 16, 1.0 kilometre east of, Kwinitza (Area 2, Figure 9, Open File 1988-26).

MINING DIVISION: Skeena
UTM ZONE: 09 (NAD 83)
NORTHING: 6009278
EASTING: 464709

COMMODITIES: Sillimanite Garnet

MINERALS

SIGNIFICANT: Sillimanite Garnet
ASSOCIATED: Biotite Quartz Feldspar
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Layered Stratabound
CLASSIFICATION: Metamorphic Industrial Min.
TYPE: P02 Kyanite-sillimanite schists
SHAPE: Tabular
MODIFIER: Folded

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic			Central Gneiss Complex

LITHOLOGY: Garnet Sillimanite Gneiss
Biotite Quartz Feldspar Gneiss
Biotite Hornblende Gneiss
Amphibolite

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Plutonic Rocks
METAMORPHIC TYPE: Regional
PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)
RELATIONSHIP: Syn-mineralization
GRADE: Amphibolite

CAPSULE GEOLOGY

The area around Kwinitza is dominantly underlain by grey biotite plus or minus hornblende gneiss, amphibolite and minor sillimanite plus or minus garnet gneiss. Two sillimanite occurrences, noted on Geological Survey of Canada Map 3-1965, are located on the north side of the Skeena River, one opposite the mouth of Feak Creek, and the other north of Snag Point. These occurrences are part of a 20 kilometre zone which strikes northwest.

The gneisses are part of the Paleozoic(?) Central Gneiss Complex of the Prince Rupert-Skeena map areas.

Locally, 1.0 kilometre east of Kwinitza, along Highway 16, excellent exposures of garnet-sillimanite-quartz-feldspar gneisses contain between 5 to 30 per cent garnet and 5 to 30 per cent sillimanite. The sillimanite is generally present in densely felted layers ranging from 0.2 to 2.5 centimetres in thickness (Geological Survey of Canada Memoir 394). Similar mineralization occurs around Khatada Lake to the south (refer to Khatada Lake 1031 220).

BIBLIOGRAPHY

EMPR OF *88-26, p. 15
GSC MAP *3-1965; 12-1966; 1136A; 1385A; 1868A
GSC MEM *394
GSC P 66-33

DATE CODED: 1988/03/28
DATE REVISED: 1989/02/01

CODED BY: JP
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 012**

NATIONAL MINERAL INVENTORY: 10319 Au4

NAME(S): **GOLDEN CROWN**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103109W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 35 39 N
LONGITUDE: 128 23 11 W
ELEVATION: 250 Metres

NORTHING: 6049805
EASTING: 539647

LOCATION ACCURACY: Within 500M

COMMENTS: Descriptions from Minister of Mines Annual Report 1914, page 129;
Crown granted Lots 5661-5664.

COMMODITIES: Gold Silver Copper

MINERALS

SIGNIFICANT: Pyrite Arsenopyrite Gold Chalcopyrite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic
TYPE: I02 Intrusion-related Au pyrrhotite veins L01 Subvolcanic Cu-Ag-Au (As-Sb)
SHAPE: Irregular
MODIFIER: Fractured
DIMENSION: STRIKE/DIP: 140/40E TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Cretaceous-Tertiary			Coast Plutonic Complex

LITHOLOGY: Granodiorite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Plutonic Rocks

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1937
SAMPLE TYPE: Channel
COMMODITY GRADE
Silver 78.2000 Grams per tonne
Gold 12.3000 Grams per tonne
COMMENTS: The sample width is 40 centimetres.
REFERENCE: Geological Survey of Canada Memoir 212.

CAPSULE GEOLOGY

Granodiorite of the Cretaceous to Tertiary Coast Plutonic Complex intrudes Jurassic Hazelton volcanics. Three parallel fracture zones, which strike 140 degrees and dip 40 degrees east, occur in the granodiorite. The fractures contain quartz lenses, up to 1.5 metres wide, which locally contain coarse pyrite and chalcopyrite. A 40-centimetre channel sample of one vein assayed 12.3 grams per tonne gold and 78.2 grams per tonne silver (Geological Survey of Canada Memoir 212).

BIBLIOGRAPHY

EMPR AR 1901-997, 999; 1902-46; 1903-52; 1904-101; 1905-82; 1908-65; 1909-84; *1914-129-131; 1919-98; 1920-81-83; 1921-95,96; 1934-C2; 1939-68
EMPR MAP 8; 69-1
EMPR PF (Rpts by D.C. McKay, 1922; W.J. Elmendorf, 1924; H.L. Batten, 1931; Map by D. Lay, 1925)
EMR MP CORPFILE (Kleanza Company, Limited)
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM *212, pp. 13,14; 329
GSC P 36-20, pp. 15,16

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 497
REPORT: RGEN0100

BIBLIOGRAPHY

GSC SUM RPT 1925A, p. 117

DATE CODED: 1986/12/05
DATE REVISED: 1989/08/11

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 499
REPORT: RGEN0100

CAPSULE GEOLOGY

south part of the main zone gave 0.32 per cent copper, 0.80 per cent zinc and 0.29 per cent molybdenum over 29 metres and drill intersections in the north part of the zone returned values up to 0.87 per cent copper, 0.043 per cent molybdenite and 6.2 grams per tonne silver over 1.5 metres (Assessment Report 4978).

BIBLIOGRAPHY

EMPR ASS RPT 3585, *4978
EMPR GEM *1970-97,98; 1971-113; 1972-499; 1973-485,486
EMPR MAP 8
EMPR PF (*Report by K.P. Bottoms, 1967)
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329
Placer Dome File

DATE CODED: 1986/10/08
DATE REVISED: 1989/08/11

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 014**

NATIONAL MINERAL INVENTORY: 103I2 Fe1

NAME(S): **WEDEENE**, IRON MOUNTAIN, MINERAL HILL,
BIMETALLIC

STATUS: Developed Prospect

MINING DIVISION: Skeena

REGIONS: British Columbia

NTS MAP: 103I02E

UTM ZONE: 09 (NAD 83)

BC MAP:

LATITUDE: 54 10 24 N

LONGITUDE: 128 39 16 W

ELEVATION: 220 Metres

NORTHING: 6002862

EASTING: 522557

LOCATION ACCURACY: Within 500M

COMMENTS: "A" zone (Property File: Lazenby, 1962); located adjacent to the railway, 13 kilometres due north of Kitimat.

COMMODITIES: Iron

Magnetite

Copper

MINERALS

SIGNIFICANT: Magnetite Pyrite Chalcopyrite

ASSOCIATED: Garnet Epidote

ALTERATION TYPE: Silicific'n Skarn

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Massive

Disseminated

CLASSIFICATION: Skarn

Replacement

Industrial Min.

TYPE: K03 Fe skarn

SHAPE: Irregular

DIMENSION: 1400 x 0120 x 0300 Metres

STRIKE/DIP:

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE

Middle Jurassic

GROUP

Hazelton

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY:

Andesite

Greenstone

Granodiorite

Dike

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline

TERRANE: Stikine

METAMORPHIC TYPE: Regional

Plutonic Rocks

RELATIONSHIP:

PHYSIOGRAPHIC AREA: Kitimat Trench

GRADE: Greenschist

INVENTORY

ORE ZONE: SUMMIT

REPORT ON: Y

CATEGORY: Indicated

YEAR: 1962

QUANTITY: 3160465 Tonnes

COMMODITY

GRADE

Iron

21.7300

Per cent

COMMENTS: Summit zone reserves.

REFERENCE: Property File - Lazenby, H.S., 1962.

ORE ZONE: A

REPORT ON: Y

CATEGORY: Indicated

YEAR: 1962

QUANTITY: 2194563 Tonnes

COMMODITY

GRADE

Iron

22.6200

Per cent

COMMENTS: A zone reserves.

REFERENCE: Property File - Lazenby, H.S., 1962.

CAPSULE GEOLOGY

Metamorphosed volcanic rocks of the Middle Jurassic Hazelton Group are intruded by a granodiorite stock which forms the core of Iron Mountain. The intrusive and associated dykes are part of the Cretaceous to Tertiary Coast Plutonic Complex. Within the volcanic rocks, which are largely andesite, are irregular epidote-garnet-magnetite-silica skarns and related lenses of magnetite with minor pyrite and chalcopyrite. The mineralized area strikes about 010 degrees and dips 75 degrees west, is exposed over a 1.4 kilometre length, from 75 to 530 metres elevation, and varies in width from 100 to 150 metres. Total reserves include 5.36 megatonnes averaging

CAPSULE GEOLOGY

22.09 per cent soluble iron (Lazenby, 1962).

The magnetite occurs in three zones known as the "A" zone, "B" zone, and Summit zone. The "A" zone, lowest in elevation, is about 180 by 120 metres, with drill indicated reserves of 2,194,563 tonnes of 22.62 per cent acid soluble iron. The Summit zone, 1100 metres to the north-northeast, measures 300 by 90 metres and contains 3,160,465 tonnes of 21.73 per cent acid soluble iron (Property File - Lazenby, H.S., 1962). The "B" zone, between the above two zones contains irregular mineralization. Drilling has been shallow and it is estimated that more magnetite can be found downdip. The northern extension also remains open. A maximum of 9 megatonnes of 20 per cent soluble iron is postulated (Lazenby, 1962).

The rocks are cut by post-ore felsic to mafic dykes and north-trending faults.

BIBLIOGRAPHY

EMPR AR 1903-52; 1904-102; 1908-57; 1909-57; 1925-67; 1926-71,446;
1929-72; 1932-48; *1945-80,81; 1958-73; 1959-15; 1960-13; *1961-
17,18; 1962-14,15
EMPR MAP 8
EMPR OF *1988-28, p. 101, Fig. 38
EMPR PF (*Lazenby, H.S., 1962: Wedeene Iron Deposit)
EMR MP CORPFILE (Q.M.I. Minerals Ltd.)
GSC EC GEOL No. 3, Vol. 1, p. 26
GSC MAP 278A; 1136A; 11-1956; 1385A
GSC MEM 329, pp. 97,98
Falconbridge File

DATE CODED: 1986/10/01
DATE REVISED: 1989/08/11

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 015**

NATIONAL MINERAL INVENTORY: 10319 Au12

NAME(S): **IBEX**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103109W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 35 14 N
LONGITUDE: 128 21 06 W
ELEVATION: 250 Metres

NORTHING: 6049053
EASTING: 541897

LOCATION ACCURACY: Within 500M

COMMENTS: Descriptions and sketch map (Minister of Mines Annual Report 1914);
located along the south bank of Kleanza Creek.

COMMODITIES: Gold Silver Copper Lead

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Galena

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Unknown
TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb)
SHAPE: Irregular

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Cretaceous-Tertiary			Coast Plutonic Complex

LITHOLOGY: Granodiorite
Andesitic Dike

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Plutonic Rocks

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: STOCKPILE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Rock

YEAR: 1914

COMMODITY	GRADE	
Silver	120.0000	Grams per tonne
Gold	4.1000	Grams per tonne
Copper	3.8000	Per cent

COMMENTS: The sample was taken from "sorted ore".

REFERENCE: Minister of Mines Annual Report 1914, page 128.

CAPSULE GEOLOGY

An andesite dyke cuts granodiorite of the Cretaceous to Tertiary Coast Plutonic Complex. Pyrite, galena, and probably chalcopyrite are disseminated within the andesite dyke for about 6 metres along strike. A sample of sorted ore contained 4.1 grams per tonne gold, 120 grams per tonne silver and 3.8 per cent copper (Minister of Mines Annual Report 1914).

BIBLIOGRAPHY

EMPR AR 1914-128, Map p. 121
EMPR MAP 8; 69-1
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329

DATE CODED: 1986/12/05
DATE REVISED: 1989/08/11

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 016**

NATIONAL MINERAL INVENTORY: 103110 Mo1

NAME(S): **MOLYBDENUM CREEK**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103110W
BC MAP:

MINING DIVISION: Skeena
UTM ZONE: 09 (NAD 83)

LATITUDE: 54 34 29 N
LONGITUDE: 128 45 16 W
ELEVATION: 300 Metres

NORTHING: 6047496
EASTING: 515874

LOCATION ACCURACY: Within 500M

COMMENTS: Centre of mineralized zone, Figure 3 (Assessment Report 7740).

COMMODITIES: Molybdenum Copper

MINERALS

SIGNIFICANT: Molybdenite Chalcopyrite Pyrite Magnetite Pyrrhotite
ASSOCIATED: Quartz
ALTERATION: Feldspar Chlorite
ALTERATION TYPE: Potassic Chloritic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stockwork Vein Disseminated
CLASSIFICATION: Porphyry Hydrothermal Igneous-contact
TYPE: L05 Porphyry Mo (Low F- type)
SHAPE: Irregular
DIMENSION: 1300 x 0200 x 0150 Metres
COMMENTS: Discontinuous mineralized zone. STRIKE/DIP: TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Jurassic Cretaceous-Tertiary	Hazelton	Undefined Formation	Coast Plutonic Complex

LITHOLOGY: Hornfels
Quartz Monzonite
Granodiorite
Feldspar Quartz Porphyry
Meta Siltstone
Meta Greywacke
Dacite
Basaltic Andesite
Porphyritic Andesite
Dike

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline PHYSIOGRAPHIC AREA: Kitimat Ranges
TERRANE: Stikine Plutonic Rocks
METAMORPHIC TYPE: Contact RELATIONSHIP: GRADE: Hornfels

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1979
SAMPLE TYPE: Grab
COMMODITY GRADE
Copper 1.9000 Per cent
Molybdenum 0.0970 Per cent
REFERENCE: Assessment Report 7740.

CAPSULE GEOLOGY

Sedimentary and volcanic rocks of the Jurassic Hazelton Group are intruded by quartz monzonite and granodiorite and later feldspar-quartz porphyry of the Cretaceous to Tertiary Coast Plutonic Complex. The Hazelton rocks are dominantly meta-siltstone and porphyritic andesite with minor meta-greywacke argillite, dacite and basaltic andesite. These rocks have been locally hornfelsed. Distribution of the hornfels generally coincides with zones of molybdenite mineralization.

Discontinuous molybdenite mineralization occurs in a zone measuring 1300 by 200 by 150 metres, in a northwest direction. Molybdenite and minor chalcopyrite, pyrite, and magnetite occur in quartz veins and fractures. The veins, up to 25 centimetres

CAPSULE GEOLOGY

wide, are generally flat lying and shallow dipping. A grab sample assayed 0.097 per cent molybdenum and 1.90 per cent copper (Assessment Report 7740).

Alteration includes feldspathization and chloritization of the quartz veins and bleaching, with associated disseminated pyrite and pyrrhotite, of the hornfels.

BIBLIOGRAPHY

EMPR AR 1918-47
EMPR ASS RPT *7740
EMPR MAP 8
EMPR PF (Sketch Map - Molly Creek Property, 1972)
EMR MP CORPFILE (Canamax Resources Inc.)
GSC MAP 278A; 11-1956; 1136A; 1385A
GSC MEM 329
Placer Dome File

DATE CODED: 1985/10/08
DATE REVISED: 1989/08/11

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 017**

NATIONAL MINERAL INVENTORY: 10319 Au11

NAME(S): **GOLDEN ERA**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103109W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 35 29 N
LONGITUDE: 128 20 36 W
ELEVATION: 520 Metres

NORTHING: 6049521
EASTING: 542431

LOCATION ACCURACY: Within 500M

COMMENTS: Description and sketch map (Minister of Mines Annual Report 1914);
located on the north side of Kleanza Creek.

COMMODITIES: Gold Silver

MINERALS

SIGNIFICANT: Pyrite Arsenopyrite
ASSOCIATED: Quartz
ALTERATION: Malachite Azurite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal
TYPE: I02 Intrusion-related Au pyrrhotite veins
SHAPE: Irregular
MODIFIER: Sheared
DIMENSION:

STRIKE/DIP: 140/40N

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

Cretaceous-Tertiary

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Coast Plutonic Complex

LITHOLOGY: Granodiorite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Plutonic Rocks

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1914

SAMPLE TYPE: Rock

COMMODITY

GRADE

Silver

48.0000

Grams per tonne

Gold

8.9000

Grams per tonne

REFERENCE: Minister of Mines Annual Report 1914.

CAPSULE GEOLOGY

A shear zone within granodiorite of the Cretaceous to Tertiary Coast Plutonic Complex contains a quartz vein mineralized with pyrite, arsenopyrite, and minor azurite and malachite. The main vein strikes 140 degrees and dips 40 degrees northeast. It is about 45 centimetres wide and 60 metres long. A typical sample assayed 8.9 grams per tonne gold and 48 grams per tonne silver (Minister of Mines Annual Report 1914).

BIBLIOGRAPHY

EMPR AR 1914-127,128,Map p. 121
EMPR MAP 8; 69-1
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329

DATE CODED: 1986/12/05
DATE REVISED: 1989/08/10

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 018**

NATIONAL MINERAL INVENTORY: 103110 Ag1

NAME(S): **QUARTZ SILVER**, QS 1-6

MINING DIVISION: Skeena

STATUS: Showing
 REGIONS: British Columbia
 NTS MAP: 10310W
 BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 43 24 N
 LONGITUDE: 128 52 56 W
 ELEVATION: 300 Metres

NORTHING: 6064011
 EASTING: 507586

LOCATION ACCURACY: Within 500M

COMMENTS: Located on the south side of the Nelson River, about 27 kilometres north-northwest of Terrace; location of mineralization from Assessment Report 13455, Figure 2.

COMMODITIES: Silver Lead Zinc Copper Gold

MINERALS

SIGNIFICANT: Pyrite Galena Sphalerite Chalcopyrite Bornite
 Arsenopyrite
 ASSOCIATED: Quartz Calcite Clay Sericite
 ALTERATION TYPE: Silicific'n
 MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
 CLASSIFICATION: Epigenetic Hydrothermal
 TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
 SHAPE: Irregular
 MODIFIER: Sheared
 DIMENSION:

STRIKE/DIP: 155/70W TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Jurassic-Cretaceous	Bowser Lake	Undefined Formation	

LITHOLOGY: Argillite
 Felsic Dike

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
 TERRANE: Bowser Lake

PHYSIOGRAPHIC AREA: Kitimat Ranges

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis
 SAMPLE TYPE: Chip

YEAR: 1985

<u>COMMODITY</u>	<u>GRADE</u>	
Silver	78.9000	Grams per tonne
Gold	0.3400	Grams per tonne
Lead	7.7400	Per cent
Zinc	15.3800	Per cent

COMMENTS: The sample width is 60 centimetres.
 REFERENCE: Assessment Report 13455.

CAPSULE GEOLOGY

The property is underlain by argillites and minor sandstones of the Upper Jurassic to Lower Cretaceous Bowser Lake Group. The sediments are cut by felsite dykes and feldspar porphyry intrusives of the Cretaceous to Tertiary Coast Plutonic Complex. The contact zones of felsite with argillite are commonly altered to clay, sericite and silica and have associated sulphide bearing quartz veins. One such quartz-sulphide vein, striking roughly 155 degrees and dipping 70 degrees to the west, contains galena, sphalerite and chalcopyrite. Pyrite, arsenopyrite, galena, sphalerite and bornite are present in minor amounts as veinlets and as disseminations within the felsite dykes.

A 60 centimetre chip sample assayed 7.74 per cent lead, 15.38 per cent zinc, 78.9 grams per tonne silver and 0.34 grams per tonne gold (Assessment Report 13455).

BIBLIOGRAPHY

EMPR ASS RPT *13455; *16411

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 507
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR EXPL 1984-377; 1987-C360
EMPR GEM 1969-71,72; 1970-97; 1971-116
EMPR MAP 8
EMPR PF (*Cavey, G. and Chapman, J. (1987): Summary Report on the
Quartz-Silver Claims for Mt. Allard Resources Ltd. in Prospectus
for Mt. Allard Resources Ltd., Feb. 15, 1988)
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329
GSC P 36-17, p. 22
PR REL Eagle Plains Resources Ltd., Feb.20, 2003

DATE CODED: 1986/09/02
DATE REVISED: 1989/08/05

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 019**

NATIONAL MINERAL INVENTORY: 103115 Au3

NAME(S): **KALUM LAKE**, PORTLAND, BAV,
GOLD BAR BURN

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 103115W
BC MAP:
LATITUDE: 54 45 04 N
LONGITUDE: 128 48 21 W
ELEVATION: 150 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Located on the west side of Kitsumkalum Lake; location of vein #1 from Assessment Report 13303, Figure 3.

Underground
MINING DIVISION: Skeena
UTM ZONE: 09 (NAD 83)
NORTHING: 6067113
EASTING: 512497

COMMODITIES: Gold Silver Copper Lead Zinc

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Tetrahedrite Gold Galena
Sphalerite
ASSOCIATED: Quartz
ALTERATION: Epidote Chlorite Hematite
ALTERATION TYPE: Propylitic Silicific'n Epidote Argillic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
DIMENSION:
COMMENTS: Main vein. STRIKE/DIP: 037/45S TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Jurassic-Cretaceous Cretaceous-Tertiary	Bowser Lake	Undefined Formation	Coast Plutonic Complex

LITHOLOGY: Granodiorite
Argillite
Greywacke
Conglomerate

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Plutonic Rocks
Bowser Lake
PHYSIOGRAPHIC AREA: Kitimat Trench

INVENTORY

ORE ZONE: PORTLAND
CATEGORY: Inferred
QUANTITY: 9434 Tonnes
COMMODITY: Gold
GRADE: 16.1000 Grams per tonne
REPOR ON: Y
YEAR: 1987
COMMENTS: To a depth of 45 metres.
REFERENCE: Property File - Report by Collins and Arnold, 1987.

CAPSULE GEOLOGY

The area is underlain by Upper Jurassic to Lower Cretaceous sediments of the Bowser Lake Group comprised mainly of argillite, greywackes and conglomerates. Generally, the sediments strike east-west and dip 75 degrees to the north. Stocks comprised of granodiorite, diorite and quartz monzonite of the Late Cretaceous to Tertiary Coast Plutonic Complex intrude the Bowser Lake sediments. Alteration in the granodioritic intrusive is directly related to the density of veining and shearing. The predominant type is propylitic with lesser silicification and epidote-hematite alteration. Two granodioritic stocks, about 2.25 kilometres apart, are exposed and exhibit extensive hydrothermal alteration with associated mineralization. Two epigenetic, steeply dipping, auriferous quartz veins, termed the #1 and #2 veins, are exposed at the main showing. The #1 vein is approximately 30 centimetres wide, strikes 037 degrees and dips 45 degrees southeast. Selected samples from a dump site assayed up to 193 grams per tonne gold and 477 grams per tonne silver (Assessment Report 13303).

CAPSULE GEOLOGY

A parallel vein (#2 vein), 150 metres southwest of the #1 vein, dips 65 degrees southeast and is exposed for about 30 metres along strike with variable thicknesses ranging between 15 to 60 centimetres. Drilling reports indicate that both the #1 and #2 veins steepen to subvertical at depth.

Mineralization within these veins consists of pyrite, chalcopyrite, tetrahedrite, galena, sphalerite and occasional visible gold within a quartz gangue. Selected trench samples assayed up to 251 grams per tonne gold and 226 grams per tonne silver (Assessment Report 13303). A third sub-parallel vein, 10 centimetres in width, parallels the north wall and comes to within 5 centimetres of the #2 vein.

A 52.4 kilogram bulk sample taken from these veins assayed 11.86 grams per tonne gold and 15.43 grams per tonne silver. Reserves reported for the two main veins are estimated at 9434 tonnes grading 16.1 grams per tonne gold to a depth of 45 metres (Collins and Arnold, 1987).

In addition to the main site, a subsidiary mineralized zone is exposed about 2.25 kilometres to the southwest within an intensely altered granodiorite intrusive (refer to Burn - 103I 211).

Shipments of selected ore were made in 1940, 1941 and 1945, totalling 15.75 tonnes with 781 grams of gold, 1223 grams of silver and 2173 kilograms of copper (Minister of Mines Annual Reports 1940, 1941 and 1945).

BIBLIOGRAPHY

- EMPR AR 1922-47-49; 1923-48; 1924-48; 1925-69; 1926-74; 1927-63; 1928-422; 1930-74; 1940-53; 1941-41,42; 1945-52
EMPR ASS RPT 8299, *13303, *16026
EMPR EXPL 1980-397; 1984-377; 1987-C359
EMPR MAP 8
EMPR PF (*Collins, D.A. and Arnold, R.R., (1987): Report on the Kalum Lake Property, in Statement of Material Facts #31/88 for Terracamp Developments Ltd., Apr. 25, 1988; *Cavey, G. and Chapman, J., (1987): Report on the 1987 Drilling Program for the Kalum Lake Claims, in Prospectus for Terracamp Developments Ltd., Jul. 22, 1987; Statement of Material Facts #52/88 for Terracamp Developments Ltd., Jun. 15, 1988)
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM *205, pp.15-17; 329, p. 75
GSC P 36-17, p. 22-24; 36-20, p. 31
GSC SUM RPT 1923A, p. 42
GCNL #214, 1985; #174, 1987
PR REL Eagle Plains Resources Ltd., Feb.20, 2003

DATE CODED: 1986/09/23
DATE REVISED: 1989/08/01

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 020**

NATIONAL MINERAL INVENTORY: 103115 Au1

NAME(S): **MARTIN, NOBLE, REX,**
GLEN NO.1

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103115W
BC MAP:

MINING DIVISION: Skeena

LATITUDE: 54 48 29 N
LONGITUDE: 128 55 26 W
ELEVATION: 840 Metres

UTM ZONE: 09 (NAD 83)

NORTHING: 6073435
EASTING: 504892

LOCATION ACCURACY: Within 500M
COMMENTS: Symbol, Map 1136A (Geological Survey of Canada Memoir 329).

COMMODITIES: Gold Silver Lead

MINERALS

SIGNIFICANT: Pyrrhotite Pyrite Arsenopyrite Galena Sphalerite

Chalcopyrite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Massive
CLASSIFICATION: Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
SHAPE: Regular
MODIFIER: Sheared
DIMENSION:

STRIKE/DIP: 015/55W

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

Jurassic-Cretaceous
Cretaceous-Tertiary

GROUP

Bowser Lake

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Coast Plutonic Complex

LITHOLOGY: Granodiorite
Greywacke

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Plutonic Rocks

Bowser Lake

PHYSIOGRAPHIC AREA: Kitimat Ranges

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1928

SAMPLE TYPE: Chip

COMMODITY

GRADE

Silver

137.0000

Grams per tonne

Gold

8.2000

Grams per tonne

Lead

4.0000

Per cent

COMMENTS: The sample width is 30.0 centimetres.

REFERENCE: Minister of Mines Annual Report 1928.

CAPSULE GEOLOGY

Jurassic to Cretaceous Bowser Lake Group sediments, predominately greywacke, are intruded by granodiorite of the Cretaceous to Tertiary Coast Plutonic Complex. Gold bearing quartz veins occur near the contact.

The main vein strikes 015 degrees and dips 55 degrees north-west. It follows a shear zone in granodiorite for 100 metres and is up to 0.5 metres wide. Mineralization consists of pyrrhotite, arsenopyrite, galena, pyrite, sphalerite and chalcopyrite. A 30.0 centimetre sample assayed 8.2 grams per tonne gold, 137 grams per tonne silver and 4.0 per cent lead (Minister of Mines Annual Report 1928).

A second parallel vein, 50 metres from the main vein assayed 6.8 grams per tonne gold and 12.3 grams per tonne silver over 0.18 metres (Geological Survey of Canada Memoir 205). This quartz vein occurs in greywacke and consists largely of massive arsenopyrite.

BIBLIOGRAPHY

EMPR AR 1922-48; 1923-49; 1924-48; 1925-69; 1926-73,74; *1928-71;
1967-53

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 511
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR ASS RPT 10523
EMPR GEM 1970-96
EMPR MAP 8
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM *205, p. 23; 329 pp. 74,75
GSC P 36-17, pp. 37,38
PR REL Eagle Plains Resources Ltd., Feb.20, 2003

DATE CODED: 1986/09/24
DATE REVISED: 1989/08/10

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 021**

NATIONAL MINERAL INVENTORY: 103115 Cu1

NAME(S): **MACEX**, LC, EGAN

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103115W
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 53 19 N
LONGITUDE: 128 59 22 W
ELEVATION: 750 Metres

NORTHING: 6082396
EASTING: 500677

LOCATION ACCURACY: Within 500M

COMMENTS: Centre of molybdenite zone, Figure 3 (Assessment Report 8446).
Located on the south side of Little Cedar River.

COMMODITIES: Copper Molybdenum

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Molybdenite Ferrimolybdite Pyrrhotite
Magnetite
ASSOCIATED: Quartz
ALTERATION: Sericite Chlorite Silica
ALTERATION TYPE: Sericitic Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: L05 Porphyry Mo (Low F- type) L04 Porphyry Cu ± Mo ± Au
SHAPE: Irregular
MODIFIER: Sheared

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Jurassic-Cretaceous Eocene	Bowser Lake	Undefined Formation	Unnamed/Unknown Informal

LITHOLOGY: Argillite
Greywacke
Siltstone
Quartz Monzonite
Granodiorite
Biotite Hornfels

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Bowser Lake
METAMORPHIC TYPE: Contact
COMMENTS: Bowser Lake rocks overlie the Stikina Terrane rock assemblage.

PHYSIOGRAPHIC AREA: Kitimat Ranges
RELATIONSHIP:
GRADE: Hornfels

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
YEAR: 1980
CATEGORY: Assay/analysis
SAMPLE TYPE: Rock
COMMODITY
Copper 0.0600 Per cent
Molybdenum 0.0200 Per cent

COMMENTS: Average grade of mineralization.
REFERENCE: Assessment Report 8446.

CAPSULE GEOLOGY

Upper Jurassic to Cretaceous black carbonaceous argillites and greywackes of the Bowser Lake Group are intruded by porphyritic quartz monzonite of probable Eocene age. Granodiorite of the Cretaceous to Tertiary Coast Plutonic Complex lies to the west. The sediments trend north-northeast to north-northwest with moderate to steep west dips. They are locally graphitic and are weakly to moderately altered to biotite hornfels near the intrusive rocks. The plug-like and dyke-like intrusions of quartz monzonite are strung out in a north-northeast direction.

Abundant quartz veins occur over an area of at least 1500 by 1000 metres with prominent 104 degree trends and steep dips. Sulphides are present in about 20 per cent of the veins. Molybdenite and chalcopyrite occur in a 250 metre zone of quartz

CAPSULE GEOLOGY

veins within bleached and sheared argillite and siltstone. Grades average 0.02 per cent molybdenite and 0.06 per cent copper (Assessment Report 8446).

Silicification occurs along many of the joint planes and is associated with the sulphide mineralization. Pyrite is the most common with minor chalcopyrite occurring as disseminations in the altered host rock and within the quartz veining. Molybdenite and possibly ferrimolybdite, occur in the quartz veins or in quartz-chlorite lenses where they form disseminations of 1-2 millimetre flakes. Pyrrhotite and magnetite are present as minor constituents in the altered host rock.

BIBLIOGRAPHY

EMPR AR 1968-69
EMPR ASS RPT 2029, 7570, *8446
EMPR EXPL 1979-255; 1980-398
EMPR GEM 1969-71
EMPR MAP 8
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329
*McBride, D.E. (1972): The Macex Deposit, British Columbia; MSc Thesis, Queens University, Kingston, Ontario

DATE CODED: 1986/09/17
DATE REVISED: 1989/08/10

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 022**

NATIONAL MINERAL INVENTORY: 103115 Ag1

NAME(S): **HOPE SILVER**, SILVER COIN, SILVER DOLLAR,
IONA, SILVER PLATE, SILVER CUP

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 103115W
BC MAP:
LATITUDE: 54 57 24 N
LONGITUDE: 128 53 27 W
ELEVATION: 330 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Showings Figures 2, 14 (Geological Survey of Canada Memoir 205).

Underground
MINING DIVISION: Skeena
UTM ZONE: 09 (NAD 83)
NORTHING: 6089975
EASTING: 506991

COMMODITIES: Silver Copper Lead Zinc Gold

MINERALS

SIGNIFICANT: Pyrite Galena Chalcopyrite Sphalerite Tetrahedrite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated Breccia
CLASSIFICATION: Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
SHAPE: Regular
MODIFIER: Sheared Other
DIMENSION: STRIKE/DIP: 070/70S TREND/PLUNGE:
COMMENTS: The modifier is also brecciated.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Jurassic-Cretaceous Bowser Lake Undefined Formation

LITHOLOGY: Argillite
Greywacke
Siltstone
Andesitic Dike
Quartz Monzonitic Dike
Breccia

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Kitimat Trench
TERRANE: Bowser Lake

INVENTORY

ORE ZONE: VEIN REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1969
SAMPLE TYPE: Chip
COMMODITY GRADE
Silver 432.0000 Grams per tonne
Copper 0.7600 Per cent
Lead 1.9000 Per cent
Zinc 6.7000 Per cent
COMMENTS: The sample width is 4.5 metres.
REFERENCE: Geology, Exploration and Mining in British Columbia, 1969.

CAPSULE GEOLOGY

The area is underlain by northeast striking, moderately north-west dipping siltstones and greywackes of the Jurassic to Cretaceous Bowser Lake Group. The sediments are intruded by andesite and quartz monzonite dykes.

A 6 to 9 metre wide breccia zone, bounded by 0.3 to 0.6 metre wide quartz veins, follow a northeast striking, southeast steeply dipping shear zone within the sediments. The quartz veins are exposed for about 100 metres and are mineralized with pyrite, chalcopyrite, galena, sphalerite and tetrahedrite. A 4.5 metre chip sample assayed 432 grams per tonne silver, 6.7 per cent zinc, 1.9 per cent lead, 0.76 per cent copper and trace gold (Geology, Exploration and Mining in B.C. 1969).

Shear zones of similar strike and dip, with associated quartz-breccia veins occur over several hundred metres southeast of the main showing.

CAPSULE GEOLOGY

In 1966, 5 tonnes of sorted ore were shipped from this property. From this ore 7,527 grams of silver, 151 kilograms of copper, and 292 kilograms of lead were recovered.

BIBLIOGRAPHY

EMPR AR 1913-78; 1914-109; 1918-50; 1921-44,45; 1922-49; 1923-49;
1924-48; 1925-70; 1926-74; 1966-51
EMPR GEM *1969-70,71; 1970-95; 1971-118; 1972-501
EMPR MAP 8
EMPR PF (Bates, R.H. c1970: Plan Map, Kleanza Mines Ltd.)
EMR MP CORPFILE (Kendal Mining & Exploration Company Limited)
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM *205, pp. 11-13; 329, p. 73
GSC P 36-17, pp. 18,19
GSC SUM RPT 1922A, p. 48
Placer Dome File
Chevron File

DATE CODED: 1986/09/25
DATE REVISED: 1989/08/10

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 023**

NATIONAL MINERAL INVENTORY: 103115 Mo1

NAME(S): **BIG JOE** BIG, JOE

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103115W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 57 29 N
LONGITUDE: 128 50 37 W
ELEVATION: 440 Metres

NORTHING: 6090135
EASTING: 510014

LOCATION ACCURACY: Within 500M

COMMENTS: Centre of intrusive, Figure 21 (Geology, Exploration and Mining in B.C. 1971).

COMMODITIES: Molybdenum

MINERALS

SIGNIFICANT: Molybdenite

ASSOCIATED: Quartz Sericite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: L05 Porphyry Mo (Low F- type)
SHAPE: Irregular
MODIFIER: Fractured

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

Jurassic-Cretaceous
Tertiary

GROUP

Bowser Lake

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Unnamed/Unknown Informal

LITHOLOGY: Granodiorite
Quartz Monzonite
Argillaceous Siltstone
Greywacke
Hornfels

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Bowser Lake

METAMORPHIC TYPE: Contact

PHYSIOGRAPHIC AREA: Kitimat Trench

RELATIONSHIP:

GRADE: Hornfels

CAPSULE GEOLOGY

Thin-bedded, argillaceous siltstones and greywackes of the Jurassic to Cretaceous Bowser Lake Group are intruded by a 300 by 800 metre size stock consisting of mainly granodiorite with gradations to quartz monzonite. A 45 to 60 metre hornfels halo extends from the northeast trending stock.

Molybdenite mineralization occurs in the intrusive as selvages along widely spaced, 1.2 to 2.5 centimetre wide milky white quartz veins, as disseminations in aplite stringers, and as coatings on fracture planes with sericite.

BIBLIOGRAPHY

EMPR AR 1966-51; 1967-53
EMPR ASS RPT 857
EMPR GEM *1971-116-118
EMPR MAP 8
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329
CIM Special Vol. 15, 1976, Map B

DATE CODED: 1986/09/25
DATE REVISED: 1989/08/10

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 024**

NATIONAL MINERAL INVENTORY: 103115 Cu2

NAME(S): **SEPTEMBER**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103115E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 54 39 N
LONGITUDE: 128 36 41 W
ELEVATION: 1220 Metres

NORTHING: 6084938
EASTING: 524914

LOCATION ACCURACY: Within 500M

COMMENTS: Symbol 7, Geological Survey of Canada Map 1136A. Located at the head of Lorne Creek.

COMMODITIES: Silver

MINERALS

SIGNIFICANT: Pyrite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
SHAPE: Irregular

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Jurassic-Cretaceous

GROUP

Bowser Lake

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Tuff

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Bowser Lake

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Channel

YEAR: 1937

COMMODITY

GRADE

Silver

17.0000

Grams per tonne

COMMENTS: Two channel samples assayed less than 17 grams per tonne silver.

REFERENCE: GSC Memoir 212, page 46.

CAPSULE GEOLOGY

Quartz veins carrying pyrite occur in gently dipping volcanic tuffs of the Jurassic to Cretaceous Bowser Lake Group. The veins, up to a metre in width, strike north and dip 50 to 70 degrees east. Two channel samples assayed less than 17 grams per tonne silver (Geological Survey of Canada Memoir 212).

BIBLIOGRAPHY

EMPR MAP 8
GSC MAP 1136A; 11-1956; 278A; 1385A
GSC MEM *212, p. 46; 329, p. 93

DATE CODED: 1986/10/14
DATE REVISED: 1989/08/10

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 025**

NATIONAL MINERAL INVENTORY: 103115 Cu3

NAME(S): **JULY**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103115E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 53 39 N
LONGITUDE: 128 37 36 W
ELEVATION: 1200 Metres

NORTHING: 6083078
EASTING: 523944

LOCATION ACCURACY: Within 500M
COMMENTS: Symbol 8, Geological Survey of Canada Map 1136A.

COMMODITIES: Copper Silver

MINERALS

SIGNIFICANT: Chalcopyrite Pyrite Pyrrhotite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: 105 Polymetallic veins Ag-Pb-Zn±Au
SHAPE: Irregular

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Jurassic-Cretaceous	Bowser Lake	Undefined Formation	

LITHOLOGY: Tuff
Quartz Vein

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Bowser Lake

PHYSIOGRAPHIC AREA: Hazelton Ranges

CAPSULE GEOLOGY

Three quartz veins, 8 to 15 centimetres wide and 4.6 metres apart, occur in tuffs of the Jurassic to Cretaceous Bowser Lake Group. The strata strikes 120 degrees and dips 10 degrees north. Mineralization consists of pyrite, chalcopyrite and pyrrhotite with low values of silver.

BIBLIOGRAPHY

EMPR MAP 8
GSC MAP 1136A; 11-1956; 278A; 1385A
GSC MEM *212, pp. 46,47; 329, p. 93

DATE CODED: 1986/10/14
DATE REVISED: 1989/08/10

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 026**

NATIONAL MINERAL INVENTORY: 103115 Ag3

NAME(S): **BERMALINE**, GRANITE, FRANKIE BLUE

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103115E
BC MAP:
LATITUDE: 54 52 19 N
LONGITUDE: 128 38 06 W
ELEVATION: 1480 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Mineralized vein.

MINING DIVISION: Omineca
Skeena
UTM ZONE: 09 (NAD 83)
NORTHING: 6080603
EASTING: 523423

COMMODITIES: Silver Lead Copper Gold Zinc
 Molybdenum

MINERALS

SIGNIFICANT: Galena Pyrite Chalcopyrite Sphalerite Molybdenite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
 TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
SHAPE: Irregular
MODIFIER: Sheared

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Jurassic-Cretaceous Bowser Lake Undefined Formation

LITHOLOGY: Argillite
 Greywacke

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Hazelton Ranges
TERRANE: Bowser Lake

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N

CATEGORY: Assay/analysis YEAR: 1937
SAMPLE TYPE: Chip
COMMODITY GRADE
Silver 108.0000 Grams per tonne
Gold 2.1000 Grams per tonne
Copper 4.4400 Per cent
Lead 9.0600 Per cent
Zinc 0.4000 Per cent

COMMENTS: The sample width is 1.2 metres.
REFERENCE: Geological Survey of Canada Memoir 212.

CAPSULE GEOLOGY

Jurassic to Cretaceous Bowser Lake Group argillites and greywackes are intruded by granodiorite and quartz monzonite stocks and sills. The sediments are cut by shear zones and mineralized quartz veins, between 1470 and 1650 metres elevation and between the headwaters of Douglas and Lorne Creeks. Mineralization consists of galena, pyrite, chalcopyrite and minor sphalerite in the quartz veins and disseminated molybdenite near shear zones.

A 1.0 metre sample taken in 1932, across a vein, assayed 3 per cent lead, 103 grams per tonne silver and 20.6 grams per tonne gold (Bulletin 1). In 1937, a 1.2 metre chip sample assayed 9.06 per cent lead, 4.44 per cent copper, 108 grams per tonne silver, 0.4 per cent zinc and 2.1 grams per tonne gold (Geological Survey of Canada Memoir 212).

BIBLIOGRAPHY

EMPR AR *1930-137,138; 1931-71; 1954-64
EMPR ASS RPT 8315
EMPR BULL *1, 1932, pp. 51,56,57
EMPR EXPL 1980-399
EMPR MAP 8

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 520
REPORT: RGEN0100

BIBLIOGRAPHY

GSC MAP 278A; 11-1956; 1136A; 1385A
GSC MEM *212, pp. 45,46, Fig. 10; 329
GSC P 36-20, p. 49; 36-17

DATE CODED: 1986/10/14
DATE REVISED: 1989/08/10

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 028**

NATIONAL MINERAL INVENTORY: 103115 Au6

NAME(S): **GOLD CAP**, GOLDEN EAGLE, GOLD CUP

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103115E
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 49 14 N
LONGITUDE: 128 38 36 W
ELEVATION: 1340 Metres

NORTHING: 6074882
EASTING: 522917

LOCATION ACCURACY: Within 500M

COMMENTS: Vein, Figure 5, (Geological Survey of Canada Memoir 205); located on the north side of Maroon Mountain.

COMMODITIES: Gold Silver Lead Zinc Copper

MINERALS

SIGNIFICANT: Galena Chalcopyrite Sphalerite Pyrite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Concordant
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
DIMENSION:

STRIKE/DIP: 030/15S

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Jurassic-Cretaceous

GROUP

Bowser Lake

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Argillite
Greywacke
Conglomerate
Black Carbonaceous Shale

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Bowser Lake

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1937

SAMPLE TYPE: Grab

COMMODITY

GRADE

Silver

18.5000

Grams per tonne

Gold

2.0600

Grams per tonne

COMMENTS: The sample weighed 0.82 kilograms.

REFERENCE: Geological Survey of Canada Memoir 205.

CAPSULE GEOLOGY

The area is underlain by argillite, greywacke, and conglomerate of the Jurassic to Cretaceous Bowser Lake Group. Narrow quartz veins lie conformably below a 35 to 75 metre wide conglomerate bed which strikes northeast and dips 50 to 75 degrees southeast. The veins are mineralized with galena, sphalerite, pyrite, and pyrrhotite, and minor chalcopyrite.

The Gold Cap veins consist of a 90 metre continuation of the Bear vein (1031 029), to the west and a 30 metre long vein, 120 metres to the east. The vein to the west is 5 to 15 centimetres wide and strikes 030 degrees with a 15 degree south east dip. It follows a narrow seam of soft, black, carbonaceous shale, overlain by greywacke. A 0.82 kilogram sample assayed 2.06 grams per tonne gold and 18.5 grams per tonne silver (Geological Survey of Canada Memoir 205).

BIBLIOGRAPHY

EMPR AR 1921-43; 1922-49; 1923-47; 1924-47; 1930-76
EMPR ASS RPT 21742
EMPR BULL 1, 1932, pp. 22,30
EMPR MAP 8
EMPR OF 1994-14
GSC MAP 1136A; 11-1956; 278A; 1385A

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 523
REPORT: RGEN0100

BIBLIOGRAPHY

GSC MEM *205, p. 19; 329, pp. 75,76
GSC P 36-17, p. 28
GSC SUM RPT 1923, pp. 42-44

DATE CODED: 1986/10/15
DATE REVISED: 1989/08/10

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 029**

NATIONAL MINERAL INVENTORY: 103115 Au4

NAME(S): **BEAR**, BLACK BEAR, HAWK (L.6792)

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 103115E
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 48 59 N
LONGITUDE: 128 39 07 W
ELEVATION: 1400 Metres

NORTHING: 6074415
EASTING: 522366

LOCATION ACCURACY: Within 500M

COMMENTS: Adits, Figure 5 (Geological Survey of Canada Memoir 205).

COMMODITIES: Gold Silver Lead Zinc Copper
 Tungsten

MINERALS

SIGNIFICANT: Galena Sphalerite Pyrite Chalcopyrite Pyrrhotite
 Gold Scheelite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Concordant
CLASSIFICATION: Hydrothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
DIMENSION: 0300 x 0024 x 0001 Metres

STRIKE/DIP: 030/55E TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Jurassic-Cretaceous Bowser Lake Undefined Formation

LITHOLOGY: Argillite
 Greywacke
 Conglomerate

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Bowser Lake

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1930

SAMPLE TYPE: Chip

COMMODITY

GRADE

Silver	69.0000	Grams per tonne
Gold	17.0000	Grams per tonne
Lead	1.2000	Per cent
Zinc	6.0000	Per cent

COMMENTS: The sample width is 40.0 centimetres.

REFERENCE: Minister of Mines Annual Report 1930.

CAPSULE GEOLOGY

The area is underlain by argillite, greywacke and conglomerate of the Jurassic to Cretaceous Bowser Lake Group. Narrow quartz veins lie conformably below a 35 to 75 metre wide conglomerate bed which strikes northeast and dips 50 to 75 degrees southeast. The veins are mineralized with galena, sphalerite, pyrite and pyrrhotite and minor chalcopyrite.

The Bear vein system is 0.5 to 2.0 metres wide and is about 350 metres long. It strikes 060 to 070 degrees and dips across foliation at 50 to 80 degrees southeast, parallel to subparallel to bedding, for at least 24 metres. Foliation in the argillite strike 074 to 084 degrees, dipping 55 to 60 degrees north. The veining is disrupted by a 1.2 to 3.6 metre wide aplite dike which crosses and recrosses the vein. Wherever the dike crosses the veining, folding of the veins and concentrations of sulphides (galena, sphalerite, pyrite, chalcopyrite) occur.

A 40 centimetre sample of the vein assayed 17 grams per tonne gold, 69 grams per tonne silver, 1.2 per cent lead and 6.0 per cent zinc (Minister of Mines Annual Report 1930). A grab sample of the dump assayed 14.4 grams per tonne gold, 823 grams per tonne silver, 4.24 per cent lead, 4.40 per cent zinc and 0.02 per cent copper

CAPSULE GEOLOGY

(Geological Survey of Canada Memoir 329). Scheelite has been reported occurring in the vein.

In 1991, rock-saw channel cuts were sampled across the mineralization in five separate locations along the length of the shear/vein system. One sample across 1.5 metres assayed 8.5 grams per tonne gold and 16.7 grams per tonne silver (Assessment Report 21742).

Seymour Exploration Corp. drilled 2 core holes in 2002 from a set-up 65 metres southeast of the uppermost adit. One hole intersected 0.61-metre of vein grading 26 grams per tonne gold. The second hole intersected two smaller veins (Press Release Seymour Exploration Corp., October 23, 2002).

BIBLIOGRAPHY

EMPR AR 1914-111; 1919-43; 1920-41,42; 1921-43,44; 1922-47; 1923-47;
1924-47; 1925-68; 1926-73; 1927-63,64; *1928-72; 1930-75,76;
1931-36; 1932-51
EMPR ASS RPT *21742
EMPR BULL 1, 1932, pp. 22,30; 10, 1943, p. 58
EMPR GEM 1970-97
EMPR MAP 8
EMPR OF 1991-17; 1994-14
GSC MAP 11-1956; 36-17; 1136A; 278A; 1385A
GSC MEM *205, pp. 17-19; 329, pp. 75,76
GSC P 36-17, pp. 25-27; *36-20, pp. 44-47
GSC SUM RPT 1922A, p. 49; 1923A, pp. 42-44
PR REL Seymour Exploration Corp., Oct. 23, 2002

DATE CODED: 1986/10/15
DATE REVISED: 1989/08/10

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 030**

NATIONAL MINERAL INVENTORY: 103115 Au5

NAME(S): **BLACK WOLF**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 103115E
BC MAP:

Underground

MINING DIVISION: Skeena

LATITUDE: 54 48 39 N
LONGITUDE: 128 39 37 W
ELEVATION: 1430 Metres

UTM ZONE: 09 (NAD 83)

NORTHING: 6073794
EASTING: 521834

LOCATION ACCURACY: Within 500M

COMMENTS: Middle Adit, Figure 5 (Geological Survey of Canada Memoir 205).

COMMODITIES: Gold Silver Lead Zinc Copper

MINERALS

SIGNIFICANT: Galena Sphalerite Pyrite Gold Chalcopyrite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Concordant
CLASSIFICATION: Hydrothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

DIMENSION:
COMMENTS: Vein cutting conglomerate bed.

STRIKE/DIP: 110/40W

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Jurassic-Cretaceous

GROUP

Bowser Lake

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Argillite
Greywacke
Conglomerate
Argillaceous Sandstone
Slate

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Bowser Lake

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: VEIN

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1927

SAMPLE TYPE: Chip

COMMODITY

GRADE

Silver	68.6000	Grams per tonne
Gold	36.3000	Grams per tonne
Lead	1.0000	Per cent
Zinc	5.0000	Per cent

COMMENTS: 30 centimetre sample

REFERENCE: Minister of Mines Annual Report 1927, page 64.

CAPSULE GEOLOGY

The area is underlain by argillite, greywacke, and conglomerate of the Jurassic to Cretaceous Bowser Lake Group. Narrow quartz veins lie conformably below a 35 to 75 metre wide conglomerate bed which strikes northeast and dips 50 to 75 degrees southeast. The veins are mineralized with galena, sphalerite, pyrite, and pyrrotite, and minor chalcopyrite.

The Black Wolf quartz veins occur parallel to the bedding in underlying argillaceous sandstones and slates about 15 metres below a conglomerate bed which dips 15 degrees to the east. One vein occurs in a fracture cutting the conglomerate. The vein averages 30 centimetres wide, is 60 metres long, and strikes 110 degrees with a 40 degree north dip. A 30 centimetre sample assayed 36.3 grams per gold, 68.6 grams per tonne silver, 1 per cent lead, and 5 per cent zinc (Minister of Mines Annual Report 1927).

The concordant veins are 180 to 280 metres to the north and strike southeast. They are up to 120 metres long and 10 to 25 centimetres wide. An 18 centimetre sample assayed 2.1 grams per tonne gold and 7.5 grams per tonne silver (Geological Survey of Canada Memoir 205). A one metre wide aplite dyke occurs 90 metres to the

CAPSULE GEOLOGY

west and carries minor gold and silver.
In 1928, 23 tonnes of ore were shipped from this property. From this ore 1151 grams of gold, 3577 grams of silver, 1103 kilograms of lead and 1905 kilograms of zinc were recovered.

BIBLIOGRAPHY

EMPR AR 1914-111; 1921-43; 1922-49; 1923-48; 1924-47,48; 1925-68,69;
1926-73; 1927-64,397; 1928-73; 1930-74,75; 1931-36; 1932-51
EMPR ASS RPT 21742
EMPR BULL 1, 1932, pp. 22,30
EMPR MAP 8
EMPR OF 1994-14
GSC MAP 278A; 1136A; 11-1956; 1385A
GSC MEM *205, pp. 20,21; 329, pp. 75,76
GSC P 36-17, pp. 30-32; *36-20, pp. 44-46
GSC SUM RPT 1923, pp. 42-44

DATE CODED: 1986/10/15
DATE REVISED: 1989/08/10

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 031**

NATIONAL MINERAL INVENTORY: 103115 Ag4

NAME(S): **MOTHERLODE**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103115E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 46 59 N
LONGITUDE: 128 41 16 W
ELEVATION: 1670 Metres

NORTHING: 6070695
EASTING: 520080

LOCATION ACCURACY: Within 500M

COMMENTS: Symbol 17 (Geological Survey of Canada Map 1136A).

COMMODITIES: Silver Gold Zinc Copper Lead

MINERALS

SIGNIFICANT: Sphalerite Galena Chalcopryite Tetrahedrite Silver

Pyrrhotite Pyrite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein

CLASSIFICATION: Hydrothermal

TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

COMMENTS: Blocks of float with unfound source.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Jurassic-Cretaceous

Bowser Lake

Undefined Formation

LITHOLOGY: Argillite

Slate

Quartz Diorite

Hornblende Gabbro

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Bowser Lake

Plutonic Rocks

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1930

SAMPLE TYPE: Rock

COMMODITY

GRADE

Silver

651.0000

Grams per tonne

Gold

1.4000

Grams per tonne

Copper

0.0300

Per cent

Zinc

4.4000

Per cent

REFERENCE: Minister of Mines Annual Report 1930.

CAPSULE GEOLOGY

The area is underlain by slates and argillites of the Jurassic to Cretaceous Bowser Lake Group. The sediments, which strike 40 degrees and dip 25 degrees northwest, are intruded by a small quartz diorite stock and a coarsely crystalline hornblende gabbro dyke.

Talus blocks of vein quartz are mineralized with pyrite, sphalerite, galena, and tetrahedrite. A sample assayed 651 grams per tonne silver, 1.4 grams per tonne gold, 4.4 per cent zinc, 0.03 per cent copper and trace lead (Minister of Mines Annual Report 1930). The source vein has not been located.

BIBLIOGRAPHY

EMPR AR 1920-41; 1921-43; 1922-49; 1923-48; 1924-48; 1925-69;

1926-74; 1927-64,397; 1930-74; 1931-36; 1932-51

EMPR MAP 8

GSC MAP 11-1956; 278A; 1136A; 1385A

GSC MEM *205, pp. 21,22; 329, pp. 76,77

GSC P 36-17, pp. 33,34

GSC SUM RPT 1923A, pp. 42-44

DATE CODED: 1986/10/15

CODED BY: LDJ

FIELD CHECK: N

DATE REVISED: 1989/08/10

REVISED BY: LLD

FIELD CHECK: N

MINFILE NUMBER: **1031 031**

MINFILE NUMBER: **1031 032**

NATIONAL MINERAL INVENTORY: 103115 Cu6

NAME(S): **LUCY O'NEILL**, KEYSTONE

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103115E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 45 39 N
LONGITUDE: 128 36 46 W
ELEVATION: 680 Metres

NORTHING: 6068246
EASTING: 524917

LOCATION ACCURACY: Within 500M

COMMENTS: Description (Geological Survey of Canada Memoir 205).

COMMODITIES: Copper Silver Gold

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein

CLASSIFICATION: Hydrothermal

TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb)

I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

Cretaceous-Tertiary

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Coast Plutonic Complex

LITHOLOGY: Diorite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Plutonic Rocks

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1937

SAMPLE TYPE: Channel

COMMODITY

GRADE

Silver

27.6000

Grams per tonne

Gold

0.5000

Grams per tonne

Copper

2.6800

Per cent

COMMENTS: The sample width is 1.37 metres.

REFERENCE: Geological Survey of Canada Memoir 205.

CAPSULE GEOLOGY

A 0.9 to 1.4 metre wide quartz vein, mineralized with pyrite and chalcopyrite, occurs in massive grey diorite of the Cretaceous to Tertiary Coast Plutonic Complex. The vein is on the lower side of a dark, fine-grained diabase dyke, about 1 metre wide, that strikes 150 degrees and dips 60 degrees northeast. A 1.37 metre channel sample assayed 27.6 grams per tonne silver, 2.68 per cent copper and 0.5 grams per tonne gold (Geological Survey of Canada Memoir 205).

BIBLIOGRAPHY

EMPR AR *1921-44; 1922-49; 1923-48; 1924-48; 1925-70

EMPR MAP 8

GSC MAP 278A; 1136A; 11-1956; 1385A

GSC MEM *205, pp. 22,23; 329, p. 77

GSC P 36-17, pp. 35,36

GSC SUM RPT 1923, pp. 42-44

DATE CODED: 1986/10/16

DATE REVISED: 1989/08/10

CODED BY: LDJ

REVISED BY: LLD

FIELD CHECK: N

FIELD CHECK: N

MINFILE NUMBER: **1031 033**

NATIONAL MINERAL INVENTORY: 103110 Mo2

NAME(S): **NAR 26**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103110E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 35 29 N
LONGITUDE: 128 32 46 W
ELEVATION: 670 Metres

NORTHING: 6049418
EASTING: 529329

LOCATION ACCURACY: Within 500M

COMMENTS: Rock sample, Figure 6 (Assessment Report 1661).

COMMODITIES: Molybdenum

MINERALS

SIGNIFICANT: Molybdenite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein

CLASSIFICATION: Hydrothermal Epigenetic

TYPE: L05 Porphyry Mo (Low F- type)

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

Cretaceous-Tertiary

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Coast Plutonic Complex

LITHOLOGY: Biotite Granite
Basaltic Dike
Volcanic
Sediment/Sedimentary

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Plutonic Rocks

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1968

SAMPLE TYPE: Chip

COMMODITY

GRADE

Molybdenum

0.4800

Per cent

REFERENCE: Assessment Report 1661.

CAPSULE GEOLOGY

White biotite granite of the Cretaceous to Tertiary Coast Plutonic Complex intrudes Triassic sedimentary and volcanic rocks of the Takla Group, which lie to the northwest and southeast. The rocks are cut by aplite and basalt dykes.

Molybdenite occurs in quartz veins filling flat, widely spaced joint fractures. A rock chip sample assayed 0.48 per cent molybdenum (Assessment Report 1661).

BIBLIOGRAPHY

EMPR AR 1967-53; 1968-68
EMPR ASS RPT *1661
EMPR MAP 8
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329

DATE CODED: 1986/10/09
DATE REVISED: 1989/08/10

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 034**

NATIONAL MINERAL INVENTORY: 103110 Mo2

NAME(S): **NAR 44**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103110E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 35 34 N
LONGITUDE: 128 30 46 W
ELEVATION: 920 Metres

NORTHING: 6049587
EASTING: 531482

LOCATION ACCURACY: Within 500M

COMMENTS: Mineralized zone, Figures 4, 5 (Assessment Report 1661).

COMMODITIES: Molybdenum Copper

MINERALS

SIGNIFICANT: Molybdenite Chalcopyrite Pyrite

ASSOCIATED: Quartz

COMMENTS: Alteration minerals are not identified.

ALTERATION TYPE: Argillic Potassic

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein

CLASSIFICATION: Hydrothermal

TYPE: L05 Porphyry Mo (Low F- type)

SHAPE: Irregular

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Cretaceous-Tertiary

Coast Plutonic Complex

LITHOLOGY: Biotite Granite
Basalt Dike

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Plutonic Rocks

PHYSIOGRAPHIC AREA: Hazelton Ranges

CAPSULE GEOLOGY

White biotite granite of the Cretaceous to Tertiary Coast Plutonic Complex intrudes Triassic sedimentary and volcanic rocks of the Takla Group, which lie to the northwest and southeast. The rocks are cut by associated aplite and basalt dykes.

Molybdenite occurs in quartz veins within the granite, along a 600 metre, northwest trending zone of intense shearing, and argillic and K-feldspar alteration. Less commonly, it occurs along fractures in the aplitic dykes. Chalcopyrite, in trace amounts, is sometimes associated with the molybdenum and pyrite occurs in all rock types.

BIBLIOGRAPHY

EMPR AR 1967-53; 1968-68
EMPR ASS RPT *1661
EMPR MAP 8
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329

DATE CODED: 1986/10/09
DATE REVISED: 1989/08/10

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 035**

NATIONAL MINERAL INVENTORY:

NAME(S): **OAKWOOD**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103110E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 31 19 N
LONGITUDE: 128 33 56 W
ELEVATION: 250 Metres

NORTHING: 6041683
EASTING: 528120

LOCATION ACCURACY: Within 500M

COMMENTS: Description and Figure 14 (Geological Survey of Canada Memoir 205).

COMMODITIES: Silver

MINERALS

SIGNIFICANT: Pyrite
ASSOCIATED: Quartz Specularite
ALTERATION: Hematite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
SHAPE: Irregular
MODIFIER: Sheared

HOST ROCK

DOMINANT HOSTROCK: Plutonic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Cretaceous-Tertiary			Coast Plutonic Complex

LITHOLOGY: Granodiorite
Quartz Albite Dike

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Plutonic Rocks

PHYSIOGRAPHIC AREA: Kitimat Trench

CAPSULE GEOLOGY

Granodiorite of the Cretaceous to Tertiary Coast Plutonic Complex is cut by shear zones and a quartz albite dyke. Quartz veins up to 20 centimetres wide, associated with these features, contain pyrite and hematite. A channel sample assayed trace silver (Geological Survey of Canada Memoir 205).

BIBLIOGRAPHY

EMPR AR 1923-49; 1925-68
EMPR MAP 8
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM *205, pp. 24,25, Fig 14; 329
GSC P 36-17, p. 41

DATE CODED: 1986/10/09
DATE REVISED: 1989/08/10

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 036**

NATIONAL MINERAL INVENTORY: 10319 Cu5

NAME(S): **NUGGET**, GOLD STAR

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103109W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 36 19 N
LONGITUDE: 128 28 16 W
ELEVATION: 570 Metres

NORTHING: 6050997
EASTING: 534163

LOCATION ACCURACY: Within 500M

COMMENTS: Showing #4, Figure 12 (Assessment Report 1090).

COMMODITIES: Copper Gold Silver

MINERALS

SIGNIFICANT: Chalcocite Bornite Gold
ASSOCIATED: Quartz Magnetite Specularite
ALTERATION: Malachite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb)
SHAPE: Irregular
DIMENSION:
COMMENTS: Main vein.

STRIKE/DIP: 360/35W

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Jurassic
Cretaceous-Tertiary

GROUP

Hazelton

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Coast Plutonic Complex

LITHOLOGY: Andesite
Feldspar Porphyry
Granodiorite
Andesite Feldspar Porphyry

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

Plutonic Rocks

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1937

SAMPLE TYPE: Rock

COMMODITY

GRADE

Silver	150.9000	Grams per tonne
Gold	9.6000	Grams per tonne
Copper	4.6000	Per cent

REFERENCE: Geological Survey of Canada Memoir 205.

CAPSULE GEOLOGY

Andesite and andesite feldspar porphyry of the Jurassic Hazelton Group are intruded by granodiorite dykes and sills of the Cretaceous to Tertiary Coast Plutonic Complex. The volcanics are cut by faults, shears, and quartz veins, which contain fracture fills, disseminations, and blebs of chalcocite and bornite and copper staining (malachite). Occasional specks of free gold occur.

The main vein strikes north for 12 metres, adjacent a fault, and dips 35 degrees west. It is about 1 metre wide and a 1.4 kilogram sample assayed 9.6 grams per tonne gold, 150.9 grams per tonne silver and 4.6 per cent copper (Geological Survey of Canada Memoir 205). Other veins are exposed in creek beds over an area measuring 300 by 150 metres.

BIBLIOGRAPHY

EMPR AR 1928-146; *1937-C9,C10; 1939-69; 1967-81
EMPR ASS RPT 999, *1090, 1961, 2719
EMPR GEM 1969-76,77
EMPR MAP 69-1; 8

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

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GEOLOGICAL SURVEY BRANCH
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PAGE: 534
REPORT: RGEN0100

BIBLIOGRAPHY

GSC MAP 1136A; 11-1956; 278A; 1385A
GSC MEM *205, p. 52; 329, p. 86
GSC P 36-17, p. 91; 36-20, pp. 22,23

DATE CODED: 1986/12/12
DATE REVISED: 1989/08/10

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 037**

NATIONAL MINERAL INVENTORY: 10319 Cu5

NAME(S): **COPPER KING**, GOLD STAR

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 103109W
BC MAP:
LATITUDE: 54 36 39 N
LONGITUDE: 128 29 16 W
ELEVATION: 580 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Main vein #7, Figure 12 (Assessment Report 1090).

MINING DIVISION: Omineca
UTM ZONE: 09 (NAD 83)
NORTHING: 6051607
EASTING: 533082

COMMODITIES: Copper Gold Silver

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Bornite Chalcocite
ASSOCIATED: Quartz
ALTERATION TYPE: Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb)
SHAPE: Irregular
MODIFIER: Sheared
DIMENSION:
COMMENTS: Mineralized zone of irregularly distributed quartz veins.
STRIKE/DIP: 065/65N
TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Jurassic
Cretaceous-Tertiary

GROUP

Hazelton

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Coast Plutonic Complex

LITHOLOGY: Andesite
Andesite Feldspar Porphyry
Granodiorite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

Plutonic Rocks

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: VEIN

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Chip

YEAR: 1928

COMMODITY

GRADE

Silver	37.7000	Grams per tonne
Gold	11.7000	Grams per tonne
Copper	1.0000	Per cent

COMMENTS: The sample width is 76.0 centimetres.
REFERENCE: Minister of Mines Annual Report 1928.

CAPSULE GEOLOGY

The area is underlain by andesite and andesite feldspar porphyry of the Jurassic Hazelton Group and is intruded by granodiorite dykes and sills of the Cretaceous to Tertiary Coast Plutonic Complex. The volcanics are cut by faults, shears, and quartz veins, which contain fracture fills, disseminations, and blebs of chalcopyrite, pyrite, bornite, and minor chalcocite. The mineralization is usually close to, or associated with the granodiorite.

The main vein strikes 065 degrees for 40 metres and dips 65 degrees to the northwest. It is 5.5 to 8.2 metres wide and a 76 centimetre wide sample assayed 11.7 grams per tonne gold, 37.7 grams per tonne silver and 1.0 per cent copper (Minister of Mines Annual Report 1928). The mineralized zones are mainly exposed in north trending streams over an area measuring 600 by 300 metres.

BIBLIOGRAPHY

EMPR AR *1914-142,143,Map p. 120; 1923-105; *1928-145,146;
1967-81
EMPR ASS RPT 999, *1090, 1961, 2719

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

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GEOLOGICAL SURVEY BRANCH
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PAGE: 536
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR GEM 1969-76,77
EMPR MAP 69-1; 8
GSC MAP 278A; 11-1956; 1136A; 1385A
GSC MEM *205, pp. 52,53; 329, p. 86
GSC P 36-17, pp. 92,93; 36-20, pp. 22,23

DATE CODED: 1986/12/12
DATE REVISED: 1989/08/10

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 038**

NATIONAL MINERAL INVENTORY: 10319 Cu20

NAME(S): **GOLD STAR**, FRYING PAN, TRIUNE

MINING DIVISION: Omineca

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 103109W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 37 29 N
LONGITUDE: 128 27 56 W
ELEVATION: 1430 Metres

NORTHING: 6053163
EASTING: 534506

LOCATION ACCURACY: Within 500M

COMMENTS: A zone, Figure 22 (Geology, Exploration and Mining in British Columbia 1970).

COMMODITIES: Copper Silver

MINERALS

SIGNIFICANT: Bornite Chalcopyrite
ALTERATION: Pyrite
ALTERATION TYPE: Pyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb)
SHAPE: Irregular
MODIFIER: Sheared
DIMENSION: 0085 x 0045 x 0030 Metres
COMMENTS: A zone.

STRIKE/DIP: TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Permian			Unnamed/Unknown Informal

LITHOLOGY: Dacite
Tuff
Rhyodacite
Basalt
Basaltic Andesite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: A

REPORT ON: N

CATEGORY:	Assay/analysis	YEAR:	1969
SAMPLE TYPE:	Channel		
COMMODITY	GRADE		
Silver	27.4000	Grams per tonne	
Copper	1.0700	Per cent	

COMMENTS: Is the weighted average of channel samples taken every 3 metres over a length of 31 metres and average width of 1.2 metres.

REFERENCE: Assessment Report 2365.

CAPSULE GEOLOGY

Kitselas Mountain is underlain by volcanics and metavolcanics of probable Permian age. The metavolcanics, derived from rhyodacite crystal-lithic tuffs and fragmental tuffs, are cut by basic dykes. The volcanics, consisting of massive basalts and basaltic andesites, apparently unconformably overlie the metavolcanics. The rocks are complexly folded and cut by a northwest striking fault. Northeast of the fault is a 600 by 450 metre mineralized area containing bornite and chalcopyrite as fracture fills and disseminations in the metavolcanics.

In the A zone, mineralization is confined to closely spaced northeast and northwest vertical fractures and shear planes. Channel samples of average width 1.2 metres taken every 3.0 metres over a length of 31 metres assayed 1.07 per cent copper and 27.4 grams per tonne silver. A 6.7 metre chip sample, 85 metres to the east, assayed 1.33 per cent copper and 3.4 grams per tonne silver (Assessment Report 2365). The A zone is about 30 metres wide with an east-west strike

CAPSULE GEOLOGY

length of 85 metres and a vertical expression of 45 metres.

In the B zone, 250 metres southwest of the A zone, disseminated bornite and chalcopyrite occurs along the margins of, and adjacent to basic dykes. Chip sampling over 26.5 metres assayed 0.51 per cent copper and 27.4 grams per tonne silver. Channel samples in the lower B zone assayed 0.02 per cent copper and 41.1 grams per tonne silver over 1.4 metres and 0.02 per cent copper and 6.9 grams per tonne silver over 1.7 metres (Assessment Report 2365).

In the C zone, 500 metres west-southwest of the A zone, minor chalcopyrite occurs in meta-rhyolites adjacent to basic dykes. A 4.6 chip sample assayed 0.08 per cent copper and 13.7 grams per tonne silver (Assessment Report 2365).

The K to M zones, 650 metres south of the A zone, occurs in a felsite rock, which represents bleaching and pyritization of the finer grained grey crystal tuffs adjacent to the major northwest fault zone. A 3 metre sample assayed 0.47 per cent copper and 10.3 grams per tonne silver in one zone (Property File: White, 1970).

BIBLIOGRAPHY

EMPR AR 1919-99; 1929-151
EMPR ASS RPT *2365, 2719
EMPR GEM *1969-76,77; *1970-195-197
EMPR MAP 8; 69-1
EMPR PF (Rpts by *G.E.P. White, 1969,1970; *P.G. Marshall, 1970)
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329
GSC P 36-20, p. 23

DATE CODED: 1986/12/12
DATE REVISED: 1989/08/10

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

CAPSULE GEOLOGY

content was sorted and shipped, and in 1967 about 3 tonnes of sorted ore produced 93 grams of gold, 3,359 grams of silver, and 1,158 kilograms of copper.

BIBLIOGRAPHY

EMPR AR 1918-110,111; 1919-98; 1923-104; 1924-88; 1925-125; 1928-146;
1931-70; 1934-C4; *1937-C7-C9; 1938-B36,C48; 1939-69; 1964-47;
1965-70; 1967-A54
EMPR BULL 10(Rev.), p. 58
EMPR MAP 69-1; 8
EMPR OF 1991-17
EMR MP CORPFILE (Lucky Gold Quartz Inc.)
GSC EC GEOL No. 17, p. 44
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM *205, pp. 49-51; *329, pp. 85,86
GSC P 36-17, pp. 87-89; 36-20, pp. 20,21
GSC SUM RPT 1925A, p. 116
CANMET IR 66-30; 66-31
N MINER June 25, 1942, p. 26

DATE CODED: 1986/12/16
DATE REVISED: 1989/08/10

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 040**

NATIONAL MINERAL INVENTORY: 10319 Cu18

NAME(S): **CORDILLERA**, KITSALAS MOUNTAIN COPPER CO.

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 103109W
BC MAP:

Underground

MINING DIVISION: Omineca

LATITUDE: 54 37 44 N
LONGITUDE: 128 26 21 W
ELEVATION: 200 Metres

UTM ZONE: 09 (NAD 83)

NORTHING: 6053640
EASTING: 536206

LOCATION ACCURACY: Within 500M

COMMENTS: Veins, Figure 11 (Geological Survey of Canada Memoir 205).

COMMODITIES: Copper

Silver

Gold

Tungsten

MINERALS

SIGNIFICANT: Bornite Chalcocite Chalcopyrite Gold

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal

TYPE: I02 Intrusion-related Au pyrrhotite veins

L01 Subvolcanic Cu-Ag-Au (As-Sb)

SHAPE: Irregular

DIMENSION:

STRIKE/DIP: 040/30W

TREND/PLUNGE:

COMMENTS: Vein system.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Triassic

Unnamed/Unknown Informal

LITHOLOGY: Andesite Flow
Chlorite Schist
Tuff
Lamprophyre Dike

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Stikine

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: VEIN

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1925

SAMPLE TYPE: Chip

COMMODITY

GRADE

Silver

130.3000

Grams per tonne

Gold

13.7000

Grams per tonne

Copper

7.1000

Per cent

REFERENCE: Geological Survey of Canada Summary Report 1925A.

CAPSULE GEOLOGY

The area is underlain by andesite flows, chlorite schists, and tuffs of probable Triassic age. The rocks are cut by lamprophyre dykes. Several quartz vein, striking 040 degrees and dipping 25 to 45 degrees northwest contain sparse bornite, chalcocite, chalcopyrite, and gold. The veins are up to 30 metres long and up to 3.0 metres wide. The vein system extends for about 150 metres along strike. A 1.0 metre sample of one vein assayed 13.7 grams per tonne gold, 130.3 grams per tonne silver, and 7.1 per cent copper (Geological Survey of Canada Summary Report 1925A).

Tungsten has also been reported.

Recorded production for the period 1915-1922 totals 73 tonnes of ore milled and/or shipped from this property. From this ore 1151 grams of gold, 6875 grams of silver, and 15,881 kilograms of copper were recovered.

BIBLIOGRAPHY

EMPR AR *1914-141,142,174; *1917-97-99; 1918-110; 1919-98; *1920-80, 81; 1921-95; 1922-97,353; 1923-101; 1925-125; 1926-124; 1930-136; 1938-B37,C48; 1939-68
EMPR BULL 10(Rev.), p. 58
EMPR MAP 69-1; 8

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

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PAGE: 542
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BIBLIOGRAPHY

EMPR OF 1991-17
N MINER Jun.25, 1942, p. 26
GSC EC GEOL No. 17, p. 44
GSC MAP 278A; 1136A; 11-1956; 1385A
GSC MEM *205, pp. 46-49; 329, pp. 85,86
GSC P 36-17, pp. 83-86; *36-20, pp. 21,22
GSC SUM RPT *1925, pp. 115,116

DATE CODED: 1986/12/16
DATE REVISED: 1989/08/10

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 041**

NATIONAL MINERAL INVENTORY: 10319 Cu1

NAME(S): **DIADEM**, NICHOLSON CREEK

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103109W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 40 04 N
LONGITUDE: 128 23 26 W
ELEVATION: 370 Metres

NORTHING: 6057994
EASTING: 539306

LOCATION ACCURACY: Within 500M

COMMENTS: Veins, Map by Siefert, 1946 (Property File).

COMMODITIES: Copper Silver Gold

MINERALS

SIGNIFICANT: Chalcopyrite Bornite Pyrite
ASSOCIATED: Quartz
ALTERATION: Silica
ALTERATION TYPE: Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb)
SHAPE: Irregular
DIMENSION:
COMMENTS: Width of zone of quartz veins.

STRIKE/DIP: 070/55S

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Triassic
Cretaceous-Tertiary

GROUP

Unnamed/Unknown Group

FORMATION

Unnamed/Unknown Formation

IGNEOUS/METAMORPHIC/OTHER

Coast Plutonic Complex

LITHOLOGY: Andesite Flow
Rhyolite
Quartz Diorite
Granodiorite
Feldspar Porphyritic Dike

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

Plutonic Rocks

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: VEIN

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Chip

YEAR: 1928

COMMODITY

	<u>GRADE</u>	
Silver	35.0000	Grams per tonne
Copper	8.5000	Per cent

COMMENTS: 60 centimetre sample from one vein; also assayed trace gold.

REFERENCE: Minister of Mines Annual Report 1928, page 144.

CAPSULE GEOLOGY

Triassic volcanics, consisting of rhyolites and andesite flows, are intruded by quartz diorite and granodiorite of the Cretaceous to Tertiary Coast Plutonic Complex. The volcanics are cut by feldspar with associated quartz veins.

Several east trending veins occur within the volcanics over a 200 metre width. The veins carry chalcopyrite, bornite and pyrite. A 60 centimetre sample of one vein assayed trace gold, 35 grams per tonne silver and 8.5 per cent copper (Minister of Mines Annual Report 1928).

Two trial shipments, totalling about one tonne, assayed 0.6 grams per tonne gold, 55 grams per tonne silver, and 5.8 per cent copper (Minister of Mines Annual Report 1928).

BIBLIOGRAPHY

EMPR AR 1923-102; 1925-126; 1926-125; 1927-126; *1928-144; 1929-152;
*1930-133-135; 1931-70; 1934-C5; 1935-C7; 1938-B39; 1948-76,77;
1951-108; 1952-85; 1953-92; 1954-85; 1955-21

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 544
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR MAP 69-1; 8
EMPR PF (Rpt by N.G. Freshwater, Maps by J.A. Siefert, 1946
and F. Nash, 1931)
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM *205, pp. 56,57; *329, pp. 86,87
GSC P 36-17, pp. 97,98

DATE CODED: 1986/12/19
DATE REVISED: 1989/08/10

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 042**

NATIONAL MINERAL INVENTORY: 10319 Cu11

NAME(S): **MAC SHANNON**, NICHOLSON CREEK, KOKANEE,
DIADEM

STATUS: Developed Prospect
REGIONS: British Columbia
NTS MAP: 103109W
BC MAP:

MINING DIVISION: Omineca

LATITUDE: 54 39 54 N
LONGITUDE: 128 24 16 W
ELEVATION: 520 Metres

UTM ZONE: 09 (NAD 83)
NORTHING: 6057677
EASTING: 538413

LOCATION ACCURACY: Within 500M

COMMENTS: Location from map by Siefert, 1946 (Property File).

COMMODITIES: Copper Silver Gold Tungsten

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Bornite Scheelite

ASSOCIATED: Quartz

ALTERATION: Silica

COMMENTS: Skarn is mentioned but minerals are not identified.

ALTERATION TYPE: Silicific'n Skarn

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated Vein

CLASSIFICATION: Hydrothermal

TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb)

SHAPE: Irregular

MODIFIER: Faulted Sheared

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Triassic

Cretaceous-Tertiary

GROUP

Unnamed/Unknown Group

FORMATION

Unnamed/Unknown Formation

IGNEOUS/METAMORPHIC/OTHER

Coast Plutonic Complex

LITHOLOGY: Porphyritic Andesite Flow
Rhyolite
Basalt
Porphyritic Feldspar Dike
Quartz Diorite
Granodiorite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Stikine

Plutonic Rocks

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1939

SAMPLE TYPE: Chip

COMMODITY

GRADE

Silver

34.3000

Grams per tonne

Copper

1.2000

Per cent

COMMENTS: 75 centimetre sample from stripped area, also assayed trace gold.

REFERENCE: Minister of Mines Annual Report 1938, page B39.

CAPSULE GEOLOGY

Triassic volcanics and metavolcanics are intruded by quartz diorite and granodiorite of the Cretaceous to Tertiary Coast Plutonic Complex. The volcanics consist mainly of rhyolites, porphyritic andesite flows, and minor basalt. All rocks are cut by feldspar porphyry dykes, faults, and shear zones with associated quartz veins.

The volcanics and veins carry pyrite, sparse bornite and chalcopyrite, minor skarn minerals, and, in places, some scheelite. A 75 centimetre sample of a silicified zone assayed trace gold, 34.3 grams per tonne silver and 1.2 per cent copper (Minister of Mines Annual Report 1939).

Bulk samples shipped to the Provincial Sampling Plant at Prince Rupert in 1941 and 1945 assayed as follows:

Tonnes	Gold (grams)	Silver (grams)	Copper (per cent)
0.44	nil	nil	nil

CAPSULE GEOLOGY

0.469 13.71 397.7 8.38
(Minister of Mines Annual Reports for 1941, page 41; and 1945, page 52). In 1953, about 1.0 tonne of ore from this property produced 62 grams of silver and 59 kilograms of copper.

BIBLIOGRAPHY

EMPR AR 1930-134,135; 1938-B39; 1939-68,69; *1941-41; *1945-52,63
EMPR ASS RPT 5722, 6032
EMPR EXPL 1975-176; 1976-163
EMPR MAP 8; 69-1
EMPR OF 1991-17
EMPR PF (Rpt by N.G. Freshwater, 1946; Maps by J.A. Siefert, 1946, and F. Nash, 1931)
EMR MP CORPFILE (International Shasta Resources Ltd.)
GSC MAP 278A; 11-1956; 1136A; 1385A
GSC MEM *205, pp. 56,57; 329, pp. 86,87
GSC P 36-17, pp. 97,98
CIM Spec. Vol. 15, 1976, Map B

DATE CODED: 1986/12/19
DATE REVISED: 1989/08/10

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 043**

NATIONAL MINERAL INVENTORY: 10319 Ag4

NAME(S): **A - B, RIDGE**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103109W
BC MAP:

MINING DIVISION: Omineca

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 41 54 N
LONGITUDE: 128 22 36 W
ELEVATION: 810 Metres

NORTHING: 6061401
EASTING: 540172

LOCATION ACCURACY: Within 500M

COMMENTS: Sketch Map, Mandy, 1938 (Property File).

COMMODITIES: Silver Copper Zinc Gold

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Pyrrhotite Arsenopyrite Sphalerite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb) I05 Polymetallic veins Ag-Pb-Zn±Au
SHAPE: Irregular
MODIFIER: Sheared
DIMENSION: STRIKE/DIP: 010/45E TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Jurassic Hazelton Undefined Formation

LITHOLOGY: Andesite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: VEIN

REPORT ON: N

CATEGORY: Assay/analysis	YEAR: 1937
SAMPLE TYPE: Rock	
COMMODITY	GRADE
Silver	2.4000 Grams per tonne
Gold	0.3000 Grams per tonne
Zinc	10.2000 Per cent

COMMENTS: The sample was obtained from a 15 to 30 centimetre wide vein.

REFERENCE: Geological Survey of Canada Memoir 205.

CAPSULE GEOLOGY

Andesites of the Jurassic Hazelton Group are cut by shear zones and quartz veins mineralized with pyrite, chalcopyrite, pyrrhotite and arsenopyrite. A shear zone, up to 6 metres wide, contains two quartz veins trending 75 degrees and dipping 45 degrees north. A sample of a 38 centimetre vein assayed 0.2 grams per tonne gold, 24 grams per tonne silver and 0.39 per cent copper (Geological Survey of Canada Memoir 329). About 16 metres to the east, a 3.4 metre sample of disseminated pyrite and chalcopyrite in a shear zone assayed 0.2 grams per tonne gold, 12.3 grams per tonne silver and 0.23 per cent copper (Geological Survey of Canada Memoir 329). A 0.5 metre wide mineralized quartz vein occurs 53 metres further to the east.

About 120 metres to the north, between two lakes, a 15 to 30 centimetre wide vein, striking 010 degrees and dipping 45 degrees east, is exposed for 7.6 metres. A sample assayed 0.3 grams per tonne gold, 2.4 grams per tonne silver and 10.20 per cent zinc (Geological Survey of Canada Memoir 205).

BIBLIOGRAPHY

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EMPR PF (*Sketch Map by J.T. Mandy, 1938)
GSC MAP 11-1956; 1136A; 278A; 1385A
GSC MEM *205, p. 57; *329, pp. 87,88

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 548
REPORT: RGEN0100

BIBLIOGRAPHY

GSC P 36-17, pp. 99,100

DATE CODED: 1986/12/22
DATE REVISED: 1989/08/10

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 044**

NATIONAL MINERAL INVENTORY: 10319 Cu19

NAME(S): **DIORITE** DIAMOND, GROTTO,
CANYON

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 103109W
BC MAP:
LATITUDE: 54 42 19 N
LONGITUDE: 128 20 46 W
ELEVATION: 200 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Description.

Underground

MINING DIVISION: Omineca

UTM ZONE: 09 (NAD 83)

NORTHING: 6062192
EASTING: 542134

COMMODITIES: Copper Gold Silver

MINERALS

SIGNIFICANT: Chalcopyrite Bornite Specularite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal
TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb)
SHAPE: Irregular
MODIFIER: Fractured

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Jurassic
Cretaceous-Tertiary

GROUP

Hazelton

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Unnamed/Unknown Informal

LITHOLOGY: Andesite
Granodiorite
Quartz Albite Dike

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Rock
COMMODITY

YEAR: 1929

	GRADE	
Silver	27.4000	Grams per tonne
Gold	4.8000	Grams per tonne
Copper	2.8000	Per cent

REFERENCE: Minister of Mines Annual Report 1929.

CAPSULE GEOLOGY

Andesite of the Jurassic Hazelton Group are cut by quartz albite dykes and granodiorite dykes and stocks. Chalcopyrite and sparse bornite occur along minor faults and fractures in the quartz-albite dyke. Mineralization also occurs along the contacts of several narrow granodiorite dykes cutting the quartz-albite dyke. A selected sample assayed 4.8 grams per tonne gold, 27.4 grams per tonne silver and 2.8 per cent copper (Minister of Mines Annual Report 1929).

In 1916, 9 tonnes of ore were shipped from this property. From this ore 454 kilograms of copper were recovered and about 65 cents per tonne in gold and silver were recovered (Minister of Mines Annual Report 1916, page 98).

BIBLIOGRAPHY

EMPR AR *1916-98-100; 1929-152; 1930-137; 1931-71; 1937-C4; 1952-85
EMPR BULL 1, 1932, p. 56
EMPR MAP 69-1; 8
EMPR PF (*Maps & Rpt by J.T. Mandy, 1938)
EMR MP CORPFILE (Huestis Mining Corporation Ltd.)
GSC MAP 11-1956; 1136A; 278A; 1385A
GSC *MEM 212, pp. 37,38; 329, p. 88

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 550
REPORT: RGEN0100

BIBLIOGRAPHY

GSC P *36-20, p. 35; 36-17

DATE CODED: 1986/12/22
DATE REVISED: 1989/08/10

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 045**

NATIONAL MINERAL INVENTORY: 10319 Cu3

NAME(S): **GROTTO**

STATUS: Past Producer
 REGIONS: British Columbia
 NTS MAP: 103109W
 BC MAP:

Underground

MINING DIVISION: Omineca

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 42 29 N
 LONGITUDE: 128 21 36 W
 ELEVATION: 200 Metres

NORTHING: 6062493
 EASTING: 541236

LOCATION ACCURACY: Within 500M

COMMENTS: Adits, Figure 6 (Geological Survey of Canada Memoir 212), located on Hardscrabble Creek.

COMMODITIES: Copper Gold Silver Tungsten Tellurium

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Specularite Sphalerite Petzite
 Hessite Cosalite Rickardite Empressite
 ASSOCIATED: Quartz
 ALTERATION: Limonite
 MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated
 CLASSIFICATION: Epigenetic Hydrothermal
 TYPE: I02 Intrusion-related Au pyrrhotite veins L01 Subvolcanic Cu-Ag-Au (As-Sb)
 SHAPE: Irregular
 MODIFIER: Sheared
 DIMENSION:
 COMMENTS: No. 1 vein. STRIKE/DIP: 045/60N TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Jurassic	Hazelton	Undefined Formation	Coast Plutonic Complex
Cretaceous-Tertiary			

LITHOLOGY: Andesite
 Granodiorite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
 TERRANE: Stikine

PHYSIOGRAPHIC AREA: Hazelton Ranges

CAPSULE GEOLOGY

Andesite of the Jurassic Hazelton Group is intruded by porphyritic granodiorite dykes and stocks of the Cretaceous to Tertiary Coast Plutonic Complex. Narrow quartz veins and stringers occur adjacent to contacts of the dykes and stocks and along shears and faults in the andesites. Mineralization consists of pyrite, chalcopyrite and specularite, with minor amounts of sphalerite, petzite, hessite, cosalite, empressite, rickardite, chalcocite and possibly native tellurium.

No. 1 vein, along the contact of a 4 metre wide dyke, is 30 centimetres wide along a northeast strike for 30 metres. It dips 60 degrees to 90 degrees northwest. A 106 centimetre sample assayed 6.9 grams per tonne gold, 1,070 grams per tonne silver and 1.4 per cent copper (Minister of Mines Annual Report 1937). About 90 metres to the west, a northeast trending vein in andesite is 12 metres long and about 20 centimetres wide. A 23 centimetre channel sample assayed 24 grams per tonne gold, 493.7 grams per tonne silver and 3.76 per cent copper (Geological Survey of Canada Memoir 212). A further 90 metres to the west, several parallel east-northeast trending quartz veins in andesite, are up to 15 metres long and 30 centimetres wide. A 48 centimetre channel sample assayed 10.3 grams per tonne gold, 85.7 grams per tonne silver and 3.08 per cent copper (Geological Survey of Canada Memoir 212). Thirty metres to the southwest of the above quartz veins is a shear zone containing a quartz vein striking 120 degrees and dipping 65 degrees southwest. A 61 centimetre channel sample across the vein assayed 0.7 grams per tonne gold, 54.2 grams per tonne silver and 0.32 per cent copper (Geological Survey of Canada Memoir 212).

About 170 metres southeast of No. 1 vein, silicified tuffs contain disseminated chalcopyrite. A chip sample over a 1.5 by 3.0 metre area assayed trace gold, 13.7 grams per tonne silver and 0.4

CAPSULE GEOLOGY

per cent copper (Minister of Mines Annual Report 1937).
Tungsten is also reported to occur in the area.
Ore shipments in 1938-39 and 1953 totalled 63 tonnes. From this ore 1244 grams of gold, 43,109 grams of silver, and 2303 kilograms of copper were recovered.

BIBLIOGRAPHY

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1939-55,58,69; 1940-55; 1941-55; 1952-85; 1953-92; 1954-85;
1959-17
EMPR BULL 1, 1932, p. 56; 10 (Rev), p. 59
EMPR MAP 69-1; 8
EMPR OF 1991-17
EMPR PF (*Maps & Rpt by J.T. Mandy, 1938; *Rpt by J.T. Mandy
& D. Lay, 1937; Plan Map J.T. Mandy, 1939)
EMR MP CORPFILE (Huestis Mining Corporation Ltd.)
GSC EC GEOL No. 17, p. 45
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC *MEM 212, pp. 38-40; 329, pp. 88-90
GSC P 36-20, pp. 34,35; 36-17
N MINER Jun.25, 1942, p. 26

DATE CODED: 1986/12/22
DATE REVISED: 1989/08/10

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 046**

NATIONAL MINERAL INVENTORY: 10319 Mo1

NAME(S): **PITMAN**, JB, PIT 1-4

STATUS: Developed Prospect

MINING DIVISION: Omineca

REGIONS: British Columbia

NTS MAP: 103109W

BC MAP:

LATITUDE: 54 43 49 N

LONGITUDE: 128 20 01 W

ELEVATION: 280 Metres

LOCATION ACCURACY: Within 500M

COMMENTS: Upper showing, Figure 4 (Assessment Report 7993).

UTM ZONE: 09 (NAD 83)

NORTHING: 6064981

EASTING: 542913

COMMODITIES: Molybdenum

MINERALS

SIGNIFICANT: Molybdenite Pyrite Chalcopyrite Magnetite Specularite

ASSOCIATED: Quartz

ALTERATION: Chlorite

K-Feldspar

Hematite

Epidote

ALTERATION TYPE: Chloritic

Potassic

Epidote

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein

Disseminated

CLASSIFICATION: Hydrothermal

Porphyry

TYPE: L05 Porphyry Mo (Low F- type)

SHAPE: Irregular

MODIFIER: Fractured

COMMENTS: Mineralized area.

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

Jurassic

Cretaceous-Tertiary

GROUP

Hazelton

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Coast Plutonic Complex

LITHOLOGY: Quartz Monzonite

Quartz Diorite

Andesite

Hornfels

Granitic Porphyry

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

PHYSIOGRAPHIC AREA: Hazelton Ranges

TERRANE: Stikine

METAMORPHIC TYPE: Contact

RELATIONSHIP:

GRADE: Hornfels

INVENTORY

ORE ZONE: PITMAN

REPORT ON: Y

CATEGORY: Unclassified

YEAR: 1965

QUANTITY: 3400000 Tonnes

COMMODITY

GRADE

Molybdenum

0.0800

Per cent

REFERENCE: CIM Special Volume 15 (1976), Table 1, No.105.

CAPSULE GEOLOGY

Andesitic fragmental volcanics and flows of the Jurassic Hazelton Group are intruded by quartz diorite and quartz monzonite of the Cretaceous to Tertiary Coast Plutonic Complex. All rocks are cut by granite porphyry and andesite dykes. The volcanic rocks are silicified, hornfelsed, and locally altered to K-feldspar and chlorite.

Mineralization is associated mainly with the quartz monzonite. Pyrite occurs as disseminations in all units and as blebs and grains in quartz veins. Molybdenite occurs predominantly as fracture fillings with minor amounts related to quartz veins, which also contain minor chalcopyrite, magnetite, and specularite.

The Upper showing, sampled over 16.5 metres, assayed 0.47 per cent molybdenite, and the Lower showing, which is in aplite, averaged 0.10 per cent molybdenite (Assessment Report 7993).

A drill hole, 500 metres to the southwest of the Upper showing, intersected 0.12 per cent molybdenite over 55 metres, which contained 0.196 per cent molybdenite over 18.3 metres (Assessment Report 7993).

Unclassified reserves are 3.4 million tonnes grading 0.08 per

CAPSULE GEOLOGY

cent molybdenum (CIM Special Volume 15 (1976), Table 1, No.105).

BIBLIOGRAPHY

EMPR AR *1959-15,17; 1964-47; 1965-70
EMPR ASS RPT *7993
EMPR EXPL 1980-394
EMPR MAP 69-1; 8
EMPR PF (Rpt by H.H. Huestis, 1959; Map by W.H. White, 1959)
EMR MIN BULL MR 223 B.C. 292
EMR MP CORPFILE (Huestis Molybdenum Corporation Ltd.; Canex
Aerial Exploration)
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329
CIM SPEC VOL. 15, Table 1 (S.H. Pilcher & J.J. McDougal, #105,
1976)
GCNL #133, 1980
N MINER Jan. 3, 1980, p. 2

DATE CODED: 1986/12/23
DATE REVISED: 1989/08/10

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 047**

NATIONAL MINERAL INVENTORY: 103116 Au6

NAME(S): **GOLD DOME**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103116W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 46 19 N
LONGITUDE: 128 24 06 W
ELEVATION: 1220 Metres

NORTHING: 6069578
EASTING: 538491

LOCATION ACCURACY: Within 500M

COMMENTS: Symbol 10 and description (Geological Survey of Canada Map 1136A;
Geological Survey of Canada Memoir 329).

COMMODITIES: Gold Silver Copper Lead Zinc
 Tungsten

MINERALS

SIGNIFICANT: Galena Pyrite Chalcopyrite Sphalerite Scheelite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au I02 Intrusion-related Au pyrrhotite veins

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Cretaceous-Tertiary Coast Plutonic Complex

LITHOLOGY: Granodiorite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Plutonic Rocks

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis	YEAR: 1964
SAMPLE TYPE: Grab	
COMMODITY	GRADE
Silver	1765.0000 Grams per tonne
Gold	20.4000 Grams per tonne
Copper	1.7600 Per cent
Lead	1.3200 Per cent
Zinc	5.2000 Per cent

REFERENCE: Geological Survey of Canada Memoir 329.

CAPSULE GEOLOGY

Granodiorite of the Cretaceous to Tertiary Coast Plutonic Complex is cut by narrow quartz veins up to 0.5 metres wide. Two of the veins carry patches and streaks of scheelite. One streak measures up to 5 centimetres wide and 50 centimetres long. The veins strike northeast and dip 55 to 65 degrees southeast.

West of the scheelite occurrences, several northwest trending, southwest dipping veins strike for a few hundred metres along a cliff face. The veins carry galena, chalcopyrite, sphalerite, and pyrite. A 36 centimetre sample of one vein assayed 17.5 grams per tonne gold and 2085 grams per tonne silver (Minister of Mines Annual Report 1945) and a grab sample of another vein assayed 20.4 grams per tonne gold, 1765 grams per tonne silver, 1.76 per cent copper, 1.32 per cent lead and 5.2 per cent zinc (Geological Survey of Canada Memoir 329).

BIBLIOGRAPHY

EM OF 1999-3
EMPR AR 1945-64
EMPR MAP 8; 69-1
EMPR OF 1991-17, 1999-3
GSC MAP 11-1956; 1136A; 278A; 1385A

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

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PAGE: 556
REPORT: RGEN0100

BIBLIOGRAPHY

GSC MEM *329, p. 90

DATE CODED: 1986/10/20
DATE REVISED: 1989/08/10

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 048**

NATIONAL MINERAL INVENTORY: 103116 Au1

NAME(S): **FIDDLER, DORREEN**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 103116W
BC MAP:

Underground

MINING DIVISION: Omineca

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 48 39 N
LONGITUDE: 128 24 26 W
ELEVATION: 660 Metres

NORTHING: 6073903
EASTING: 538097

LOCATION ACCURACY: Within 500M

COMMENTS: Vein outcrop, Figure 7 (Geological Survey of Canada Memoir 212).

COMMODITIES: Gold Silver Lead Zinc Copper

MINERALS

SIGNIFICANT: Galena Pyrite Sphalerite Chalcopyrite Covellite

Tetrahedrite Arsenopyrite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Concordant

CLASSIFICATION: Hydrothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

SHAPE: Regular

MODIFIER: Faulted

DIMENSION:

STRIKE/DIP: 130/25N

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Upper Jurassic
Lower Jurassic
Cretaceous

GROUP

Bowser Lake
Hazelton

FORMATION

Undefined Formation
Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Unnamed/Unknown Informal

LITHOLOGY: Argillite
Andesite Flow
Quartz Diorite
Andesite
Tuff

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Bowser Lake

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: VEIN

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1937

SAMPLE TYPE: Channel

COMMODITY

GRADE

Silver	161.8000	Grams per tonne
Gold	33.6000	Grams per tonne
Copper	1.0400	Per cent
Lead	6.7300	Per cent
Zinc	3.0000	Per cent

COMMENTS: 30 centimetre sample width.

REFERENCE: Geological Survey of Canada Memoir 212, page 41.

CAPSULE GEOLOGY

The area is underlain by Lower Jurassic age volcanics of the Hazelton Group and Upper Jurassic age sediments of the Bowser Lake Group. The strata is comprised of laminated argillites, bedded tuffs and interbedded andesite flows. The rocks strike 130 degrees and dip 25 degrees northeast and are intruded by a 45 metre wide quartz diorite dyke, which strikes 150 degrees and dips 55 degrees southwest.

The Fiddler quartz vein occurs along a bedding fault plane in argillite below an andesite bed and near the intrusive. The lens shaped vein has been traced for 100 metres and is up to 1.7 metres wide. A 30 centimetre channel sample assayed 33.6 grams per tonne gold, 161.8 grams per tonne silver, 6.73 per cent lead, 3.00 per cent zinc and 1.04 per cent copper (Geological Survey of Canada Memoir 212). Mineralization consists of chalcopyrite, covellite, galena,

CAPSULE GEOLOGY

pyrite, sphalerite, tetrahedrite and arsenopyrite.

Twenty one metres stratigraphically above the main vein is a smaller vein assaying 32.2 grams per tonne gold, 19.2 grams per tonne silver, 1.28 per cent lead and 0.24 per cent copper over 20 centimetres (Geological Survey of Canada Memoir 212).

In 1924, 80 tonnes of ore were shipped from this property. This ore reportedly assayed 57.26 grams gold, 205.71 grams silver, 1.3 per cent copper, 6.2 per cent lead, and 5.8 per cent zinc. In 1926, about 8 tonnes of similar ore were shipped.

In 1952, 476 tonnes of ore were shipped. From this ore 3,266 grams of gold, 8,118 grams of silver, 3137 kilograms of lead and 1342 kilograms of zinc were recovered.

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1922-98; 1923-105; 1924-93; 1925-131-133; 1926-125; 1927-397;
1940-45; 1949-94; 1950-81,82; 1951-108,109; 1952-85
EMPR ASS RPT 10033
EMPR MAP 69-1; 8
EMPR PF (*Mine Plans, 1922; Turner, J.R., 1925; Lay, D. 1937)
EMR MP CORPFILE (Fiddler Creek Gold Mining Company, Limited;
Dorreen Gold Mines Limited; Dorreen Mines Ltd.)
GSC MAP 11-1956; 1136A; 278A; 1385A
GSC MEM *212, pp. 41-44; 329, pp. 90-92
GSC P *36-20, pp. 41-43; 36-17

DATE CODED: 1986/10/17
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CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 049**

NATIONAL MINERAL INVENTORY: 103116 Au4

NAME(S): **PATMORE**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103116W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 49 49 N
LONGITUDE: 128 27 06 W
ELEVATION: 780 Metres

NORTHING: 6076043
EASTING: 535224

LOCATION ACCURACY: Within 500M

COMMENTS: Symbol #10 (Geological Survey of Canada Map 1136A).

COMMODITIES: Silver Lead Zinc Gold

MINERALS

SIGNIFICANT: Galena Sphalerite Pyrite Chalcopyrite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Stockwork
CLASSIFICATION: Hydrothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
SHAPE: Irregular

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Jurassic-Cretaceous
Cretaceous

GROUP

Bowser Lake

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Unnamed/Unknown Informal

LITHOLOGY: Argillite
Tuff
Quartz Diorite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Bowser Lake

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1937

SAMPLE TYPE: Channel

COMMODITY

GRADE

Silver	91.9000	Grams per tonne
Gold	4.8000	Grams per tonne
Lead	2.9200	Per cent

COMMENTS: The sample width is 15 centimetres.
REFERENCE: Geological Survey of Canada Memoir 212.

CAPSULE GEOLOGY

Cretaceous quartz diorite sills and dykes cut argillites and tuffs of the Jurassic to Cretaceous Bowser Lake Group. The intrusives locally contain quartz veins mineralized with galena, sphalerite and lesser pyrite and chalcopyrite.

No. 1 showing contains quartz veins averaging 15 centimetres in width and 15 metres in length. A representative sample assayed 4.1 grams per tonne gold, 78.2 grams per tonne silver, 1.00 per cent lead and 1.05 per cent zinc (Geological Survey of Canada Memoir 212).

No. 2 showing, 365 metres to the west, occurs in a quartz diorite sill within argillites striking east and dipping 40 degrees north. A 15 centimetre channel sample assayed 4.8 grams per tonne gold, 91.9 grams per tonne silver and 2.92 per cent lead (Geological Survey of Canada Memoir 212).

BIBLIOGRAPHY

EMPR AR 1934-C5
EMPR ASS RPT 10033
EMPR MAP 69-1; 8
GSC MAP 1136A; 11-1956; 278A; 1385A
GSC MEM *212, pp. 44,45; 329, pp. 92,93

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 560
REPORT: RGEN0100

BIBLIOGRAPHY

GSC P *36-20, pp. 43,44; 36-17

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REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

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MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 561
REPORT: RGEN0100

MINFILE NUMBER: **1031 050**

NATIONAL MINERAL INVENTORY: 103116 Au2

NAME(S): **DRY HILL**, LORNE CREEK

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 103116W
BC MAP:

Open Pit

MINING DIVISION: Omineca

LATITUDE: 54 53 14 N
LONGITUDE: 128 24 11 W
ELEVATION: 190 Metres

UTM ZONE: 09 (NAD 83)

NORTHING: 6082405
EASTING: 538292

LOCATION ACCURACY: Within 500M

COMMENTS: Dry Hill Pit, page 157 (Minister of Mines Annual Report 1930).

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Jurassic-Cretaceous

GROUP

Bowser Lake

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Argillite
Conglomerate
Quartzite
Gravel

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Bowser Lake

PHYSIOGRAPHIC AREA: Hazelton Ranges

CAPSULE GEOLOGY

Lorne Creek cuts flat lying conglomerates, argillites and quartzites of the Jurassic to Cretaceous Bowser Lake Group. Placer gold occurs in drift-filled pre-glacial channels, up to 120 metres depth. Auriferous quartz veins are probable sources for the fairly coarse and nugget size gold, of which one, discovered in 1931, weighed 46.7 grams.

Approximate volume of gravel in the channel was estimated as 1,720,000 cubic metres with about 0.24 grams of gold per cubic metre (Minister of Mines Annual Report 1930).

BIBLIOGRAPHY

EMPR AR 1884-table; 1885-501,table; 1886-201,table; 1887-table;
1898-1152; 1899-657; 1900-790; 1901-991,996; 1902-47; 1903-
26,52; 1904-101; 1905-82; 1906-109; *1914-137,138,175; 1916-
92; 1927-65; *1930-154-159; *1931-77-79; 1932-86,87; 1934-
C18
EMPR BULL 1, 1931, p. 76; 21, pp. 17,18; 28, pp. 43,45
EMPR MAP 69-1; 8
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 212, p. 53; 329, pp. 69-71
GSC P 36-20, pp. 10,11
GSC SUM RPT 1923A, pp. 42-44

DATE CODED: 1986/09/29
DATE REVISED: 1989/08/10

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 050**

MINFILE NUMBER: **1031 051**

NATIONAL MINERAL INVENTORY:

NAME(S): **CANADIAN SWEDE**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103116W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 54 39 N
LONGITUDE: 128 24 26 W
ELEVATION: 200 Metres

NORTHING: 6085030
EASTING: 538003

LOCATION ACCURACY: Within 1 KM

COMMENTS: Description and elevation of adit.

COMMODITIES: Copper Lead Zinc Silver Gold
Molybdenum

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Galena Sphalerite Molybdenite

ASSOCIATED: Quartz

ALTERATION: Malachite

COMMENTS: Copper-stain is assumed to be malachite.

ALTERATION TYPE: Oxidation

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein

CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

SHAPE: Irregular

MODIFIER: Sheared

DIMENSION: Metres

STRIKE/DIP: 085/60S

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE GROUP
Jurassic-Cretaceous Bowser Lake

FORMATION
Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Argillite
Quartzite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Bowser Lake

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: VEINS

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Rock

YEAR: 1988

COMMODITY	GRADE	
Silver	298.0000	Grams per tonne
Gold	5.4000	Grams per tonne
Copper	2.7000	Per cent
Lead	12.0300	Per cent
Zinc	0.7000	Per cent

COMMENTS: Highest values.
REFERENCE: Assessment Report 18831.

CAPSULE GEOLOGY

Quartz veins occur in argillites and quartzites of the Jurassic to Cretaceous Bowser Lake Group. The quartz veins, generally associated with shear zones averaging 0.6 metre wide, are mineralized with pyrite and contain traces of gold and silver. A vein 150 metres northwest of an adit assayed 13.7 grams per tonne silver and trace gold over 3.6 metres (Minister of Mines Annual Report 1928). The vein is also mineralized with areas of copper-stain and molybdenite which assayed 61.7 grams per tonne silver and 0.7 gram per tonne gold (Minister of Mines Annual Report 1930). The shear zone strikes 085 degrees and dips 60 degrees south.

Sampling of the quartz veins in 1988 revealed that they are variably mineralized with chalcopyrite, galena, sphalerite and pyrite. Assays yielded up to 2.7 per cent copper, 298 grams per tonne silver, 12.03 per cent lead, 5.4 grams per tonne gold and 0.7 per cent zinc (Assessment Report 18831).

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 563
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR AR *1928-149,150; 1930-138
EMPR ASS RPT *18831
EMPR MAP 69-1; 8
EMPR OF 1994-14
GSC MAP 1136A; 11-1956; 278A; 1385A
GSC MEM 212, p. 47; 329, p. 93
GSC P 36-17

DATE CODED: 1986/10/21
DATE REVISED: 1989/08/10

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 052**

NATIONAL MINERAL INVENTORY: 103116 Ag4

NAME(S): **WINDFALL**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103116W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 56 24 N
LONGITUDE: 128 25 51 W
ELEVATION: 300 Metres

NORTHING: 6088263
EASTING: 536463

LOCATION ACCURACY: Within 500M

COMMENTS: Quartz vein, Figure 8 (Geological Survey of Canada Memoir 212).

COMMODITIES: Silver Lead Zinc Copper Gold

MINERALS

SIGNIFICANT: Sphalerite Galena Chalcopryite Pyrite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
SHAPE: Regular
MODIFIER: Faulted
DIMENSION:

STRIKE/DIP: 110/45S TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Jurassic-Cretaceous

GROUP

Bowser Lake

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Argillite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Bowser Lake

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1931

SAMPLE TYPE: Chip

COMMODITY

GRADE

Silver	240.0000	Grams per tonne
Gold	0.3400	Grams per tonne
Copper	0.9000	Per cent
Lead	7.2000	Per cent
Zinc	24.0000	Per cent

COMMENTS: The sample width is 1.5 metres.

REFERENCE: Minister of Mines Annual Report 1931.

CAPSULE GEOLOGY

A quartz vein containing sphalerite, galena, chalcopryite and pyrite occurs at the crest of a small anticline in argillites of the Jurassic to Cretaceous Bowser Lake Group. The vein, striking 110 degrees and dipping 45 degrees south, is 1.0 to 1.5 metres wide and about 12 metres long. It is cut off to the north by an east striking, 45 degree north dipping fault. A 1.5 metre sample assayed 240 grams per tonne silver, 7.2 per cent lead, 24 per cent zinc, 0.9 per cent copper and 0.34 grams per tonne gold (Minister of Mines Annual Report 1931). Thirty metres to the north, a 3 to 12 metre wide feldspar porphyry sill strikes 120 degrees and dips 15 degrees north.

BIBLIOGRAPHY

EMPR AR 1931-71,72,79
EMPR MAP 69-1; 8
GSC MAP 11-1956; 1136A; 278A; 1385A
GSC MEM *212, pp. 47-49; 329, pp. 93,94
GSC P *36-20, pp. 52,53; 36-17

DATE CODED: 1986/10/21
DATE REVISED: 1989/08/10

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 052**

MINFILE NUMBER: **1031 053**

NATIONAL MINERAL INVENTORY: 103116 Ag3

NAME(S): **HUGHIE**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103116W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 58 59 N
LONGITUDE: 128 19 16 W
ELEVATION: 550 Metres

NORTHING: 6093117
EASTING: 543445

LOCATION ACCURACY: Within 500M

COMMENTS: Description from Minister of Mines Annual Report 1928, page 150.

COMMODITIES: Silver Copper Lead Zinc Gold

MINERALS

SIGNIFICANT: Pyrite Sphalerite Galena Chalcopyrite

ASSOCIATED: Quartz Calcite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated Breccia
CLASSIFICATION: Replacement
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
SHAPE: Irregular
MODIFIER: Sheared

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Jurassic-Cretaceous Bowser Lake Undefined Formation

LITHOLOGY: Argillite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Bowser Lake

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1929

SAMPLE TYPE: Chip

COMMODITY

GRADE

Silver	137.0000	Grams per tonne
Copper	8.0000	Per cent
Lead	4.6000	Per cent
Zinc	5.0000	Per cent

COMMENTS: The sample width is 46.0 centimetres.

REFERENCE: Minister of Mines Annual Report 1929.

CAPSULE GEOLOGY

Shear zones within argillites of the Jurassic to Cretaceous Bowser Lake Group contain brecciated argillite, which are veined and replaced by quartz and calcite gangue. The shear zones are mineralized with pyrite, sphalerite, galena and chalcopyrite. The zones are 1 to 2.5 metres wide and strike north to northwest with 60 to 70 degrees southeast dips. A 60 centimetre sample of a north striking shear assayed 38.7 grams per tonne silver, 3.8 per cent zinc and trace gold (Geological Survey of Canada Memoir 212). A 46 centimetre sample of a northwest striking shear assayed 137 grams per tonne silver, 8 per cent copper, 4.6 per cent lead, 5 per cent zinc and trace gold (Minister of Mines Annual Report 1929).

BIBLIOGRAPHY

EMPR AR 1925-130; 1927-129; *1928-150; 1929-153
EMPR ASS RPT 3541
EMPR MAP 69-1; 8
GSC MAP 278A; 11-1956; 1136A; 1385A
GSC MEM *212, pp. 51,52; 329
GSC P 36-17

DATE CODED: 1986/10/21
DATE REVISED: 1989/08/10

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 054**

NATIONAL MINERAL INVENTORY: 103116 Ag1

NAME(S): **SEVEN SISTERS**, NILO, D.W.

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 103116W
BC MAP:
LATITUDE: 54 57 09 N
LONGITUDE: 128 17 06 W
ELEVATION: 1300 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Main shaft, Figure 9 (Geological Survey of Canada Memoir 212).

MINING DIVISION: Omineca
UTM ZONE: 09 (NAD 83)
NORTHING: 6089740
EASTING: 545791

COMMODITIES: Silver Zinc Lead Copper Gold

MINERALS

SIGNIFICANT: Pyrite Galena Sphalerite Pyrrhotite Chalcopyrite
ASSOCIATED: Quartz Calcite Pyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Concordant
CLASSIFICATION: Replacement Hydrothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
SHAPE: Regular
MODIFIER: Sheared
DIMENSION: STRIKE/DIP: 360/30E TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Jurassic-Cretaceous Bowser Lake Undefined Formation

LITHOLOGY: Argillite
Tuff
Conglomerate
Arkose
Sandstone
Greywacke
Intrusive

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Hazelton Ranges
TERRANE: Bowser Lake

INVENTORY

ORE ZONE: SHAFT REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1972
SAMPLE TYPE: Chip
COMMODITY GRADE
Silver 492.0000 Grams per tonne
Gold 0.1700 Grams per tonne
Copper 0.1600 Per cent
Lead 3.6000 Per cent
Zinc 24.8000 Per cent

COMMENTS: The sample width is 45 centimetres.
REFERENCE: Property File: Report by M.K. Lorimer, 1972.

CAPSULE GEOLOGY

Underlying rocks include conglomerate, sandstone, greywacke, argillite, arkose and interbedded tuffs of the Jurassic to Cretaceous Bowser Lake Group. To the northeast, the sediments are intruded by a stock which forms the core of the Seven Sisters Mountain. This intrusion resulted in the folding and faulting of the strata and the emplacement of quartz veins and mineralized zones. Sphalerite and galena mineralization, and quartz and calcite gangue occur as replacement zones along sheared bedding planes in the sediments. The mineralized zone, striking north-south and dipping 30 degrees east, is traced for 500 metres and is up to 1 metre wide. A 60 centimetre sample assayed 257 grams per tonne silver, 3 per cent lead, 18 per cent zinc and trace gold (Minister of Mines Annual Report 1927). A 45 centimetre sample taken at the shaft collar assayed 492 grams per tonne silver, 0.16 per cent copper, 3.60 per cent lead, 24.80 per cent zinc and 0.17 grams per tonne gold

CAPSULE GEOLOGY

(Property File: Lorimer, 1972). A sample of a massive pyrrhotite and pyrite vein, 800 metres to the north, assayed 14.1 grams per tonne silver, 0.32 per cent copper and trace gold (Geological Survey of Canada Memoir 212).

BIBLIOGRAPHY

EMPR AR 1925-130; 1926-125; *1927-126-128; 1928-150-152; 1929-153;
1930-138
EMPR ASS RPT 3541, 4276
EMPR GEM 1969-84; 1972-502; 1973-487
EMPR MAP 69-1; 8
EMPR PF (*Rpts by M.K. Lorimer, 1969, 1972; Farmin, H. 1926;
Lay, D. 1927; Nash, F. 1927)
EMR MP CORPFILE (Magnetron Mining Ltd.; Acquest Enterprises Ltd.)
GSC EC GEOL No. 8, pp. 280,281
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM *212, pp. 49-51; 329, pp. 95,96
GSC P *36-20, pp. 51,52; 36-17
GCNL #166,#184, 1984

DATE CODED: 1986/10/21
DATE REVISED: 1989/08/10

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 055**

NATIONAL MINERAL INVENTORY: 103116 Ag2

NAME(S): **JACKAL**, CALEDONIA, WAVERLEY,
 REGA, MAG, MACDONALD,
 COLLIER

MINING DIVISION: Omineca
 UTM ZONE: 09 (NAD 83)
 NORTHING: 6088529
 EASTING: 548295

STATUS: Prospect
 REGIONS: British Columbia
 NTS MAP: 103116E
 BC MAP:
 LATITUDE: 54 56 29 N
 LONGITUDE: 128 14 46 W
 ELEVATION: 1550 Metres
 LOCATION ACCURACY: Within 500M
 COMMENTS: Veins, Figure 4 (Assessment Report 4276).

COMMODITIES: Silver Cadmium Zinc Antimony Lead Copper Gold

MINERALS

SIGNIFICANT: Galena Sphalerite Pyrite Pyrrhotite Chalcopyrite
 Arsenopyrite Pentlandite
 MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Concordant Disseminated Massive
 CLASSIFICATION: Replacement Hydrothermal
 TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
 SHAPE: Regular
 DIMENSION: STRIKE/DIP: 170/65W TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
 Jurassic-Cretaceous Bowser Lake Undefined Formation

LITHOLOGY: Argillite
 Tuff
 Conglomerate
 Sandstone
 Greywacke
 Arkose
 Intrusive

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Hazelton Ranges
 TERRANE: Bowser Lake

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
 CATEGORY: Assay/analysis YEAR: 1972
 SAMPLE TYPE: Chip
 COMMODITY GRADE
 Silver 305.0000 Grams per tonne
 Gold 0.1700 Grams per tonne
 Copper 0.5200 Per cent
 Lead 6.7000 Per cent
 Zinc 24.1000 Per cent

COMMENTS: The sample width is 60.0 centimetres.
 REFERENCE: Property File: Report by M.K. Lorimer, 1972.

CAPSULE GEOLOGY

Underlying rocks include conglomerate, sandstone, greywacke, argillite, arkose, and interbedded tuffs of the Jurassic to Cretaceous Bowser Lake Group. To the northeast, the sediments are intruded by a stock which forms the core of the Seven Sisters Mountain. This intrusion resulted in the folding and faulting of the strata and the emplacement of quartz veins and mineralized zones. A replacement zone, striking 170 degrees and dipping 65 degrees west, consists of pyrite, pyrrhotite, galena, sphalerite, chalcopyrite and arsenopyrite. The zone averages 2.4 metres wide and is traced for 120 metres. A 60 centimetre sample assayed 0.17 grams per tonne gold, 305 grams per tonne silver, 0.52 per cent copper, 6.70 per cent lead and 24.1 per cent zinc (Property File: Lorimer, 1972). A parallel zone, to the west, is up to 10.6 metres wide and a 4 metre

CAPSULE GEOLOGY

sample assayed 58.3 grams per tonne silver, 0.55 per cent copper, 1.00 per cent lead, 23.30 per cent zinc and 0.17 grams per tonne gold (Property File: Lorimer, 1972). Smaller zones occur to the north over 600 metres.

A 22.1 kilogram sample, shipped for assaying, returned trace gold, 720 grams per tonne silver, 0.3 per cent copper, 14.7 per cent lead, 11.7 per cent zinc and 0.15 per cent antimony (Minister of Mines Annual Report 1940).

In 1969, a shipment of 13.6 tonnes graded 1717 grams per tonne silver, 3.4 grams per tonne gold and 9.55 per cent copper (George Cross Newsletter #184, 1984).

BIBLIOGRAPHY

EMPR AR 1929-153,154; 1930-137; 1940-43; 1968-109
EMPR ASS RPT *466, 2016, 3541, 4276, 9147
EMPR GEM 1969-83,84; 1972-502; 1973-487
EMPR MAP 69-1; 8
EMPR PF (*Rpts by M.K. Lorimer, 1969, 1972)
EMR MP CORPFILE (Mega Mineral Limited; Magnetron Mining Ltd; Acquest Enterprises Ltd.)
GSC MAP 1136A; 11-1956; 278A; 1385A
GSC MEM *329, pp. 96,97
GSC P *36-20, p. 51; 36-17
GCNL #166,#184, 1984

DATE CODED: 1986/10/21
DATE REVISED: 1989/08/10

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 056**

NATIONAL MINERAL INVENTORY: 103116 Mo1

NAME(S): **SEVEN SISTERS PEAKS**, NORTH CENTRAL CIRQUE

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103116E
BC MAP:
LATITUDE: 54 59 29 N
LONGITUDE: 128 12 26 W
ELEVATION: 1540 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Mineralized sample #22281, Figure 4A (Assessment Report 8467).

MINING DIVISION: Omineca
UTM ZONE: 09 (NAD 83)
NORTHING: 6094121
EASTING: 550723

COMMODITIES: Molybdenum Silver Copper Gold Lead Zinc Tungsten

MINERALS

SIGNIFICANT: Molybdenite Pyrite Chalcopyrite Galena Sphalerite
Pyrrhotite Scheelite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal
TYPE: L05 Porphyry Mo (Low F- type) I05 Polymetallic veins Ag-Pb-Zn±Au
L07 Porphyry W
SHAPE: Irregular

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Jurassic-Cretaceous	Bowser Lake	Undefined Formation	Seven Sisters Stock
Tertiary			

LITHOLOGY: Siltstone
Granodiorite
Greenstone
Rhyolite
Conglomerate
Greywacke
Granite
Diorite
Quartz Feldspar Porphyry

HOSTROCK COMMENTS: Bowser Lake Group sediments are intruded by Early Tertiary age Seven Sisters stock.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Plutonic Rocks Bowser Lake PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE:	SAMPLE	REPORT ON:	N
CATEGORY:	Assay/analysis	YEAR:	1980
SAMPLE TYPE:	Grab		
COMMODITY		GRADE	
Silver		49.7100	Grams per tonne
Gold		0.1710	Grams per tonne
Copper		0.3800	Per cent
Molybdenum		0.0100	Per cent
Lead		0.4400	Per cent
Zinc		3.1000	Per cent

COMMENTS: There is also 0.02 per cent tungsten in the sample.
REFERENCE: Assessment Report 8467.

CAPSULE GEOLOGY

Upper Jurassic to Lower Cretaceous Bowser Lake Group sediments are intruded by the Early Tertiary age Seven Sisters stock which forms the core of the Seven Sisters Peaks. The sediments are mainly siltstone and greywacke with minor conglomerate, greenstone and rhyolite. Near the stock, they are sharply crenulated and deformed. The stock is largely granodiorite with lesser granite and diorite. Quartz feldspar porphyry is gradational with the intrusive and forms dykes cutting the sediments. Aplitic dykes extend from the intrusive

CAPSULE GEOLOGY

into the sediments.

Mineralization in the north central cirque area consists of widely spaced fractures with quartz, molybdenite, and minor chalcopyrite and scheelite in granodiorite. A talus sample with rusty pyrrhotite taken from below a gossan zone assayed 0.171 grams per tonne gold, 49.71 grams per tonne silver, 0.38 per cent copper, 0.44 per cent lead, 3.1 per cent zinc, 0.01 per cent molybdenum (MoS₂) and 0.02 per cent tungsten. A one kilometre long, north-northeast trending geochemical high returned assays up to 0.08 per cent copper, 1.12 per cent lead, 0.13 per cent zinc, 0.32 per cent molybdenum, 37 grams per tonne silver and 0.03 per cent tungsten. Talus samples carrying massive pyrrhotite with chalcopyrite and scheelite occur 1.5 kilometres to the east and returned values of 1.22 per cent copper, 0.010 per cent Mo, 0.57 per cent tungsten and 16.1 grams per tonne silver (Assessment Report 8467).

BIBLIOGRAPHY

EMPR AR 1960-13
EMPR ASS RPT *8467, 9147
EMPR EXPL 1979-256; 1980-400,401
EMPR MAP 69-1; 8
EMPR OF 1991-17
EMR MP CORPFILE (Mega Minerals Ltd.)
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329

DATE CODED: 1986/10/23
DATE REVISED: 1989/08/10

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 572
REPORT: RGEN0100

MINFILE NUMBER: **1031 057**

NATIONAL MINERAL INVENTORY: 10319 Ag5

NAME(S): **BRADLE BANE**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103109W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 40 49 N
LONGITUDE: 128 18 16 W
ELEVATION: 870 Metres

NORTHING: 6059436
EASTING: 544846

LOCATION ACCURACY: Within 500M
COMMENTS: Description.

COMMODITIES: Silver Lead Molybdenum

MINERALS

SIGNIFICANT: Pyrite Galena Molybdenite Sphalerite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stockwork Vein
CLASSIFICATION: Hydrothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au L05 Porphyry Mo (Low F- type)
SHAPE: Irregular
MODIFIER: Sheared

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Tuff

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: DUMP

REPORT ON: N

CATEGORY: Assay/analysis	YEAR: 1937
SAMPLE TYPE: Grab	
COMMODITY	GRADE
Silver	15.8000 Grams per tonne
Molybdenum	0.1100 Per cent
Lead	0.7200 Per cent

COMMENTS: This is a typical dump sample.
REFERENCE: Geological Survey of Canada Memoir 212.

CAPSULE GEOLOGY

The area is underlain by east striking, 50 degree south dipping tuffs of the Jurassic Hazelton Group. A 5 metre wide brecciated and altered zone, between two intersecting faults, is mineralized along minute fractures with pyrite and minor galena and molybdenite. A typical dump sample assayed 15.8 grams per tonne silver, 0.72 per cent lead and 0.11 per cent molybdenite (Geological Survey of Canada Memoir 212). About 50 metres to the north, sheared and altered tuff contains minor pyrite, galena and sphalerite.

BIBLIOGRAPHY

EMPR BULL 9, p. 93
EMPR MAP 69-1; 8
GSC MAP 1136A; 11-1956; 278A; 1385A
GSC MEM *212, p. 36; 329

DATE CODED: 1986/12/10
DATE REVISED: 1989/08/10

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 057**

MINFILE NUMBER: **1031 058**

NATIONAL MINERAL INVENTORY: 10319 Cu23

NAME(S): **SHENANDOAH**, RAINBOW

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103109E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 39 24 N
LONGITUDE: 128 14 06 W
ELEVATION: 1600 Metres

NORTHING: 6056855
EASTING: 549352

LOCATION ACCURACY: Within 500M
COMMENTS: Description.

COMMODITIES: Copper Silver Lead Zinc Gold

MINERALS

SIGNIFICANT: Sphalerite Galena Chalcopyrite
ASSOCIATED: Quartz
ALTERATION: Malachite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Replacement Epigenetic
TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb) I05 Polymetallic veins Ag-Pb-Zn±Au
SHAPE: Irregular
MODIFIER: Sheared
DIMENSION: STRIKE/DIP: 100/55N TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Jurassic Hazelton Undefined Formation

LITHOLOGY: Andesite
Basalt
Porphyritic Granodiorite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: VEIN

REPORT ON: N

CATEGORY: Assay/analysis YEAR: 1937
SAMPLE TYPE: Chip
COMMODITY GRADE
Silver 90.0000 Grams per tonne
Gold 0.7000 Grams per tonne
Copper 2.9400 Per cent

COMMENTS: This is a typical assay from a 1.0 metre wide vein.
REFERENCE: Geological Survey of Canada Memoir 212.

CAPSULE GEOLOGY

The area is underlain by a thick assemblage of andesites and basalts of the Jurassic Hazelton Group. The flows, which strike southeast and dip 50 to 60 degrees south, are intruded by small stocks and tongues of porphyritic granodiorite.

A vein, containing chalcocite, sphalerite, galena and bornite, occurs along the contact of two andesite flows. The vein is about 15 metres long and averages 0.5 metres wide. A 0.5 metre sample assayed trace gold, 480 grams per tonne silver, 6 per cent copper, 2 per cent lead and 8 per cent zinc (Minister of Mines Annual Report 1928).

About 300 metres to the east a quartz vein in a shear zone trends 100 degrees for about 300 metres and dips 55 degrees north. The vein averages 1 metre wide and a typical sample assayed 0.7 grams per tonne gold, 90 grams per tonne silver and 2.94 per cent copper (Geological Survey of Canada Memoir 212).

BIBLIOGRAPHY

EMPR AR 1914-136,137,Map p. 120; 1927-126; *1928-147; 1929-150
EMPR MAP 69-1; 8
EMPR PF (Map by J. Willman, 1929)
GSC MAP 1136A; 11-1956; 278A; 1385A

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

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REPORT: RGEN0100

BIBLIOGRAPHY

GSC MEM *212, pp. 28,29; 329, p. 94
GSC P 36-20, p. 38; 36-17

DATE CODED: 1986/11/21
DATE REVISED: 1989/08/10

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 059**

NATIONAL MINERAL INVENTORY: 10319 Cu24

NAME(S): **UNITED ST. CROIX**, ST. CROIX

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103109E
BC MAP:

MINING DIVISION: Omineca

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 39 09 N
LONGITUDE: 128 11 36 W
ELEVATION: 1530 Metres

NORTHING: 6056422
EASTING: 552046

LOCATION ACCURACY: Within 500M

COMMENTS: Description and Figure 10 (Geological Survey of Canada Memoir 212).

COMMODITIES: Copper Silver

MINERALS

SIGNIFICANT: Chalcopyrite Bornite Chalcocite Pyrite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Breccia Vein
CLASSIFICATION: Replacement Epigenetic Hydrothermal

TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb)

SHAPE: Irregular

MODIFIER: Sheared

DIMENSION:

STRIKE/DIP: 170/35E

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Jurassic

GROUP

Hazelton

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Andesite
Volcanic Breccia
Granodiorite
Quartz Albite Dike

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Stikine

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1937

SAMPLE TYPE: Rock

COMMODITY

Silver

GRADE

6.9000

Grams per tonne

Copper

5.9600

Per cent

REFERENCE: Geological Survey of Canada Memoir 212.

CAPSULE GEOLOGY

Andesitic flows of the Jurassic Hazelton Group are cut by numerous granodiorite and quartz-albite dykes.

A 3.6 metre wide volcanic breccia zone in andesite contains quartz veinlets and is mineralized with chalcopyrite. The zone, which is intermittently exposed for 100 metres, strikes 135 degrees and dips 40 degrees north. A representative sample of a similar parallel zone, 15 metres to the northwest, assayed 6.9 grams per tonne silver and 5.96 per cent copper (Geological Survey of Canada Memoir 212).

About 150 metres to the east, a 0.5 metre wide quartz vein containing chalcopyrite strikes 170 degrees and dips 35 to 50 degrees east. It is intermittently exposed for 230 metres and is offset by a northeast trending quartz albite dyke. A 35 centimetre channel sample assayed 10.3 grams per tonne silver and 3.12 per cent copper (Geological Survey of Canada Memoir 212).

BIBLIOGRAPHY

EMPR AR 1914-136 ,Map p. 120
EMPR MAP 69-1; 8
GSC MAP 1136A; 11-1956; 278A; 1385A
GSC MEM *212, pp. 24-26; 329, p. 94

RUN DATE: 26-Jun-2003
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GEOLOGICAL SURVEY BRANCH
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REPORT: RGEN0100

BIBLIOGRAPHY

GSC P 36-17

DATE CODED: 1986/11/21
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CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 060**

NATIONAL MINERAL INVENTORY: 10319 Ag7

NAME(S): **ZONA MAY**, TOM, WHITE BEAR

MINING DIVISION: Omineca

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 103109E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 38 49 N
LONGITUDE: 128 09 46 W
ELEVATION: 1220 Metres

NORTHING: 6055827
EASTING: 554024

LOCATION ACCURACY: Within 500M

COMMENTS: Mineralized vein, Figure 4 (Assessment Report 10125).

COMMODITIES: Silver Gold Lead Zinc Copper
 Tungsten

MINERALS

SIGNIFICANT: Galena Sphalerite Pyrite Chalcopyrite Tetrahedrite

 Scheelite Bornite

ASSOCIATED: Quartz

ALTERATION: Quartz

 Carbonate Sericite

 Serpentine

ALTERATION TYPE: Quartz-Carb.

 Sericitic

 Serpentin'zn

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated

CLASSIFICATION: Epigenetic Hydrothermal

TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb) 102 Intrusion-related Au pyrrhotite veins

SHAPE: Irregular

DIMENSION: 0700 x 0003 x 0200 Metres

STRIKE/DIP: 120/80S

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

Jurassic
Cretaceous-Tertiary

GROUP

Hazelton

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Coast Plutonic Complex

LITHOLOGY: Diorite
 Quartz Monzonite
 Felsite
 Quartz Feldspar Porphyry

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Stikine

Plutonic Rocks

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: LENS

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1981

SAMPLE TYPE: Chip

COMMODITY

GRADE

Silver	3977.0000	Grams per tonne
Gold	3.7700	Grams per tonne
Copper	0.9000	Per cent
Lead	1.1000	Per cent
Zinc	0.9700	Per cent

COMMENTS: The sample is from a sulphide-rich lens, 8.0 metres long and 5 to 20 centimetres wide.

REFERENCE: Assessment Report 10125.

CAPSULE GEOLOGY

Andesite and rhyolite of the Jurassic age Hazelton Group are intruded by diorite and quartz diorite of the Coast Plutonic Complex. These rocks are intruded by dykes and irregular bodies of quartz monzonite, felsite and quartz feldspar porphyry.

A 700 metre long discontinuous quartz vein occurs along the northern contact of a 3 to 15 metre wide felsite dyke, which cuts across the contact between the diorite and volcanics. The vein strikes 110 degrees to 132 degrees and dips 70 to 90 degrees south. It is 0.2 to 3 metres wide and contains disseminations, streaks and lenses of galena, pyrite, chalcopyrite, sphalerite and tetrahedrite. A 15 metre wide alteration envelope, containing quartz, sericite, carbonate and serpentinite, occurs along the margin of the quartz vein. Locally the quartz contains scheelite.

CAPSULE GEOLOGY

A sample of a sulphide-rich lens, 8 metres long and 5 to 20 centimetres wide, assayed 3977 grams per tonne silver, 3.77 grams per tonne gold, 1.1 per cent lead, 0.97 per cent zinc and 0.9 per cent copper (Assessment Report 10125). A gold rich zone, with up to 24 grams per tonne gold, occurs over a distance of 50 metres and a width of 0.4 to 0.7 metres.

BIBLIOGRAPHY

EMPR AR 1925-129; 1926-125; 1927-126; *1928-147,148
EMPR ASS RPT *9181, *10125, *15006
EMPR BULL 10(Rev), p. 59
EMPR EXPL 1986-C427
EMPR MAP 69-1; 8
EMPR OF 1991-17
EMR MP CORPFILE (Carl Creek Resources Ltd.)
GSC EC GEOL No. 17, p. 45
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM *212, pp. 23,24; 329, p. 94
GSC P 36-20, pp. 32,33; 36-17
GSC SUM RPT 1925A, p. 112
N MINER Jun.25, 1942, p. 26

DATE CODED: 1986/11/13
DATE REVISED: 1989/07/23

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 061**

NATIONAL MINERAL INVENTORY: 10319 Cu10

NAME(S): **FRISCO**, LEGATE CREEK

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 103109E
BC MAP:

Underground

MINING DIVISION: Omineca

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 40 04 N
LONGITUDE: 128 05 36 W
ELEVATION: 1430 Metres

NORTHING: 6058201
EASTING: 558476

LOCATION ACCURACY: Within 500M

COMMENTS: Description; property is located along the south side of Frisco Creek.

COMMODITIES: Copper Silver Gold

MINERALS

SIGNIFICANT: Chalcopyrite Bornite Chalcocite Tetrahedrite
ASSOCIATED: Quartz
ALTERATION: Malachite Azurite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb)
SHAPE: Irregular
DIMENSION:

STRIKE/DIP: 090/30S

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Jurassic Hazelton Undefined Formation

LITHOLOGY: Andesite
Quartz Porphyry

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: DUMP

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Grab

YEAR: 1928

COMMODITY	GRADE	
Silver	398.0000	Grams per tonne
Copper	11.6200	Per cent

COMMENTS: Grab sample of sorted ore.

REFERENCE: Geological Survey of Canada Memoir 212, page 23.

CAPSULE GEOLOGY

Andesites of the Jurassic Hazelton Group are intruded by quartz porphyry sills up to 30 metres wide. Disseminations and stringers of chalcopyrite and bornite occur above the sills over a 30 metre distance. A 12 metre wide mineralized zone strikes east and dips 30 degrees south. A grab sample from sorted ore assayed 11.62 per cent copper and 398 grams per tonne silver (Geological Survey of Canada Memoir 212).

About 300 metres to the east, a quartz vein, 15 to 60 centimetres wide, is exposed for 30 metres along the hangingwall side of another quartz porphyry sill intruding the andesite. The vein is sparsely mineralized with chalcocite and tetrahedrite. A 10 centimetre sample across the vein assayed 2489 grams per tonne silver, 5.2 per cent copper and 0.69 grams per tonne gold (Minister of Mines Annual Report 1928).

In 1917, 9 tonnes of ore was shipped from this property. From this ore, 15,552 grams of silver and 2903 kilograms of copper were recovered.

BIBLIOGRAPHY

EMPR AR 1916-90,101; 1917-447; 1920-84; 1923-105; 1925-130; *1928-149
EMPR MAP 69-1; 8
EMR MP CORPFILE (Glen Copper Mines Limited)

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

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GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

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BIBLIOGRAPHY

GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM *212, p. 23; 329, p. 94
GSC P 36-20, pp. 32,33; 36-17
GSC SUM RPT *1925A , p. 111

DATE CODED: 1986/11/20
DATE REVISED: 1989/08/10

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 062**

NATIONAL MINERAL INVENTORY: 10319 Cu9

NAME(S): **M & K, HUB, PRICE,
LEGATE CREEK**

STATUS: Past Producer Open Pit

MINING DIVISION: Omineca

REGIONS: British Columbia

NTS MAP: 103109E

UTM ZONE: 09 (NAD 83)

BC MAP:

LATITUDE: 54 39 29 N

LONGITUDE: 128 05 46 W

ELEVATION: 1430 Metres

NORTHING: 6057116

EASTING: 558310

LOCATION ACCURACY: Within 500M

COMMENTS: Adits; upper showing, Figure 2 (Geological Survey of Canada Memoir 212).

COMMODITIES: Copper Silver Lead Zinc Gold

MINERALS

SIGNIFICANT: Bornite Galena Chalcopyrite Specularite Tetrahedrite

Pyrite Sphalerite

ASSOCIATED: Quartz

ALTERATION: Malachite Azurite

ALTERATION TYPE: Oxidation

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated Massive

CLASSIFICATION: Unknown

TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb)

SHAPE: Irregular

MODIFIER: Sheared

DIMENSION:

STRIKE/DIP: 030/30S

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Jurassic

Cretaceous-Tertiary

GROUP

Hazelton

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Legate Creek Apophysis

LITHOLOGY: Andesite Flow
Volcanic Breccia
Tuff
Diorite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Stikine

Plutonic Rocks

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: VEIN

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1928

SAMPLE TYPE: Chip

COMMODITY

GRADE

Silver 597.0000 Grams per tonne

Gold 0.7000 Grams per tonne

Lead 0.2000 Per cent

Zinc 0.6000 Per cent

COMMENTS: 38 centimetre sample

REFERENCE: Minister of Mines Annual Report 1928, page 149.

CAPSULE GEOLOGY

Andesite flows with interbedded volcanic breccia and tuff of the Jurassic Hazelton Group are intruded by diorite of the Cretaceous to Tertiary Legate Creek apophysis. The volcanics, which strike northeast and dip 30 degrees southeast, contain concordant mineralized zones up to 1.2 metres wide. Mineralization consists of an intergrowth of chalcopyrite, galena, bornite and sphalerite, with minor tetrahedrite, pyrite, specularite, malachite and azurite. A 20 centimetre sample from a sheared zone assayed 2.16 per cent copper, 17.1 grams per tonne silver and 0.7 grams per tonne gold and a typical talus sample assayed 10.98 per cent copper, 26.51 per cent lead, 106.3 grams per tonne silver and trace gold (Geological Survey of Canada Memoir 212).

The "lower" showing, 500 metres south of the above "upper"

CAPSULE GEOLOGY

showing, is a 0.5 metre wide, 30 metre long quartz vein in diorite. The vein, striking north-northeast and dipping 60 degrees west, is mineralized with pyrite, chalcopyrite, tetrahedrite, galena and sphalerite. A 38 centimetre sample assayed 0.7 grams per tonne gold, 597 grams per tonne silver, 0.2 per cent lead and 0.6 per cent zinc (Minister of Mines Annual Report 1928).

Drilling in 1968 intersected 3 metres of 10.3 grams per tonne silver, 11.1 per cent copper and 0.10 per cent lead (National Mineral Inventory 103ICu9).

From 1917 to 1921, 212 tonnes of ore was shipped from this property. From this ore, 145,033 grams of silver, 42,066 kilograms of copper, and 34,144 kilograms of lead were recovered.

BIBLIOGRAPHY

EMPR AR 1916-100,101; 1917-99,100; 1919-99,100; 1920-83,84; 1921-96,97; 1923-105; 1924-93; *1925-128,129; *1928-148,149; 1929-153; 1966-80; 1967-83; 1968-108
EMPR GEM 1969-83; 1970-193
EMPR MAP 69-1; 8
EMPR PF (Rpt by A.P. Fawley, 1965 in Hub Mining & Exploration Ltd. Prospectus)
EMR MP CORPFILE (Sileurian Chieftan Mining Company, Limited; Hub Mining & Exploration Ltd.)
GSC MAP 278A; 1136A; 11-1956; 1385A
GSC MEM *212, pp. 21-23; 329, pp. 94,95
GSC P 36-20, pp. 32,33; 36-17
GSC SUM RPT *1925A, p. 111
Eardley-Wilmot, V.L.: Silver Producing Mines in British Columbia, p. 163, June 1930, Unpub. Rpt., Ottawa

DATE CODED: 1986/11/21
DATE REVISED: 1989/08/10

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 063**

NATIONAL MINERAL INVENTORY: 10319 Ag8

NAME(S): **M & M**, FM, LEGATE CREEK

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103109E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 38 49 N
LONGITUDE: 128 06 26 W
ELEVATION: 1370 Metres

NORTHING: 6055871
EASTING: 557609

LOCATION ACCURACY: Within 500M

COMMENTS: Veins, Figure 1 (Geological Survey of Canada Memoir 212).

COMMODITIES: Silver Lead Copper Gold

MINERALS

SIGNIFICANT: Pyrite Galena Tetrahedrite Chalcopyrite Sphalerite

ASSOCIATED: Specularite Quartz Calcite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

SHAPE: Irregular
MODIFIER: Faulted Sheared
DIMENSION:

STRIKE/DIP: 120/60W TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Cretaceous-Tertiary Legate Creek Apophysis

LITHOLOGY: Diorite
Volcanic

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Plutonic Rocks Stikine

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N

CATEGORY: Assay/analysis YEAR: 1937
SAMPLE TYPE: Channel
COMMODITY GRADE
Silver 134.0000 Grams per tonne
Gold 0.7000 Grams per tonne
Copper 0.3600 Per cent
Lead 0.8200 Per cent

COMMENTS: The sample width is 76.0 centimetres.
REFERENCE: Geological Survey of Canada Memoir 212, pages 19-21.

CAPSULE GEOLOGY

Albite diorite of the Cretaceous to Tertiary Legate Creek apophysis intrudes Jurassic Hazelton volcanics. Several northwest, 45 to 70 degrees southwest dipping quartz veins occur along shears in the diorite over a distance of 300 metres. The veins are 0.15 to 3 metres wide and contain sparse disseminations of pyrite, galena, tetrahedrite, chalcopyrite, galena and specularite. The upper vein is cut by a northeast trending, 40 degree southeast dipping fault, which also terminates quartz veins to the west. A 76 centimetre channel sample across the upper vein assayed 0.7 grams per tonne gold, 134 grams per tonne silver, 0.36 per cent copper and 0.82 per cent lead (Geological Survey of Canada Memoir 212).

BIBLIOGRAPHY

EMPR AR *1917-100; 1920-83,84; *1925-129; 1928-149; 1929-153;
1966-80; 1967-83; 1968-108
EMPR GEM 1969-83; 1970-193
EMPR MAP 69-1; 8
EMPR PF (Rpt by A.P. Fawley, 1965 in Hub Mining & Exploration Ltd. Prospectus)
GSC MAP 11-1956; 278A; 1136A; 1385A

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 584
REPORT: RGEN0100

BIBLIOGRAPHY

GSC MEM *212, pp. 19-21; 329, p. 94
GSC P 36-20, pp. 32,33; 36-17
GSC SUM RPT *1925A, p. 112

DATE CODED: 1986/11/21
DATE REVISED: 1989/08/10

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 064**

NATIONAL MINERAL INVENTORY: 10319 Ag14

NAME(S): **SILVER CROWN**, SILVER HORDE, BASIN

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103109E
BC MAP:

MINING DIVISION: Omineca

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 35 54 N
LONGITUDE: 128 07 36 W
ELEVATION: 1460 Metres

NORTHING: 6050446
EASTING: 556422

LOCATION ACCURACY: Within 500M

COMMENTS: Vein, Figure P91 (Minister of Mines Annual Report 1924), located between the heads of Chimdemash and North Kleanza Creeks.

COMMODITIES: Silver Copper Gold

MINERALS

SIGNIFICANT: Tetrahedrite Chalcopyrite Chalcocite Pyrite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb)
SHAPE: Irregular
DIMENSION:

STRIKE/DIP: 135/75S TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Jurassic

GROUP

Hazelton

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Andesite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Stikine

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1924

SAMPLE TYPE: Chip

COMMODITY

GRADE

Silver

1858.0000

Grams per tonne

Gold

0.3000

Grams per tonne

Copper

26.6600

Per cent

COMMENTS: The sample width is 15.0 centimetres.

REFERENCE: Minister of Mines Annual Report 1924, pages 88-93.

CAPSULE GEOLOGY

Andesite flows of the Jurassic Hazelton Group are intruded by quartz diorite dykes, probably related to a nearby diorite stock of the Coast Plutonic Complex. The volcanics, which strike southeast and dip steeply, are cut by quartz veins mineralized with tetrahedrite, chalcopyrite, chalcocite, and pyrite.

One of the veins, striking 135 degrees and dipping 75 degrees southwest is 45 metres long and 7 to 17 centimetres wide. A 17.8 centimetre channel sample assayed 150.2 grams per tonne silver, 0.7 cent copper (Geological Survey of Canada Memoir 212). A parallel vein, 60 metres to the northeast is 6 metres long and 13 centimetres wide. A sample across the vein assayed 1309 grams per tonne silver, 0.7 grams per tonne gold and 7.66 per cent copper (Geological Survey of Canada Memoir 212). A 15 centimetre sample of a vein 750 metres to the northwest, at the pass, assayed 1858 grams per tonne silver, 0.3 grams per tonne gold and 26.66 per cent copper (Minister of Mines Annual Report 1924).

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EMPR AR 1923-102,103; *1924-88-93; 1925-127; 1926-125

EMPR ASS RPT 15985

EMPR EXPL 1987-C359

EMPR MAP 69-1; 8

EMPR PF (Rpt by Elmendorf, W.J., 1924; Map by Willman, J.,

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 586
REPORT: RGEN0100

BIBLIOGRAPHY

Feb. 1929)
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 212, pp. 18,19; 329, p. 82
GSC P 36-20, pp. 31,32; 36-17
GSC SUM RPT 1925A, p. 113
V STOCKWATCH July 9, 1987

DATE CODED: 1986/11/10
DATE REVISED: 1989/08/15

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 065**

NATIONAL MINERAL INVENTORY: 10319 Ag13

NAME(S): **SILVER BASIN**, BASIN, BASIN SILVER

MINING DIVISION: Omineca

STATUS: Showing
 REGIONS: British Columbia
 NTS MAP: 103109E
 BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 36 24 N
 LONGITUDE: 128 08 56 W
 ELEVATION: 1265 Metres

NORTHING: 6051356
 EASTING: 554975

LOCATION ACCURACY: Within 500M

COMMENTS: Description, Figure P 91 (Minister of Mines Annual Report 1924); below falls along Chimdemash Creek.

COMMODITIES: Silver Copper Gold

MINERALS

SIGNIFICANT: Tetrahedrite Silver Galena Pyrite Chalcopyrite
 Bornite Chalcocite

ASSOCIATED: Quartz Calcite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated
 CLASSIFICATION: Epigenetic Hydrothermal
 TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au L01 Subvolcanic Cu-Ag-Au (As-Sb)
 SHAPE: Irregular
 MODIFIER: Faulted

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Andesite
 Dacite
 Tuff
 Albite Dike
 Lamprophyre Dike

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
 TERRANE: Stikine

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: SAMPLE	REPORT ON: N
CATEGORY: Assay/analysis	YEAR: 1923
SAMPLE TYPE: Chip	
COMMODITY	GRADE
Silver	4457.0000 Grams per tonne
Gold	10.3000 Grams per tonne
Copper	2.4000 Per cent

COMMENTS: The sample width is 15.0 centimetres.
 REFERENCE: Minister of Mines Annual Report 1923.

CAPSULE GEOLOGY

Underlying volcanics, which strike 110 degrees and dip 60 degrees south, consist of andesite, dacite and tuffs of the Jurassic Hazelton Group. The rocks are cut by albite and lamprophyre dykes and quartz veins mineralized with tetrahedrite, silver, chalcopyrite, galena, pyrite and bornite. A vein, up to 1 metre wide has been traced intermittently for 1400 metres in an east direction.

The main showing is a quartz vein averaging 30 centimetres wide and 60 metres long with sparse tetrahedrite, galena, pyrite and native silver. A 15 centimetre sample assayed 4457 grams per tonne silver, 10.3 grams per tonne gold and 2.4 per cent copper (Minister of Mines Annual Report 1923). The vein is offset by minor cross faults.

A 30 centimetre wide, 30 metre long vein containing narrow seams of tetrahedrite and bornite lies 520 metres to the east. A 33 centimetre channel sample assayed 333 grams per tonne silver and 1.0 per cent copper (Geological Survey of Canada Memoir 212).

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PAGE: 588
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BIBLIOGRAPHY

EMPR AR 1923-102,103; *1924-88-93; 1925-127; 1926-125; 1928-147
EMPR ASS RPT 15985
EMPR EXPL 1987-C359
EMPR MAP 69-1; 8
EMPR PF (Rpt by Elmendorf, W.J., 1924; Map by J. Willman, Feb. 1929)
EMR MP CORPFILE (Brent Exploration Ltd - Statement of Material
Facts, Feb. 1973)
GSC MAP 1136A; 1385A; 11-1956; 278A
GSC MEM *212, pp. 17,18; 329, p. 82
GSC P 36-20, pp. 31,32; 36-17
GSC SUM RPT 1925A, p. 113
V STOCKWATCH July 9, 1987
Placer Dome File

DATE CODED: 1986/11/10
DATE REVISED: 1989/08/15

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 066**

NATIONAL MINERAL INVENTORY: 10319 Cu27

NAME(S): **BANNER HOMESTAKE**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103109E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 36 19 N
LONGITUDE: 128 13 36 W
ELEVATION: 1300 Metres

NORTHING: 6051143
EASTING: 549953

LOCATION ACCURACY: Within 500M

COMMENTS: Description from Minister of Mines Annual Report 1925, page 128.

COMMODITIES: Copper Silver

MINERALS

SIGNIFICANT: Chalcopyrite Bornite Galena
ASSOCIATED: Quartz
ALTERATION: Malachite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb)
SHAPE: Irregular
DIMENSION:

STRIKE/DIP: 120/75S

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Andesite
Tuff
Volcanic Breccia
Porphyritic Quartz Dike

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Chip

YEAR: 1937

COMMODITY	GRADE	
Silver	8.9000	Grams per tonne
Copper	0.2000	Per cent

REFERENCE: Geological Survey of Canada Memoir 212, page 17.

CAPSULE GEOLOGY

Andesite and volcanic tuffs and breccias of the Jurassic Hazelton Group are cut by a 1.2 metre wide quartz porphyry dyke. The altered zone on both sides of the dyke, which strikes 120 degrees and dips 75 degrees southwest, contains quartz veins with minor chalcopyrite, bornite, galena and malachite. The zone extends for about 300 metres along strike and is one metre wide. A typical sample assayed 0.20 per cent copper and 8.9 grams per tonne silver (Geological Survey of Canada Memoir 212).

BIBLIOGRAPHY

EMPR AR *1925-128
EMPR MAP 69-1; 8
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM *212, p. 17; 329
GSC P 36-20, pp. 31,32; 36-17
GSC SUM RPT 1925A, p. 113

DATE CODED: 1986/11/10
DATE REVISED: 1989/08/10

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 067**

NATIONAL MINERAL INVENTORY: 10319 Cu30

NAME(S): **GALENA**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103109E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 38 19 N
LONGITUDE: 128 13 06 W
ELEVATION: 1220 Metres

NORTHING: 6054858
EASTING: 550450

LOCATION ACCURACY: Within 500M

COMMENTS: Description from Geological Survey of Canada Memoir 212, page 26.

COMMODITIES: Copper Lead Silver Gold

MINERALS

SIGNIFICANT: Chalcopyrite Bornite Galena

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic
TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb)
SHAPE: Irregular
DIMENSION:

I05 Polymetallic veins Ag-Pb-Zn±Au

STRIKE/DIP: 180/45E TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Jurassic

Hazelton

Undefined Formation

LITHOLOGY: Andesite Flow
Basaltic Flow
Quartz Albite Dike

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1937

SAMPLE TYPE: Rock

COMMODITY

GRADE

Silver	229.0000	Grams per tonne
Gold	0.7000	Grams per tonne
Copper	6.9800	Per cent
Lead	0.9600	Per cent

REFERENCE: Geological Survey of Canada Memoir 212, pages 26,27.

CAPSULE GEOLOGY

Andesite and basalt flows, ranging from 6 to 15 metres thick, belong to the Jurassic Hazelton Group. The flows, which strike from east to southeast and dip 50 degrees south, are cut by a quartz-albite dyke which strikes south and dips 45 degrees east.

Galena and chalcopyrite occur in a one metre wide, 10 metre long altered zone along the footwall of the dyke. A 60 centimetre channel sample assayed trace gold, 23.3 grams per tonne silver, and 1.09 per cent lead (Geological Survey of Canada Memoir 212).

At about 75 metres lower in elevation, a 60 centimetre wide quartz vein, striking 110 degrees and dipping 55 degrees north, occurs in the volcanics. A selected sample, containing chalcopyrite, bornite and minor galena, assayed 0.7 grams per tonne gold, 229 grams per tonne silver, 0.96 per cent lead and 6.98 per cent copper (Geological Survey of Canada Memoir 212).

BIBLIOGRAPHY

EMPR MAP 69-1; 8
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM *212, pp. 26,27; 329, p. 94

DATE CODED: 1986/11/24
DATE REVISED: 1989/08/10

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 067**

MINFILE NUMBER: **1031 068**

NATIONAL MINERAL INVENTORY: 10319 Cu29

NAME(S): **SILVER MITTS, MITTS**

STATUS: Showing
 REGIONS: British Columbia
 NTS MAP: 103109E
 BC MAP:

MINING DIVISION: Omineca
 UTM ZONE: 09 (NAD 83)
 NORTHING: 6054999
 EASTING: 549193

LATITUDE: 54 38 24 N
 LONGITUDE: 128 14 16 W
 ELEVATION: 975 Metres

LOCATION ACCURACY: Within 500M

COMMENTS: Main showing from descriptions (Lay & Mandy, 1937, Property File).

COMMODITIES: Copper Silver Gold

MINERALS

SIGNIFICANT: Bornite Chalcopyrite Cuprite Specularite Pyrite
 Galena
 ASSOCIATED: Quartz Biotite Calcite
 ALTERATION: Malachite Silica
 ALTERATION TYPE: Silicific'n Oxidation
 MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
 CLASSIFICATION: Epigenetic
 TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb)
 SHAPE: Irregular
 MODIFIER: Sheared
 DIMENSION:
 COMMENTS: Main showing.

STRIKE/DIP: 105/67N TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Andesite
 Quartz Albite Dike

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
 TERRANE: Stikine

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis
 SAMPLE TYPE: Channel

YEAR: 1937

<u>COMMODITY</u>	<u>GRADE</u>	
Silver	205.0000	Grams per tonne
Gold	0.7000	Grams per tonne
Copper	1.1600	Per cent

COMMENTS: The sample width is 35 centimetres.

REFERENCE: Geological Survey of Canada Memoir 212, pages 27,28.

CAPSULE GEOLOGY

Andesites of the Jurassic Hazelton Group are cut by quartz-albite dykes. A silicified zone in red andesite contains quartz veins and fractures mineralized with bornite, chalcopyrite and chalcocite. The zone, which strikes 105 degrees and dips 67 degrees north, is up to 20 metres long and 2 metres wide. A 2 metre sample across the zone assayed 2.9 per cent copper, 48 grams per tonne silver and 0.17 grams per tonne gold (Property File: Lay and Mandy, 1937).

About 500 metres to the northwest, chalcopyrite, pyrite and minor galena occur in narrow seams along faults and joints in a zone 1.2 metres wide. A selected sample assayed trace gold, 28.8 grams per tonne silver and 2.16 per cent copper (Geological Survey of Canada Memoir 212).

About 300 metres northeast, a silicified shear zone, along the hangingwall side of a 3.7 metre wide quartz-albite dyke, contains a 35 centimetre wide quartz vein with chalcopyrite and bornite. The dyke strikes 170 degrees and dips 45 degrees east. A 35 centimetre channel sample assayed 0.7 grams per tonne gold, 205 grams per tonne silver and 1.16 per cent copper (Geological Survey of Canada Memoir

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CAPSULE GEOLOGY

212).

BIBLIOGRAPHY

EMPR AR 1929-150,151; *1930-135,136; 1937-C32
EMPR MAP 69-1; 8
EMPR PF (*Rpt by D. Lay and J.T. Mandy, 1937)
GSC MAP 278A; 1136A; 11-1956; 1385A
GSC MEM *212, pp. 27,28; 329, p. 94
GSC P 36-20, pp. 38,39; 36-17

DATE CODED: 1986/11/24
DATE REVISED: 1989/08/10

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 069**

NATIONAL MINERAL INVENTORY: 10319 Cu32

NAME(S): **CONTINENTAL**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103109W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 37 29 N
LONGITUDE: 128 19 06 W
ELEVATION: 1190 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Description.

NORTHING: 6053246
EASTING: 544011

COMMODITIES: Copper Silver Gold

MINERALS

SIGNIFICANT: Bornite Chalcopyrite Pyrite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic
TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb)
SHAPE: Irregular
DIMENSION:

STRIKE/DIP: 360/30W TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Jurassic Hazelton Undefined Formation

LITHOLOGY: Andesite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Channel
COMMODITY
Silver
Copper

GRADE
20.6000 Grams per tonne
0.1800 Per cent

COMMENTS: The sample width is 40 centimetres.
REFERENCE: Geological Survey of Canada Memoir 212, pages 29,30.

CAPSULE GEOLOGY

A quartz vein in andesite of the Jurassic Hazelton Group strikes north and dips 30 degrees west. The vein is about 30 metres long and averages 1 metre wide. Mineralization includes blebs and streaks of chalcopyrite, bornite and pyrite. A 40 centimetre channel sample assayed trace gold, 20.6 grams per tonne silver and 0.18 per cent copper (Geological Survey of Canada Memoir 212).

BIBLIOGRAPHY

EMPR AR *1914-134,135; 1920-83; 1924-89
EMPR MAP 69-1; 8
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM *212, pp. 29,30; 329
GSC P 36-17

DATE CODED: 1986/12/09
DATE REVISED: 1989/08/10

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 070**

NATIONAL MINERAL INVENTORY: 10319 Ag15

NAME(S): **SINGLEHURST**, PTARMIGAN (L.154)

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103109W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 36 19 N
LONGITUDE: 128 18 46 W
ELEVATION: 1400 Metres

NORTHING: 6051086
EASTING: 544391

LOCATION ACCURACY: Within 500M

COMMENTS: Vein, Figure 4 (Geological Survey of Canada Memoir 212).

COMMODITIES: Silver Gold Copper

MINERALS

SIGNIFICANT: Argentite Chalcopyrite Bornite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb)

I05 Polymetallic veins Ag-Pb-Zn±Au

SHAPE: Irregular

MODIFIER: Faulted

DIMENSION:

STRIKE/DIP: 020/75E

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Jurassic

GROUP

Hazleton

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Andesite
Chert
Dioritic Dike

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1937

SAMPLE TYPE: Grab

COMMODITY

GRADE

Silver

4210.0000

Grams per tonne

Gold

0.7000

Grams per tonne

REFERENCE: Geological Survey of Canada Memoir 212, pages 30-32.

CAPSULE GEOLOGY

Andesitic flows and interbedded chert of the Jurassic Hazelton Group are cut by a north trending diorite dyke and a north-northeast trending fault. A quartz vein, about 100 metres long and 20 centimetres wide, follows the fault which strikes 020 degrees and dips 75 degrees east. The vein contains veinlets of argentite and minor chalcopyrite. A 0.9 kilogram sample of selected ore assayed 4210 grams per tonne silver and 0.7 grams per tonne gold and a representative sample from an old ore bin assayed 1222 grams per tonne silver, 0.7 grams per tonne gold and 0.20 per cent copper (Geological Survey of Canada Memoir 212).

BIBLIOGRAPHY

EMPR AR 1899-655; 1900-786; 1901-990,992,(photo),997-998; 1902-46;
1914-131,132
EMPR MAP 69-1; 8
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM *212, pp. 30-32; *329, p. 83
GSC P 36-17

DATE CODED: 1986/12/10
DATE REVISED: 1989/08/08

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 071**

NATIONAL MINERAL INVENTORY:

NAME(S): **MADDEN**, MABLE

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103109W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 39 04 N
LONGITUDE: 128 19 36 W
ELEVATION: 260 Metres

NORTHING: 6056177
EASTING: 543445

LOCATION ACCURACY: Within 500M
COMMENTS: Description.

COMMODITIES: Copper Silver

MINERALS

SIGNIFICANT: Chalcocite Specularite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb)
SHAPE: Irregular

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Andesite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Channel
COMMODITY: Silver
GRADE: 5.1000 Grams per tonne

YEAR: 1937

COMMENTS: The sample is 40.0 centimetres wide and also contains trace gold.
REFERENCE: Geological Survey of Canada Memoir 212, page 35.

CAPSULE GEOLOGY

A quartz vein, sparsely mineralized with chalcocite and specularite, occurs in andesite of the Jurassic Hazelton Group. The vein trends southeast for about 25 metres and is 0.5 metres wide. A 40 centimetre channel sample assayed trace gold and 5.1 grams per tonne silver (Geological Survey of Canada Memoir 212).

BIBLIOGRAPHY

EMPR AR 1914-Map p. 120; p. 135
EMPR MAP 69-1; 8
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 212, p. 35; 329
GSC P 36-17

DATE CODED: 1986/12/09
DATE REVISED: 1989/08/08

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 072**

NATIONAL MINERAL INVENTORY: 10319 Cu2

NAME(S): **TOULON**, TOULON (L.2268)

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 103109W
BC MAP:

MINING DIVISION: Omineca

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 39 04 N
LONGITUDE: 128 20 21 W
ELEVATION: 370 Metres

NORTHING: 6056169
EASTING: 542638

LOCATION ACCURACY: Within 500M

COMMENTS: Adits, Figure 5 (Geological Survey of Canada Memoir 212) on Lot 2268, located on the north side of Bornite Mountain.

COMMODITIES: Copper Gold Silver Antimony

MINERALS

SIGNIFICANT: Bornite Chalcocite Chalcopyrite Specularite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic
TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb)
SHAPE: Irregular
MODIFIER: Faulted
DIMENSION:

STRIKE/DIP: 050/40N TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Andesite
Greenstone
Dioritic Dike
Quartz Albite Dike

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: VEIN

REPORT ON: N

CATEGORY: Assay/analysis	YEAR: 1937	
SAMPLE TYPE: Chip		
<u>COMMODITY</u>	<u>GRADE</u>	
Silver	74.0000	Grams per tonne
Gold	0.7000	Grams per tonne
Copper	1.3200	Per cent

COMMENTS: The sample width is 79 centimetres.
REFERENCE: Geological Survey of Canada Memoir 212, pages 33-35.

CAPSULE GEOLOGY

Andesites of the Jurassic Hazelton Group are intruded by diorite and quartz-albite dykes and cut by several faults. A quartz vein, striking 050 degrees and dipping 40 degrees north, contains blebs and streaks of chalcocite, bornite, and chalcopyrite. The vein is about 30 metres long and averages 1 metre wide. A 79 centimetre sample assayed 0.7 grams per tonne gold, 74 grams per tonne silver and 1.32 per cent copper (Geological Survey of Canada Memoir 212).

About 800 metres to the east, the andesite on the west side of a quartz-albite dyke is sparsely mineralized with chalcocite and chalcopyrite over a 30 metre width. A 2 metre sample assayed 0.34 grams per tonne gold, 75.4 grams per tonne silver and 1.6 per cent copper (Property File: J. Willman, 1929).

Two test samples, totalling 70.8 kilograms produced 0.5 grams gold, 7.1 grams silver, 2.3 kilograms copper and 0.14 kilograms antimony (Minister of Mines Annual Report 1940).

BIBLIOGRAPHY

EMPR AR 1899-656; 1900-787; 1901-999; 1902-46; 1903-52; 1908-65; 1909-84; 1911-288; *1914-133,134; 1924-89; *1929-149,150;

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

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BIBLIOGRAPHY

1930-136; 1937-C32; 1940-45; 1965-70; 1967-82
EMPR MAP 69-1; 8
EMPR PF (Rpt by *D. Lay, 1937; Sketch Map by J. Willman, 1929)
EMR MP CORPFILE (Northlode Exploration Ltd.; Copper River
Exploration Company, Limited)
GSC MAP 278A; 11-1956; 1136A; 1385A
GSC MEM *212, pp. 33-35; 329, p. 82
GSC P 36-20, p. 39; 36-17

DATE CODED: 1986/12/09
DATE REVISED: 1989/08/08

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 073**

NATIONAL MINERAL INVENTORY:

NAME(S): **GOLD STAR - 4A CREEK**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103109W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 36 29 N
LONGITUDE: 128 28 46 W
ELEVATION: 600 Metres

NORTHING: 6051302
EASTING: 533623

LOCATION ACCURACY: Within 500M

COMMENTS: Mineralized zone, Figures 2, 5 (Assessment Report 2365).

COMMODITIES: Copper Silver

MINERALS

SIGNIFICANT: Chalcopyrite Pyrite Pyrrhotite Bornite

ALTERATION: Limonite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Epigenetic
TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb)
SHAPE: Irregular
MODIFIER: Faulted
DIMENSION:
COMMENTS: Mineralized gabbro.

STRIKE/DIP: 070/30N

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

Jurassic
Cretaceous-Tertiary

GROUP

Hazelton

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Coast Plutonic Complex

LITHOLOGY: Porphyritic Gabbro
Andesite
Basalt

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1969

SAMPLE TYPE: Channel

COMMODITY

Silver

GRADE

13.7000

Grams per tonne

Copper

0.2800

Per cent

COMMENTS: The sample width is 6.9 metres.

REFERENCE: Assessment Report 2365.

CAPSULE GEOLOGY

Andesite and basalt of the probable Jurassic age Hazelton Group, are intruded by a porphyritic gabbro sill of the Cretaceous to Tertiary Coast Plutonic Complex. The sill strikes 070 degrees for about 50 metres, dips 30 degrees northwest and is about 17 metres wide. All rocks are cut by northeast trending faults.

Chalcopyrite, pyrrhotite, and pyrite occur as disseminations and blebs within the intrusive. A 6.9 metre channel sample assayed 0.28 per cent copper, 13.7 grams per tonne silver and trace nickel (Assessment Report 2365).

On #4 Creek, 400 metres northwest of the above 4A Creek zone, bornite and chalcopyrite occur as disseminations, associated with mafic minerals in a porphyritic gabbro. A 4.6 metre chip sample assayed 0.33 per cent copper and 1.7 grams per tonne silver (Assessment Report 2365).

BIBLIOGRAPHY

EMPR ASS RPT 999, 1090, *2365, 2719

EMPR GEM *1969-76,77

EMPR MAP 8; 69-1

EMPR PF (Rpt by G.P. White, 1969)

RUN DATE: 26-Jun-2003
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REPORT: RGEN0100

BIBLIOGRAPHY

GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329

DATE CODED: 1986/12/15
DATE REVISED: 1989/08/08

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 074**

NATIONAL MINERAL INVENTORY: 10319 Cu34

NAME(S): **EMMA (L.71)**, I.X.L. (L.72), HAZEL

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103109W
BC MAP:
LATITUDE: 54 38 14 N
LONGITUDE: 128 23 56 W
ELEVATION: 140 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Adit, Emma (Lot 71).

MINING DIVISION: Omineca
UTM ZONE: 09 (NAD 83)
NORTHING: 6054589
EASTING: 538798

COMMODITIES: Copper Gold Silver Tungsten

MINERALS

SIGNIFICANT: Bornite Chalcopyrite Scheelite
ASSOCIATED: Quartz
ALTERATION: Malachite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb)
SHAPE: Irregular
MODIFIER: Faulted Sheared
DIMENSION: STRIKE/DIP: 105/40N TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Jurassic Hazelton Undefined Formation

LITHOLOGY: Andesite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Hazelton Ranges
TERRANE: Stikine

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1937
SAMPLE TYPE: Channel
COMMODITY GRADE
Silver 86.4000 Grams per tonne
Gold 0.7000 Grams per tonne
Copper 1.2100 Per cent

COMMENTS: The sample width is 71.0 centimetres.
REFERENCE: Geological Survey of Canada Memoir 205, pages 44,45.

CAPSULE GEOLOGY

Quartz veins mineralized with bornite, chalcopyrite and malachite occur in andesitic rocks of the Jurassic Hazelton Group. The Emma vein, at about 140 metres elevation, strikes 105 degrees and dips 25 to 40 degrees north. It is up to 60 metres long and varies from 0.3 to 2 metres wide. Several faults offset the vein. A 40 centimetre channel sample taken across the vein assayed 5.5 grams per tonne gold and 25 grams per tonne silver (Geological Survey of Canada Memoir 205).

The I.X.L. vein, about 300 metres to the east, strikes 120 degrees and dips 65 degrees south. It is exposed for about 30 metres and is up to 2.1 metres wide. A 71 centimetre channel sample taken across the best mineralized section assayed 0.7 grams per tonne gold, 86.4 grams per tonne silver and 1.21 per cent copper (Geological Survey of Canada Memoir 205).

Scheelite has been reported from the Emma workings.

BIBLIOGRAPHY

EMPR AR 1898-1153,1198; 1899-656; 1901-998; 1908-65; 1914-132,133;
1918-109,110; 1920-83,349; 1924-89; *1927-125; 1928-143,144;
*1929-149
EMPR BULL 10 (Rev), pp. 58,59

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

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GEOLOGICAL SURVEY BRANCH
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BIBLIOGRAPHY

EMPR MAP 69-1; 8
EMPR OF 1991-17
EMPR PF (Sketch Map by F. Nash)
GSC EC GEOL No. 17, pp. 44,45
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM *205, pp. 44,45; 329
GSC P 36-17, pp. 79,80; 36-20, p. 39
GSC SUM RPT 1925A, pp. 116,117
Omineca Herald, October 8, 1920 (Hazel Group)

DATE CODED: 1986/12/09
DATE REVISED: 1989/08/10

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 075**

NATIONAL MINERAL INVENTORY: 10319 Ag16

NAME(S): **BORNITE KING**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103109W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 37 29 N
LONGITUDE: 128 20 36 W
ELEVATION: 1370 Metres

NORTHING: 6053230
EASTING: 542397

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Silver Copper Gold

MINERALS

SIGNIFICANT: Chalcopyrite Bornite Chalcocite Galena
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic
TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb)
SHAPE: Irregular

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Andesite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Chip

YEAR: 1919

<u>COMMODITY</u>	<u>GRADE</u>	
Silver	2359.0000	Grams per tonne
Gold	1.7000	Grams per tonne
Copper	34.4000	Per cent

COMMENTS: The sample width is 12 centimetres.
REFERENCE: Minister of Mines Annual Report 1919, page 99.

CAPSULE GEOLOGY

Andesitic flows of the Jurassic Hazelton Group are intruded by quartz-albite dykes and granodiorite tongues. Small quartz veins, associated with the intrusives, contain chalcopyrite, bornite, chalcocite and galena. A selected sample of one 12 centimetre wide vein assayed 1.7 grams per tonne gold, 2359 grams per tonne silver and 34.4 per cent copper and a 30 centimetre sample of another assayed trace gold, 363 grams per tonne silver and 1 per cent copper (Minister of Mines Annual Report 1919).

BIBLIOGRAPHY

EMPR AR *1919-99; 1931-70,71
EMPR MAP 8; 69-1
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM *212, pp. 32,33; 329, p.82
GSC P 36-20, p. 39; 36-17

DATE CODED: 1986/12/10
DATE REVISED: 1989/08/10

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 076**

NATIONAL MINERAL INVENTORY: 10319 Cu33

NAME(S): **FOUR ACES (L.166)**, GOLCONDA (L.167), HICKEY

STATUS: Prospect
 REGIONS: British Columbia
 NTS MAP: 103109W
 BC MAP:
 LATITUDE: 54 37 49 N
 LONGITUDE: 128 22 16 W
 ELEVATION: 600 Metres
 LOCATION ACCURACY: Within 500M

MINING DIVISION: Omineca
 UTM ZONE: 09 (NAD 83)
 NORTHING: 6053832
 EASTING: 540598

COMMENTS: Golconda showing, Map 4 (Assessment Report 15144).

COMMODITIES: Copper Silver Gold Lead Zinc

MINERALS

SIGNIFICANT: Pyrite Bornite Chalcopyrite Galena Sphalerite
 ASSOCIATED: Quartz
 ALTERATION: Malachite Limonite
 ALTERATION TYPE: Oxidation
 MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated
 CLASSIFICATION: Epigenetic Hydrothermal
 TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb) I05 Polymetallic veins Ag-Pb-Zn±Au
 SHAPE: Irregular
 MODIFIER: Sheared

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Andesite
 Aplite Dike

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
 TERRANE: Stikine
 PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: SAMPLE	REPORT ON: N
CATEGORY: Assay/analysis	YEAR: 1969
SAMPLE TYPE: Grab	
COMMODITY	GRADE
Silver	96.0000 Grams per tonne
Gold	0.3400 Grams per tonne
Copper	1.2700 Per cent
Lead	0.2500 Per cent
Zinc	1.2100 Per cent

COMMENTS: The sample was collected from a sheared aplite dyke.
 REFERENCE: Geology, Exploration and Mining in British Columbia 1969, page 81.

CAPSULE GEOLOGY

The area is underlain by andesites of the Jurassic Hazelton Group, which are cut by aplite dykes. The Golconda showing, at 600 metres elevation, is a 150 metre long, east trending shear zone containing bornite, chalcopyrite, malachite and limonite. The zone is at least 8 metres wide and chip samples taken across this width assayed 4.16 per cent copper and 86.1 grams per tonne silver (Property File: Phendler, 1968). Drilling intersected 14 metres of 3.30 per cent copper (Property File: Phendler, 1968).

To the northwest, at 460 metres elevation, a sheared aplite dykes in andesite contains disseminated chalcopyrite, galena, sphalerite and pyrite. A grab sample assayed 0.34 grams per tonne gold, 96 grams per tonne silver, 1.27 per cent copper, 0.25 per cent lead and 1.21 per cent zinc (Geology, Exploration and Mining in British Columbia, 1969).

On the Four Aces claim, 450 metres northwest of the Golconda showing, quartz veins are mineralized with pyrite, chalcopyrite and minor bornite, galena and sphalerite. A grab sample assayed 0.05 per cent copper, 38.4 grams per tonne silver, and 0.2 grams per tonne gold (Assessment Report 15144). A sample of a shear zone, 650 metres

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RUN TIME: 12:06:33

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CAPSULE GEOLOGY

northeast of the Golconda showing, assayed 1.7 per cent copper, 22.0 grams per tonne silver and 0.2 grams per tonne gold (Assessment Report 15144).

BIBLIOGRAPHY

EMPR AR 1899-656; 1900-786; 1901-991; 1902-46,308; 1914-133; 1927-125,126; 1928-143,144; *1929-149; 1939-69; 1967-82; 1968-108
EMPR ASS RPT 2175, 2176, *15144
EMPR EXPL 1986-C428
EMPR GEM *1969-81
EMPR MAP 8; 69-1
EMPR PF (*Rpt by R.W. Phendler, 1968)
GSC MAP 278A; 11-1956; 1136A; 1385A
GSC MEM *205, pp. 45,46; 329, p. 82
GSC P 36-17, pp. 81,82; 36-20, p. 39
GSC SUM RPT 1925A, pp. 116,117

DATE CODED: 1986/12/09
DATE REVISED: 1989/08/08

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 077**

NATIONAL MINERAL INVENTORY: 10319 Au3

NAME(S): **COLUMARIO**, VALHALLA, KLEANZA,
TENDERFOOT

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 103109W
BC MAP:
LATITUDE: 54 34 39 N
LONGITUDE: 128 23 06 W
ELEVATION: 600 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Centre of quartz veins, Figure 9 (Geological Survey of Canada Memoir 205).

Underground
MINING DIVISION: Omineca
UTM ZONE: 09 (NAD 83)
NORTHING: 6047952
EASTING: 539753

COMMODITIES: Gold Silver Copper Lead

MINERALS

SIGNIFICANT: Pyrite Arsenopyrite Chalcopyrite Galena
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: I02 Intrusion-related Au pyrrhotite veins
SHAPE: Irregular
MODIFIER: Sheared
DIMENSION:
COMMENTS: Area of several large quartz veins.
STRIKE/DIP: 155/40E
TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Jurassic	Hazelton	Undefined Formation	Coast Plutonic Complex
Cretaceous-Tertiary			

LITHOLOGY: Andesite
Granodiorite
Diorite
Quartz Albite Dike
Dioritic Dike
Lamprophyre Dike

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine
Plutonic Rocks
PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: VEIN
REPORT ON: N
CATEGORY: Assay/analysis
SAMPLE TYPE: Bulk Sample
COMMODITY

	GRADE	
Silver	120.3000	Grams per tonne
Gold	49.4000	Grams per tonne
Copper	0.4200	Per cent
Lead	0.0200	Per cent

COMMENTS: The assays were obtained from a 90 kilogram test sample.
REFERENCE: Geological Survey of Canada Memoir 329, pages 81,82.

CAPSULE GEOLOGY

The Columario mine is located 11 kilometres east of Terrace. Andesites of the Jurassic Hazelton Group are intruded by diorite and granodiorite stocks of the Cretaceous to Tertiary Coast Plutonic Complex. These rocks are cut by quartz albite, diorite and lamprophyre dykes.

Seven fracture related, parallel quartz veins, mineralized with pyrite, arsenopyrite and minor chalcopyrite and galena, occur mainly in the andesite over an area 1300 by 500 metres. The veins strike 155 degrees and dip 30 to 60 degrees northeast. They average one metre in width and are up to 700 metres long. Gold is associated with the pyrite and a 90 kilogram test sample assayed 49.4 grams per tonne gold, 120.3 grams per tonne silver, 0.42 per cent copper and 0.02 per cent lead (Geological Survey of Canada Memoir 329).

CAPSULE GEOLOGY

The veins were discovered in 1919, and by 1934 Columario Consolidated Gold Mines, Ltd. explored the seven vein systems with 11 adits and about 2,400 metres of underground development. In 1934, a 91 tonne per day mill was constructed. Actual tonnage mined is not known, but production of precious metals recorded in 1934 and 1935 was 21,150 grams of gold and 58,101 grams of silver.

A limited geochemical survey in 1984 and underground sampling in 1987 were conducted. Rinsey Mines Ltd. signed an option agreement from Renoble Holdings Inc. in 1990.

BIBLIOGRAPHY

EMPR AR 1920-81-83; 1921-95,96; 1922-97; 1923-102; *1925-126,127;
1926-124; 1927-125; *1928-142,143; *1929-148,505; 1930-136,map;
1931-70; 1933-96; *1934-C2-4; 1939-55,69
EMPR ASS RPT *12781, 17551
EMPR BC METAL MM00465
EMPR BULL 1, 1932, pp. 55,56
EMPR EXPL 1984-376; 1988-C201
EMPR INDEX 3-192
EMPR MAP 8; 69-1
EMPR PF (*Rpts by D.C. McKay, 1922; W.J. Elmendorf, 1924-1925;
W.G. Norrie, 1931; H.L. Batten, 1931; Maps & Plans, 1926-
1935; Map by D. Lay, 1925; Rpt by J.A. McClintock, 1987 in
Prospectus for Fircrest Resources Ltd., Apr. 20, 1988, page 7)
EMR MP CORPFILE (Kleanza Company Limited; Columario Gold Mines
Limited; Endurance Minerals Inc.)
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM *205, pp. 41-43; 329, pp. 81,82
GSC P 36-17, pp. 73-76; *36-20, pp. 15-17
GSC SUM RPT 1925A, p. 117; 1926A
CANMET IR 743 (No. 506), 1933, pp. 132-135
GCNL #176, 1990
V STOCKWATCH Aug.17, 1987
Placer Dome File

DATE CODED: 1986/12/05
DATE REVISED: 1989/08/05

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 078**

NATIONAL MINERAL INVENTORY: 10319 Au5

NAME(S): **VICTOR**, NELSON, HAVROEN

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103109W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 33 39 N
LONGITUDE: 128 23 06 W
ELEVATION: 1150 Metres

NORTHING: 6046097
EASTING: 539769

LOCATION ACCURACY: Within 500M

COMMENTS: Veins, Map by Mandy, 1939 (Property File).

COMMODITIES: Gold Silver Copper

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: I02 Intrusion-related Au pyrrhotite veins
SHAPE: Irregular

MODIFIER: Fractured

DIMENSION:

STRIKE/DIP: 130/50N

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Jurassic
Cretaceous-Tertiary

GROUP

Hazelton

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Coast Plutonic Complex

LITHOLOGY: Andesite
Diorite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

Plutonic Rocks

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1940

SAMPLE TYPE: Rock

COMMODITY

GRADE

Silver

240.0000

Grams per tonne

Gold

120.0000

Grams per tonne

Copper

0.2500

Per cent

REFERENCE: Minister of Mines Annual Report 1940, page 46.

CAPSULE GEOLOGY

Andesites of the Jurassic Hazelton Group are intruded by diorite stocks of the Cretaceous to Tertiary Coast Plutonic Complex. Quartz veins, striking northwest and dipping 45 to 60 degrees northeast, occur along fractures in both andesite and diorite. The veins are 0.5 to 0.8 metres wide and up to 120 metres long. Gold is associated with pyrite and a 0.5 metre sample of one vein assayed 21 grams per tonne gold and 6.5 grams per tonne silver (Geological Survey of Canada Memoir 212). A 0.9 kilogram sample sent for assay, returned 120 grams per tonne gold, 240 grams per tonne silver and 0.25 per cent copper (Minister of Mines Annual Report 1940).

BIBLIOGRAPHY

EMPR AR 1939-59,68; 1940-45,46,54
EMPR ASS RPT 12781
EMPR EXPL 1984-376
EMPR MAP 69-1; 8
EMPR PF (*Sketch Map by J.T. Mandy, 1939)
EMR MP CORPFILE (Endurance Minerals Inc.)
GSC MAP 11-1956; 278A; 1136A; 1385A

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

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BIBLIOGRAPHY

GSC MEM *212, pp. 12,13; 329, p. 81

DATE CODED: 1986/12/05
DATE REVISED: 1989/08/10

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 079**

NATIONAL MINERAL INVENTORY: 10319 Au7

NAME(S): **TERRACE**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103109W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 33 19 N
LONGITUDE: 128 26 06 W
ELEVATION: 460 Metres

NORTHING: 6045452
EASTING: 536541

LOCATION ACCURACY: Within 500M
COMMENTS: Description.

COMMODITIES: Gold Silver Zinc Lead

MINERALS

SIGNIFICANT: Galena Sphalerite Pyrite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic Igneous-contact
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
DIMENSION:

STRIKE/DIP: 170/20E TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Cretaceous-Tertiary			Coast Plutonic Complex

LITHOLOGY: Granodiorite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Plutonic Rocks Stikine

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N

CATEGORY:	Assay/analysis	YEAR:	1937
SAMPLE TYPE:	Grab		
COMMODITY	GRADE		
Silver	82.3000	Grams per tonne	
Gold	16.8000	Grams per tonne	
Zinc	0.0100	Per cent	

REFERENCE: Geological Survey of Canada Memoir 205, pages 37,38.

CAPSULE GEOLOGY

Granodiorite of the Cretaceous to Tertiary Coast Plutonic Complex cuts volcanic rock of the Jurassic Hazelton Group. A flat-lying quartz vein, 46 centimetres wide, lies along the contact between the intrusive and volcanic rocks. The vein trends southeast and is cut by a 3.6 metre wide diorite porphyry dyke. Mineralization consists of minor sphalerite, galena and pyrite. A grab sample assayed 16.8 grams per tonne gold, 82.3 grams per tonne silver and 0.10 per cent zinc (Geological Survey of Canada Memoir 205).

BIBLIOGRAPHY

EMPR AR 1926-124
EMPR MAP 69-1; 8
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM *205, pp. 37,38; 329, p. 81
GSC P 36-17, p. 66; *36-20, p. 18
Placer Dome File

DATE CODED: 1986/11/28
DATE REVISED: 1989/08/10

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 080**

NATIONAL MINERAL INVENTORY: 10319 Ag2

NAME(S): **SILVER BOW**, SILVER CLIFF, CROESUS 19,
 CROESUS

STATUS: Prospect
 REGIONS: British Columbia
 NTS MAP: 103109W
 BC MAP:
 LATITUDE: 54 33 23 N
 LONGITUDE: 128 25 17 W
 ELEVATION: 610 Metres
 LOCATION ACCURACY: Within 500M
 COMMENTS: Location of old shaft on the Silver Bow claim from Geological Survey
 of Canada Memoir 205, Figure 8.

MINING DIVISION: Omineca
 UTM ZONE: 09 (NAD 83)
 NORTHING: 6045583
 EASTING: 537420

COMMODITIES: Silver Gold Lead Zinc Copper

MINERALS

SIGNIFICANT: Galena Sphalerite Pyrite Chalcopyrite Tetrahedrite
 ASSOCIATED: Quartz
 MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
 CLASSIFICATION: Epigenetic Hydrothermal
 TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
 SHAPE: Irregular
 DIMENSION: STRIKE/DIP: 170/65E TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic	Hazelton	Undefined Formation	Coast Plutonic Complex
Cretaceous-Tertiary			

LITHOLOGY: Andesite
 Feldspar Porphyry
 Granodiorite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
 TERRANE: Stikine Plutonic Rocks
 PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: VEIN REPORT ON: N
 CATEGORY: Assay/analysis YEAR: 1925
 SAMPLE TYPE: Rock

COMMODITY	GRADE	
Silver	720.0000	Grams per tonne
Gold	3.4000	Grams per tonne
Lead	26.0000	Per cent
Zinc	8.0000	Per cent

 REFERENCE: Minister of Mines Annual Report 1925, pages 124,125.

CAPSULE GEOLOGY

Andesites of the Lower Jurassic Hazelton Group are intruded by granodiorites and related feldspar porphyry dykes of the Cretaceous to Tertiary Coast Plutonic Complex. North striking, east dipping quartz veins occur over a 250 metre length adjacent to feldspar porphyry dykes within the andesites. The veins are up to 1 metre wide and contain galena, sphalerite, pyrite, tetrahedrite and chalcopyrite. A 25 centimetre sample of the Silver Bow showing assayed 6.9 grams per tonne gold, 2880 grams per tonne silver, 50 per cent lead and 24 per cent zinc (Geological Survey of Canada Memoir 205).
 The Silver Cliff showing, which is 150 metres to the northwest, is a 15 metre wide, 20 metre long quartz vein, striking 160 degrees and dipping 65 degrees east. A sample assayed 3.4 grams per tonne gold, 720 grams per tonne silver, 26 per cent lead and 8 per cent zinc (Minister of Mines Annual Report 1925).
 Production from the Silver Bow claim includes 6.7 tonnes which averaged 5.9 grams per tonne gold, 1426.6 grams per tonne silver, 1.1 per cent copper, 11.2 per cent lead and 13.0 per cent zinc (Minister of Mines Annual Report 1937, page C13).

BIBLIOGRAPHY

EMPR AR *1925-124,125; 1926-124; *1937-A35,C12-15; 1938-B39; 1967-80;
1968-107
EMPR ASS RPT 1234, 12072, *17260
EMPR EXPL 1983-502; 1988-C201
EMPR GEM 1970-194.195; 1972-500,501
EMPR MAP 8; 69-1
EMPR PF (Rpt by W.M. Sharp, 1966 in Kleanza Mines Ltd. Prospectus;
Rpt by J.A. McClintock, 1987 in Prospectus for Fircrest Resources
Ltd., Apr. 20, 1988)
EMR MP CORPFILE (Kendal Mining and Exploration Company Limited)
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM *205, pp. 38,39; 212; 329, p. 81
GSC P 36-17, pp. 67-69; *36-20, pp. 17,18
V STOCKWATCH Aug.17, 1987
Chevron File

DATE CODED: 1986/12/01
DATE REVISED: 1989/08/10

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 081**

NATIONAL MINERAL INVENTORY: 10319 Cu15

NAME(S): **EXCELSIOR**, CROESUS 12, CROESUS

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103109W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 32 28 N
LONGITUDE: 128 25 38 W
ELEVATION: 503 Metres

NORTHING: 6043880
EASTING: 537057

LOCATION ACCURACY: Within 500M

COMMENTS: Figure 8 (Assessment Report 12072).

COMMODITIES: Copper Gold Silver

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite
ASSOCIATED: Quartz Calcite Chlorite
ALTERATION: Chlorite Silica Carbonate
ALTERATION TYPE: Silicific'n Chloritic Carbonate
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Epigenetic
TYPE: I02 Intrusion-related Au pyrrhotite veins
SHAPE: Irregular
MODIFIER: Sheared
DIMENSION:

STRIKE/DIP: 045/90

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Lower Jurassic Cretaceous-Tertiary	Hazelton	Undefined Formation	Coast Plutonic Complex

LITHOLOGY: Andesite
Tuff
Amphibolite
Migmatite
Granodiorite
Diorite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

Plutonic Rocks

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Chip

YEAR: 1937

<u>COMMODITY</u>	<u>GRADE</u>	
Silver	13.7000	Grams per tonne
Gold	1.4000	Grams per tonne
Copper	0.3000	Per cent

COMMENTS: The sample width is 1.2 metres.

REFERENCE: Geological Survey of Canada Memoir 212, page 12.

CAPSULE GEOLOGY

Granodiorites of the Cretaceous to Tertiary Coast Plutonic Complex intrude recrystallized mafic volcanic rocks of the Lower Jurassic Hazelton Group. The rocks are intensely sheared and contain numerous quartz stringers over a 12 metre width. The quartz veins trend north and contain disseminations and blebs of pyrite and chalcopyrite. A 1.2 metre sample assayed 1.4 grams per tonne gold, 13.7 grams per tonne silver and 0.3 per cent copper (Geological Survey of Canada Memoir 212).

The mineralization occurs within migmatized intrusives and volcanics, marginally-outward of the intrusive complex. The rocks are soft-chloritized dark green andesitic tuff or amphibolite-diorite.

Several trenches have been blasted and bulldozed in chloritized and carbonate altered dark green andesite over a 60 by 20 metre area. Within this area, the andesite is mineralized by pyrite and quartz-carbonate-chlorite veins and minor chalcopyrite. Samples from the

CAPSULE GEOLOGY

mineralized zone include a 1.2 metre chip sample which assayed 0.3 per cent copper, 13.7 grams per tonne silver and 1.37 grams per tonne gold. Another 1.5 metre chip sample assayed 0.2 per cent copper, 1.7 grams per tonne silver and 1.03 grams per tonne gold (McClintock, 1987).

BIBLIOGRAPHY

EMPR AR 1967-81,82; 1968-107
EMPR ASS RPT 1234, 1942, *12072, *17260
EMPR EXPL 1983-502; 1988-C201
EMPR GEM 1969-77,78; 1970-194,195; 1972-500,501
EMPR MAP 8; 69-1
EMPR PF (Rpt by *W.M. Sharp, 1966 in Kleanza Mines Ltd. Prospectus;
Rpt by *J.A. McClintock, 1987 in Prospectus for Fircrest Resources
Ltd., Apr. 20, 1988)
EMR MP CORPFILE (Kendal Mining and Exploration Company Limited)
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 205; *212, p. 12; 329
V STOCKWATCH Aug.17, 1987
Chevron File

DATE CODED: 1986/12/02
DATE REVISED: 1989/08/10

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 082**

NATIONAL MINERAL INVENTORY: 10319 Au2

NAME(S): **ZYMOETZ**, HOMESTEAD, CROESUS

STATUS: Showing
 REGIONS: British Columbia
 NTS MAP: 103109W
 BC MAP:

MINING DIVISION: Omineca
 UTM ZONE: 09 (NAD 83)

LATITUDE: 54 31 59 N
 LONGITUDE: 128 25 14 W
 ELEVATION: 160 Metres

NORTHING: 6042987
 EASTING: 537495

LOCATION ACCURACY: Within 500M

COMMENTS: Located along the Zymoetz River; location of mineralized veins on the north side of the river from Assessment Report 12072, Figure 8.

COMMODITIES: Gold Silver Zinc Lead Copper

MINERALS

SIGNIFICANT: Pyrite Sphalerite Galena Chalcopyrite Magnetite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein

CLASSIFICATION: Epigenetic

TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au I02 Intrusion-related Au pyrrhotite veins

SHAPE: Irregular

DIMENSION:

STRIKE/DIP: 090/45N TREND/PLUNGE:

COMMENTS: Main showing.

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Cretaceous-Tertiary			Coast Plutonic Complex

LITHOLOGY: Quartz Diorite
 Feldspar Porphyry

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
 TERRANE: Plutonic Rocks

Stikine

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1938

SAMPLE TYPE: Rock

COMMODITY

GRADE

Silver	34.3000	Grams per tonne
Gold	24.0000	Grams per tonne
Zinc	9.4000	Per cent

COMMENTS: The sample was collected from an area measuring 50 centimetres by 8 metres.

REFERENCE: Minister of Mines Annual Report 1938, pages B12-B15.

CAPSULE GEOLOGY

Quartz diorite of the Cretaceous to Tertiary Coast Plutonic Complex intrudes volcanic rocks of the Lower Jurassic Hazelton Group. The quartz diorite is cut by northeast trending feldspar porphyry dykes which range from 3 to 5 metres in width.

Two separate, parallel quartz veins approximately 100 metres apart, cut the quartz diorite and host irregular streaks and patches of pyrite, chalcopyrite, sphalerite, galena and magnetite. The lower vein consists of two easterly converging, 5 to 75 centimetre wide veins that trend 280 degrees and dip 75 degrees north. Both veins are well mineralized with sphalerite, pyrite and minor galena. A channel sample taken across 1.0 metre, assayed 1.71 grams per tonne gold and 4.8 grams per tonne silver (Assessment Report 12072). A 70 centimetre channel sample, taken from a crosscut adit which intersected a 30 to 75 centimetre wide quartz vein which may represent the down dip extension of these veins, assayed 2.7 grams per tonne gold, 5.1 grams per tonne silver and 0.32 per cent zinc (Geological Survey of Canada Memoir 205).

Seventy-five metres west of these veins, an open cut exposed a 35 centimetre wide quartz vein which strikes 280 degrees and dips 65 degrees north. A chip sample, taken across 35 centimetres, averaged

CAPSULE GEOLOGY

15.1 grams per tonne gold and 13.7 grams per tonne silver (Geological Survey of Canada Memoir 205).

The upper, or main vein, consists of a single 10 to 100 centimetre wide quartz vein which strikes 283 degrees and dips between 25 and 48 degrees north. The vein is traceable for 21 metres in outcrop and has been explored by a 14.5 metre long adit. The vein consists of massive to sheared quartz variably mineralized with sphalerite, pyrite, galena and magnetite. Two channel samples taken across the vein assayed 8.9 grams per tonne gold and 0.1 grams per tonne silver across 75 centimetres and 30 centimetres, respectively (McClintock, 1987, Figure 6). In 1938, a sample of selected mineralization over a 50 centimetre width and 8 metre length assayed 24 grams per tonne gold, 34.3 grams per tonne silver and 9.4 per cent zinc (Geological Survey of Canada Memoir 205).

The Minister of Mines Annual Report for 1938, reports the following bulk shipments to the sampling plant at Prince Rupert:

	Gold	Silver	Copper	Lead	Zinc
Weight	g/tonne	g/tonne	%	%	%
24.5 kg	11.66	58.28	tr	3.7	21.2
0.64 t	44.23	53.48	tr	nil	7.8
0.07 t	13.37	44.57	nil	2.0	16.0

BIBLIOGRAPHY

- EMPR AR 1934-C4; 1937-C33; *1938-B12-B15,B39; 1939-69; 1940-54
- EMPR ASS RPT 12072, *17260
- EMPR EXPL 1983-502; 1988-C201
- EMPR MAP 8; 69-1
- EMPR PF (*McClintock, J.A. (1987): Report on the Croesus Gold Property in Prospectus for Fircrest Resources Ltd., Apr. 20, 1988)
- GSC MAP 11-1956; 278A; 1136A; 1385A
- GSC MEM *205, pp. 35,36; 329, pp. 79,80
- GSC P 36-17, pp. 61,62; *36-20, pp. 18,19
- V STOCKWATCH Aug.20, 1987
- Chevron File

DATE CODED: 1986/12/03
DATE REVISED: 1989/08/10

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 083**

NATIONAL MINERAL INVENTORY: 10319 Cu37

NAME(S): **KINO**, KDL, H,
M.C., B.X.

MINING DIVISION: Omineca

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 103109W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 33 29 N
LONGITUDE: 128 19 36 W
ELEVATION: 600 Metres

NORTHING: 6045823
EASTING: 543544

LOCATION ACCURACY: Within 500M

COMMENTS: Mineralized volcanic breccia, Figure 3 (Assessment Report 10406).

COMMODITIES: Copper Molybdenum Lead Zinc Silver

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Molybdenite Galena Sphalerite

ASSOCIATED: Quartz Tetrahedrite

ALTERATION: Calcite Carbonate Chlorite Epidote Pyrite

Actinolite Malachite Limonite

ALTERATION TYPE: Sericitic Carbonate Propylitic Oxidation

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Breccia Stockwork
CLASSIFICATION: Porphyry Epigenetic Disseminated Hydrothermal
TYPE: L04 Porphyry Cu ± Mo ± Au I05 Polymetallic veins Ag-Pb-Zn±Au

SHAPE: Irregular

MODIFIER: Fractured

DIMENSION: 0250 x 0120 x 0015 Metres

STRIKE/DIP: 115/35N TREND/PLUNGE:

COMMENTS: Volcanic breccia zone.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE: Jurassic Cretaceous-Tertiary
GROUP: Hazelton
FORMATION: Undefined Formation
IGNEOUS/METAMORPHIC/OTHER: Coast Plutonic Complex

LITHOLOGY: Volcanic Breccia
Gossan
Quartz Diorite
Andesite
Volcanic Agglomerate
Siltstone

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

Plutonic Rocks

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1972
SAMPLE TYPE: Chip
COMMODITY: Copper GRADE: 0.0500 Per cent
COMMENTS: Chip sample over 120 metre width.
REFERENCE: Assessment Report 4275, 10406.

ORE ZONE: BRECCIA REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1972
SAMPLE TYPE: Chip
COMMODITY: Copper GRADE: 0.3700 Per cent
COMMENTS: Chip sample over 30 metres. Volume of the breccia is about
450000 cubic metres.
REFERENCE: Assessment Report 4275.

CAPSULE GEOLOGY

Volcanics and sediments of the Jurassic Hazelton Group are intruded by quartz-diorite stocks and dykes of the Cretaceous to Tertiary Coast Plutonic Complex. A 2000 by 1000 metre, east-west

CAPSULE GEOLOGY

trending gossan zone contains areas of copper and molybdenite mineralization which occur as fracture fillings and disseminations within the volcanics and intrusives.

The volcanics and sediments consist of banded tuffs, andesites, volcanic agglomerates, breccias, and siltstones. The rocks occupy a broad syncline with an east-northeast trending fold axis and are intensely fractured, responding to the northwest trending Dardenelle fault system.

A 250 metre long, 120 metre wide, and 15 metre thick volcanic breccia, within the volcanic rocks, strikes 115 degrees and dips 35 degrees to the northeast. It contains blebs, crystals and disseminations of pyrite and minor chalcopyrite. A chip sample over 30 metres assayed 0.37 per cent copper and grab samples over 120 metres assayed 1.6 per cent copper, 0.34 grams per tonne gold and 19.5 grams per tonne silver (Assessment Report 4275). The breccia and, to a limited extent, the volcanics show carbonate and some sericitic alteration.

A porphyritic quartz-diorite stock, referred to as the Copper Stock, occurs 500 metres north of the breccia zone. It is about 150 metres wide and is sparsely mineralized with fracture fillings and disseminations of pyrite, chalcopyrite and molybdenite. A 120 metre chip sample assayed 0.05 per cent copper and trace molybdenite (Assessment Report 4275). Alteration in the stock includes sericitic and some carbonate.

Quartz veins, up to 25 centimetres wide, occur with various attitudes throughout the gossan area. Some have carbonate minerals and most have pyrite. Many of the veins also carry galena, sphalerite, tetrahedrite, chalcopyrite and molybdenite. Associated alteration includes actinolite, chlorite, epidote, dolomite, ankerite, limonite, pyrite and malachite.

The old B.X. Showing is a 1.2 metre wide quartz vein containing pyrite and molybdenite. It and other quartz veins outcrop along the banks of Kleanza Creek, north of the above showings.

BIBLIOGRAPHY

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EMPR ASS RPT *829, 2325, *4275, 8221, *10406
EMPR BULL 9, p. 93
EMPR EXPL 1980-393; 1981-283
EMPR GEM *1970-194; 1971-114; 1972-501
EMPR MAP 69-1; 8
EMR MP CORPFILE (Kendal Mining & Exploration Company Limited)
GSC MEM 329
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC P 36-17
CIM Spec. Vol. 15, 1976, Map B

DATE CODED: 1986/11/26
DATE REVISED: 1989/08/10

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 084**

NATIONAL MINERAL INVENTORY: 10319 Au8

NAME(S): **ADELINE**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103109W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 32 39 N
LONGITUDE: 128 23 46 W
ELEVATION: 840 Metres

NORTHING: 6044236
EASTING: 539066

LOCATION ACCURACY: Within 500M

COMMENTS: Description and Map 36-17; located on the south side of Kleanza Mountain.

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Pyrite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: I02 Intrusion-related Au pyrrhotite veins
DIMENSION:

STRIKE/DIP: 090/30N

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Cretaceous-Tertiary

Coast Plutonic Complex

LITHOLOGY: Granodiorite
Volcanic

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Plutonic Rocks

Stikine

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1937

SAMPLE TYPE: Chip

COMMODITY

GRADE

Gold

0.7000

Grams per tonne

COMMENTS: The sample width is 60.0 centimetres.

REFERENCE: Geological Survey of Canada Memoir 205, page 36.

CAPSULE GEOLOGY

Granodiorite of the Cretaceous to Tertiary Coast Plutonic Complex cuts volcanics of the Jurassic Hazelton Group. A 1.2 metre wide quartz vein, striking east and dipping 30 degrees north, occurs in the granodiorite. A 60 centimetre sample assayed 0.7 grams per tonne gold and trace silver (Geological Survey of Canada Memoir 205).

BIBLIOGRAPHY

EMPR MAP 8; 69-1
GSC MAP 278A; 11-1956; 1136A; 1385A
GSC MEM *205, p. 36; 329, p. 81
GSC P 36-17, p. 63

DATE CODED: 1986/11/28
DATE REVISED: 1989/08/10

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 085**

NATIONAL MINERAL INVENTORY: 10319 Cu16

NAME(S): **ALVIJA**, LUCKY JIM

STATUS: Developed Prospect

MINING DIVISION: Omineca

REGIONS: British Columbia

NTS MAP: 103109E

BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 33 49 N

LONGITUDE: 128 10 56 W

ELEVATION: 650 Metres

NORTHING: 6046540

EASTING: 552878

LOCATION ACCURACY: Within 500M

COMMENTS: Adits and drilling site (Property File).

COMMODITIES: Copper

Silver

MINERALS

SIGNIFICANT: Bornite Chalcocite Chalcopyrite Tetrahedrite

ASSOCIATED: Quartz

ALTERATION: Malachite

Epidote

ALTERATION TYPE: Oxidation

Epidote

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein

Disseminated

CLASSIFICATION: Epigenetic

Hydrothermal

TYPE: D03 Volcanic redbed Cu

L01 Subvolcanic Cu-Ag-Au (As-Sb)

SHAPE: Irregular

MODIFIER: Sheared

Other

DIMENSION: 0075 x 0075 x 0060 Metres

STRIKE/DIP: 160/65W

TREND/PLUNGE:

COMMENTS: Main showing with four zones. Modifier is brecciated.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Jurassic

GROUP

Hazelton

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Andesite
Rhyolite
Tuff

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Stikine

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: MAIN

REPORT ON: Y

CATEGORY: Unclassified
QUANTITY: 181420 Tonnes

YEAR: 1968

COMMODITY

GRADE

Silver

68.5000

Grams per tonne

Copper

4.0000

Per cent

COMMENTS: Four drillholes.

REFERENCE: Property File - Phendler, 1968.

CAPSULE GEOLOGY

The area is underlain by interbedded andesites, rhyolites and tuffs of the Jurassic Hazelton Group. The rocks, which strike 160 degrees and dip about 50 degrees northeast, are concordantly sheared and brecciated, with associated copper mineralization occurring as disseminations, blebs and fracture fillings. Mineralization includes bornite and minor chalcocite, chalcopyrite, malachite and possibly tetrahedrite, with associated quartz and epidote.

The Main showing contains four zones, the widest being 10.7 metres, over a width of 75 metres, a length of 75 metres and a vertical depth of 60 metres. A 7.6 metre chip sample on surface assayed 3.60 per cent copper and 65.1 grams per tonne silver (Geology, Exploration and Mining in British Columbia 1969). Sampling of 3 zones intersected by drilling, averaged 1.10 per cent copper and 23.7 grams per tonne silver over their average width of 9.3 metres (Property File: Phendler, 1968). Unclassified ore, based on 4 drill holes, is 181,420 tonnes of 4 per cent copper and 68.5 grams per tonne silver (Property File - Phendler, R.W., 1968; Western Miner October 1968, page 154).

A shaft, 500 metres to the southeast, follows a fault in ande-

CAPSULE GEOLOGY

site with associated chalcocite veinlets. A 30 centimetre sample assayed 0.28 per cent copper and 4.1 grams per tonne silver (Geological Survey of Canada Memoir 212). Two small showings, the North and Chris, occur 460 metres northwest and 760 metres east, respectively, of the Main showing.

BIBLIOGRAPHY

EMPR AR 1905-82; 1908-65; 1909-84; 1914-126,127,Map P120; 1920-83;
*1923-103,104; 1924-88,89; 1925-126; 1926-125; 1928-146; 1929-152;
1930-137; 1967-82; 1968-107,108
EMPR ASS RPT 9914
EMPR EXPL 1980-392
EMPR GEM *1969-82,83; 1970-193,194
EMPR MAP 69-1; 8
EMPR PR (*Rpts by R.G. Jury, 1967; G.P.E. White, 1967; R.W. Phendler,
1968; Alviija Mines Ltd.- Prospectus; Maps by J. Willman, 1929)
EMR MIN BULL MR 223 B.C. 289
EMR MP CORPFILE (Alviija Mines Ltd.)
GSC MAP 278A; 11-1956; 1136A; 1385A
GSC MEM *212, pp. 16,17; 329
GSC P 36-20, p. 31; 36-17
GSC SUM RPT 1925A, pp. 114,115
W MINER Oct. 1968, p. 154
EMPR OF 1998-10

DATE CODED: 1986/11/12
DATE REVISED: 1989/08/08

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 086**

NATIONAL MINERAL INVENTORY: 10319 Cu8

NAME(S): **AVON**, LOWRIE, NORTH STAR

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103109E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 33 09 N
LONGITUDE: 128 03 56 W
ELEVATION: 990 Metres

NORTHING: 6045397
EASTING: 560438

LOCATION ACCURACY: Within 500M
COMMENTS: Description.

COMMODITIES: Copper Gold Silver

MINERALS

SIGNIFICANT:	Chalcopyrite	Bornite	Chalcocite	Pyrite
ASSOCIATED:	Garnet	Calcite	Magnetite	Quartz
ALTERATION TYPE:	Skarn		Silicific'n	
MINERALIZATION AGE:	Unknown			

DEPOSIT

CHARACTER: Breccia Vein
CLASSIFICATION: Skarn Replacement
TYPE: K04 Au skarn
SHAPE: Irregular
MODIFIER: Other
DIMENSION:
COMMENTS: Modifier is brecciated.

STRIKE/DIP: 360/90

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Triassic	Undefined Group	Unnamed/Unknown Formation	

LITHOLOGY: Limestone
Skarn

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine
METAMORPHIC TYPE: Contact

PHYSIOGRAPHIC AREA: Hazelton Ranges

RELATIONSHIP:

GRADE: Granulite

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Channel

YEAR: 1937

<u>COMMODITY</u>	<u>GRADE</u>	
Silver	1.4000	Grams per tonne
Gold	2.1000	Grams per tonne

COMMENTS: The sample width is 61.0 centimetres.
REFERENCE: Geological Survey of Canada Memoir 212, pages 15,16.

CAPSULE GEOLOGY

Triassic age limestone and andesite of the Jurassic Hazelton Group are intruded by a granodiorite stock of the Cretaceous to Tertiary Coast Plutonic Complex. A wide band of limestone, striking north and dipping 45 degrees east is altered and silicified into a green banded skarn containing garnet, epidote, quartz and calcite. The rock is cut by several north striking, vertical faults resulting in brecciated zones up to 2 metres wide.

A zone is sparsely mineralized with chalcopyrite, pyrite, bornite and chalcocite. A 61 centimetre channel sample across the zone assayed 2.1 grams per tonne gold and 1.4 grams per tonne silver and a 25 centimetre sample of a nearby quartz vein with chalcopyrite assayed 0.04 per cent copper (Geological Survey of Canada Memoir 212).

BIBLIOGRAPHY

EMPR AR 1908-65; 1909-84; 1914-122, Map P120; 1917-95; 1924-89
EMPR MAP 69-1; 8
EMPR PF (Map, 1929; Map by J. Willman, Feb. 1929)
GSC MAP 278A; 1136A; 11-1956; 1385A
GSC MEM *212, pp. 15,16; 329 p. 82

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 622
REPORT: RGEN0100

BIBLIOGRAPHY

GSC P 36-17
GSC SUM RPT 1910, p. 101; *1925A, p. 114

DATE CODED: 1986/11/07
DATE REVISED: 1989/08/10

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 087**

NATIONAL MINERAL INVENTORY: 10319 Cu6

NAME(S): **WELLS**, GLEN, LOW PASS

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103109E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 31 59 N
LONGITUDE: 128 01 26 W
ELEVATION: 1420 Metres

NORTHING: 6043271
EASTING: 563162

LOCATION ACCURACY: Within 500M
COMMENTS: Description.

COMMODITIES: Copper Silver

MINERALS

SIGNIFICANT: Chalcocite Bornite Cuprite
ASSOCIATED: Quartz Calcite Epidote
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal
TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb) D03 Volcanic redbed Cu
SHAPE: Irregular
MODIFIER: Sheared

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE: Jurassic GROUP: Hazelton FORMATION: Undefined Formation IGNEOUS/METAMORPHIC/OTHER:

LITHOLOGY: Andesite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Hazelton Ranges
TERRANE: Stikine

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1917
SAMPLE TYPE: Chip
COMMODITY: Silver GRADE: 79.0000 Grams per tonne
Copper 9.5000 Per cent
COMMENTS: The sample width is 1.2 metres.
REFERENCE: Minister of Mines Annual Report 1917, page 96.

CAPSULE GEOLOGY

Mineralization consisting of bornite, chalcocite and cuprite occurs in three shear zones cutting andesitic volcanic rocks of the Jurassic Hazelton Group. The variably oriented shear zones are up to 1.2 metres wide and contain stringers of quartz, calcite and epidote, up to 20 centimetres wide.

A 1.2 metre sample from an adit assayed 9.5 per cent copper, 79 grams per tonne silver and trace gold (Minister of Mines Annual Report 1917). A sample of another shear zone assayed 4.2 per cent copper and 103 grams per tonne silver over 3 metres (Minister of Mines Annual Report 1917).

BIBLIOGRAPHY

EMPR AR 1914-120,121; *1917-96; 1924-89; 1930-136; 1966-80
EMPR GEM 1969-79
EMPR MAP 69-1; 8
EMPR PF (Map, 1929; Map by J. Willman, Feb. 1929)
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM *212, p. 15; 329, p. 82
GSC P 36-17
GSC SUM RPT 1910, p. 101; *1925A, p. 114

DATE CODED: 1986/11/07
DATE REVISED: 1989/08/10

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 088**

NATIONAL MINERAL INVENTORY: 10319 Cu12

NAME(S): **MONTANA**, GLEN

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103109E
BC MAP:

MINING DIVISION: Omineca

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 31 29 N
LONGITUDE: 128 01 16 W
ELEVATION: 1460 Metres

NORTHING: 6042346
EASTING: 563355

LOCATION ACCURACY: Within 500M

COMMENTS: Description, #46 symbol (Geological Survey of Canada Map 1136A).

COMMODITIES: Copper Silver

MINERALS

SIGNIFICANT: Chalcocite Bornite
ASSOCIATED: Quartz Calcite
ALTERATION TYPE: Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb) D03 Volcanic redbed Cu
SHAPE: Irregular
MODIFIER: Sheared

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE: Jurassic GROUP: Hazelton FORMATION: Undefined Formation IGNEOUS/METAMORPHIC/OTHER:

LITHOLOGY: Andesite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1917
SAMPLE TYPE: Chip
COMMODITY GRADE
Silver 65.0000 Grams per tonne
Copper 1.1000 Per cent
COMMENTS: The sample width is 6.0 metres.
REFERENCE: Minister of Mines Annual Report 1917, pages 96,97.

CAPSULE GEOLOGY

Shear zones with associated quartz-calcite veins cut andesitic volcanic rocks of the Jurassic Hazelton Group. Mineralization consists of stringers and disseminations of bornite and chalcocite. A quartz vein, up to 90 centimetres wide and 76 metres long returned a 71 centimetre channel sample assaying 1.18 per cent copper, 20 grams per tonne silver and trace gold (Geological Survey of Canada Memoir 212). A 6 metre sample of a shear zone assayed 1.1 per cent copper and 65 grams per tonne silver (Minister of Mines Annual Report 1917).

BIBLIOGRAPHY

EMPR AR 1914-121; *1917-96,97; 1924-89; 1930-136; 1966-80
EMPR GEM 1969-79
EMPR MAP 69-1; 8
EMPR PF (Map, 1929; Map by J. Willman, Feb. 1929)
EMR MP CORPFILE (Glen Copper Mines Limited)
GSC MAP 278A; 1136A; 11-1956; 1385A
GSC MEM *212, pp. 14,15; 329, p. 82
GSC P 36-17
GSC SUM RPT 1925A, p. 114

DATE CODED: 1986/11/07
DATE REVISED: 1989/08/10

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 089**

NATIONAL MINERAL INVENTORY: 10319 Cu38

NAME(S): **DF**, NORTHWEST, SNOW 31

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 103108E
BC MAP:

MINING DIVISION: Omineca

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 28 49 N
LONGITUDE: 128 01 16 W
ELEVATION: 1000 Metres

NORTHING: 6037401
EASTING: 563424

LOCATION ACCURACY: Within 500M

COMMENTS: No. 2 zone (Assessment Report 3959), located on the south slope of the south shoulder of Treasure Mountain.

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Bornite Chalcopyrite Chalcocite
ALTERATION: Malachite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Replacement Porphyry
TYPE: D03 Volcanic redbed Cu L01 Subvolcanic Cu-Ag-Au (As-Sb)
SHAPE: Regular
MODIFIER: Faulted
DIMENSION: 0120 x 0090 Metres STRIKE/DIP: 010/55E TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Jurassic

GROUP

Hazelton

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Feldspar Porphyry
Lapilli Tuff
Dioritic Dike
Sill

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: 2

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1964

SAMPLE TYPE: Chip

COMMODITY

GRADE

Copper

1.5400

Per cent

COMMENTS: The sample width is 13.0 metres.

REFERENCE: Property File: Report by D.D. Campbell, 1964.

CAPSULE GEOLOGY

The area is underlain by volcanic rocks of the Jurassic Hazelton Group which include 010 degree striking, 55 degree east dipping, vesicular purple feldspar porphyry and red and purple tuffs and lapilli tuffs. These are cut by a brown feldspar porphyry sill, a trachytic sill and a microdiorite dyke.

Bornite, chalcocite, chalcopyrite and malachite occur as disseminations, in vesicles and in fractures within the purple flow rocks and tuffs and, to a lesser degree, the porphyry sill. The best ore occurs along an east fault in the top of the trachytic porphyry and adjacent purple porphyry and tuff.

The mineralized zone (No. 2 Zone) is about 120 metres long and 90 metres wide. A 13 metre sample from a trench assayed 1.54 per cent copper (Property File: Campbell, 1964).

BIBLIOGRAPHY

EMPR AR 1964-48; *1965-71,72
EMPR ASS RPT 3959
EMPR GEM 1972-500; 1973-486
EMPR MAP 69-1; 8
EMPR PF (*Rpt by Campbell, D.D., 1964)

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 626
REPORT: RGEN0100

BIBLIOGRAPHY

EMR MP CORPFILE (Purdex Minerals Limited; Treasure Mountain
Copper Limited; Metron Exploration Limited; Spectroair
Explorations Limited)
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329
Placer Dome File

DATE CODED: 1986/11/06
DATE REVISED: 1989/08/10

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 090**

NATIONAL MINERAL INVENTORY: 10319 Cu38

NAME(S): **SNOW**, NORTHWEST, SNOW 11,
TREASURE MT.

STATUS: Developed Prospect
REGIONS: British Columbia
NTS MAP: 103108E
BC MAP:
LATITUDE: 54 29 04 N
LONGITUDE: 128 00 36 W
ELEVATION: 1280 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: No. 1 zone (Property File: Campbell, 1964).

MINING DIVISION: Omineca
UTM ZONE: 09 (NAD 83)
NORTHING: 6037874
EASTING: 564137

COMMODITIES: Copper Silver

MINERALS

SIGNIFICANT: Chalcocite Bornite Chalcopyrite Pyrite
ALTERATION: Malachite Azurite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Stratabound Disseminated
CLASSIFICATION: Replacement Porphyry
TYPE: D03 Volcanic redbed Cu L01 Subvolcanic Cu-Ag-Au (As-Sb)
SHAPE: Regular
DIMENSION: 0060 x 0036 x 0010 Metres STRIKE/DIP: 360/40 TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Lapilli Tuff
Feldspar Porphyry

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Hazelton Ranges
TERRANE: Stikine

INVENTORY

ORE ZONE: NO. 1 REPORT ON: Y
CATEGORY: Unclassified YEAR: 1972
QUANTITY: 28120 Tonnes
COMMODITY: Copper GRADE: 1.7000 Per cent
REFERENCE: SMF June 19, 1973 - Spectroair Expl. Ltd., T. Sadlier-Brown, Oct.1972.

CAPSULE GEOLOGY

The area is underlain by volcanic rocks of the Jurassic Hazelton Group which include 020 degree north trending, 35 to 50 degree east dipping purple lapilli tuff and vitrophyre. A brown feldspar porphyry sill intrudes the volcanics. Chalcocite, bornite and minor chalcopyrite occur as disseminations and veinlets along a bed of the pyroclastic rock. The mineralized block is about 60 metres long, 10 metres true width and 36 metres down dip length. A gouge-filled shear zone cuts the zone to the east, with a continuation of the zone east of the fault (drill intersections).

A 26 metre surface chip sample assayed 2.44 per cent copper and 0.4 grams per tonne silver (Minister of Mines Annual Report 1965). The mineralized block is estimated to contain 40,820 tonnes of about 2 per cent copper (Property File: Campbell, 1964). Unclassified reserves are 28,120 tonnes grading 1.7 per cent copper (Statement of Material Facts June 19, 1973 - Spectroair Explorations Ltd., T. Sadlier-Brown, October 1972).

A parallel zone, similar in character and 60 metres to the west, measures 30 by 10 metres. Surface samples average 3.26 per cent copper (Property File: Campbell, 1964).

BIBLIOGRAPHY

EMPR AR 1914-118,119,Map p. 120; 1962-15; 1963-23,24; 1964-48;
*1965-71,72
EMPR ASS RPT 3959

BIBLIOGRAPHY

EMPR GEM 1973-486
EMPR MAP 69-1; 8
EMPR PF (*Rpts by James, D.H., 1963; Bell, T., 1963; Campbell, D.D.,
1964; Map by J. Willman, Feb. 1929)
EMR MIN BULL MR 181, p. 231; 223 B.C. 291
EMR MP CORPFILE (The Premier Border Gold Mining Company Limited; The
Cariboo Gold Quartz Mining Company Limited; Purdex Minerals
Limited; Treasure Mountain Copper Limited; Metron Exploration
Limited; Spectroair Explorations Limited; Copper River Explora-
tion Company, Limited)
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329
CIM Spec. Vol. 15, 1976, Map B
GCNL #47, 1973
Sadlier-Brown, T. (1972): Statement of Material Facts for
Spectroair Explorations Ltd., June 16, 1973
Placer Dome File

DATE CODED: 1986/11/06
DATE REVISED: 1989/08/10

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 629
REPORT: RGEN0100

MINFILE NUMBER: **1031 091**

NATIONAL MINERAL INVENTORY: 10318 Cu1

NAME(S): **I, DA, DOR**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103108E
BC MAP:

MINING DIVISION: Omineca
UTM ZONE: 09 (NAD 83)

LATITUDE: 54 26 59 N
LONGITUDE: 128 02 21 W
ELEVATION: 240 Metres

NORTHING: 6033985
EASTING: 562300

LOCATION ACCURACY: Within 500M

COMMENTS: Descriptions (Assessment Report 1863). The property is located on the south side of the Zymoetz River, at the mouth of the Clore River.

COMMODITIES: Copper Barite

MINERALS

SIGNIFICANT: Chalcopyrite Barite Bornite
ALTERATION: Malachite Azurite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Hydrothermal Industrial Min.
TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb) G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn
SHAPE: Irregular
MODIFIER: Sheared

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Andesite
Basalt
Rhyolite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Hazelton Ranges

CAPSULE GEOLOGY

The area is underlain by andesites, basalts and rhyolites of the Jurassic Hazelton Group. Chalcopyrite, malachite, azurite, bornite and barite occur in a northwest trending, steeply dipping shear zone within the volcanics. The shears range up to 1.0 metre in width.

BIBLIOGRAPHY

EMPR AR 1968-108
EMPR ASS RPT 1581, 1747, *1863, 2688, 3464
EMPR GEM 1969-370; 1970-188,189
EMPR MAP 8; 69-1
EMPR PF (Rpt by Campbell, D.D., 1964, p. 11)
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329
GSC SUM RPT 1926A, p. 44

DATE CODED: 1986/11/05
DATE REVISED: 1989/08/08

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 091**

MINFILE NUMBER: **1031 092**

NATIONAL MINERAL INVENTORY: 10318 Cu2

NAME(S): **KELLY CREEK**, ZYM, ZYMOETZ

STATUS: Developed Prospect

MINING DIVISION: Omineca

REGIONS: British Columbia

NTS MAP: 103108E

BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 27 09 N

LONGITUDE: 128 08 21 W

ELEVATION: 550 Metres

NORTHING: 6034210

EASTING: 555813

LOCATION ACCURACY: Within 500M

COMMENTS: Upper showing, located on the south side of the Zymoetz River on what is locally known as Kelly Creek (Geology, Exploration and Mining in British Columbia 1970).

COMMODITIES: Copper

Silver

Gold

MINERALS

SIGNIFICANT: Chalcopyrite Bornite Chalcocite

ALTERATION: Malachite Sericite Quartz

ALTERATION TYPE: Epidote Chloritic Oxidation

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated

CLASSIFICATION: Hydrothermal Porphyry

TYPE: D03 Volcanic redbed Cu L01 Subvolcanic Cu-Ag-Au (As-Sb)

SHAPE: Regular

MODIFIER: Fractured Sheared

DIMENSION: 150 x 120 x 30 Metres STRIKE/DIP: 105/40S

COMMENTS: Upper Showing zone. TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Jurassic

Hazelton

Undefined Formation

Mesozoic-Cenozoic

Coast Plutonic Complex

LITHOLOGY: Andesite

Basalt

Breccia

Rhyolite

Granodiorite

Andesitic Feldspar Porphyry

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Stikine

Plutonic Rocks

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: KELLY CREEK

REPORT ON: Y

CATEGORY: Unclassified

YEAR: 1985

QUANTITY: 545167 Tonnes

COMMODITY

GRADE

Silver

45.9000

Grams per tonne

Copper

2.2300

Per cent

COMMENTS: Reserves are based on a cutoff grade of 1.5 per cent copper.

REFERENCE: VSE Filing Statement, Imperial Metals Corp., July 1985.

CAPSULE GEOLOGY

Lower-Middle Jurassic Hazelton Group volcanic rocks, consisting of basalts, andesites and rhyolite-dacites and their fragmental equivalents, occupy a north striking antiform. The west limb of the fold has been intruded by an east trending elliptical stock of quartz diorite and granodiorite, measuring 2400 by 1500 metres. Associated andesitic feldspar porphyry sills cut the volcanics in the axial region of the antiform. The intrusives are part of the Tertiary-Jurassic Coast Plutonic Complex.

The Upper Showing contains disseminations, stringers and blebs of bornite and chalcopyrite within intensely fractured rhyolite tuffs and breccias. The east striking, moderately south dipping zone is limited on both sides by weakly mineralized andesitic feldspar porphyry and measures about 150 by 120 by 30 metres. A 15.2-metre drill intersection assayed 4.83 per cent copper, 163.5 grams per

CAPSULE GEOLOGY

tonne silver and 2.7 grams per tonne gold (George Cross News Letter #245, 1979) and a 34.7 metre drill intersection assayed 1.22 per cent copper and 27.5 grams per tonne silver (George Cross News Letter #169, 1980).

The Lower Showing, 400 metres to the northwest, consists of chalcopyrite, bornite and minor chalcocite occurring as fracture-fillings in granodiorite. The zone is about 150 metres long and 15 metres wide. Chip sampling averaged 2 per cent copper and 17.1 grams per tonne silver over 4 metres (George Cross News Letter #225, 1981).

Drilling in 1980 established reserves of about 362,875 tonnes grading 3.18 per cent copper and 72.0 grams per tonne silver (Northern Miner January 22, 1981), or 2,267,960 tonnes grading 1.03 per cent copper and 18.5 grams per tonne silver (Northern Miner November 27, 1980). In 1985, unclassified reserves for the Kelly Creek property are 545,167 tonnes grading 2.23 per cent copper and 45.9 grams per tonne silver at a cutoff grade of 1.5 per cent copper (Vancouver Stock Exchange Filing Statement, Imperial Metals Corp., July 1985).

BIBLIOGRAPHY

- EMPR AR 1966-79,80
- EMPR ASS RPT *2394, 8559, 20743
- EMPR EXPL 1980-392
- EMPR GEM 1969-78,79; *1970-189-193; 1971-113,114
- EMPR MAP 58; 65 (1989); 69-1
- EMPR OF 1992-1
- EMPR PF (Drilling notes and maps, 1970)
- EMR MIN BULL MR 181, p. 86; 223 B.C. 288
- EMR MP CORPFILE (Native Mines Limited; Native Explorations Limited; Pechiney Development Limited; Cathedral Minerals Ltd.; Invex Resources Ltd.; Imperial Metals Corporation)
- EMR MP RESFILE (Zymoetz)
- GSC MAP 11-1956; 278A; 1136A; 1385A
- GSC MEM 329
- CMH 1986-87, p. 191; *1989-90, p. 234
- GCNL #245, 1979; #70,#119,#141,#169,#173,#190,#218, 1980; #77,#147,#225, 1981
- N MINER Nov.27, 1980; Jan.22, May 7, 1981
- Elwell, J.P. (1980): Report on the Kelly Project in Statement of Material Facts for Cathedral Minerals Ltd., Apr.14, 1980
- EMPR OF 1998-10

DATE CODED: 1986/11/04
DATE REVISED: 1989/08/08

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 093**

NATIONAL MINERAL INVENTORY: 10319 Ag6

NAME(S): **ST. ELMO**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103109W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 40 19 N
LONGITUDE: 128 20 26 W
ELEVATION: 300 Metres

NORTHING: 6058486
EASTING: 542527

LOCATION ACCURACY: Within 500M

COMMENTS: Description from Minister of Mines Annual Report 1929, page 151.

COMMODITIES: Silver Copper

MINERALS

SIGNIFICANT: Chalcopyrite Specularite
ALTERATION: Malachite Azurite Hematite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal
TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb)
SHAPE: Irregular
MODIFIER: Sheared

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Tuff

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis	YEAR: 1937
SAMPLE TYPE: Chip	
COMMODITY	GRADE
Silver	12.3000 Grams per tonne
Copper	0.0400 Per cent

REFERENCE: Geological Survey of Canada Memoir 212, page 36.

CAPSULE GEOLOGY

The area is underlain by tuffs of the Jurassic Hazelton Group. They strike 070 degrees and dip 40 degrees south. Minor bornite and specularite occur in a 7.6 metre width of sheared and altered tuff. A typical sample assayed 12.3 grams per tonne silver and 0.04 per cent copper (Geological Survey of Canada Memoir 212).

BIBLIOGRAPHY

EMPR AR *1929-151
EMPR MAP 69-1; 8
GSC MAP 1136A; 11-1956; 278A; 1385A
GSC MEM *212, p. 36; 329, p. 82
GSC P 36-20, p. 38; 36-17

DATE CODED: 1986/12/10
DATE REVISED: 1989/08/08

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 094**

NATIONAL MINERAL INVENTORY: 10319 Cu35

NAME(S): **OLD HICKORY**, INDEPENDENCE

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103109W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 36 49 N
LONGITUDE: 128 23 26 W
ELEVATION: 160 Metres

NORTHING: 6051966
EASTING: 539359

LOCATION ACCURACY: Within 500M

COMMENTS: Geological Survey of Canada Map 36-17.

COMMODITIES: Copper Gold Silver

MINERALS

SIGNIFICANT: Bornite Chalcopyrite Pyrite
ASSOCIATED: Quartz
ALTERATION: Malachite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic
TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb)
SHAPE: Irregular
MODIFIER: Faulted
DIMENSION:

D03 Volcanic redbed Cu

STRIKE/DIP: 065/85N TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Jurassic

GROUP

Hazelton

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Andesite
Tuff

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1937

SAMPLE TYPE: Channel

COMMODITY

GRADE

Silver	5.1000	Grams per tonne
Gold	0.2000	Grams per tonne
Copper	0.6200	Per cent

COMMENTS: The sample width is 70.0 centimetres.

REFERENCE: Geological Survey of Canada Memoir 205, page 44.

CAPSULE GEOLOGY

Mineralization is associated with a fault striking 065 degrees and dipping 85 degrees northwest within andesitic lavas and inter-bedded tuffs of the Jurassic Hazelton Group. Veinlets of bornite, chalcopyrite, pyrite and malachite occur discontinuously over a 200 metre length and 0.6 metre width. A 70 centimetre sample assayed 0.2 grams per tonne gold, 5.1 grams per tonne silver and 0.62 per cent copper (Geological Survey of Canada Memoir 205).

BIBLIOGRAPHY

EMPR AR *1918-110; *1929-148,149
EMPR MAP 69-1; 8
GSC MAP 1136A; 278A; 11-1956; 1385A; 36-17
GSC MEM *205, pp. 43,44; 329, p. 82
GSC P 36-17, pp. 77,78

DATE CODED: 1986/12/08
DATE REVISED: 1989/08/12

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 095**

NATIONAL MINERAL INVENTORY: 10318 Au2

NAME(S): **GOLDEN NIB, GLOBE, IRON HAT,
 STAR, THORN**

STATUS: Past Producer	Underground	MINING DIVISION: Skeena
REGIONS: British Columbia		UTM ZONE: 09 (NAD 83)
NTS MAP: 103108W		NORTHING: 6038326
BC MAP:		EASTING: 534439
LATITUDE: 54 29 29 N		
LONGITUDE: 128 28 06 W		
ELEVATION: 335 Metres		
LOCATION ACCURACY: Within 500M		
COMMENTS: Main adit located on the west side of Thornhill Mountain.		

COMMODITIES: Gold Silver Copper

MINERALS

SIGNIFICANT: Pyrite	Chalcopyrite	
ASSOCIATED: Quartz		
ALTERATION: Epidote	Chlorite	Biotite
ALTERATION TYPE: Epidote	Chloritic	Biotite
MINERALIZATION AGE: Unknown		

DEPOSIT

CHARACTER: Vein	Disseminated	Massive
CLASSIFICATION: Epigenetic	Hydrothermal	
TYPE: I02	Intrusion-related Au pyrrhotite veins	L01 Subvolcanic Cu-Ag-Au (As-Sb)
SHAPE: Irregular		
MODIFIER: Sheared		
DIMENSION: 0300 x 0180 x 0004 Metres	STRIKE/DIP: 045/70S	TREND/PLUNGE:
COMMENTS: Shear zone.		

HOST ROCK

DOMINANT HOSTROCK: Plutonic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Cretaceous-Tertiary			Coast Plutonic Complex

LITHOLOGY: Granodiorite
 Greenstone
 Greywacke

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane	PHYSIOGRAPHIC AREA: Hazelton Ranges
TERRANE: Plutonic Rocks	
METAMORPHIC TYPE: Contact	Stikine
	RELATIONSHIP: GRADE: Greenschist

INVENTORY

ORE ZONE: LENS	REPORT ON: N
CATEGORY: Assay/analysis	YEAR: 1983
SAMPLE TYPE: Grab	
<u>COMMODITY</u>	<u>GRADE</u>
Silver	26.1000 Grams per tonne
Gold	4.2000 Grams per tonne
Copper	1.2000 Per cent
COMMENTS: Grab sample from mineralized quartz lens.	
REFERENCE: Assessment Report 13104.	

CAPSULE GEOLOGY

A 1.5 to 4.5 metre wide shear zone, striking 045 degrees and dipping 70 degrees southeast, occurs in coarse grained granodiorite of the Cretaceous to Tertiary Coast Plutonic Complex. The zone, which is up to 300 metres long and 180 metres vertical distance, contains quartz lenses and veins mineralized with pyrite and chalcopyrite. Associated alteration minerals include epidote, chlorite and biotite.

In the area of the main vein, remnants of older Mesozoic and Paleozoic sedimentary rocks, mainly greywacke, have been altered to greenstone. North trending faults, dipping 50 to 70 degrees west, cut the vein. Mineralization is erratic with lenses up to 2 metres and assays up to 7.7 grams per tonne gold and 14 grams per tonne silver (Assessment Report 11335). A grab sample assayed 4.2 grams per tonne gold, 26.1 grams per tonne silver and 1.20 per cent copper (Assessment Report 13104).

In 1926, about 27 tonnes of hand-sorted ore were shipped from

CAPSULE GEOLOGY

the Golden Nib property. From this ore 1,493 grams of gold, 1,275 grams of silver and 302 kilograms of copper were recovered. Two tonnes of ore were shipped to the Provincial Government sampling plant in Prince Rupert between 1938 and 1941. This shipment produced 124 grams of gold and 62 grams of silver.

BIBLIOGRAPHY

EMPR AR 1918-52; 1920-41; 1921-45; 1923-49; *1925-71; 1926-64,75;
*1928-75,76; 1938-B26,B36; 1941-42
EMPR ASS RPT 11335, 13104, 14560
EMPR BULL 1, 1932, pp. 21,30
EMPR EXPL 1983-502; 1984-375
EMPR MAP 8; 69-1
EMPR PF (*DiSpirito, F. et al. (1986): Geophysical, Geochemical and Geological Surveys on the Thorn Project in Prospectus for Castello Resources Ltd., Jul. 13, 1987)
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM *205, pp. 25,26; 329, p. 78
GSC P 36-17, pp. 42-44; 36-20, pp. 27,28
GSC SUM RPT 1925A; 1926A, pp. 39,40

DATE CODED: 1986/10/29
DATE REVISED: 1989/08/11

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 096**

NATIONAL MINERAL INVENTORY: 10318 Cu4

NAME(S): **LA LIBERTAD**, THORN

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103108W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 29 39 N
LONGITUDE: 128 26 36 W
ELEVATION: 1415 Metres

NORTHING: 6038648
EASTING: 536056

LOCATION ACCURACY: Within 500M

COMMENTS: Sample CT 84, Figure 6a (Assessment Rpeort 14560).

COMMODITIES: Copper Lead Zinc Gold Silver

MINERALS

SIGNIFICANT: Chalcopyrite Galena Tetrahedrite Pyrite Sphalerite
ASSOCIATED: Quartz Calcite
ALTERATION: Limonite Siderite
ALTERATION TYPE: Carbonate Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au I02 Intrusion-related Au pyrrhotite veins
SHAPE: Irregular
MODIFIER: Sheared
DIMENSION:
COMMENTS: Quartz vein. STRIKE/DIP: 056/65S TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Cretaceous-Tertiary _____ _____ Coast Plutonic Complex

LITHOLOGY: Granodiorite
Quartz Diorite
Lamprophyre Dike
Quartz Feldspar Porphyry

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Hazelton Ranges
TERRANE: Plutonic Rocks

INVENTORY

ORE ZONE: VEINS REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1929
SAMPLE TYPE: Grab
COMMODITY GRADE
Silver 17.0000 Grams per tonne
Gold 66.0000 Grams per tonne
REFERENCE: Minister of Mines Annual Report 1930, page 78.

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1989
SAMPLE TYPE: Bulk Sample
COMMODITY GRADE
Gold 76.2000 Grams per tonne
COMMENTS: A bulk sample of 90 tonnes yielded 6856 grams of gold.
REFERENCE: Norther Miner September 4, 1989.

CAPSULE GEOLOGY

Granodiorite of the Cretaceous to Tertiary Coast Plutonic Complex is cut by quartz-feldspar porphyry and later quartz diorite and lamprophyre. The lamprophyre dykes are cut by two parallel faults, 160 metres apart, striking 056 degrees and dipping 60 to 70 degrees southeast. Quartz veins, 0.2 to 1.0 metres wide, follow the faults and are mineralized with small seams of chalcopyrite, pyrite, galena, tetrahedrite and sphalerite. The veins are up to 270 metres long and some are carbonated and contain siderite. A grab sample assayed 66 grams per tonne gold and 17 grams per tonne silver (Minister of Mines Annual Report 1930). A sample of a quartz vein

CAPSULE GEOLOGY

in the area assayed 0.07 per cent zinc (Assessment Report 13104).

BIBLIOGRAPHY

EMPR AR 1929-77,78; *1930-78
EMPR ASS RPT 13104, 14560, 15115
EMPR BULL 1, 1932, pp. 22,30
EMPR EXPL 1984-375; 1985-C373; 1986-C427
EMPR MAP 69-1; 8
EMPR PF (*DiSpirito, F. et al (1986): Geological, Geochemical and
Geological Surveys on the Thorn Project, in Prospectus for Castello
Resources Ltd., July 13, 1987)
GSC MAP 1136A; 278A; 11-1956; 1385A
GSC MEM *205, pp. 26,27; 329, p. 78
GSC P 36-17, p. 45
GSC SUM RPT 1925A, pp.117A-118A
N MINER Sept. 4, 1989

DATE CODED: 1986/10/29
DATE REVISED: 1989/08/10

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 097**

NATIONAL MINERAL INVENTORY: 10318 Cu3

NAME(S): **PTARMIGAN, THORN**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103108W
BC MAP:
LATITUDE: 54 29 24 N
LONGITUDE: 128 25 56 W
ELEVATION: 1430 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Description from Geological Survey of Canada Memoir 205.

MINING DIVISION: Omineca
Skeena
UTM ZONE: 09 (NAD 83)
NORTHING: 6038190
EASTING: 536779

COMMODITIES: Silver Copper Lead Zinc Gold

MINERALS

SIGNIFICANT: Tetrahedrite Chalcopyrite Pyrite Galena Sphalerite
ASSOCIATED: Quartz Calcite
ALTERATION: Limonite Siderite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Concordant
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
SHAPE: Irregular
MODIFIER: Sheared

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Pennsylvan.-Permian
Cretaceous-Tertiary

GROUP

Undefined Group

FORMATION

Unnamed/Unknown Formation

IGNEOUS/METAMORPHIC/OTHER

Coast Plutonic Complex

LITHOLOGY: Greenstone
Greywacke
Quartzite
Granodiorite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine
METAMORPHIC TYPE: Contact

Plutonic Rocks
RELATIONSHIP:

PHYSIOGRAPHIC AREA: Hazelton Ranges

GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Grab

YEAR: 1937

COMMODITY

Silver

GRADE

460.0000

Grams per tonne

COMMENTS: The sample contained tetrahedrite and pyrite.
REFERENCE: Geological Survey of Canada Memoir 205, page 28.

CAPSULE GEOLOGY

Granodiorite of the Cretaceous to Tertiary Coast Plutonic Complex contain small roof pendants of sheared Mesozoic and Paleozoic greenstone derived from greywackes, volcanics and quartzites. The roof pendants are 6 to 25 metres wide and contain quartz and carbonate veins parallel to the northeast trending schistosity. The veins are sparsely mineralized with tetrahedrite, chalcopyrite, pyrite, galena and sphalerite. A sample of a 2.4 metre wide mineralized zone assayed 150 grams per tonne silver (Minister of Mines Annual Report 1918) and a 4.6 metre chip sample assayed 55 grams per tonne silver and 0.3 grams per tonne gold (Minister of Mines Annual Report 1930). A selected sample of tetrahedrite and pyrite assayed 460 grams per tonne silver and trace gold (Geological Survey of Canada Memoir 205).

BIBLIOGRAPHY

EMPR AR 1914-114; 1918-50,51; 1920-40; 1921-45; 1923-49; 1924-48,49;
1925-70,71; *1930-78
EMPR ASS RPT 13104, 14560, 15115
EMPR EXPL 1984-375; 1985-C373; 1986-C427
EMPR MAP 69-1; 8

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 639
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR PF (*DiSpirito, F. et al (1986): Geophysical, Geochemical and
Geological Surveys on the Thorn Project in Prospectus for Castello
Resources Ltd., July 13, 1987)
GSC MAP 1136A; 278A; 11-1956; 1385A
GSC MEM *205, pp. 27-29; 329, p. 78
GSC P 36-17, p. 46; 36-20, p. 25
GSC SUM RPT 1925A, p. 118; 1926A, pp. 41,42

DATE CODED: 1986/10/29
DATE REVISED: 1989/08/10

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 098**

NATIONAL MINERAL INVENTORY: 10318 Cu3

NAME(S): **ST. PAUL, X, ANNIE LAURIE,
 PTARMIGAN THORN**

MINING DIVISION: Omineca
 Skeena
 UTM ZONE: 09 (NAD 83)
 NORTHING: 6037266
 EASTING: 537146

STATUS: Showing
 REGIONS: British Columbia
 NTS MAP: 103108W
 BC MAP:
 LATITUDE: 54 28 54 N
 LONGITUDE: 128 25 36 W
 ELEVATION: 1370 Metres

LOCATION ACCURACY: Within 500M
 COMMENTS: Assessment reports 14560 and 15115 refer to the showing as the Society Girl (1031 184), which, according to old references, lies to the west. Quartz vein and adit, Fig. 6b, p.7 (Assessment Report 14560).

COMMODITIES: Gold Silver Copper Lead Zinc
 Tungsten

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Galena Sphalerite Arsenopyrite
 Gold Scheelite Freibergite
 ASSOCIATED: Quartz Barite
 ALTERATION TYPE: Silicific'n
 MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
 CLASSIFICATION: Epigenetic Hydrothermal
 TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au 112 W veins
 SHAPE: Irregular
 MODIFIER: Sheared
 DIMENSION:
 COMMENTS: Quartz vein. STRIKE/DIP: 070/40N TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Cretaceous-Tertiary			Coast Plutonic Complex

LITHOLOGY: Felsite
 Biotite Granodiorite
 Andesite
 Lamprophyre Dike

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Hazelton Ranges
 TERRANE: Plutonic Rocks

INVENTORY

ORE ZONE:	SAMPLE	REPORT ON:	N
CATEGORY:	Assay/analysis	YEAR:	1984
SAMPLE TYPE:	Channel		
COMMODITY		GRADE	
Silver		92.6000	Grams per tonne
Gold		15.8000	Grams per tonne
Copper		0.0400	Per cent
Lead		1.8800	Per cent
Zinc		0.0800	Per cent

COMMENTS: The sample width is 7.0 centimetres.
 REFERENCE: Assessment Report 13104.

CAPSULE GEOLOGY

A 4.5 to 6.0 metre wide, east trending felsite dyke cuts massive biotite granodiorite and lamprophyre dykes of the Cretaceous to Tertiary Coast Plutonic Complex. Quartz veins, 0.2 to 1.4 metres wide, occur for several hundred metres along either side of the dyke. The St. Paul vein dips 40 degrees north and is mineralized with pyrite, chalcopyrite, galena, sphalerite, arsenopyrite and gold. The vein occurs on the footwall side of the dyke, over a distance of 670 metres. A 7 centimetre channel sample of a sulphide rich zone, up to 1 metre wide, assayed 15.8 grams per tonne gold, 92.6 grams per tonne silver, 0.04 per cent copper, 1.88 per cent lead and 0.08 per cent zinc. A 1.4 metre channel sample assayed 5.7 grams per tonne gold,

CAPSULE GEOLOGY

3.43 grams per tonne silver, 0.006 per cent copper, 0.11 per cent lead and 0.09 per cent zinc (Assessment Report 13104).

A quartz vein, located about 250 metres to the southeast is also mineralized with scheelite and barite. Scheelite nodules as large as 7.62 centimetres in diameter were reported from this vein on the St. Paul claim.

BIBLIOGRAPHY

EMPR AR 1914-114; 1918-50,51; 1924-49; *1925-70,71; 1926-75; 1929-78;
*1930-78; 1933-45

EMPR ASS RPT 13104, 14560, *15115

EMPR BULL 10 (Rev), p. 58; 1, 1932, pp. 21,22,30

EMPR EXPL 1984-375; 1985-C373; 1986-C427

EMPR MAP 69-1; 8

EMPR OF 1991-17

EMPF PF (*DiSpirito, F. et al (1986): Geophysical, Geochemical and Geological Surveys on the Thorn Project in Prospectus for Castello Resources Ltd., July 13, 1987)

EMR MP CORPFILE (Seastar Resource Corporation)

GSC EC GEOL #17, p. 43

GSC MAP 278A; 1136A; 11-1956; 1385A

GSC MEM *205, pp. 28,29; 329, p. 78

GSC P 36-17, pp. 47-49; 36-20, pp. 25,26

GSC SUM RPT 1925A, p. 118; 1926A, p. 41

DATE CODED: 1986/10/30
DATE REVISED: 1989/08/10

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

CAPSULE GEOLOGY

stephanite with rare visible gold occurring in the Lucky Seven vein. Pyrite is the most abundant sulphide and occurs as disseminations within the veins; the other sulphides usually occur as irregular, discontinuous masses. The mineralization is often concentrated near the vein margins. Chalcopyrite occurs as irregular masses up to 2 centimetres in diameter occasionally with malachite and/or azurite. Galena is present in several of the veins and locally, has been partly altered to cerussite(?). Several quartz veins contain siderite and minor calcite.

Sample TT-9, from a quartz vein with galena, pyrite and chalcopyrite near the old adits assayed 7.16 grams per tonne gold, 38.3 grams per tonne silver, 0.246 per cent lead, 0.03 per cent zinc and 0.015 per cent copper. Another sample taken from the dump pile at an old open cut assayed 0.695 grams per tonne gold, 99.5 grams per tonne silver, 2.533 per cent lead, 0.035 per cent zinc and 0.161 per cent copper (Di Spirito, 1986).

About 460 metres to the southwest of the old workings, a sample from a 4 metre wide quartz vein assayed 6.7 grams per tonne gold, 1049 grams per tonne silver, 0.094 per cent lead, 0.032 per cent zinc, 0.024 per cent copper and 0.0012 per cent molybdenite (Assessment Report 13140).

In 1918, about 91 tonnes of ore from the Lucky Seven claim group produced 6,221 grams of gold.

BIBLIOGRAPHY

- EMPR AR 1914-114,115; *1918-51,52; 1920-40; 1921-45; 1923-49; 1924-49; 1925-71; 1926-64,75; 1928-75; 1933-45
EMPR ASS RPT *13104, *14560, *15115
EMPR BULL 1, 1932, p. 30; 10
EMPR EXPL 1984-375; 1985-C373; 1986-C247
EMPR MAP 8; 69-1
EMPR PF (*DiSpirito, F., et al. (1986): Geophysical, Geochemical and Geological Surveys on the Thorn Project in Prospectus for Castello Resources Ltd., Jul. 13, 1987
EMR MP CORPFILE (Seastar Resource Corporation)
GSC MAP 11-1956, 278A, 1136A, 1385A
GSC MEM *205, pp. 29-32; 329, p. 78
GSC P 36-17, pp. 51-54; 36-20, pp. 26,27
GSC SUM RPT 1925A pp. 117,118; 1926A, pp. 40,41

DATE CODED: 1986/10/30
DATE REVISED: 1989/08/11

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 100**

NATIONAL MINERAL INVENTORY:

NAME(S): **EIGHT MILE**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103108W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 27 19 N
LONGITUDE: 128 21 06 W
ELEVATION: 1200 Metres

NORTHING: 6034372
EASTING: 542033

LOCATION ACCURACY: Within 500M

COMMENTS: Sample, Plan No. 551-5 (Assessment Report 8110).

COMMODITIES: Silver Copper Lead Zinc

MINERALS

SIGNIFICANT: Pyrite
COMMENTS: Other unidentified massive sulphides.
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Massive
CLASSIFICATION: Unknown
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Cretaceous-Tertiary Coast Plutonic Complex

LITHOLOGY: Granodiorite
Limestone
Greisen

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Plutonic Rocks

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Chip

YEAR: 1979

COMMODITY	GRADE	
Silver	8.6000	Grams per tonne
Copper	0.0300	Per cent
Lead	0.0300	Per cent
Zinc	0.0300	Per cent

REFERENCE: Assessment Report 8110.

CAPSULE GEOLOGY

The area is underlain by granodiorite of the Cretaceous-Tertiary Coast Plutonic Complex with roof pendants of limestone and greenstone to the east and south.

Small massive pyrite nodules and unidentified massive sulphides occur within the intrusive rocks. A sample assayed 8.6 grams per tonne silver, 0.03 per cent copper, 0.03 per cent lead, and 0.03 per cent zinc (Assessment Report 8110).

BIBLIOGRAPHY

EMPR ASS RPT *8110
EMPR EXPL 1979-252,253
EMPR MAP 8; 69-1
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329

DATE CODED: 1986/10/31
DATE REVISED: / /

CODED BY: LDJ
REVISED BY:

FIELD CHECK: N
FIELD CHECK:

MINFILE NUMBER: **1031 101**

NATIONAL MINERAL INVENTORY: 10318 Au4

NAME(S): **COIN**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103108W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 27 29 N
LONGITUDE: 128 27 56 W
ELEVATION: 240 Metres

NORTHING: 6034619
EASTING: 534647

LOCATION ACCURACY: Within 500M

COMMENTS: Symbol #19 (Geological Survey of Canada Map 1136A).

COMMODITIES: Gold Silver Lead Zinc

MINERALS

SIGNIFICANT: Pyrite Galena Sphalerite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
SHAPE: Irregular
DIMENSION:

STRIKE/DIP: 100/30N TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Cretaceous-Tertiary Coast Plutonic Complex

LITHOLOGY: Granodiorite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Plutonic Rocks

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1937

SAMPLE TYPE: Channel

COMMODITY

GRADE

Silver

9.3000

Grams per tonne

Gold

0.7000

Grams per tonne

COMMENTS: The sample width is 51 centimetres.

REFERENCE: Geological Survey of Canada Memoir 205, page 32.

CAPSULE GEOLOGY

A quartz vein averaging 36 centimetres wide occurs in granodiorite of the Cretaceous-Tertiary Coast Plutonic Complex. The vein strikes 100 degrees for 24 metres, dips 30 degrees northeast, and is mineralized with pyrite, galena and sphalerite. A 51 centimetre sample assayed 0.7 grams per tonne gold and 9.3 grams per tonne silver (Geological Survey of Canada Memoir 205).

BIBLIOGRAPHY

EMPR ASS RPT 13140, 14560
EMPR MAP 69-1; 8
GSC MAP 1136A; 278A; 11-1956; 1385A
GSC MEM *205, p. 32; 329, p. 78
GSC P 36-17, p. 55

DATE CODED: 1986/10/30
DATE REVISED: 1989/08/12

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 102**

NATIONAL MINERAL INVENTORY: 10318 Mo1

NAME(S): **EUREKA**

MINING DIVISION: Omineca
Skeena
UTM ZONE: 09 (NAD 83)
NORTHING: 6035572
EASTING: 537880

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103108W
BC MAP:
LATITUDE: 54 27 59 N
LONGITUDE: 128 24 56 W
ELEVATION: 1470 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: National Mineral Inventory location from Seastar Prospectus.

COMMODITIES: Molybdenum

MINERALS

SIGNIFICANT: Molybdenite Pyrite
ASSOCIATED: Muscovite Tourmaline
ALTERATION: Molybdite Sericite Chlorite Epidote
ALTERATION TYPE: Oxidation Chloritic Epidote
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Hydrothermal Pegmatite
TYPE: L05 Porphyry Mo (Low F- type)
SHAPE: Irregular
COMMENTS: Mineralized area.

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Cretaceous-Tertiary			Coast Plutonic Complex

LITHOLOGY: Granite
Pegmatite Dike

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Plutonic Rocks

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1929
SAMPLE TYPE: Rock
COMMODITY GRADE
Molybdenum 11.2000 Per cent

COMMENTS: The results were obtained from a sample of "selected ore". There are also traces of gold and silver.
REFERENCE: Minister of Mines Annual Report 1929, page 78.

CAPSULE GEOLOGY

Molybdenite is associated with small, irregular, pegmatite dykes which intrude fine-grained granite of the Cretaceous-Tertiary Coast Plutonic Complex. The mineralization, which occurs disseminated and in patches over a 30 by 60 metre area, consists of pyrite and molybdenite with associated muscovite, tourmaline and epidote. A selected sample assayed 11.2 per cent molybdenum and trace gold and silver (Minister of Mines Annual Report 1929).

BIBLIOGRAPHY

EMPR AR 1927-125; *1929-78; 1930-79; 1938-B37; 1942-31
EMPR ASS RPT 13104, 14560, 15115
EMPR BULL 9, p. 94; 10
EMPR EXPL 1985-C373; 1986-C427
EMPR MAP 69-1; 8
EMPR PF (*DiSpirito, F. et al. (1986): Geophysical, Geochemical and Geological Surveys on the Thorn Project - in Prospectus for Castello Resources Ltd., July 13, 1987)
GSC MAP 278A; 1136A; 11-1956; 1385A
GSC MEM *205, p. 33; 329, p. 78
GSC P 36-17, p. 56; 36-20, p. 29
GSC SUM RPT 1925A, p. 118; 1926A, p. 42

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 647
REPORT: RGEN0100

BIBLIOGRAPHY

EMR MP CORPFILE (Seastar Resource Corporation)

DATE CODED: 1986/10/30
DATE REVISED: 1987/07/23

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 103**

NATIONAL MINERAL INVENTORY: 10311 Mo1

NAME(S): **GOSSAN CREEK**, KITIMAT RIVER, MAT,
BARBS

MINING DIVISION: Skeena

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 103101E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 08 59 N
LONGITUDE: 128 12 36 W
ELEVATION: 760 Metres

NORTHING: 6000468
EASTING: 551598

LOCATION ACCURACY: Within 500M
COMMENTS: Mineralized zone, Figure 3 (Assessment Report 14011).

COMMODITIES: Molybdenum Copper

MINERALS

SIGNIFICANT: Pyrite Molybdenite Chalcopyrite
ASSOCIATED: Quartz
ALTERATION: Silica Sericite
ALTERATION TYPE: Silicific'n Sericitic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stockwork Vein Disseminated
CLASSIFICATION: Porphyry Hydrothermal
TYPE: L05 Porphyry Mo (Low F- type) L04 Porphyry Cu ± Mo ± Au
SHAPE: Irregular
COMMENTS: Mineralized area.

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Cretaceous-Tertiary Coast Plutonic Complex

LITHOLOGY: Quartz Feldspar Porphyry
Gabbro
Hornblende Biotite Diorite
Biotite Granodiorite
Sodic Granite
Dioritic Dike
Quartz Monzonitic Dike
Muscovite Granodiorite

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Plutonic Rocks

PHYSIOGRAPHIC AREA: Kitimat Ranges

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1985
SAMPLE TYPE: Chip
COMMODITY GRADE
Copper 0.0290 Per cent
Molybdenum 0.0190 Per cent
COMMENTS: This is the weighted average of mineralized zones over 3.0 metres.
REFERENCE: Assessment Report 14011.

CAPSULE GEOLOGY

The area is underlain by several phases of the Upper Cretaceous-Tertiary Coast Plutonic Complex consisting of gabbro, hornblende-biotite diorite, biotite granodiorite, soda granite, and muscovite granite. A roof pendant of Hazelton volcanics occurs to the northwest. Northwest trending dykes ranging in composition from diorite to quartz monzonite cut all rocks.

Pyrite, molybdenite, and chalcopyrite occur in narrow quartz veinlets and to a lesser extent as fracture coatings and as disseminations. In Gossan Creek, three weakly mineralized stockworks, 15 to 50 metres wide, occur over a 750 metre length and a 450 metre vertical distance, within a 1050 by 450 metre east trending plug of quartz-feldspar porphyry. Chip sampling of the mineralized zones gave weighted averages of 0.019 per cent molybdenite and 0.029 per cent copper over three metres.

CAPSULE GEOLOGY

The best interval overall is 50 metres of 0.03 per cent molybdenite (Assessment Report 14011). Silicification, feldspathization, and sericitization are structurally controlled and associated with molybdenum mineralization.

BIBLIOGRAPHY

EMPR AR 1965-72; 1966-52
EMPR ASS RPT 775, 818, 819, 1000, 7928, 12868, *14011, 15104
EMPR EXPL 1980-389,390; 1984-374; 1985-C371; 1986-C426
EMPR MAP 69-1; 8
EMR MP CORPFILE (Abo Oil Corporation)
GSC MAP 278A; 1136A; 11-1956; 1385A
GSC MEM 329
GCNL #95, #136, 1982
Richardson, P.W. (1981): Report on the Kitimat River Property - in
Prospectus for Abo Oil Corporation Nov.23, 1981

DATE CODED: 1986/10/06
DATE REVISED: 1987/07/23

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 104**

NATIONAL MINERAL INVENTORY:

NAME(S): **BOW BYES, BILLY**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103102E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 05 19 N
LONGITUDE: 128 44 31 W
ELEVATION: 760 Metres

NORTHING: 5993411
EASTING: 516879

LOCATION ACCURACY: Within 500M

COMMENTS: Sample location (Assessment Report 15528) south side, 20 metres above Bowbyes Creek.

COMMODITIES: Copper Silver Magnetite Iron

MINERALS

SIGNIFICANT: Chalcopyrite Magnetite Pyrite

ALTERATION: Silica

ALTERATION TYPE: Silicific'n

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Massive

CLASSIFICATION: Volcanogenic Industrial Min.

TYPE: K01 Cu skarn

DIMENSION: 4 x 1 Metres

G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn

STRIKE/DIP: TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE

Lower Jurassic

GROUP

Hazelton

FORMATION

Telkwa

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Chlorite Schist
Rhyolite

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline

TERRANE: Stikine

PHYSIOGRAPHIC AREA: Kitimat Ranges

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1987

SAMPLE TYPE: Rock

COMMODITY

Silver

GRADE

124.8000

Grams per tonne

Copper

11.4000

Per cent

REFERENCE: Assessment Report 15528.

CAPSULE GEOLOGY

Two massive sulphide/magnetite lenses, each about 1 metre thick and 3 to 4 metres long, occur in chloritic schist of the Lower Jurassic Hazelton Group, Telkwa Formation. Mineralization consists of massive, crudely banded chalcopyrite, pyrite and magnetite. Quartz-eye rhyolite overlies and underlies the mineralized horizon. A selected sample assayed 11.4 per cent copper and 124.8 grams per tonne silver (Assessment Report 15528).

BIBLIOGRAPHY

EMPR ASS RPT *15528
EMPR EXPL 1975-176; *1987-B67-B70,C358
EMPR GEM 1969-72; 1970-98; 1971-112; 1972-498,499; 1973-485; 1974-324
EMPR MAP 8
EMPR OF 1999-2
EMPR PF (Laramide Resources Ltd. Statement of Material Facts #78/87
May 29, 1987 pages 4-6
GSC MAP *1136A; 278A; 11-1956; 1385A
GSC MEM 329

DATE CODED: 1986/10/02
DATE REVISED: 1987/07/23

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 105**

NATIONAL MINERAL INVENTORY:

NAME(S): **BLOW, S.Q., OLD TIMER,
OXFORD**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103109W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 35 59 N
LONGITUDE: 128 27 06 W
ELEVATION: 300 Metres

NORTHING: 6050389
EASTING: 535424

LOCATION ACCURACY: Within 500M
COMMENTS: Mineralized zone, Maps 2 and 3 (Assessment Report 800).

COMMODITIES: Copper Molybdenum Silver Gold

MINERALS

SIGNIFICANT: Chalcopyrite Molybdenite Pyrite
ASSOCIATED: Quartz Magnetite
ALTERATION: Epidote Chlorite
ALTERATION TYPE: Chloritic Epidote
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: L05 Porphyry Mo (Low F- type) L04 Porphyry Cu ± Mo ± Au
I02 Intrusion-related Au pyrrhotite veins
SHAPE: Irregular
MODIFIER: Sheared

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Cretaceous-Tertiary Coast Plutonic Complex

LITHOLOGY: Quartz Monzonite
Granodiorite
Greenstone
Silica Rhyolite
Feldspar Porphyry

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine Plutonic Rocks
PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1914
SAMPLE TYPE: Rock
COMMODITY GRADE
Silver 27.4000 Grams per tonne
Gold 1.0000 Grams per tonne
Copper 3.4000 Per cent

REFERENCE: Minister of Mines Annual Report 1914, page 142.

CAPSULE GEOLOGY

Massive greenstone and siliceous rhyolite of Mesozoic to Paleozoic age are intruded by chloritic fine-grained quartz monzonite, granodiorite, and feldspar porphyry of the Cretaceous-Tertiary Coast Plutonic Complex. Pyrite, chalcopyrite and molybdenite occur as disseminations, as fracture infillings, and within quartz veins along the contact between the volcanics and intrusives. The mineralized zone trends northwest for about 360 metres. A 50 metre chip sample assayed 0.04 per cent copper and 0.01 per cent molybdenum (Assessment Report 800).

The Old Timer showing, probably 500 metres to the northwest, is a quartz vein with chalcopyrite, within intrusive rock. A sample assayed 1.0 grams per tonne gold, 27.4 grams per tonne silver and 3.4 per cent copper (Minister of Mines Annual Report 1914). The Oxford showing is also in the area.

BIBLIOGRAPHY

EMPR AR 1914-142

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 652
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR ASS RPT *800, 2719, *8465
EMPR EXPL 1980-393,394
EMPR MAP 8; 69-1
GSC MAP 36-17; 1136A
GSC MEM 205, pp. 51,52
GSC P 36-17, p. 90

DATE CODED: 1986/12/16
DATE REVISED: / /

CODED BY: LDJ
REVISED BY:

FIELD CHECK: N
FIELD CHECK:

MINFILE NUMBER: **1031 106**

NATIONAL MINERAL INVENTORY: 10319 Cu39

NAME(S): **PROVIDENCE** COPPER FALLS

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103109W
BC MAP:

MINING DIVISION: Omineca
UTM ZONE: 09 (NAD 83)

LATITUDE: 54 30 54 N
LONGITUDE: 128 22 06 W
ELEVATION: 380 Metres

NORTHING: 6041007
EASTING: 540892

LOCATION ACCURACY: Within 1 KM

COMMENTS: Description and Figure 10 (Geological Survey of Canada Memoir 212).

COMMODITIES: Copper Lead

MINERALS

SIGNIFICANT: Bornite Chalcopyrite Galena Tetrahedrite
ASSOCIATED: Quartz
ALTERATION: Silica
ALTERATION TYPE: Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal
TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb) I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Upper Paleozoic			Unnamed/Unknown Informal

LITHOLOGY: Limestone
Chlorite Schist
Siliceous Limestone

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Hazelton Ranges

CAPSULE GEOLOGY

The area is underlain by schist and altered and silicified limestone of Mississippian to Permian age. Quartz veins containing minor bornite and chalcopyrite occur in chloritic schist. A quartz vein in the limestone contains minor galena and tetrahedrite.

BIBLIOGRAPHY

EMPR AR 1914-116
EMPR MAP 69-1; 8
GSC MAP 1136A; 278A; 11-1956; 1385A
GSC MEM 212, pp. 11,12; 329, p. 80

DATE CODED: 1986/12/04
DATE REVISED: 1989/08/25

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 107**

NATIONAL MINERAL INVENTORY: 10318 Au1

NAME(S): **DARDANELLE J.P.**

STATUS: Developed Prospect
 REGIONS: British Columbia
 NTS MAP: 103108E
 BC MAP:

MINING DIVISION: Omineca

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 28 59 N
 LONGITUDE: 128 13 06 W
 ELEVATION: 275 Metres

NORTHING: 6037550
 EASTING: 550642

LOCATION ACCURACY: Within 500M

COMMENTS: Shaft, Figure 7 (Geological Survey of Canada Memoir 205); located on McNeill Creek on the north side of the Zymoetz River.

COMMODITIES: Gold Silver Copper Lead Zinc

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Sphalerite Argentite Galena
 Bornite Arsenopyrite Gold Covellite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
 CLASSIFICATION: Epigenetic Hydrothermal
 TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au I02 Intrusion-related Au pyrrhotite veins
 SHAPE: Irregular
 DIMENSION: 0700 x 0180 x 0003 Metres STRIKE/DIP: 075/75N TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Cretaceous-Tertiary			Coast Plutonic Complex

LITHOLOGY: Granodiorite

HOSTROCK COMMENTS: Quartz albite dyke.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
 TERRANE: Plutonic Rocks

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: SAMPLE	REPORT ON: N
CATEGORY: Assay/analysis	YEAR: 1964
SAMPLE TYPE: Bulk Sample	
COMMODITY	GRADE
Silver	624.7000 Grams per tonne
Gold	27.9000 Grams per tonne
Copper	0.6400 Per cent
Lead	8.1600 Per cent
Zinc	3.1500 Per cent

COMMENTS: The sample weighed 25.4 kilograms.
 REFERENCE: Geological Survey of Canada Memoir 329, pages 78, 79.

ORE ZONE: J.P.	REPORT ON: Y
CATEGORY: Unclassified	YEAR: 1983
QUANTITY: 181440 Tonnes	
COMMODITY	GRADE
Silver	17.1000 Grams per tonne
Gold	7.5000 Grams per tonne

COMMENTS: From report by Dr. S. Reamsbottom.
 REFERENCE: George Cross Newsletter No.30, 1984.

CAPSULE GEOLOGY

A 5.5 to 7.3 metre wide quartz-albite dyke trending 075 degrees and dipping 75 degrees north occurs in granodiorite of the Cretaceous to Tertiary Coast Plutonic Complex. Quartz veins, 0.3 to 2 metres wide, occur intermittently along both contacts of the dyke for 700 metres and a vertical depth of 180 metres. Minerals observed in the quartz veins include pyrite, sphalerite, chalcopyrite, argentite, galena, arsenopyrite, bornite, covellite and gold.

A 1.2 metre sample from the bottom of a shaft assayed 9.3 grams per tonne gold, 61.7 grams per tonne silver, and 1.8 per

CAPSULE GEOLOGY

cent copper (Minister of Mines Annual Report 1918). A 0.4 metre adit sample assayed 13.0 grams per tonne gold and 361.4 grams per tonne silver (Geological Survey of Canada Memoir 205). A 25.4 kilogram sample of ore sent for testing assayed 27.9 grams per tonne gold, 624.7 grams per tonne silver, 0.64 per cent copper, 8.16 per cent lead and 3.15 per cent zinc (Geological Survey of Canada Memoir 329).

In August 1983, a report by S. Reamsbottom suggested that the property contains reserves of approximately 181,440 tonnes grading about 7.5 grams per tonne gold and 17.1 grams per tonne silver (George Cross Newsletter Nov.13, 1984).

BIBLIOGRAPHY

EMPR AR 1914-116-118, Map P120; 1918-52,53; 1921-94,95; 1926-124; 1927-123,124; 1932-83; 1935-C7,C35,G48; 1936-C37; 1937-C32; 1939-68; 1940-53
EMPR BULL 1, 1932, p. 50
EMPR GEM 1969-78; 1970-193
EMPR MAP 8; 69-1
EMR MIN BULL MR 223 B.C. 287
EMR MP CORPFILE (Omineca Gold Quartz Mines, Ltd; Univex Mining Corp. Ltd.)
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM *205, pp. 33-35; 329, pp. 78,79
GSC P 36-17, pp. 57-60; 36-20, pp. 29,30
GSC SUM RPT 1925A, p. 115
CANMET IR 771 (No. 658), 1935, pp. 170-174
GCNL *Dec. 23, 1975; #24, 1980; #191, 1982; #30, 1984
IPDM Mar/Apr., 1984
EMPR OF 1998-10

DATE CODED: 1986/11/03
DATE REVISED: 1989/08/25

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 108**

NATIONAL MINERAL INVENTORY: 103115 Cu5

NAME(S): **RAY**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103115E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 48 19 N
LONGITUDE: 128 44 57 W
ELEVATION: 300 Metres

NORTHING: 6073152
EASTING: 516123

LOCATION ACCURACY: Within 500M

COMMENTS: Centre of claims located on Hall Creek, 1.6 kilometres east of the north end of Kitsumkalum Lake.

COMMODITIES: Copper Molybdenum

MINERALS

SIGNIFICANT: Chalcopyrite Molybdenite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stockwork
CLASSIFICATION: Porphyry
TYPE: L04 Porphyry Cu ± Mo ± Au

L05 Porphyry Mo (Low F- type)

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Cretaceous-Tertiary			Coast Plutonic Complex

LITHOLOGY: Granite
Porphyritic Granite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Plutonic Rocks

PHYSIOGRAPHIC AREA: Kitimat Trench

CAPSULE GEOLOGY

Veins in a porphyritic granitic rock carry chalcopyrite and molybdenite. The granitic intrusive is part of the Cretaceous to Tertiary Coast Plutonic Complex.

BIBLIOGRAPHY

EMPR GEM 1970-46
EMPR MAP 8
GSC MAP 278A; 1136A; 1385A; 11-1956
GSC MEM 329

DATE CODED: 1986/10/10
DATE REVISED: 1989/08/25

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

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GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

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CAPSULE GEOLOGY

associated with molybdenite and are mainly structurally controlled.

BIBLIOGRAPHY

EMPR AR 1965-72; 1966-52
EMPR ASS RPT 775, 818, 819, 1000, 7928, 12868, *14011, 15104
EMPR EXPL 1980-389,390; 1984-374; 1985-C371; 1986-C426
EMPR MAP 69-1; 8
EMR MP CORPFILE (Abo Oil Corporation)
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329
GCNL #95,#136, 1982

DATE CODED: 1986/10/06
DATE REVISED: 1987/07/23

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 110**

NATIONAL MINERAL INVENTORY:

NAME(S): **HALF VAST, SIL**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103101E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 04 49 N
LONGITUDE: 128 11 56 W
ELEVATION: 1060 Metres

NORTHING: 5992750
EASTING: 552411

LOCATION ACCURACY: Within 500M

COMMENTS: Mineralized area, Figure 2 (Assessment Report 9595).

COMMODITIES: Molybdenum

MINERALS

SIGNIFICANT: Molybdenite Pyrite
ASSOCIATED: Quartz
ALTERATION: Sericite
ALTERATION TYPE: Sericitic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: L05 Porphyry Mo (Low F- type)
SHAPE: Irregular

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Cretaceous-Tertiary			Coast Plutonic Complex

LITHOLOGY: Quartz Diorite
Felsic Dike
Granite
Quartz Monzonite

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Plutonic Rocks

PHYSIOGRAPHIC AREA: Kitimat Ranges

INVENTORY

ORE ZONE: VEINS

REPORT ON: N

CATEGORY: Assay/analysis	YEAR: 1981
SAMPLE TYPE: Chip	
COMMODITY	GRADE
Molybdenum	0.0390 Per cent

COMMENTS: The sample included 5 mineralized veins over a width of 6 metres.
REFERENCE: Assessment Report 9595.

CAPSULE GEOLOGY

The area is underlain by granodioritic stocks which are part of the Cretaceous to Tertiary Coast Plutonic Complex. Mineralized quartz veins occur in quartz diorite near its contact with a granite-quartz monzonite. The veins are one to 100 centimetres in width and strike 130 degrees to 160 degrees with a 45 degree to 60 degree north dip. Mafic and felsic dykes cut the granitic rocks and the quartz vein system.

Molybdenite and pyrite occurs along the margins of the quartz veins and less abundantly as disseminations in the quartz. A 6 metre sample containing about 5 mineralized veins assayed 0.039 per cent molybdenite (Assessment Report 9595). Sericite forms an envelope around the quartz veins with the molybdenite.

BIBLIOGRAPHY

EMPR ASS RPT 8558, *9595, 16271
EMPR EXPL 1980-389; 1987-C356
EMPR MAP 8; 69-1
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

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GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 660
REPORT: RGEN0100

BIBLIOGRAPHY

GCNL #133, 1980

DATE CODED: 1986/10/07
DATE REVISED: 1987/12/23

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 111**

NATIONAL MINERAL INVENTORY:

NAME(S): **SIL**, HALF VAST

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103101E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 04 39 N
LONGITUDE: 128 12 16 W
ELEVATION: 980 Metres

NORTHING: 5992437
EASTING: 552051

LOCATION ACCURACY: Within 500M

COMMENTS: Quartz pegmatite, Figure 3 (Assessment Report 9595).

COMMODITIES: Silica

MINERALS

SIGNIFICANT: Quartz
ASSOCIATED: Pyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Pegmatite Industrial Min.
TYPE: O04 Feldspar-quartz pegmatite
SHAPE: Regular
COMMENTS: Quartz pegmatite, approximate area 800 square metres.

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Cretaceous-Tertiary			Coast Plutonic Complex

LITHOLOGY: Quartz Diorite
Quartz Monzonite
Granite

HOSTROCK COMMENTS: Quartz pegmatite.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Plutonic Rocks

PHYSIOGRAPHIC AREA: Kitimat Ranges

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Chip
COMMODITY: Silica

YEAR: 1981

GRADE
99.5000 Per cent

REFERENCE: Assessment Report 9595.

CAPSULE GEOLOGY

The area is underlain by granodioritic intrusives which are part of the Cretaceous to Tertiary Coast Plutonic Complex. Locally, a unit of mixed migmatite, aplite dykes, quartz, quartz diorite and quartz-K-spar pegmatite occurs at the contact between quartz diorite and granite-quartz monzonite. Within this unit, are two pure white quartz pegmatite dykes. The smaller one measures at least 100 metres long and about 10 metres wide. The larger exposure is 140 metres by 6.7 metres with an approximate area of 800 square metres. A sample of material assayed 99.50 per cent SiO₂ (Assessment Report 9595).

BIBLIOGRAPHY

EMPR ASS RPT 8558, 9595, *16271
EMPR EXPL 1980-389; 1987-C356
EMPR MAP 8; 69-1
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329

DATE CODED: 1986/10/07
DATE REVISED: 1987/12/23

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 112**

NATIONAL MINERAL INVENTORY:

NAME(S): **HARLEQUIN**, DOLLAR, CROESUS

MINING DIVISION: Omineca

STATUS: Showing
 REGIONS: British Columbia
 NTS MAP: 103109W
 BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 32 40 N
 LONGITUDE: 128 25 41 W
 ELEVATION: 600 Metres

NORTHING: 6044250
 EASTING: 537000

LOCATION ACCURACY: Within 500M

COMMENTS: Harlequin zone, Figure 8 (Assessment Report 12072).

COMMODITIES: Lead Zinc Silver Gold Molybdenum

MINERALS

SIGNIFICANT: Sphalerite Galena Pyrite Molybdenite
 ASSOCIATED: Quartz
 MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
 CLASSIFICATION: Epigenetic
 TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Jurassic	Hazelton	Undefined Formation	
Cretaceous-Tertiary			Coast Plutonic Complex

LITHOLOGY: Andesite
 Granodiorite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
 TERRANE: Stikine Plutonic Rocks PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: DOLLAR VEIN REPORT ON: N
 CATEGORY: Assay/analysis YEAR: 1987
 SAMPLE TYPE: Grab
 COMMODITY GRADE
 Gold 0.2050 Grams per tonne
 COMMENTS: Selected sample from the Dollar vein.
 REFERENCE: Property File - McClintock, 1987.

ORE ZONE: VEIN REPORT ON: N
 CATEGORY: Assay/analysis YEAR: 1983
 SAMPLE TYPE: Grab
 COMMODITY GRADE
 Silver 143.3000 Grams per tonne
 Gold 0.3000 Grams per tonne
 Lead 22.5000 Per cent
 Zinc 6.9000 Per cent
 COMMENTS: The results were obtained from a float sample.
 REFERENCE: Assessment Report 12072.

CAPSULE GEOLOGY

Granodiorite of the Cretaceous to Tertiary Coast Plutonic Complex intrudes volcanic rocks of the Jurassic Hazelton Group. The Harlequin vein is a flat-lying, 1 metre wide quartz vein that dips 45 degrees to the north. Sphalerite and galena occur along the hangingwall of the vein. A chip sample across the vein assayed 1.1 grams per tonne gold and 31.9 grams per tonne silver and a selected float sample assayed 0.3 grams per tonne gold, 143.3 grams per tonne silver, 6.90 per cent zinc and 22.50 per cent lead (Assessment Report 12072).

The Dollar vein, located 100 metres northeast of the Harlequin vein, is a 4 to 15 centimetre wide quartz vein which is sparsely mineralized with pyrite and traces of molybdenite. A selected sample from the vein assayed 0.205 grams per tonne gold (McClintock, 1987).

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

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ENERGY AND MINERALS DIVISION

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BIBLIOGRAPHY

EMPR ASS RPT *12072, *17260
EMPR EXPL 1983-502; 1988-C201
EMPR MAP 8; 69-1
EMPR PF (Rpt by W.M. Sharp, 1966 in Kleanza Mines Ltd. Prospectus;
*McClintock, J.A. (1987): Report on the Croesus Gold Property in
Prospectus for Fircrest Resources Ltd., Apr.21, 1988)
GSC MAP 11-1956, 278A, 1136A, 1385A
GSC MEM 329
V STOCKWATCH Aug.17, 1987
Chevron File

DATE CODED: 1986/12/03
DATE REVISED: 1989/08/10

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 113**

NATIONAL MINERAL INVENTORY:

NAME(S): **MAYNER'S FORTUNE**

MINING DIVISION: Skeena

STATUS: Developed Prospect

REGIONS: British Columbia

NTS MAP: 103107E

BC MAP:

LATITUDE: 54 24 33 N

LONGITUDE: 128 39 24 W

ELEVATION: 91 Metres

LOCATION ACCURACY: Within 500M

COMMENTS: Limestone band near rail line, Map 2 (Assessment Report 3585).

UTM ZONE: 09 (NAD 83)

NORTHING: 6029102

EASTING: 522284

COMMODITIES: Limestone

MINERALS

SIGNIFICANT: Calcite

ASSOCIATED: Epidote

ALTERATION: Epidote

ALTERATION TYPE: Skarn

MINERALIZATION AGE: Permian

Garnet

Garnet

Magnetite

Magnetite

Sulphide

Sulphide

DEPOSIT

CHARACTER: Stratiform

CLASSIFICATION: Sedimentary

TYPE: R09 Limestone

DIMENSION: 0108 x 0030

Massive

Evaporite

Metres

Industrial Min.

STRIKE/DIP: 040/25E

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Permian

GROUP

Undefined Group

FORMATION

Unnamed/Unknown Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Limestone

Quartzite

Graphitic Argillite

Argillaceous Limestone

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline

TERRANE: Stikine

Plutonic Rocks

PHYSIOGRAPHIC AREA: Kitimat Trench

INVENTORY

ORE ZONE: 10 MILE

REPORT ON: Y

CATEGORY: Inferred

QUANTITY: 454000 Tonnes

COMMODITY

Limestone

YEAR: 1967

GRADE

96.3000

Per cent

COMMENTS: Grade given for CaCO₃.

REFERENCE: Property File - K.P. Bottoms, 1967, page 10.

CAPSULE GEOLOGY

Several isolated blocks of massive, Permian (?) limestone outcrop just west of Lakelse Lake, 14 kilometres south-southwest of Terrace. The limestone is contained in a sequence of thin bedded quartzite, graphitic argillite and argillaceous limestone that is intruded by Jurassic to Tertiary aged granite and diorite of the Coast Plutonic Complex. The limestone is usually white, but sometimes displays a green or bluish grey colour. It is extensively recrystallized and coarse grained in texture. Epidote-garnet skarn zones with minor magnetite and sulphides are locally developed in the limestone.

One 30 metre thick block of limestone extends for 108 metres northeast from the Lakelse River, crossing the Canadian National Railway at the 10 mile point. The bed strikes 040 degrees and dips 25 degrees southeast. The block is estimated to contain at least 454,000 tonnes of limestone (K.P. Bottoms, 1967, pp. 3, 10). A representative sample from this block assayed 96.3 percent calcium carbonate and 1.59 percent magnesium carbonate (K.P. Bottoms 1967, p. 10). At least two other deposits of relatively pure limestone outcrop to the southeast.

Inferred reserves for the 10 Mile zone measured 454,000 tonnes grading 96.3 per cent limestone (Property File - K.P. Bottoms, 1967, page 10).

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 665
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR ASS RPT *3585
EMPR GEM 1970-97,98; 1971-113
EMPR MAP 8
EMPR PF (*K.P. Bottoms, 1967 Report pp.3,10)
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329 pp.14-17
GSC OF 1136

DATE CODED: 1986/10/08
DATE REVISED: 1989/08/16

CODED BY: LDJ
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 114**

NATIONAL MINERAL INVENTORY: 10319 Mo2

NAME(S): **SAK, NICHOLSON CREEK, PHOENIX,
KOKANEE**

MINING DIVISION: Omineca

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 103109W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 40 19 N
LONGITUDE: 128 26 06 W
ELEVATION: 900 Metres

NORTHING: 6058433
EASTING: 536436

LOCATION ACCURACY: Within 500M
COMMENTS: Drill holes, Dwg. C-8765 (Assessment Report 7932).

COMMODITIES: Molybdenum

MINERALS

SIGNIFICANT: Molybdenite Pyrite Ferrimolybdtite
ASSOCIATED: Quartz
ALTERATION: Sericite Clay Quartz
ALTERATION TYPE: Silicific'n Sericitic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Stockwork Disseminated
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: L05 Porphyry Mo (Low F- type)
SHAPE: Irregular
MODIFIER: Fractured
COMMENTS: Mineralized zone.

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Cretaceous-Tertiary			Coast Plutonic Complex

LITHOLOGY: Quartz Diorite
Granodiorite
Volcanic
Porphyritic Flow
Basalt
Rhyolite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine
METAMORPHIC TYPE: Contact

PHYSIOGRAPHIC AREA: Hazelton Ranges

RELATIONSHIP:

GRADE: Hornfels

INVENTORY

ORE ZONE: DRILLHOLE

REPORT ON: N

CATEGORY: Assay/analysis	YEAR: 1970
SAMPLE TYPE: Drill Core	
COMMODITY	GRADE
Molybdenum	0.2180 Per cent

COMMENTS: The sample width is 15 metres.
REFERENCE: Property File: Drilling notes, unknown author, 1970.

CAPSULE GEOLOGY

Triassic volcanics and metavolcanics are intruded by quartz diorite and granodiorite of the Cretaceous to Tertiary Coast Plutonic Complex. The volcanics consist mainly of rhyolites, porphyritic flows, and minor basalt. All rocks are cut by faults and shear zones with associated quartz veins.

Molybdenite, associated with pyrite, occurs as disseminations, rosettes, and smears in widely spaced quartz veins and shears over a 900 by 400 metre area, which trends south-southwest. The mineralized zone occurring mainly in the intrusive rocks, shows quartz-sericite-clay alteration. In the north part of the zone, several north-northwest trending mineralized veins occur which measure up to 100 metres long and 3 metres wide. At a higher elevation, 600 metres to the south, several drill holes intersected molybdenite within quartz veins and veinlets. One hole intersected 15 metres of 0.218 per cent molybdenite and a hole 270 metres to the west intersected 49 metres of 0.108 per cent molyb-

CAPSULE GEOLOGY

denite (Property File: Drilling notes, 1970).

BIBLIOGRAPHY

EMPR AR 1928-145; 1934-C5; *1935-C7-C9; 1936-C37; 1940-54; 1941-41;
1945-63; 1948-76
EMPR ASS RPT 4298, 5722, 6032, 7197, *7932, 8592
EMPR EXPL 1975-176; 1976-163; 1979-253; 1980-394
EMPR GEM *1973-487
EMPR MAP 69-1; 8
EMPR PF (Rpt by N.G. Freshwater, 1946, Maps by J.A. Siefert,
1946 and F. Nash, 1931, 1935; Drilling Notes, author unknown,
1970)
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM *205, pp. 53-56; *329, pp. 86,87
GSC P 36-17, pp. 94-96; 36-20, pp. 35,36

DATE CODED: 1986/12/19
DATE REVISED: 1989/08/25

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 115**

NATIONAL MINERAL INVENTORY: 103115 Zn1

NAME(S): **LOU**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103115W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 58 29 N
LONGITUDE: 128 50 37 W
ELEVATION: 300 Metres

NORTHING: 6091990
EASTING: 510010

LOCATION ACCURACY: Within 500M

COMMENTS: Drill holes, Map No. 6 (Property File: White, 1969).

COMMODITIES: Zinc Lead Copper Silver Gold

MINERALS

SIGNIFICANT: Pyrite Sphalerite Galena Chalcopyrite
ASSOCIATED: Quartz Calcite
ALTERATION: Hydrozincite Smithsonite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Hydrothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
SHAPE: Irregular
MODIFIER: Sheared

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Jurassic-Cretaceous	Bowser Lake	Undefined Formation	

LITHOLOGY: Argillite
Greywacke
Quartzite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Bowser Lake
COMMENTS: Bowser Lake Group are cover rocks on the Stikinia terrane.

PHYSIOGRAPHIC AREA: Kitimat Trench

INVENTORY

ORE ZONE: DRILLHOLE REPORT ON: N

CATEGORY:	Assay/analysis	YEAR:	1969
SAMPLE TYPE:	Drill Core		
COMMODITY		GRADE	
Silver		20.6000	Grams per tonne
Gold		0.3000	Grams per tonne
Copper		0.2700	Per cent
Lead		0.0200	Per cent
Zinc		3.7500	Per cent

COMMENTS: The sample width is 2.4 metres.

REFERENCE: Property File: Report by G.P.E. White, 1969 (Gold Star: 1031 038).

CAPSULE GEOLOGY

Quartz filled shear zones, striking north to northeast, occur in Jurassic to Cretaceous Bowser Lake Group sedimentary rocks. The rocks consist of coarsely interbedded black argillites, impure greenish quartzites, and fine-grained, grey greywackes which have been tightly folded along a northeast trending axis. The folds have associated shears and faults with quartz veins. Pyrite, galena, sphalerite, chalcopyrite, possibly smithsonite, and secondary hydrozincite occur in the veins as disseminations and coarse blebs.

Drill hole #1 intersected 3.75 per cent zinc, 0.27 per cent copper, 0.02 per cent lead, 20.6 grams per tonne silver and 0.3 grams per tonne gold over 2.4 metres. Drill hole #3, 180 metres to the northeast, intersected 5.00 per cent zinc, 0.69 per cent copper, 0.10 per cent lead, 37.7 grams per tonne silver and trace gold over 50.8 centimetres (Property File: White, 1969).

BIBLIOGRAPHY

EMPR GEM 1969-71

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 669
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR MAP 8
EMPR PF (*Rpt by G.P.E. White, 1969 in GOLD STAR property -
103I 038)
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329

DATE CODED: 1986/09/26
DATE REVISED: 1989/08/25

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 116**

NATIONAL MINERAL INVENTORY: 103115 Pb1

NAME(S): **MARMOT**, SUNLIGHT

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103115E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 49 49 N
LONGITUDE: 128 40 07 W
ELEVATION: 1200 Metres

NORTHING: 6075955
EASTING: 521288

LOCATION ACCURACY: Within 500M
COMMENTS: Marmot claim.

COMMODITIES: Lead Silver Zinc Gold Copper

MINERALS

SIGNIFICANT: Galena Pyrite Chalcopyrite Sphalerite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Concordant
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
DIMENSION:

STRIKE/DIP: 080/35N

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Jurassic-Cretaceous	Bowser Lake	Undefined Formation	

LITHOLOGY: Argillite
Conglomerate
Greywacke

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Bowser Lake

PHYSIOGRAPHIC AREA: Hazelton Ranges

CAPSULE GEOLOGY

The area is underlain by argillite, greywacke and conglomerate of the Jurassic to Cretaceous Bowser Lake Group. Narrow quartz veins lie conformably below a 35 to 75 metre wide conglomerate bed which strikes northeast and dips 50 to 75 degrees southeast. The veins are mineralized with galena, sphalerite, pyrite, pyrrotite and minor chalcopyrite.

A concordant quartz vein, striking 080 degrees and dipping 35 degrees north, is up to 3.5 metres wide and 12 metres long. The ore reportedly assayed 30 per cent lead, 5 per cent zinc and 480 grams per tonne silver (Minister of Mines Annual Report 1926).

BIBLIOGRAPHY

EMPR AR 1920-42; 1922-49; 1923-48; 1924-48; 1925-70; 1926-73;
1927-64; *1928-73
EMPR MAP 8
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329
GSC P 36-17
GSC SUM RPT 1922A, pp. 48,49; 1923A, pp. 42-44

DATE CODED: 1986/10/16
DATE REVISED: 1989/08/28

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 117**

NATIONAL MINERAL INVENTORY: 10319 Cu21

NAME(S): **PAYSTREAK**, GOLD STAR, TRUE BLUE

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103109W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 37 19 N
LONGITUDE: 128 28 46 W
ELEVATION: 1340 Metres

NORTHING: 6052848
EASTING: 533611

LOCATION ACCURACY: Within 500M

COMMENTS: Showing and adit, Figure 22 (Geology, Exploration and Mining in British Columbia, 1970).

COMMODITIES: Copper Silver Lead Gold

MINERALS

SIGNIFICANT: Chalcopyrite Galena Sphalerite

ASSOCIATED: Quartz Magnetite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated

CLASSIFICATION: Hydrothermal Epigenetic

TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au L01 Subvolcanic Cu-Ag-Au (As-Sb)

SHAPE: Irregular

MODIFIER: Sheared

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE

Permian

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Unnamed/Unknown Informal

LITHOLOGY: Meta Volcanic
Rhyolite
Basic Intrusive

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Stikine

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1919

SAMPLE TYPE: Rock

COMMODITY

GRADE

Silver

55.0000

Grams per tonne

Copper

1.5000

Per cent

COMMENTS: The sample width is 90 centimetres.

REFERENCE: Minister of Mines Annual Report 1919, pages 98,99.

CAPSULE GEOLOGY

Meta-rhyolite of probable Permian age is cut by a 1.5 metre wide basic dyke. A 1 metre east trending shear zone occurs on the hangingwall side of the dyke. The shear contains a 15 to 90 centimetre quartz vein with disseminated chalcopyrite, galena, sphalerite and magnetite. A 90 centimetre sample assayed trace gold, 55 grams per tonne silver, and 1.5 per cent copper and a selected sample assayed 1.4 grams per tonne gold, 233 grams per tonne silver, 7.1 per cent copper and 14 per cent lead (Minister of Mines Annual Report 1919).

A nearby showing called "Big Lead" contained chalcopyrite, minor bornite and galena in a basic dyke and metavolcanics.

BIBLIOGRAPHY

EMPR AR *1919-98,99; 1929-151
EMPR GEM *1970-195-197
EMPR MAP 8; 69-1
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329

DATE CODED: 1986/12/12
DATE REVISED: 1989/08/12

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 118**

NATIONAL MINERAL INVENTORY: 103115 Cu4

NAME(S): **KALUM**, KEN, BELWAY AND REX,
TREADWELL NO. 2, JUNEAU, MALOYA,
LAKE SHORE, SHAFT, SOUTH ADIT,
ROAD

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103115W
BC MAP:
LATITUDE: 54 47 49 N
LONGITUDE: 128 45 57 W
ELEVATION: 150 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: North adit, Figure 112 (Fieldwork 1984); located on the east shore of
Kitsumkalum Lake.

MINING DIVISION: Skeena
UTM ZONE: 09 (NAD 83)
NORTHING: 6072221
EASTING: 515055

COMMODITIES: Copper Gold Silver

MINERALS

SIGNIFICANT: Bornite Chalcopyrite Gold Specularite
ASSOCIATED: Magnetite Quartz Pyrite
ALTERATION: Epidote Chlorite Sericite Hematite Silica
ALTERATION TYPE: Epidote Sericitic Oxidation Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Stratabound Disseminated
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb) I02 Intrusion-related Au pyrrhotite veins
SHAPE: Irregular
MODIFIER: Sheared
COMMENTS: Mineralized zone with three showings.

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE: Upper Jurassic
GROUP: Bowser Lake
FORMATION: Undefined Formation
IGNEOUS/METAMORPHIC/OTHER:

LITHOLOGY: Biotite Chlorite Schist
Muscovite Schist
Dacitic Crystal Tuff
Gneiss
Andesite
Basalt

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Bowser Lake
METAMORPHIC TYPE: Regional
PHYSIOGRAPHIC AREA: Kitimat Trench
RELATIONSHIP:
GRADE: Greenschist

INVENTORY

ORE ZONE: DRILLHOLE
REPORT ON: N
CATEGORY: Assay/analysis
SAMPLE TYPE: Drill Core
COMMODITY: Silver 1.1900 Grams per tonne
Gold 1.8000 Grams per tonne
Copper 0.0500 Per cent
COMMENTS: The sample width is 1.0 metre.
REFERENCE: Assessment Report 16158.

CAPSULE GEOLOGY

The area is underlain by metavolcanic and metasedimentary rocks of the Upper Jurassic Bowser Lake Group. The volcanic rocks consist of dacitic crystal tuffs, andesites and basalts, which are metamorphosed to muscovite schists, biotite-chlorite schists, and gneisses. The units strike east and dip 25 to 35 degrees north and have undergone varying degrees of sericite, epidote and chlorite alteration.

Bornite and chalcopyrite with low gold and silver values occur locally in narrow shear zones in quartz stringers; in quartz-epidote-hematite lenses and veins; in magnetite-rich, partly silicified tuff bands; and along planes of schistosity

CAPSULE GEOLOGY

in the biotite-chlorite schists.

Three showings (Shaft, South Adit and Road) occur over a 240 metre, north trending zone. The Shaft occurrence contains malachite along shear zones in metabasalt, which overlies muscovite schist. A 2.4 metre sample assayed 14.4 grams per tonne gold and 17.1 grams per tonne silver (Minister of Mines Annual Report 1914). The South Adit occurrence, 110 metres southeast of the shaft, showed strata-bound mineralization with magnetite. A grab sample assayed 0.78 per cent copper, 0.3 grams per tonne gold and 14 grams per tonne silver (Fieldwork 1984). The recent Road showing, 85 metres south-south-east of the adit, is mineralized with bornite, specularite and chalcopyrite. A grab sample assayed 4.80 per cent copper, 4.1 grams per tonne gold and 100 grams per tonne silver (Fieldwork 1984).

The Christmas vein, 600 metres south of the North adit, contains quartz, magnetite, pyrite and chalcopyrite. A one metre length of drill core assayed 1.18 grams per tonne gold, 1.19 grams per tonne silver and 0.05 per cent copper (Assessment Report 16158).

BIBLIOGRAPHY

EMPR AR *1915-105-107; 1918-49; 1920-41; 1923-49; 1924-48; 1925-70;
1926-74; 1927-63; 1931-36
EMPR ASS RPT *10450, 11595, 15285, *15679, *16158
EMPR BULL 1, 1932, pp. 22,30
EMPR EXPL 1983-503; 1986-C429; 1987-C360,C361
EMPR FIELDWORK *1984, pp. 303-307
EMPR GEM 1970-96
EMPR MAP 8
GSC MAP 11-1956; 278A; *1136A; 1385A
GSC MEM *205, pp. 13-15; 329, p. 74
GSC P 36-17, pp. 20,21; 36-20, pp. 47,48
GSC SUM RPT 1922A, p. 49

DATE CODED: 1986/10/10
DATE REVISED: 1987/12/23

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 119**

NATIONAL MINERAL INVENTORY:

NAME(S): **FIVE - MILE CREEK HYDRAULIC**, KENDAL

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103109W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 34 19 N
LONGITUDE: 128 18 06 W
ELEVATION: 300 Metres

NORTHING: 6047384
EASTING: 545145

LOCATION ACCURACY: Within 1 KM
COMMENTS: Description.

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE GROUP
Lower Jurassic Hazelton

FORMATION
Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Gravel
Andesite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Hazelton Ranges

CAPSULE GEOLOGY

The area is underlain by andesite of the Lower Jurassic Hazelton Group, which is overlain by gravels containing gold dust.

BIBLIOGRAPHY

EMPR AR 1914-127 (Map p.121)
EMPR MAP 8; 69-1
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329

DATE CODED: 1986/09/29
DATE REVISED: 1986/09/29

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 120**

NATIONAL MINERAL INVENTORY: 103115 Cu7

NAME(S): **CROWN**, COPPER, COPPERAS

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103115E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 46 29 N
LONGITUDE: 128 43 06 W
ELEVATION: 1200 Metres

NORTHING: 6069760
EASTING: 518119

LOCATION ACCURACY: Within 1 KM

COMMENTS: Crown-granted claims (Minister of Mines Annual Report 1925).

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated Concordant
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb) I02 Intrusion-related Au pyrrhotite veins
DIMENSION: STRIKE/DIP: 090/40N TREND/PLUNGE:
COMMENTS: Mineralized zone width.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Jurassic-Cretaceous	Bowser Lake	Undefined Formation	

LITHOLOGY: Hornblende Schist
Sericite Schist
Diorite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Bowser Lake

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1918
SAMPLE TYPE: Grab
COMMODITY: Copper GRADE 0.5000 Per cent
COMMENTS: Sample also assayed trace silver and gold.
REFERENCE: Minister of Mines Annual Report 1918, page 49.

CAPSULE GEOLOGY

Sericite and hornblende schist of the Jurassic to Cretaceous Bowser Lake Group are intruded by a 50 metre wide diorite mass. Quartz veins mineralized with pyrite and chalcopyrite occur in the diorite and concordant with the metasediments underlying the diorite. The concordant veins are hosted within a 10 metre wide zone, which also contains disseminated chalcopyrite. A sample across the zone assayed 0.5 per cent copper and traces of gold and silver (Minister of Mines Annual Report 1918). The schists strike east and dip 40 degrees north.

BIBLIOGRAPHY

EMPR AR *1918-49; 1919-43; 1925-Fig. OP. p. 68
EMPR MAP 8
GSC MAP 11-1956; 1136A; 1385A; 278A
GSC MEM 329
GSC P 36-20, pp. 41,48

DATE CODED: 1986/10/16
DATE REVISED: 1986/10/16

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 121**

NATIONAL MINERAL INVENTORY:

NAME(S): **LYNDA**, SNO, FIDDLER

MINING DIVISION: Omineca

STATUS: Prospect
 REGIONS: British Columbia
 NTS MAP: 103116W
 BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 45 39 N
 LONGITUDE: 128 26 36 W
 ELEVATION: 1030 Metres

NORTHING: 6068320
 EASTING: 535820

LOCATION ACCURACY: Within 500M

COMMENTS: Mineralized zone, Figure 2 (Assessment Report 866).

COMMODITIES: Molybdenum Copper

MINERALS

SIGNIFICANT: Molybdenite Chalcopyrite Pyrite
 ASSOCIATED: Quartz Pyrite
 ALTERATION: K-Feldspar Sericite Limonite Jarosite Silica
 ALTERATION TYPE: Potassic Sericitic Oxidation Silicific'n
 MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stockwork Disseminated
 CLASSIFICATION: Porphyry Igneous-contact Hydrothermal
 TYPE: L05 Porphyry Mo (Low F- type) L04 Porphyry Cu ± Mo ± Au
 SHAPE: Regular
 DIMENSION: 0460 x 0300 x 0150 Metres STRIKE/DIP: 140/50W TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Jurassic	Hazelton	Undefined Formation	
Jurassic-Cretaceous	Bowser Lake	Undefined Formation	
Cretaceous-Tertiary			Coast Plutonic Complex

LITHOLOGY: Porphyritic Granite
 Granodiorite
 Quartz Feldspar Biotite Porphyry
 Greywacke
 Andesite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Hazelton Ranges
 TERRANE: Plutonic Rocks Stikine

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
 CATEGORY: Assay/analysis YEAR: 1966
 SAMPLE TYPE: Chip
 COMMODITY GRADE
 Copper 0.0400 Per cent
 Molybdenum 0.0900 Per cent
 COMMENTS: The sample width is 20.0 metres.
 REFERENCE: Assessment Report 866.

CAPSULE GEOLOGY

Molybdenite occurs in the southern half of a granitic intrusive, measuring 750 by 150 metres, localized at the contact between granodiorite of the Legate Creek apophysis of the Cretaceous to Tertiary Coast Plutonic Complex and volcanics and sediments of the Hazelton and Bowser Lake Groups. The intrusive, which strikes 140 degrees and dips 45 to 50 degrees southwest, is in contact with a quartz-feldspar biotite porphyry dyke, granodiorite and porphyritic granite, along the southwest hangingwall. The regional granodiorites lie to the northeast and andesites and greywackes lie to the southwest.

Molybdenite and minor chalcopyrite mineralization occurs over a length of 460 metres, a width of 150 metres and through a vertical range of 300 metres. It is closely associated with the granitic intrusive and occurs in narrow quartz-pyrite veins, in high grade multiple-banded quartz-pyrite veins (up to 30 centimetres wide), in silicified shears, disseminated and as fracture fillings. A north-south fault truncates

CAPSULE GEOLOGY

the mineralized zone to the east. Alteration includes wide spread sericitization and local K-feldspathization.

A 26 metre chip sample assayed 0.09 per cent molybdenite and 0.04 per cent copper (Assessment Report 866). Two drill holes, 300 metres apart, intersected over 50 metres of stockwork mineralized with molybdenite. Float samples assayed up to 1.58 per cent molybdenite (Assessment Report 866).

BIBLIOGRAPHY

EMPR AR 1966-80; 1967-83
EMPR ASS RPT 842, *866, 8107, 10023
EMPR EXPL 1980-399,400
EMPR MAP 8; 69-1
EMPR Monthly Rpt. (T.Schroeter), Sept. 1976
GSC MAP 11-1956; 278A; *1136A; 1385A
GSC MEM 329
CIM Special Vol. 15, 1976, Map B

DATE CODED: 1986/10/20
DATE REVISED: 1989/08/28

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 122**

NATIONAL MINERAL INVENTORY: 103116 Cu1

NAME(S): **WOMO, DUG**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103116W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 46 49 N
LONGITUDE: 128 22 16 W
ELEVATION: 1350 Metres

NORTHING: 6070523
EASTING: 540448

LOCATION ACCURACY: Within 500M

COMMENTS: Mineralized area, Figure 2 (Assessment Report 10440).

COMMODITIES: Molybdenum Copper

MINERALS

SIGNIFICANT: Molybdenite Chalcopyrite Pyrite
ASSOCIATED: Quartz Carbonate
ALTERATION TYPE: Silicific'n Carbonate
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stockwork Disseminated
CLASSIFICATION: Porphyry Igneous-contact
TYPE: L05 Porphyry Mo (Low F- type) L04 Porphyry Cu ± Mo ± Au
SHAPE: Irregular
MODIFIER: Fractured

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Jurassic-Cretaceous
Cretaceous-Tertiary

GROUP

Bowser Lake

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Coast Plutonic Complex

LITHOLOGY:

Siltstone
Hornfels
Quartz Feldspar Porphyry
Biotite Quartz Feldspar Dike
Quartz Diorite
Granodiorite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Bowser Lake
METAMORPHIC TYPE: Contact

Plutonic Rocks
RELATIONSHIP:

PHYSIOGRAPHIC AREA: Hazelton Ranges

GRADE: Hornfels

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Chip

YEAR: 1981

COMMODITY

COMMODITY	GRADE	
Copper	0.5300	Per cent
Molybdenum	0.0490	Per cent

COMMENTS: The molybdenum and copper samples are 2.4 and 4.5 metres wide respectively.

REFERENCE: Assessment Report 10440.

CAPSULE GEOLOGY

A zone, measuring 1000 by 800 metres of molybdenite-bearing quartz veins, straddles a regional contact between quartz diorite to granodiorite rocks of the Cretaceous to Tertiary Coast Plutonic Complex and hornfelsic siltstones of the Jurassic to Cretaceous Bowser Lake Group. A 50 to 150 metre wide, northwest trending biotite-quartz feldspar dyke cuts the sediments.

Molybdenite and chalcopyrite occur as disseminations and as fracture and shear zone fillings within the fractured, silicified and carbonatized areas of the porphyry and sediments.

The mineralization is associated with east-west striking quartz veins. Later intense shearing and carbonatization, with a consistent north-south trend, have locally truncated and redistributed the mineralized structures. Chip sampling returned a value of 0.049 per cent molybdenum over 2.4 metres and 0.53 per cent copper over 4.5 metres (Assessment Report 10440).

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 679
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR ASS RPT 798, 8374, 9524, *10440
EMPR EXPL 1980-400
EMPR MAP 8; 69-1
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329

DATE CODED: 1986/10/20
DATE REVISED: 1989/08/28

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 123**

NATIONAL MINERAL INVENTORY:

NAME(S): **LADY LUCK 7**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103107E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 23 39 N
LONGITUDE: 128 39 56 W
ELEVATION: 120 Metres

NORTHING: 6027430
EASTING: 521715

LOCATION ACCURACY: Within 500M

COMMENTS: Showing, Map 3 (Assessment Report 3585).

COMMODITIES: Copper Molybdenum

MINERALS

SIGNIFICANT: Chalcopyrite Molybdenite Pyrite
ASSOCIATED: Epidote Garnet
ALTERATION TYPE: Skarn
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Skarn Replacement
TYPE: K01 Cu skarn K07 Mo skarn
SHAPE: Irregular
DIMENSION:
COMMENTS: Strata attitude. STRIKE/DIP: 090/50N TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic	Undefined Group	Unnamed/Unknown Formation	

LITHOLOGY: Limestone
Greenstone
Shale
Diorite
Granodiorite
Skarn
Quartzite

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Kitimat Trench

CAPSULE GEOLOGY

Paleozoic volcanics, consisting of greenstone, and sediments, consisting of limestone, quartzite and shale, are intruded by diorite and granodiorite of the Cretaceous to Tertiary Coast Plutonic Complex. The sediments are altered to skarn composed of epidote and garnet with minor pyrite, chalcopyrite, and molybdenite as disseminations and small patches.

BIBLIOGRAPHY

EMPR ASS RPT *3585
EMPR GEM 1971-113; 1972-499
EMPR MAP 8
GSC MAP 11-1956; 1136A; 1385A
GSC MEM 329
Placer Dome File

DATE CODED: 1986/10/08
DATE REVISED: 1986/10/08

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 124**

NATIONAL MINERAL INVENTORY:

NAME(S): **LUCKY FORTUNE**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103107E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 24 24 N
LONGITUDE: 128 37 56 W
ELEVATION: 220 Metres

NORTHING: 6028831
EASTING: 523872

LOCATION ACCURACY: Within 500M

COMMENTS: Showing, Map 2 (Assessment Report 3585).

COMMODITIES: Copper Molybdenum Iron

MINERALS

SIGNIFICANT: Chalcopyrite Molybdenite Magnetite
ALTERATION: Epidote Garnet
ALTERATION TYPE: Skarn
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Skarn Replacement Industrial Min.
TYPE: K01 Cu skarn K07 Mo skarn
K03 Fe skarn
SHAPE: Irregular
DIMENSION: STRIKE/DIP: 002/70E TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic	Unnamed/Unknown Group	Unnamed/Unknown Formation	Coast Plutonic Complex
Cretaceous-Tertiary			

LITHOLOGY: Limestone
Diorite
Granodiorite
Skarn
Quartzite

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Stikine Plutonic Rocks
PHYSIOGRAPHIC AREA: Kitimat Trench

CAPSULE GEOLOGY

Paleozoic sediments consisting of limestone, quartzite, and shale are intruded by diorite and later granodiorite of the Cretaceous to Tertiary Coast Plutonic Complex. The sediments are altered to skarn composed of epidote and garnet with disseminated and patchy chalcopyrite, molybdenite and magnetite.

BIBLIOGRAPHY

EMPR ASS RPT *3585
EMPR GEM 1971-113; 1972-499
EMPR MAP 8
GSC MAP 11-1956; 1136A; 1385A
GSC MEM 329

DATE CODED: 1986/10/08
DATE REVISED: 1989/08/28

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 125**

NATIONAL MINERAL INVENTORY: 10319 Cu14

NAME(S): **WHITE BLUFFS, CROESUS 14, CROESUS 16,
CROESUS 43, CROESUS PORPHYRY**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103109W
BC MAP:
LATITUDE: 54 32 27 N
LONGITUDE: 128 26 26 W
ELEVATION: 320 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Figure 8 (Assessment Report 12072).

MINING DIVISION: Omineca
UTM ZONE: 09 (NAD 83)
NORTHING: 6043842
EASTING: 536194

COMMODITIES: Copper Silver Gold Tungsten

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Bornite Molybdenite Scheelite
ASSOCIATED: Quartz
ALTERATION: Chlorite Epidote Silica Malachite Kaolinite
ALTERATION TYPE: Sericite
MINERALIZATION AGE: Chloritic Argillic Silicific'n Oxidation
Unknown

DEPOSIT

CHARACTER: Stockwork Disseminated Vein
CLASSIFICATION: Porphyry
TYPE: L04 Porphyry Cu ± Mo ± Au
SHAPE: Irregular

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Cretaceous-Tertiary Coast Plutonic Complex

LITHOLOGY: Pegmatite
Quartz Feldspar Porphyry
Quartz Monzonite
Breccia
Quartz Diorite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Plutonic Rocks

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1983
SAMPLE TYPE: Grab
COMMODITY GRADE
Silver 15.4000 Grams per tonne
Gold 1.7000 Grams per tonne
Copper 0.2000 Per cent
REFERENCE: Assessment Report 12072.

CAPSULE GEOLOGY

The area is underlain by plutonic rocks of the Cretaceous to Tertiary Coast Plutonic Complex. The oldest rocks include coarse pegmatite and related quartz feldspar porphyry, which grades to quartz diorite porphyry. These rocks are intruded by quartz monzonite and a related igneous breccia. All the rocks are intruded by an east-striking, 5 metre wide quartz porphyry dyke. Pyrite, chalcopyrite and locally, bornite and molybdenite, occur as fracture fillings and disseminations. Stockworks of quartz veinlets with selvages of sulphides are also present within leucocratic to pegmatitic phases of the intrusive. Alteration accompanying the mineralization includes sericitization, kaolinization and chloritization. Trenching has exposed low grade, porphyry-style mineralization over a 400 metre by 200 metre area. A grab sample from one trench assayed 1.7 grams per tonne gold, 15.4 grams per tonne silver and 0.2 per cent copper (Assessment Report 12072). Scheelite has also been reported in the area.

BIBLIOGRAPHY

EMPR AR *1967-80-82; 1968-107
EMPR ASS RPT 1234, 1942, *12072, *17260
EMPR BULL 10 (Rev), p. 58
EMPR EXPL 1983-305; 1988-C201
EMPR GEM 1969-77,78; 1970-194,195; 1971-114; 1972-500,501
EMPR MAP 8; 69-1
EMPR OF 1991-17
EMPR PF (Rpt by *W.M. Sharp, 1966 in Kleanza Mines Ltd. Prospectus;
*McClintock, J.A. (1987): Report on the Croesus Gold Property in
Prospectus for Fircrest Resources Ltd., Apr.21, 1988; Various
sketch Maps)
EMR MP CORPFILE (Kendal Mining and Exploration Company Limited)
GSC EC GEOL 17, p. 43
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM *205, pp. 36,37; 329, p. 81
GSC P 36-17, p. 64
CIM Special Vol. 15, Table 1 (by S.H. Pilcher and J.J. McDougall,
#110, 1976)
N MINER June 25, 1942, p. 26
V STOCKWATCH Aug.17, 1987
Chevron File

DATE CODED: 1986/12/02
DATE REVISED: 1989/08/11

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 126**

NATIONAL MINERAL INVENTORY:

NAME(S): **IRON CAP**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103107W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 27 59 N
LONGITUDE: 128 48 06 W
ELEVATION: 600 Metres

NORTHING: 6035432
EASTING: 512855

LOCATION ACCURACY: Within 1 KM

COMMENTS: Description from Minister of Mines Annual Report 1927, page 62.

COMMODITIES: Iron Copper

MINERALS

SIGNIFICANT: Magnetite Chalcopyrite Pyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Massive
CLASSIFICATION: Replacement Industrial Min.
TYPE: K03 Fe skarn K01 Cu skarn

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE

Paleozoic
Cretaceous-Tertiary

GROUP

Unnamed/Unknown Group

FORMATION

Unnamed/Unknown Formation

IGNEOUS/METAMORPHIC/OTHER

Coast Plutonic Complex

LITHOLOGY: Greenstone
Granodiorite

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Stikine

Plutonic Rocks

PHYSIOGRAPHIC AREA: Kitimat Ranges

CAPSULE GEOLOGY

A small lens of massive magnetite, chalcopyrite, and pyrite occurs as a replacement in Paleozoic greenstone, adjacent to granodiorite of the Cretaceous to Tertiary Coast Plutonic Complex.

BIBLIOGRAPHY

EMPR AR 1927-62
EMPR MAP 8
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329

DATE CODED: 1986/10/01
DATE REVISED: 1989/08/28

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 127**

NATIONAL MINERAL INVENTORY: 103115 Au8

NAME(S): **SCENIC**, LOG CABIN

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103115E
BC MAP:
LATITUDE: 54 45 34 N
LONGITUDE: 128 33 41 W
ELEVATION: 1370 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Summit of pass.

MINING DIVISION: Skeena
Omineca
UTM ZONE: 09 (NAD 83)
NORTHING: 6068111
EASTING: 528225

COMMODITIES: Gold Silver Copper

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Galena Sphalerite
ASSOCIATED: Quartz
ALTERATION: Silica
ALTERATION TYPE: Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Breccia
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Jurassic-Cretaceous

GROUP

Bowser Lake

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Argillite
Greenstone
Diorite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Bowser Lake

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1928

SAMPLE TYPE: Chip

COMMODITY

GRADE

Silver

137.0000

Grams per tonne

Gold

18.5000

Grams per tonne

Copper

0.5000

Per cent

COMMENTS: The sample width is 1.5 metres.

REFERENCE: Minister of Mines Annual Report 1928, pages 74,75.

CAPSULE GEOLOGY

Argillites of the Jurassic to Cretaceous Bowser Lake Group are intruded by numerous greenstone dykes. Diorite of the Cretaceous to Tertiary Coast Plutonic Complex lies to the south. On the west side of the divide, is a 2 metre wide silicified zone in the sediments. A 20 centimetre wide quartz vein mineralized with pyrite and chalcopyrite occurs on the hangingwall. At the divide, a vein of brecciated quartz and country rock is mineralized with galena, sphalerite and chalcopyrite.

East of the divide, a 2.4 to 3.0 metre stringer zone contains pyrite and minor chalcopyrite. A 1.5 metre sample assayed 18.5 grams per tonne gold, 137 grams per tonne silver and 0.5 per cent copper (Minister of Mines Annual Report 1928).

BIBLIOGRAPHY

EMPR AR 1921-44; *1922-49; 1923-48; 1924-48; 1925-70; 1926-72,73;

*1928-74,75; 1931-36

EMPR MAP 8

GSC MAP 278A; 11-1956; 1136A; 1385A

GSC MEM 329

GSC P 36-20, p. 48; 36-17

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 686
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BIBLIOGRAPHY

GSC SUM RPT 1923A, pp. 42-44

DATE CODED: 1986/10/16
DATE REVISED: 1989/08/28

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 128**

NATIONAL MINERAL INVENTORY: 103116 Zn2

NAME(S): **BIG OLIVER**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103116E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 54 59 N
LONGITUDE: 128 13 06 W
ELEVATION: 700 Metres

NORTHING: 6085767
EASTING: 550105

LOCATION ACCURACY: Within 1 KM

COMMENTS: Description from Minister of Mines Annual Report 1929, page 154.

COMMODITIES: Zinc Copper Gold

MINERALS

SIGNIFICANT: Sphalerite Chalcopyrite Pyrite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
SHAPE: Irregular
MODIFIER: Sheared
DIMENSION:

STRIKE/DIP: 055/40S

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Jurassic-Cretaceous

GROUP

Bowser Lake

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Sandstone
Argillite
Conglomerate

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Bowser Lake

PHYSIOGRAPHIC AREA: Hazelton Ranges

CAPSULE GEOLOGY

A shear zone, striking 055 degrees and dipping 40 degrees southeast, cuts sandstone of the Jurassic to Cretaceous Bowser Lake Group. The sandstone is overlain by conglomerate and argillite. The shear zone contains quartz and pyrite over a 15 centimetre width. Assays revealed trace gold. Fifteen metres to the east is a quartz vein sparsely mineralized with sphalerite and chalcopyrite over 45 centimetres.

BIBLIOGRAPHY

EMPR AR *1929-154
EMPR MAP 8; 69-1
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329
GSC P 36-17

DATE CODED: 1986/10/22
DATE REVISED: 1989/08/28

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 688
REPORT: RGEN0100

MINFILE NUMBER: **1031 129**

NATIONAL MINERAL INVENTORY:

NAME(S): **MARGARITE**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103116E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 55 09 N
LONGITUDE: 128 14 06 W
ELEVATION: 880 Metres

NORTHING: 6086064
EASTING: 549034

LOCATION ACCURACY: Within 1 KM

COMMENTS: Description from Minister of Mines Annual Report 1927, page 154.

COMMODITIES: Gold Silver

MINERALS

SIGNIFICANT: Pyrite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Jurassic-Cretaceous	Bowser Lake	Undefined Formation	

LITHOLOGY: Sandstone
Argillite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Bowser Lake

PHYSIOGRAPHIC AREA: Hazelton Ranges

CAPSULE GEOLOGY

A 2 metre, north striking, shallow dipping oxidized zone occurs in sandstones and argillites of the Jurassic to Cretaceous Bowser Lake Group. A 30 centimetre sample of a vein containing pyrite assayed trace gold and silver.

BIBLIOGRAPHY

EMPR AR *1929-154
EMPR MAP 8; 69-1
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329
GSC P 36-17

DATE CODED: 1986/10/22
DATE REVISED: 1989/08/28

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 129**

MINFILE NUMBER: **1031 130**

NATIONAL MINERAL INVENTORY: 10319 Cu12

NAME(S): **KEELER**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103108E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 29 54 N
LONGITUDE: 128 01 16 W
ELEVATION: 1520 Metres

NORTHING: 6039410
EASTING: 563396

LOCATION ACCURACY: Within 500M

COMMENTS: Description (Property File, Bell, 1963).

COMMODITIES: Copper Silver

MINERALS

SIGNIFICANT: Chalcocite Bornite Copper
ALTERATION: Hematite Azurite Malachite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated

CLASSIFICATION: Replacement
TYPE: D03 Volcanic redbed Cu

L01 Subvolcanic Cu-Ag-Au (As-Sb)
STRIKE/DIP: 135/40E TREND/PLUNGE:

DIMENSION:
COMMENTS: Discontinuous.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE GROUP
Jurassic Hazelton

FORMATION
Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Feldspar Porphyry

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1963

SAMPLE TYPE: Rock

COMMODITY

GRADE

Silver

12.3400

Grams per tonne

Copper

1.5500

Per cent

COMMENTS: The sample width is 10.7 metres.

REFERENCE: Property File: Report by T. Bell, 1963 (see 1031 089).

CAPSULE GEOLOGY

Chalcocite and lesser bornite, native copper, azurite and malachite occur as veinlets and disseminations within a 40 degree east dipping feldspar porphyry flow of the Jurassic Hazelton Group. The mineralization occurs discontinuously over 180 metres in a northwest direction. Sampling of a trench assayed 1.55 per cent copper and 12.34 grams per tonne silver over 10.7 metres (Property File - Bell, 1963).

BIBLIOGRAPHY

EMPR AR *1963-24
EMPR MAP 8; 69-1
EMPR PF (*Rpts by James, D.H. 1963; Bell, T. 1963;
Campbell, D.D. 1964)
GSC MAP 11-1956; 1136A; 1385A
GSC MEM 329

DATE CODED: 1986/11/06
DATE REVISED: 1989/08/30

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 131**

NATIONAL MINERAL INVENTORY: 10318 Cu8

NAME(S): **COPPER QUEEN**, SURPRISE, BLUE BELL

STATUS: Showing
 REGIONS: British Columbia
 NTS MAP: 103108W
 BC MAP:
 LATITUDE: 54 21 59 N
 LONGITUDE: 128 20 06 W
 ELEVATION: 1400 Metres
 LOCATION ACCURACY: Within 500M
 COMMENTS: Description from Geological Survey of Canada Map 36-17.

MINING DIVISION: Skeena
 UTM ZONE: 09 (NAD 83)
 NORTHING: 6024491
 EASTING: 543206

COMMODITIES: Copper Iron Lead Zinc Silver
 Gold

MINERALS

SIGNIFICANT: Chalcopyrite Pyrite Galena Sphalerite Bornite
 Pyrrhotite Magnetite
 ASSOCIATED: Quartz
 ALTERATION: Malachite Azurite Epidote Garnet
 ALTERATION TYPE: Skarn Oxidation
 MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated Massive
 CLASSIFICATION: Skarn Replacement Igneous-contact Industrial Min.
 TYPE: K04 Au skarn K01 Cu skarn
 K02 Pb-Zn skarn K03 Fe skarn
 SHAPE: Irregular
 DIMENSION:
 COMMENTS: Discontinuous skarn zones. STRIKE/DIP: 360/70E TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Permian-Triassic	Unnamed/Unknown Group	Unnamed/Unknown Formation	Coast Plutonic Complex
Cretaceous-Tertiary			

LITHOLOGY: Andesite Tuff
 Rhyolite Tuff
 Limestone
 Granodiorite

HOSTROCK COMMENTS: Mafic volcanic rocks are Triassic and older in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
 TERRANE: Stikine
 METAMORPHIC TYPE: Regional
 PHYSIOGRAPHIC AREA: Kitimat Ranges
 RELATIONSHIP: Plutonic Rocks
 GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
 YEAR: 1929
 CATEGORY: Assay/analysis
 SAMPLE TYPE: Chip

<u>COMMODITY</u>	<u>GRADE</u>	
Silver	223.0000	Grams per tonne
Copper	1.0000	Per cent
Lead	7.0000	Per cent
Zinc	11.0000	Per cent

COMMENTS: The sample width is 46.0 centimetres.
 REFERENCE: Minister of Mines Annual Report 1929, page 77.

CAPSULE GEOLOGY

A north trending unit of andesite-rhyolite tuff, with inter-bedded limestone masses, occurs in granodiorite of the Cretaceous to Tertiary Coast Plutonic Complex. The volcaniclastics, which are likely late Paleozoic (Triassic and older) in age, are weakly to intensely foliated, striking north-northwest and dipping 70 to 80 degrees east. Along the contact with the intrusives, discontinuous skarn zones contain magnetite, chalcopyrite, galena, sphalerite, bornite, pyrite and pyrrhotite. Epidote and garnet are gangue minerals. The mineralized zones occurring over an area about 600 by 30 metres, are replacements of the limestone. Mineralization occurs as dissemination, patches and in quartz veins. A 46 centimetre chip

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CAPSULE GEOLOGY

sample of one zone assayed trace gold, 223 grams per tonne silver, 1 per cent copper, 7 per cent lead and 11 per cent zinc (Minister of Mines Annual Report 1929). Magnetite masses, up to 2.4 metres wide, occur over several hundred metres to the south.

BIBLIOGRAPHY

EMPR AR 1922-50; 1923-49; 1924-49; 1925-71,72; *1929-77; *1930-79
EMPR ASS RPT 14076
EMPR EXPL 1984-376; 1985-C372
EMPR MAP 8; 69-1
GSC MAP 278A; 11-1956; 1136A; 1385A
GSC MEM 205, p. 5; 329
GSC P 36-17
GSC SUM RPT *1926A, pp. 42,43

DATE CODED: 1986/10/24
DATE REVISED: 1987/07/23

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 692
REPORT: RGEN0100

MINFILE NUMBER: **1031 132**

NATIONAL MINERAL INVENTORY: 10319 Cu31

NAME(S): **CALENDAR**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103109E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 37 29 N
LONGITUDE: 128 11 06 W
ELEVATION: 1350 Metres

NORTHING: 6053337
EASTING: 552619

LOCATION ACCURACY: Within 1 KM

COMMENTS: Description from Minister of Mines Annual Report 1925, page 128.

COMMODITIES: Copper Lead

MINERALS

SIGNIFICANT: Galena Tetrahedrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Unknown
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Plutonic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Cretaceous-Tertiary			Legate Creek Apophysis

LITHOLOGY: Granodiorite
 Quartz Monzonite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Plutonic Rocks

PHYSIOGRAPHIC AREA: Hazelton Ranges

CAPSULE GEOLOGY

The area is underlain by the Cretaceous to Tertiary Legate Creek apophysis, consisting of granodiorite and quartz monzonite. Tetrahedrite and galena are reported to occur in the intrusive rocks.

BIBLIOGRAPHY

EMPR AR 1925-128
EMPR MAP 8; 69-1
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329

DATE CODED: 1986/11/24
DATE REVISED: 1989/08/28

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 132**

MINFILE NUMBER: **1031 133**

NATIONAL MINERAL INVENTORY: 10319 Zn1

NAME(S): **JACKIE**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103109W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 38 39 N
LONGITUDE: 128 28 06 W
ELEVATION: 570 Metres

NORTHING: 6055326
EASTING: 534310

LOCATION ACCURACY: Within 1 KM

COMMENTS: Description from Minister of Mines Annual Report 1928, page 145.

COMMODITIES: Zinc Silver

MINERALS

SIGNIFICANT: Sphalerite Pyrite Galena

ALTERATION: Silica

ALTERATION TYPE: Silicific'n

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein

CLASSIFICATION: Hydrothermal

TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

SHAPE: Irregular

MODIFIER: Sheared

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Triassic

Unnamed/Unknown Informal

LITHOLOGY: Schist
Volcanic

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Stikine

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1928

SAMPLE TYPE: Rock

COMMODITY

GRADE

Silver

41.1000

Grams per tonne

Zinc

7.0000

Per cent

REFERENCE: Minister of Mines Annual Report 1928, page 145.

CAPSULE GEOLOGY

A shear zone in silicified volcanics and schists of probable Triassic age, is mineralized with sphalerite, pyrite and galena. The shear zone, striking 160 degrees and dipping northeast is about 100 metres long and 1 metre wide. A sample assayed 7 per cent zinc, 41.1 grams per tonne silver and trace gold (Minister of Mines Annual Report 1928). Another showing occurs about 355 metres higher in elevation on an adjoining creek to the south.

BIBLIOGRAPHY

EMPR AR *1928-145

EMPR MAP 8; 69-1

EMPR PF (Sketch of Mineral Claims in Usk District,

J. Willman, 1929)

GSC MAP 11-1956; 278A; 1136A; 1385A

GSC MEM 329

GSC P 36-20, p. 23

DATE CODED: 1986/12/16

CODED BY: LDJ

FIELD CHECK: N

DATE REVISED: 1989/08/28

REVISED BY: LLD

FIELD CHECK: N

MINFILE NUMBER: **1031 134**

NATIONAL MINERAL INVENTORY: 103116 Au3

NAME(S): **BLACK BEAR**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103116W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 52 44 N
LONGITUDE: 128 27 06 W
ELEVATION: 410 Metres

NORTHING: 6081452
EASTING: 535181

LOCATION ACCURACY: Within 500M

COMMENTS: Symbol #89 (Geological Survey of Canada Map 36-17); description (Minister of Mines Annual Report 1930).

COMMODITIES: Copper Silver Gold

MINERALS

SIGNIFICANT: Chalcopyrite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
DIMENSION:

STRIKE/DIP: 135/45E TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Jurassic-Cretaceous Bowser Lake Undefined Formation

LITHOLOGY: Argillite
Conglomerate
Quartzite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Bowser Lake

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N

CATEGORY: Assay/analysis YEAR: 1930
SAMPLE TYPE: Grab
COMMODITY GRADE
Silver 44.6000 Grams per tonne
Gold 0.3400 Grams per tonne
Copper 1.1000 Per cent

COMMENTS: The results were obtained from a "selected sample".
REFERENCE: Minister of Mines Annual Report 1930, page 138.

CAPSULE GEOLOGY

The area is underlain by argillites, conglomerates and quartzites of the Jurassic to Cretaceous Bowser Lake Group. A 135 degree striking, 45 degree northeast dipping quartz vein occurs in the sediments. The vein is up to 0.8 metres wide and is mineralized with chalcopyrite. A selected sample assayed 1.1 per cent copper, 44.6 grams per tonne silver and 0.34 grams per tonne gold (Minister of Mines Annual Report 1930).

BIBLIOGRAPHY

EMPR AR 1930-138
EMPR MAP 8; 69-1
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329
GSC P 36-17

DATE CODED: 1986/10/20
DATE REVISED: 1989/08/28

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 135**

NATIONAL MINERAL INVENTORY: 103115 Pb2

NAME(S): **GOAT**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103115E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 48 54 N
LONGITUDE: 128 39 52 W
ELEVATION: 1370 Metres

NORTHING: 6074257
EASTING: 521564

LOCATION ACCURACY: Within 500M
COMMENTS: Goat claim.

COMMODITIES: Lead Zinc Silver

MINERALS

SIGNIFICANT: Galena Sphalerite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Concordant
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Jurassic-Cretaceous Bowser Lake Undefined Formation

LITHOLOGY: Argillite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Bowser Lake

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis YEAR: 1920
SAMPLE TYPE: Rock
COMMODITY GRADE
Silver 686.0000 Grams per tonne
Lead 49.0000 Per cent

COMMENTS: A description of the sample is not available.
REFERENCE: Property File: Assays, 1926, no author.

CAPSULE GEOLOGY

A concordant quartz vein in argillite of the Jurassic to Cretaceous Bowser Lake Group contains galena and sphalerite. The vein is 5 to 15 centimetres wide and is exposed along the face of a bluff for about 30 metres. A sample assayed 49 per cent lead and 686 grams per tonne silver (Property File: Assays, 1926).

BIBLIOGRAPHY

EMPR AR 1920-41; 1921-43; 1923-47; *1926-73
EMPR ASS RPT 21742
EMPR MAP 8; 69-1
EMPR OF 1994-14
EMPR PF (Assays, 1926)
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329
GSC P 36-17
GSC SUM RPT 1923A, pp. 42-44

DATE CODED: 1986/10/16
DATE REVISED: 1989/08/28

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

CAPSULE GEOLOGY

Laboratory tests indicate the gold and silver are present as tellurides which occur as tiny inclusions and fillings in spongy pyrite. Minor scheelite, galena, sphalerite and tetrahedrite has also been reported.

In 1940, about 2 tonnes of ore was shipped from the Black Bull Group (includes the Gem and Blue Bird claims). This ore shipment produced 31 grams of gold and 62 grams of silver.

Reserves of about 4355 tonnes averaging 26.06 grams per tonne gold and 59.31 grams per tonne silver were calculated over a length of 34 metres and a width of 0.4 metres for the Gem vein (Sharp, 1971).

Erickson Gold Mining drilled (20 holes, 1917 metres) the property in 1988.

BIBLIOGRAPHY

- EMPR AR 1938-B37-38; 1939-69; 1940-23,42,54; 1941-24,41; 1942-31;
*1946-85,86; 1967-81; 1968-107
EMPR ASS RPT 1234, 12072, *17260
EMPR BULL 10 (Rev), p. 58
EMPR EXPL 1983-502; 1988-C201
EMPR GEM 1969-77,78; *1971-114-116; 1972-500,501
EMPR MAP 8; 69-1
EMPR OF 1991-17
EMPR PF (Rpts by *W.M. Sharp, 1966 in Kleanza Mines Ltd. Prospectus;
*W.M. Sharp, 1971; Sketch Maps by W.H. White, 1946 and J.T. Mandy,
1940; Prospectus for Fircrest Resources Ltd., Apr.20, 1988, p. 8;
Baase, R. (1990): Brief Economic Analysis)
EMR MIN BULL MR 223 B.C. 290
EMR MP CORPFILE (Kendal Mining and Exploration Company Limited;
Cathedral Minerals Ltd.)
GSC EC GEOL 17, p. 43
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM *205, p. 37; 329
GSC P 36-17, p. 65
CANMET IR 72-20; 74-4
GCNL #12, 1983
V STOCKWATCH Aug.17, 1987
Placer Dome File
Chevron File

DATE CODED: 1986/12/02
DATE REVISED: 1989/08/11

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 698
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MINFILE NUMBER: **1031 137**

NATIONAL MINERAL INVENTORY: 10319 Cu17

NAME(S): **LITTLE WONDER**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103109W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 39 19 N
LONGITUDE: 128 25 26 W
ELEVATION: 300 Metres

NORTHING: 6056585
EASTING: 537168

LOCATION ACCURACY: Within 1 KM

COMMENTS: Description from Minister of Mines Annual Report 1930, page 136.

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite Pyrite Specularite
ASSOCIATED: Quartz
ALTERATION: Silica
ALTERATION TYPE: Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal
TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb)
SHAPE: Irregular
MODIFIER: Sheared

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Triassic			Unnamed/Unknown Informal

LITHOLOGY: Volcanic

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Hazelton Ranges

CAPSULE GEOLOGY

A quartz vein, up to 1.5 metres wide, occurs in sheared volcanic rock of probable Triassic age. The veins are mineralized with probable chalcopyrite. Higher in elevation are altered and silicified rocks containing pyrite and specularite.

BIBLIOGRAPHY

EMPR AR 1930-136
EMPR MAP 8; 69-1
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329

DATE CODED: 1986/12/16
DATE REVISED: 1989/08/28

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 137**

MINFILE NUMBER: **1031 138**

NATIONAL MINERAL INVENTORY:

NAME(S): **R & F**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103108W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 15 29 N
LONGITUDE: 128 29 36 W
ELEVATION: 300 Metres

NORTHING: 6012352
EASTING: 533006

LOCATION ACCURACY: Within 1 KM
COMMENTS: Claims

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Unknown
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Unknown

HOST ROCK

DOMINANT HOSTROCK: Plutonic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Cretaceous-Tertiary			Coast Plutonic Complex

LITHOLOGY: Granodiorite
Quartz Diorite
Diorite

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Plutonic Rocks

PHYSIOGRAPHIC AREA: Kitimat Ranges

CAPSULE GEOLOGY

The area is underlain by granodiorite, diorite, and quartz diorite of the Cretaceous to Tertiary Coast Plutonic Complex. Details of reported mineralization are not available.

BIBLIOGRAPHY

EMPR AR 1967-53
EMPR MAP 8; 69-1
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329

DATE CODED: 1986/10/27
DATE REVISED: 1989/08/28

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 139**

NATIONAL MINERAL INVENTORY: 10319 Ag11

NAME(S): **INDEPENDENCE** LEGAL TENDER

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103109E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 37 39 N
LONGITUDE: 128 09 26 W
ELEVATION: 1500 Metres

NORTHING: 6053668
EASTING: 554409

LOCATION ACCURACY: Within 500M

COMMENTS: Descriptions; old campsite, Map 1 (Assessment Report 8777).

COMMODITIES: Silver Gold Copper Lead Zinc

MINERALS

SIGNIFICANT: Chalcopyrite Pyrite Tetrahedrite Arsenopyrite Galena

Bornite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein

CLASSIFICATION: Epigenetic

TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb)

I05 Polymetallic veins Ag-Pb-Zn±Au

SHAPE: Irregular

MODIFIER: Sheared

DIMENSION:

STRIKE/DIP: 155/80W

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Jurassic

Hazelton

Undefined Formation

Cretaceous-Tertiary

Legate Creek Apophysis

LITHOLOGY: Andesite
Quartz Monzonite
Granophyre

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Stikine

Plutonic Rocks

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: FLOAT

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1919

SAMPLE TYPE: Grab

COMMODITY

GRADE

Silver

1989.0000

Grams per tonne

Gold

4.8000

Grams per tonne

Copper

0.2000

Per cent

COMMENTS: Higher grade float sample found in 1980.

REFERENCE: Minister of Mines Annual Report 1919.

CAPSULE GEOLOGY

Andesite of the Jurassic Hazelton Group is intruded by the Legate Creek apophysis of the Cretaceous to Tertiary Coast Plutonic Complex. The central phase of the apophysis consists of adamellite and granophyre.

A shear zone, trending northwest and dipping steeply east, occurs in andesite and contains quartz veins up to 3 metres wide. Mineralization consists of chalcopyrite, tetrahedrite, pyrite, arsenopyrite, sphalerite, bornite and galena. A 1.2 metre sample assayed trace gold, 0.5 per cent copper and 702.9 grams per tonne silver (Minister of Mines Annual Report 1919).

About 300 metres downslope, a quartz vein containing galena assayed 1989 grams per tonne silver, 4.8 grams per tonne gold and 0.2 per cent copper (Minister of Mines Annual Report 1919). A downslope float sample assayed 4613.5 grams per tonne silver, 17.3 grams per tonne gold, 5.93 per cent lead, 8.21 per cent zinc and 0.74 per cent copper (Assessment Report 8777).

BIBLIOGRAPHY

EMPR AR *1919-100; 1920-83; 1923-105; 1924-93; *1925-129

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
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REPORT: RGEN0100

BIBLIOGRAPHY

EMPR ASS RPT 8777
EMPR EXPL 1980-392,393
EMPR MAP 8; 69-1
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329
GSC P 36-20, pp. 32,33; 36-17

DATE CODED: 1986/11/14
DATE REVISED: 1989/08/28

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 140**

NATIONAL MINERAL INVENTORY: 10319 Cu26

NAME(S): **HIDDEN**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103109E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 38 39 N
LONGITUDE: 128 07 46 W
ELEVATION: 1130 Metres

NORTHING: 6055544
EASTING: 556179

LOCATION ACCURACY: Within 1 KM

COMMENTS: Description and Geological Survey of Canada Map 36-17; old MINFILE locates the showing 2.3 kilometres to the south.

COMMODITIES: Copper Lead Zinc

MINERALS

SIGNIFICANT: Tetrahedrite Galena Sphalerite
ASSOCIATED: Quartz
ALTERATION: Malachite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
SHAPE: Irregular

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Cretaceous-Tertiary			Legate Creek Apophysis

LITHOLOGY: Pyroxene Granodiorite
Volcanic

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Plutonic Rocks

PHYSIOGRAPHIC AREA: Hazelton Ranges

CAPSULE GEOLOGY

A pyroxene[C quartz diorite stock of the Cretaceous to Tertiary Coast Plutonic Complex intrudes Jurassic Hazelton Group volcanics. A quartz vein, about 15 centimetres wide, occurs along the hangingwall of a fissure within a pyroxene granodiorite phase of the Legate Creek apophysis. The vein, exposed intermittently for 300 metres, is mineralized with tetrahedrite, galena, sphalerite and malachite.

BIBLIOGRAPHY

EMPR AR *1925-129
EMPR MAP 8; 69-1
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329
GSC P 36-20, pp. 32,33; 36-17

DATE CODED: 1986/11/14
DATE REVISED: 1989/08/28

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 141**

NATIONAL MINERAL INVENTORY: 10319 Cu26

NAME(S): **BULLION**, ZONA II

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103109E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 37 34 N
LONGITUDE: 128 07 31 W
ELEVATION: 1370 Metres

NORTHING: 6053538
EASTING: 556473

LOCATION ACCURACY: Within 500M

COMMENTS: Mineralized showing, Map 1 (Assessment Report 8777).

COMMODITIES: Silver

Copper

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Galena
ASSOCIATED: Quartz Calcite
ALTERATION: Malachite Limonite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb)
SHAPE: Irregular
DIMENSION:

STRIKE/DIP: 025/40E

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Cretaceous-Tertiary			Legate Creek Apophysis

LITHOLOGY: Pyroxene Quartz Diorite
Porphyritic Pyroxene Granodiorite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Plutonic Rocks

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Chip
COMMODITY
Silver
Copper

YEAR: 1980

GRADE	Grams per tonne
1313.0000	Per cent
2.1500	

COMMENTS: The sample width is 30.0 centimetres.
REFERENCE: Assessment Report 8777.

CAPSULE GEOLOGY

A pyroxene quartz diorite stock of the Cretaceous to Tertiary Coast Plutonic Complex intrudes volcanics of the Jurassic Hazelton Group. A quartz-carbonate vein occurs along the upper contact of an aplitic dyke within a porphyritic pyroxene granodiorite phase of the Legate Creek apophysis. The vein contains minor limonite, malachite and sulphides, likely chalcopyrite, pyrite and galena. A 30 centimetre chip sample assayed 2.15 per cent copper and 1313 grams per tonne silver (Assessment Report 8777).

An early report describes a quartz vein along the foot of a bluff for a distance of 200 metres in a northeast direction. A 30 centimetre sample assayed 1.9 per cent copper and 54.9 grams per tonne silver (Minister of Mines Annual Report 1919).

BIBLIOGRAPHY

EMPR AR 1919-100
EMPR ASS RPT *8777
EMPR EXPL 1980-392,393
EMPR MAP 8; 69-1
GSC MAP 11-1956; 278A; 1136A; 1385A

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
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BIBLIOGRAPHY

GSC MEM 329

DATE CODED: 1986/11/14
DATE REVISED: 1989/08/28

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 142**

NATIONAL MINERAL INVENTORY:

NAME(S): **FOX 3, SEVEN SISTERS PEAK**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103116E
BC MAP:

MINING DIVISION: Omineca
UTM ZONE: 09 (NAD 83)

LATITUDE: 54 59 04 N
LONGITUDE: 128 14 06 W
ELEVATION: 1240 Metres

NORTHING: 6093328
EASTING: 548954

LOCATION ACCURACY: Within 500M

COMMENTS: Mineralized sample #55-10, Figure 8 (Assessment Report 9147).

COMMODITIES: Molybdenum Copper Silver

MINERALS

SIGNIFICANT: Molybdenite
ALTERATION: Malachite Azurite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stockwork
CLASSIFICATION: Hydrothermal Porphyry Igneous-contact
TYPE: L05 Porphyry Mo (Low F- type) 105 Polymetallic veins Ag-Pb-Zn±Au
SHAPE: Irregular
COMMENTS: Gossan zone.

HOST ROCK

DOMINANT HOSTROCK: Plutonic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Jurassic-Cretaceous Tertiary	Bowser Lake	Undefined Formation	Seven Sisters Stock

LITHOLOGY: Granodiorite
Siltstone
Diorite
Siltstone
Greywacke
Conglomerate
Greisen
Rhyolite
Quartz Feldspar Porphyry

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Plutonic Rocks Bowser Lake PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N

CATEGORY: Assay/analysis	YEAR: 1981
SAMPLE TYPE: Grab	
<u>COMMODITY</u>	<u>GRADE</u>
Silver	24.7000 Grams per tonne
Copper	1.2600 Per cent
Molybdenum	0.0970 Per cent

REFERENCE: Assessment Report 9147.

CAPSULE GEOLOGY

Upper Jurassic to Lower Cretaceous Bowser Lake Group sediments are intruded by the Early Tertiary age Seven Sisters stock which forms the core of the Seven Sisters Peaks. The sediments are mainly siltstone and greywacke with minor conglomerate, greenstone and rhyolite. Near the stock, they are sharply crenulated and deformed. The stock is largely granodiorite with lesser granite and diorite. Quartz feldspar porphyry is gradational with the intrusive and forms dykes cutting the sediments. Aplitic dykes extend from the intrusive into the sediments.

Molybdenite occurs in fractures within granodiorite in contact with siltstones. A sample assayed 1.46 per cent molybdenum and another, 300 metres west, assayed 0.26 per cent molybdenum. Three hundred metres to the east, a five metre wide gossan with malachite and azurite occurs along a fracture

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RUN TIME: 12:06:33

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REPORT: RGEN0100

CAPSULE GEOLOGY

in the granodiorite. A sample of this assayed 0.097 per cent molybdenum, 1.26 per cent copper, and 24.7 grams per tonne silver (Assessment Report 9147).

BIBLIOGRAPHY

EMPR ASS RPT 8467, *9147
EMPR EXPL 1979-256; 1980-400,401
EMPR MAP 8; 69-1
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329

DATE CODED: 1986/10/23
DATE REVISED: 1989/08/12

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 143**

NATIONAL MINERAL INVENTORY: 10319 Cu28

NAME(S): **IMPERIAL**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103109E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 39 29 N
LONGITUDE: 128 08 56 W
ELEVATION: 820 Metres

NORTHING: 6057074
EASTING: 554906

LOCATION ACCURACY: Within 1 KM

COMMENTS: Description from Minister of Mines Annual Report 1925, page 129.

COMMODITIES: Copper Silver

MINERALS

SIGNIFICANT: Chalcopyrite Specularite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Unknown
TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb)

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Jurassic

GROUP

Hazelton

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Volcanic Breccia
Rhyolite
Diorite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1925

SAMPLE TYPE: Chip

COMMODITY

GRADE

Silver

13.7000

Grams per tonne

Copper

3.5000

Per cent

COMMENTS: The sample width is 1.8 metres.

REFERENCE: Minister of Mines Annual Report 1925, page 129.

CAPSULE GEOLOGY

Volcanics of the Jurassic Hazelton Group are cut by a diorite stock of the Cretaceous to Tertiary Coast Plutonic Complex. Specularite and chalcopyrite mineralization, 2 metres wide, occurs along the contact between volcanic breccia and rhyolite, about 40 metres east of the intrusive.

A 1.8 metre sample assayed 3.5 per cent copper, 13.7 grams per tonne silver and trace gold (Minister of Mines Annual Report 1925).

BIBLIOGRAPHY

EMPR AR *1925-129
EMPR MAP 8; 69-1
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329

DATE CODED: 1986/11/20
DATE REVISED: 1989/08/28

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 144**

NATIONAL MINERAL INVENTORY: 10319 Ag9

NAME(S): **REGINA**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103109E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 38 49 N
LONGITUDE: 128 08 26 W
ELEVATION: 1500 Metres

NORTHING: 6055844
EASTING: 555458

LOCATION ACCURACY: Within 500M

COMMENTS: Descriptions and Geological Survey of Canada Map 36-17.

COMMODITIES: Silver Copper Gold

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Galena Tetrahedrite Chalcocite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
SHAPE: Irregular

L01 Subvolcanic Cu-Ag-Au (As-Sb)

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Cretaceous-Tertiary			Legate Creek Apophysis

LITHOLOGY: Granodiorite

HOSTROCK COMMENTS: Porphyritic pyroxene granodiorite.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Plutonic Rocks

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1917

SAMPLE TYPE: Chip

COMMODITY

GRADE

Silver

2434.0000

Grams per tonne

Gold

6.9000

Grams per tonne

COMMENTS: The sample width is 45.0 centimetres.

REFERENCE: Minister of Mines Annual Report 1917, pages 100,101.

CAPSULE GEOLOGY

A pyroxene quartz diorite stock of the Cretaceous to Tertiary Coast Plutonic Complex intrudes Jurassic Hazelton Group volcanics. A 2 metre wide shear zone strikes southeast for 200 metres and dips steeply southwest within a porphyritic pyroxene granodiorite phase of the Legate Creek apophysis. The shear contains quartz stringers mineralized with pyrite, chalcopyrite, galena, tetrahedrite and chalcocite. A 45 centimetre sample assayed 2434 grams per tonne silver and 6.9 grams per tonne gold and a selected sample assayed 13 per cent copper, 13,234 grams per tonne silver and 2.1 grams per tonne gold (Minister of Mines Annual Report 1917).

BIBLIOGRAPHY

EMPR AR *1917-100,101; 1919-100,101; 1925-129
EMPR ASS RPT 15006
EMPR EXPL 1986-C427
EMPR MAP 8; 69-1
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329
GSC P 36-20, pp. 32,33; 36-17
GSC SUM RPT *1925A, p. 112

DATE CODED: 1986/11/19
DATE REVISED: 1987/07/23

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 145**

NATIONAL MINERAL INVENTORY: 10319 Cu40

NAME(S): **LINDY**, NX, FRISCO,
LINDY²

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103109E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 39 59 N
LONGITUDE: 128 03 06 W
ELEVATION: 1700 Metres

NORTHING: 6058081
EASTING: 561165

LOCATION ACCURACY: Within 1 KM

COMMENTS: Lindy claim group - old MINFILE.

COMMODITIES: Copper Silver

MINERALS

SIGNIFICANT: Chalcopyrite Bornite Tetrahedrite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein

CLASSIFICATION: Hydrothermal

TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb)

D03 Volcanic redbed Cu

SHAPE: Irregular

MODIFIER: Sheared

DIMENSION:

STRIKE/DIP: 170/35E

TREND/PLUNGE:

COMMENTS: Shear zone.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Jurassic

GROUP

Hazelton

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Andesite

Quartz Porphyry

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Stikine

PHYSIOGRAPHIC AREA: Hazelton Ranges

CAPSULE GEOLOGY

Andesite of the Jurassic Hazelton Group are cut by quartz porphyry dykes and sills. A shear zone, striking 170 degrees and dipping 35 degrees east in red andesite, is locally mineralized with chalcopyrite, bornite and tetrahedrite in a quartz gangue.

BIBLIOGRAPHY

EMPR AR 1967-83

EMPR MAP 8; 69-1

EMR MP CORPFILE (Eardley-Wilmot, V.L. (1930): Silver Producing Mines in British Columbia, p. 165, June 1930, Unpublished Report, Ottawa)

GSC MAP 11-1956; 278A; 1136A; 1385A

GSC MEM 212, p. 23 (under Frisco Group); 329

Omineca Herald, October 17, 1928

DATE CODED: 1986/11/20
DATE REVISED: 1989/08/28

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 146**

NATIONAL MINERAL INVENTORY: 10319 Au6

NAME(S): **BEANSTOCK**, CROESUS

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103109W
BC MAP:

MINING DIVISION: Omineca
UTM ZONE: 09 (NAD 83)

LATITUDE: 54 33 28 N
LONGITUDE: 128 24 53 W
ELEVATION: 730 Metres

NORTHING: 6045741
EASTING: 537850

LOCATION ACCURACY: Within 500M

COMMENTS: Vein, Figure 8 (Geological Survey of Canada Memoir 205); lies north of and adjoins the Silver Bow property (1031 080).

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Pyrite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic
TYPE: I02 Intrusion-related Au pyrrhotite veins
SHAPE: Irregular
DIMENSION:

STRIKE/DIP: 150/35E TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE: Jurassic
GROUP: Hazelton

FORMATION: Undefined Formation

IGNEOUS/METAMORPHIC/OTHER:

LITHOLOGY: Andesite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Chip
COMMODITY: Gold
GRADE: 1.4000 Grams per tonne

COMMENTS: The sample width is 100 centimetres.
REFERENCE: Geological Survey of Canada Memoir 205, pages 39,40.

CAPSULE GEOLOGY

Andesite of the Jurassic Hazelton Group is intruded by granodiorite of the Cretaceous to Tertiary Coast Plutonic Complex. A quartz vein sparsely mineralized with pyrite strikes 150 degrees and dips 35 degrees east within the volcanics. The vein averages 76 centimetres in width and is exposed intermittently for 400 metres. A 100 centimetre wide sample from the southeast part of the vein assayed 1.4 grams per tonne gold and trace silver (Geological Survey of Canada Memoir 205).

BIBLIOGRAPHY

EMPR AR 1967-80; 1968-107
EMPR ASS RPT 1234; 12072; 17260
EMPR EXPL 1983-502; 1988-C201
EMPR GEM 1970-194,195; 1972-500,501
EMPR MAP 8; 69-1
EMPR PF (Prospectus for Fircrest Resources Ltd., Apr. 20, 1988)
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM *205, pp. 39,40; 329, p. 81
GSC P 36-17, p. 70
V STOCKWATCH Aug.17, 1987

DATE CODED: 1986/11/28
DATE REVISED: 1989/08/11

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 147**

NATIONAL MINERAL INVENTORY:

NAME(S): **BENEX**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103I14E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 55 39 N
LONGITUDE: 129 08 06 W
ELEVATION: 1200 Metres

NORTHING: 6086732
EASTING: 491349

LOCATION ACCURACY: Within 1 KM
COMMENTS: Claim group

COMMODITIES: Copper Molybdenum

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Molybdenite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal
TYPE: L04 Porphyry Cu ± Mo ± Au L05 Porphyry Mo (Low F- type)

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Eocene			Ponder Pluton

LITHOLOGY: Granodiorite

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Plutonic Rocks
PHYSIOGRAPHIC AREA: Kitimat Ranges

CAPSULE GEOLOGY

The area is underlain by granodiorite of the Tertiary Ponder pluton. Quartz veins probably carry pyrite, chalcopyrite, and molybdenite.

BIBLIOGRAPHY

EMPR AR 1968-69
EMPR MAP 8
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329

DATE CODED: 1986/09/17
DATE REVISED: 1989/08/28

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 148**

NATIONAL MINERAL INVENTORY: 10319 Au10

NAME(S): **COPPER DOLLAR**, EAGLES NEST

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103109E
BC MAP:

MINING DIVISION: Omineca
UTM ZONE: 09 (NAD 83)

LATITUDE: 54 41 19 N
LONGITUDE: 128 14 26 W
ELEVATION: 730 Metres

NORTHING: 6060406
EASTING: 548956

LOCATION ACCURACY: Within 500M

COMMENTS: Description and map (Minister of Mines Annual Report 1914); located on the north fork of St. Croix Creek.

COMMODITIES: Gold Silver Copper

MINERALS

SIGNIFICANT: Unknown
COMMENTS: Copper minerals.
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Unknown
TYPE: I02 Intrusion-related Au pyrrhotite veins L01 Subvolcanic Cu-Ag-Au (As-Sb)

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Andesite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine
PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1914
SAMPLE TYPE: Grab
COMMODITY GRADE
Gold 6.6000 Grams per tonne
COMMENTS: Sample of mineralization from Copper Dollar showing.
REFERENCE: Minister of Mines Annual Report 1914, page 137.

CAPSULE GEOLOGY

The area is underlain by andesites of the Jurassic Hazelton Group. The Copper Dollar showing contains gold mineralization in a banded quartzose structure. Samples contain up to 6.6 grams per tonne gold (Minister of Mines Annual Report 1914). The Eagle's Nest showing carries traces of gold and silver in a zone containing copper minerals. It lies about 500 metres northwest of the Copper Dollar.

BIBLIOGRAPHY

EMPR AR *1914-137, Map p. 120
EMPR MAP 8
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329
GSC P 36-17

DATE CODED: 1986/11/24
DATE REVISED: 1989/08/28

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 149**

NATIONAL MINERAL INVENTORY:

NAME(S): **FOX 4, SEVEN SISTERS PEAKS**

MINING DIVISION: Omineca

STATUS: Showing
 REGIONS: British Columbia
 NTS MAP: 103116E
 BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 58 39 N
 LONGITUDE: 128 12 41 W
 ELEVATION: 1790 Metres

NORTHING: 6092572
 EASTING: 550474

LOCATION ACCURACY: Within 500M

COMMENTS: Mineralized sample #22265, Figure 4a (Assessment Report 8467).

COMMODITIES: Molybdenum Copper Silver Lead

MINERALS

SIGNIFICANT: Molybdenite Chalcopyrite
 ASSOCIATED: Quartz
 ALTERATION: Powellite
 ALTERATION TYPE: Oxidation
 MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
 CLASSIFICATION: Hydrothermal
 TYPE: L05 Porphyry Mo (Low F- type) I05 Polymetallic veins Ag-Pb-Zn±Au
 SHAPE: Irregular

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Jurassic-Cretaceous Tertiary	Bowser Lake	Undefined Formation	Seven Sisters Stock

LITHOLOGY: Siltstone
 Granodiorite
 Quartz Diorite
 Greywacke
 Conglomerate
 Greisen
 Rhyolite
 Granite
 Diorite
 Quartz Feldspar Porphyry

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
 TERRANE: Bowser Lake Plutonic Rocks PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: SAMPLE	REPORT ON: N
CATEGORY: Assay/analysis	YEAR: 1980
SAMPLE TYPE: Grab	
<u>COMMODITY</u>	<u>GRADE</u>
Silver	8.6000 Grams per tonne
Copper	0.1200 Per cent
Molybdenum	4.2100 Per cent
Lead	0.0600 Per cent

COMMENTS: The sample was collected from talus material.
 REFERENCE: Assessment Report 8467.

CAPSULE GEOLOGY

Upper Jurassic to Lower Cretaceous Bowser Lake Group sediments are intruded by the Early Tertiary Seven Sisters stock which forms the core of the Seven Sisters Peaks. The sediments are mainly siltstone and greywacke with minor conglomerate, greenstone and rhyolite. Near the stock, they are sharply crenulated and deformed. The stock is largely granodiorite with lesser granite and diorite. Quartz feldspar porphyry is gradational with the intrusive and forms dykes cutting the sediments. Aplitic dykes extend from the intrusive into the sediments.
 Molybdenite, chalcopyrite and powellite occur in fractures and quartz veins within siltstone above its contact with granodiorite and within granodiorite and quartz diorite. A sample of a vein with

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RUN TIME: 12:06:33

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CAPSULE GEOLOGY

chalcopyrite, in the sediments, assayed 0.54 per cent copper and 11.0 grams per tonne silver. A 2 centimetre quartz vein with molybdenite and minor powellite within quartz diorite assayed 0.15 per cent molybdenum (Assessment Report 8467). A talus sample of feldspathized granodiorite with a quartz vein mineralized with molybdenite, chalcopyrite and powellite assayed 4.21 per cent molybdenum and 8.6 grams per tonne silver (Assessment Report 8467).

BIBLIOGRAPHY

EMPR ASS RPT *8467, 9147
EMPR EXPL 1979-256; 1980-400-401
EMPR MAP 8; 69-1
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329

DATE CODED: 1986/10/23
DATE REVISED: 1989/08/28

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 150**

NATIONAL MINERAL INVENTORY:

NAME(S): **SVEN**, SEVEN SISTERS PEAKS

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103116E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 59 04 N
LONGITUDE: 128 09 06 W
ELEVATION: 1520 Metres

NORTHING: 6093390
EASTING: 554287

LOCATION ACCURACY: Within 500M

COMMENTS: Mineralized sample #22279, Figure 4b (Assessment Report 8467).

COMMODITIES: Molybdenum Copper Tungsten

MINERALS

SIGNIFICANT: Molybdenite Chalcopyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Hydrothermal
TYPE: L05 Porphyry Mo (Low F- type)
SHAPE: Irregular

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

Jurassic-Cretaceous
Tertiary

GROUP

Bowser Lake

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Seven Sisters Stock

LITHOLOGY: Diorite
Granodiorite
Siltstone
Greywacke
Conglomerate
Greisen
Rhyolite
Granite
Quartz Feldspar Porphyry

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Plutonic Rocks

Bowser Lake

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Grab

YEAR: 1980

COMMODITY

GRADE

Molybdenum

0.2800

Per cent

Tungsten

0.0800

Per cent

REFERENCE: Assessment Report 8467.

CAPSULE GEOLOGY

Upper Jurassic to Lower Cretaceous Bowser Lake Group sediments are intruded by the Early Tertiary Seven Sisters stock which forms the core of the Seven Sisters Peaks. The sediments are mainly siltstone and greywacke with minor conglomerate, greenstone and rhyolite. Near the stock, they are sharply crenulated and deformed. The stock is largely granodiorite with lesser granite and diorite. Quartz feldspar porphyry is gradational with the intrusive and forms dykes cutting the sediments. Aplitic dykes extend from the intrusive into the sediment.

On the northeast side of the Seven Sisters Peaks, an aplitic dyke, cutting diorite carries molybdenite and assays 0.28 per cent molybdenum and 0.08 per cent tungsten (Assessment Report 8467). A nearby siltstone sample assayed 0.014 per cent copper (Assessment Report 8387). A hornblende rich, later phase, of the stock carries molybdenite, with values of 0.0003 per cent molybdenum and 0.10 per cent tungsten (Assessment Report 8467).

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

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GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 716
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR ASS RPT 8387, *8467, 9147
EMPR EXPL 1979-256; 1980-400,401
EMPR MAP 8; 69-1
EMPR OF 1991-17
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329

DATE CODED: 1986/10/23
DATE REVISED: 1989/08/28

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 152**

NATIONAL MINERAL INVENTORY: 10319 Au9

NAME(S): **POOR BOY**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103109W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 38 39 N
LONGITUDE: 128 25 26 W
ELEVATION: 240 Metres

NORTHING: 6055348
EASTING: 537178

LOCATION ACCURACY: Within 1 KM

COMMENTS: Description from Minister of Mines Annual Report 1914, page 141.

COMMODITIES: Gold Silver Copper

MINERALS

SIGNIFICANT: Bornite Gold
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal
TYPE: I02 Intrusion-related Au pyrrhotite veins L01 Subvolcanic Cu-Ag-Au (As-Sb)
SHAPE: Irregular
MODIFIER: Sheared

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Cretaceous-Tertiary Coast Plutonic Complex

LITHOLOGY: Diorite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Plutonic Rocks

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Chip

YEAR: 1914

COMMODITY	GRADE	
Silver	54.9000	Grams per tonne
Gold	2.0000	Grams per tonne
Copper	0.3000	Per cent

REFERENCE: Minister of Mines Annual Report 1914, page 141.

CAPSULE GEOLOGY

The area is underlain by granite to diorite intrusions related to the Cretaceous to Tertiary Coast Plutonic Complex.

An east trending, north dipping shear zone in diorite contains a 0.5 metre wide quartz vein mineralized with bornite and possibly free gold. A sample assayed 2.0 grams per tonne gold, 54.9 grams per tonne silver and 0.3 per cent copper (Minister of Mines Annual Report 1914).

BIBLIOGRAPHY

EMPR AR *1914-141, Map p. 120
EMPR ASS RPT 2719
EMPR MAP 8
GSC MAP 1136A; 1385A; 11-1956
GSC MEM 329

DATE CODED: 1986/12/15
DATE REVISED: 1989/08/28

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 153**

NATIONAL MINERAL INVENTORY:

NAME(S): **MARDAV**, CLIFF

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103114E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 52 59 N
LONGITUDE: 129 04 26 W
ELEVATION: 1440 Metres

NORTHING: 6081781
EASTING: 495260

LOCATION ACCURACY: Within 500M
COMMENTS: Showings, Plan #553-2 (Assessment Report 8200).

COMMODITIES: Molybdenum

MINERALS

SIGNIFICANT: Molybdenite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal
TYPE: L05 Porphyry Mo (Low F- type)

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Jurassic-Cretaceous Eocene	Bowser Lake	Undefined Formation	Ponder Pluton

LITHOLOGY: Granodiorite
Sandstone
Siltstone

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Plutonic Rocks

Bowser Lake

PHYSIOGRAPHIC AREA: Kitimat Ranges

CAPSULE GEOLOGY

Molybdenite occurs in quartz veins and on fracture surfaces within felsic intrusive rocks. Granodiorites of the Eocene Ponder pluton lie to the west and fine-grained sandstone and siltstone of the Jurassic to Cretaceous Bowser Lake Group lie to the east.

BIBLIOGRAPHY

EMPR ASS RPT *8200
EMPR EXPL 1979-253
EMPR MAP 8
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329

DATE CODED: 1986/09/17
DATE REVISED: / /

CODED BY: LDJ
REVISED BY:

FIELD CHECK: N
FIELD CHECK:

MINFILE NUMBER: **1031 154**

NATIONAL MINERAL INVENTORY: 103116 Au5

NAME(S): **PADDY MAC**, WARRIOR, PADDY-MAC,
PADDY McGOLD

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103116W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 45 09 N
LONGITUDE: 128 23 06 W
ELEVATION: 137 Metres

NORTHING: 6067424
EASTING: 539582

LOCATION ACCURACY: Within 500M

COMMENTS: Quartz vein (Assessment Report 15337); located near the headwaters of
Carpenter Creek.

COMMODITIES: Gold Silver Lead Copper Zinc

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Galena Arsenopyrite Pyrrhotite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: I02 Intrusion-related Au pyrrhotite veins I05 Polymetallic veins Ag-Pb-Zn±Au
SHAPE: Irregular
MODIFIER: Fractured
DIMENSION: STRIKE/DIP: 035/50E TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Jurassic-Cretaceous Bowser Lake Undefined Formation

LITHOLOGY: Argillite
Granodiorite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Hazelton Ranges
TERRANE: Bowser Lake

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1986
SAMPLE TYPE: Chip
COMMODITY GRADE
Silver 253.7000 Grams per tonne
Gold 373.7000 Grams per tonne
Copper 0.0600 Per cent
Lead 0.3800 Per cent
Zinc 0.0200 Per cent
COMMENTS: The sample width is 30.0 centimetres.
REFERENCE: Assessment Report 15337.

ORE ZONE: VEIN REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1980
SAMPLE TYPE: Chip
COMMODITY GRADE
Silver 176.2200 Grams per tonne
Gold 19.5400 Grams per tonne
COMMENTS: Average of 21 chip samples taken across an average width of 0.36
metres.
REFERENCE: Property File - Holt, 1987.

CAPSULE GEOLOGY

Steeply dipping, altered argillites of the Jurassic to Cretaceous Bowser Lake Group are cut by granodiorite dykes related to the Cretaceous to Tertiary Coast Plutonic Complex. Granodioritic intrusives are exposed to the southwest of the property.
A 430 metre long quartz vein, striking 035 degrees and dipping 50 degrees southeast, cuts the altered Bowser Lake sediments and is visible along the cirque wall for most of this distance. The vein

CAPSULE GEOLOGY

varies from 10 to 76 centimetres in width and averages about 0.6 metres in width. Mineralization consists of pyrite, chalcopyrite, galena, arsenopyrite and pyrrhotite. In 1945, a 36 centimetre sample assayed 172 grams per tonne gold and 122 grams per tonne silver. Another 50 centimetre sample assayed, collected 60 metres to the southwest, assayed 12.3 grams per tonne gold and 185 grams per tonne silver (Minister of Mines Annual Report 1945, page 63). Recent sampling returned an assay of 373.7 grams per tonne gold, 253.7 grams per tonne silver, 0.6 per cent copper and 0.38 per cent lead (Assessment Report 15337).

In 1980, 27 chip samples were collected from this vein and the adjacent host rocks. The samples were taken at 3 metre intervals along a strike length of approximately 80 metres. Twenty-one samples taken from the vein averaged 19.54 grams per tonne gold and 176.22 grams per tonne silver across an average width of 0.36 metres. The six wall rock samples averaged 0.55 grams per tonne gold and 6.0 grams per tonne silver (Holt, 1987).

BIBLIOGRAPHY

EMPR AR *1945-63
EMPR ASS RPT *15337, *20504, 22050, 23113
EMPR EXPL 1986-C428
EMPR MAP 8; 69-1
EMPR OF 1994-14
EMPR PF (*Holt, E.S. (1987): Report of Examination, Review of Sampling Data and Recommendations on the Paddy-Mac Gold Claim in Prospectus for A-1 Resources Ltd., Sept.16, 1987)
GSC MAP 11-1956, 278A, 1136A, 1385A
GSC MEM 329, p. 90
Placer Dome File

DATE CODED: 1986/10/20
DATE REVISED: 1989/08/11

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 155**

NATIONAL MINERAL INVENTORY:

NAME(S): **TWO GOAT**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103116E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 48 39 N
LONGITUDE: 128 14 56 W
ELEVATION: 340 Metres

NORTHING: 6074000
EASTING: 548273

LOCATION ACCURACY: Within 500M

COMMENTS: Zone A, Map (Assessment Report 8133).

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite Pyrite

ALTERATION: Malachite

ALTERATION TYPE: Oxidation

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein

CLASSIFICATION: Hydrothermal

TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb)

D03 Volcanic redbed Cu

SHAPE: Irregular

MODIFIER: Fractured Sheared

COMMENTS: Strike length of 1 kilometre contains four zones of mineralization.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Rhyolite
Basalt
Diabase

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Hazelton Ranges

CAPSULE GEOLOGY

The area is underlain by Jurassic age volcanics of the Hazelton Group. The strata, which dips gently eastwards, consists of a lower, massive rhyolite unit; a diabase-basalt unit; a 20 to 50 metre thick fractured, rusty, buff-coloured rhyolite unit; and a massive mauve coloured rhyolite unit.

Mineralization, consisting of malachite, chalcopyrite and pyrite, occurs mainly in the fractured, rusty, buff-coloured rhyolite unit above the diabase. It occurs mainly in four zones over a 1000 metre strike length and is associated with fractures and shears up to 1 metre wide.

BIBLIOGRAPHY

EMPR ASS RPT *8133
EMPR EXPL 1980-399
EMPR MAP 8; 69-1
GSC MAP 11-1956; 1136A; 1385A
GSC MEM 329

DATE CODED: 1986/10/20
DATE REVISED: / /

CODED BY: LDJ
REVISED BY:

FIELD CHECK: N
FIELD CHECK:

MINFILE NUMBER: **1031 156**

NATIONAL MINERAL INVENTORY: 10318 Cu2

NAME(S): **EAST SIDE**, KELLY CREEK, ZYM,
GLOBIN

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103108E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 26 59 N
LONGITUDE: 128 08 06 W
ELEVATION: 550 Metres

NORTHING: 6033904
EASTING: 556087

LOCATION ACCURACY: Within 500M
COMMENTS: Plan No. 1 (Assessment Report 2394).

COMMODITIES: Copper Silver

MINERALS

SIGNIFICANT: Chalcopyrite Bornite
ALTERATION: Silica
ALTERATION TYPE: Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Hydrothermal
TYPE: D03 Volcanic redbed Cu
DIMENSION:

L01 Subvolcanic Cu-Ag-Au (As-Sb)
STRIKE/DIP: 360/70E TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Jurassic

GROUP

Hazelton

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Andesite
Tuff
Rhyolite Porphyry

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Channel
COMMODITY

YEAR: 1969

Silver
Copper

GRADE

10.3000
0.7000

Grams per tonne
Per cent

COMMENTS: The sample width is 4.7 metres.
REFERENCE: Assessment Report 2394.

CAPSULE GEOLOGY

A small granodiorite stock intrudes red silicified andesites, grey-green andesites and red tuff of the Jurassic Hazelton Group. These rocks are intruded by rhyolitic porphyry dykes. The volcanics strike north-south and dip 70 degrees east.

The East Side showing, which lies 300 metres east of the Upper showing (1031 092), is mineralized with chalcopyrite and bornite within the red silicified andesites. A 4.7 metre channel sample assayed 0.70 per cent copper, 10.3 grams per tonne silver and trace gold (Assessment Report 2394).

BIBLIOGRAPHY

EMPR ASS RPT *2394
EMPR GEM 1970-189-193
EMPR MAP 8; 69-1
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329

DATE CODED: 1986/11/05
DATE REVISED: 1989/08/28

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 724
REPORT: RGEN0100

MINFILE NUMBER: **1031 157**

NATIONAL MINERAL INVENTORY: 10318 Cu2

NAME(S): **GOAT BLUFF**, KELLY CREEK, ZYM,
NATIVE GLOBIN

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103108E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 26 34 N
LONGITUDE: 128 07 26 W
ELEVATION: 960 Metres

NORTHING: 6033141
EASTING: 556817

LOCATION ACCURACY: Within 500M
COMMENTS: Plan No. 1 (Assessment Report 2394).

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite Bornite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Unknown
TYPE: D03 Volcanic redbed Cu

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE GROUP
Jurassic Hazelton

FORMATION
Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Andesite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Hazelton Ranges

CAPSULE GEOLOGY

Chalcopyrite and bornite are disseminated in red
andesites and grey-green andesites of the Jurassic Hazelton
Group.

BIBLIOGRAPHY

EMPR ASS RPT *2394
EMPR GEM 1970-189-193
EMPR MAP 8; 69-1
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329

DATE CODED: 1986/11/05
DATE REVISED: 1989/08/28

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 157**

MINFILE NUMBER: **1031 158**

NATIONAL MINERAL INVENTORY:

NAME(S): **CALONA**, KELLY CREEK, ZYM

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103108E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 27 34 N
LONGITUDE: 128 11 16 W
ELEVATION: 550 Metres

NORTHING: 6034945
EASTING: 552652

LOCATION ACCURACY: Within 500M
COMMENTS: Plan No. 1 (Assessment Report 2394).

COMMODITIES: Copper Silver

MINERALS

SIGNIFICANT: Chalcopyrite Pyrite Bornite
ALTERATION: Malachite
ALTERATION TYPE: Epidote
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Porphyry
TYPE: D03 Volcanic redbed Cu

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Agglomerate
Dioritic Dike

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Chip
COMMODITY
Silver
Copper

YEAR: 1969

<u>GRADE</u>	
3.4000	Grams per tonne
0.0500	Per cent

COMMENTS: The sample width is 4.3 metres.
REFERENCE: Assessment Report 2394.

CAPSULE GEOLOGY

Agglomerate of the Jurassic Hazelton Group is cut by east striking diorite dykes. The agglomerate is very hard and contains fragments of andesite in a matrix of feldspar and amphibole. Patches of chalcopyrite and bornite occur over 4.3 metres within the agglomerate and a sample over this length assayed 0.05 per cent copper and 3.4 grams per tonne silver (Assessment Report 2394).

BIBLIOGRAPHY

EMPR ASS RPT *2394
EMPR GEM 1970-189-193
EMPR MAP 8; 69-1
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329

DATE CODED: 1986/11/05
DATE REVISED: / /

CODED BY: LDJ
REVISED BY:

FIELD CHECK: N
FIELD CHECK:

MINFILE NUMBER: **1031 159**

NATIONAL MINERAL INVENTORY:

NAME(S): **CHICKEN**, KELLY CREEK, ZYM

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103108E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 26 54 N
LONGITUDE: 128 10 16 W
ELEVATION: 700 Metres

NORTHING: 6033722
EASTING: 553747

LOCATION ACCURACY: Within 500M

COMMENTS: Plan No. 1 (Assessment Report 2394).

COMMODITIES: Copper Silver Molybdenum Gold

MINERALS

SIGNIFICANT: Chalcopyrite Bornite Pyrite Molybdenite
ALTERATION: Malachite Azurite K-Feldspar Chlorite Sericite
ALTERATION TYPE: Oxidation Potassic Chloritic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated Breccia
CLASSIFICATION: Hydrothermal
TYPE: L04 Porphyry Cu ± Mo ± Au D03 Volcanic redbed Cu
SHAPE: Irregular
MODIFIER: Other
COMMENTS: Shape of modifier is brecciated.

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Cretaceous-Tertiary Coast Plutonic Complex

LITHOLOGY: Granodiorite
Andesite
Rhyolite
Lamprophyre Dike

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Plutonic Rocks

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Chip

YEAR: 1969

COMMODITY	GRADE	
Silver	30.9000	Grams per tonne
Gold	0.3400	Grams per tonne
Copper	3.3800	Per cent

COMMENTS: The sample width is 2.1 metres.
REFERENCE: Assessment Report 2394.

CAPSULE GEOLOGY

A granodiorite stock of the Cretaceous to Tertiary Coast Plutonic Complex is cut by andesite, rhyolite, and lamprophyre dykes and exhibits varying degrees of brecciation and chlorite-sericite and potash feldspar alteration.

Mineralization, observed over 30 metres, consists of chalcopyrite, pyrite, and bornite as disseminations, fracture fillings, and patches within the granodiorite. Minor molybdenite occurs on chloritic slip planes. A 2.1 metre sample assayed 3.38 per cent copper, 30.9 grams per tonne silver, and 0.34 grams per tonne gold (Assessment Report 2394).

BIBLIOGRAPHY

EMPR ASS RPT *2394
EMPR GEM 1970-189-193
EMPR MAP 8; 69-1
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329
CIM Spec. Vol. 15, Table 1 (by S.H. Pilcher and J.J. McDougall,

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 727
REPORT: RGEN0100

BIBLIOGRAPHY

#109, 1976)

DATE CODED: 1986/11/05
DATE REVISED: / /

CODED BY: LDJ
REVISED BY:

FIELD CHECK: N
FIELD CHECK:

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 728
REPORT: RGEN0100

MINFILE NUMBER: **1031 160**

NATIONAL MINERAL INVENTORY:

NAME(S): **STEPHEN**, KELLY CREEK, ZYM

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103108E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 25 29 N
LONGITUDE: 128 10 01 W
ELEVATION: 460 Metres

NORTHING: 6031098
EASTING: 554048

LOCATION ACCURACY: Within 500M
COMMENTS: Plan No. 1 (Assessment Report 2394).

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Unknown
TYPE: D03 Volcanic redbed Cu

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE GROUP
Jurassic Hazelton

FORMATION
Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Andesite
Tuff
Agglomerate

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Hazelton Ranges

CAPSULE GEOLOGY

The area is underlain by agglomerates and andesitic tuffs of the Jurassic Hazelton Group. Disseminated chalcopyrite occurs in a 1 metre wide bed of andesitic tuff. The mineralization has been traced for 1 metre in length. Major faults cut the rocks in the vicinity.

BIBLIOGRAPHY

EMPR ASS RPT *2394
EMPR GEM 1970-189-193
EMPR MAP 8; 69-1
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329

DATE CODED: 1986/11/05
DATE REVISED: / /

CODED BY: LDJ
REVISED BY:

FIELD CHECK: N
FIELD CHECK:

MINFILE NUMBER: **1031 160**

MINFILE NUMBER: **1031 161**

NATIONAL MINERAL INVENTORY:

NAME(S): **MIKE**, KELLY CREEK, ZYM

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103108E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 25 14 N
LONGITUDE: 128 10 06 W
ELEVATION: 800 Metres

NORTHING: 6030633
EASTING: 553964

LOCATION ACCURACY: Within 500M

COMMENTS: Plan No. 1 (Assessment Report 2394).

COMMODITIES: Copper Silver Gold

MINERALS

SIGNIFICANT: Chalcopyrite
ALTERATION: Epidote
ALTERATION TYPE: Epidote
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Unknown
TYPE: D03 Volcanic redbed Cu

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Agglomerate
Andesite
Andesitic Tuff
Granite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Chip

YEAR: 1969

COMMODITY	GRADE	
Silver	10.3000	Grams per tonne
Gold	0.7000	Grams per tonne
Copper	0.9200	Per cent

COMMENTS: The sample width is 10.0 centimetres.
REFERENCE: Assessment Report 2394.

CAPSULE GEOLOGY

Grey-green andesites and agglomerates of the Jurassic Hazelton Group are intruded by a granite plug to the south. The agglomerates are interbedded with andesitic tuffs which dip 40 to 60 degrees south-southwest. Several faults cut the rocks.

Patches of chalcopyrite occur in epidotized agglomerates over widths less than 30 centimetres. A 10 centimetre sample assayed 0.92 per cent copper, 10.3 grams per tonne silver and 0.7 grams per tonne gold (Assessment Report 2394).

BIBLIOGRAPHY

EMPR ASS RPT *2394
EMPR GEM 1970-189-193
EMPR MAP 8; 69-1
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329

DATE CODED: 1986/11/05
DATE REVISED: / /

CODED BY: LDJ
REVISED BY:

FIELD CHECK: N
FIELD CHECK:

MINFILE NUMBER: **1031 162**

NATIONAL MINERAL INVENTORY:

NAME(S): **LA ZONE FAILLEE**, KELLY CREEK, ZYM

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103108E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 24 59 N
LONGITUDE: 128 09 06 W
ELEVATION: 1230 Metres

NORTHING: 6030182
EASTING: 555051

LOCATION ACCURACY: Within 500M
COMMENTS: Plan No. 1 (Assessment Report 2394).

COMMODITIES: Copper Silver Gold

MINERALS

SIGNIFICANT: Chalcopyrite Bornite
ALTERATION: Malachite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Hydrothermal
TYPE: D03 Volcanic redbed Cu
SHAPE: Irregular
MODIFIER: Fractured

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE: Jurassic
GROUP: Hazelton

FORMATION: Undefined Formation

IGNEOUS/METAMORPHIC/OTHER:

LITHOLOGY: Andesite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Channel
COMMODITY: Silver
Gold
Copper

YEAR: 1969

GRADE	
24.0000	Grams per tonne
0.3400	Grams per tonne
0.8200	Per cent

COMMENTS: The sample width is 2.0 metres.
REFERENCE: Assessment Report 2394.

CAPSULE GEOLOGY

The area is underlain by volcanic rocks of the Jurassic Hazelton Group. Red andesites are separated to the east from grey-green andesites by a northeast striking, 75 degrees west dipping fault. Disseminated chalcopyrite and bornite occur in the broken and fractured zone. A 2.0 metre channel sample assayed 0.82 per cent copper, 24 grams per tonne silver and 0.34 grams per tonne gold (Assessment Report 2394).

BIBLIOGRAPHY

EMPR ASS RPT *2394
EMPR GEM 1970-189-193
EMPR MAP 8; 69-1
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329

DATE CODED: 1986/11/25
DATE REVISED: / /

CODED BY: LDJ
REVISED BY:

FIELD CHECK: N
FIELD CHECK:

MINFILE NUMBER: **1031 163**

NATIONAL MINERAL INVENTORY: 103I9 Cu13

NAME(S): **COPPER KING**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103I09E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 32 49 N
LONGITUDE: 128 01 06 W
ELEVATION: 1520 Metres

NORTHING: 6044821
EASTING: 563500

LOCATION ACCURACY: Within 500M

COMMENTS: Description (Minister of Mines Annual Report 1914); Map, 1929
(Property File).

COMMODITIES: Copper Silver

MINERALS

SIGNIFICANT: Chalcocite Bornite

COMMENTS: Probable copper minerals present.

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown

CLASSIFICATION: Unknown

TYPE: D03 Volcanic redbed Cu

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE GROUP
Jurassic Hazelton

FORMATION
Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Andesite
Basalt

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Hazelton Ranges

CAPSULE GEOLOGY

The area is underlain by felsic to basic volcanic rocks of the Jurassic Hazelton Group. Copper minerals, likely chalcocite and bornite, occur in the volcanics.

A 12 metre surface sample is reported to assay 1.35 per cent copper, 12 grams per tonne silver and 0.3 grams per tonne gold (National Mineral Inventory 103I9 Cu13).

BIBLIOGRAPHY

EMPR AR *1914-121,122,Map-P120; 1930-136
EMPR MAP 8
EMPR PF (Map 1929; Map by J. Willman, Feb. 1929)
EMR MP CORPFILE (Glen Copper Mines Limited)
GSC MAP 278A; 11-1956; 1136A; 1385A
GSC MEM 329

DATE CODED: 1986/11/07
DATE REVISED: / /

CODED BY: LDJ
REVISED BY:

FIELD CHECK: N
FIELD CHECK:

MINFILE NUMBER: **1031 164**

NATIONAL MINERAL INVENTORY:

NAME(S): **HOULT**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103101E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 12 24 N
LONGITUDE: 128 03 46 W
ELEVATION: 875 Metres

NORTHING: 6006921
EASTING: 561129

LOCATION ACCURACY: Within 500M

COMMENTS: Seventy metres mineralized zone, Map 1 (Assessment Report 9713).

COMMODITIES: Molybdenum Copper Silver

MINERALS

SIGNIFICANT: Molybdenite Chalcopyrite Pyrite Pyrrhotite
ASSOCIATED: Quartz
ALTERATION: Epidote Chlorite Actinolite
ALTERATION TYPE: Propylitic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Hydrothermal Porphyry
TYPE: L05 Porphyry Mo (Low F- type)
SHAPE: Irregular
MODIFIER: Fractured
DIMENSION: 1000 x 0600 x 0350 Metres
COMMENTS: Mineralized area.

STRIKE/DIP:

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Jurassic
Cretaceous-Tertiary

GROUP

Hazelton

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Coast Plutonic Complex

LITHOLOGY: Rhyolite Flow
Greenstone
Granite
Granodiorite
Pegmatite
Andesite Flow
Andesite Tuff
Andesite Breccia

HOSTROCK COMMENTS: Leucogranite.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

PHYSIOGRAPHIC AREA: Hazelton Ranges

TERRANE: Stikine

METAMORPHIC TYPE: Contact

RELATIONSHIP:

GRADE: Hornfels

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1980

SAMPLE TYPE: Chip

COMMODITY

GRADE

Molybdenum 0.0360 Per cent

COMMENTS: The weighted average of eleven samples over 70.0 metres.

REFERENCE: Assessment Report 8205.

CAPSULE GEOLOGY

Andesitic and rhyolite flows of the Upper division of the Jurassic Hazelton Group are intruded by granites and granodiorites of the Cretaceous to Tertiary Coast Plutonic Complex. The Hazelton rocks strike east and dip northward at moderate angles. All rocks are cut by Tertiary age diabase dykes and northwest striking slip faults.

The mineralized area is largely confined to hornfelsed greenstones consisting of undifferentiated andesitic tuffs, flows and breccias, which occur above a weakly mineralized cupola of leucogranite. Molybdenite and lesser chalcopyrite and pyrite occur in fault or fissure-type quartz veins, as disseminations in leucogranite, and as disseminations in and selvages on quartz or pegmatite

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CAPSULE GEOLOGY

veins within hornfelsed greenstone. The main mineralized area measures 1000 by 600 by 350 metres, but grades are very low. Propylitic alteration consisting of epidote, chlorite, actinolite, pyrite and pyrrhotite is widespread. A series of eleven rock-chip channel samples were taken over 70 metres along a northwest trending fault. The weighted average was 0.036 per cent molybdenum, including a 5.6 metre sample assaying 0.094 per cent molybdenum and 7.5 grams per tonne silver (Assessment Report 8205).

BIBLIOGRAPHY

EMPR ASS RPT *8205, *9713, 11378
EMPR EXPL 1980-390; 1983-501
EMPR MAP 8; 69-1
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329

DATE CODED: 1986/10/06
DATE REVISED: / /

CODED BY: LDJ
REVISED BY:

FIELD CHECK: N
FIELD CHECK:

CAPSULE GEOLOGY

bodies of skarn containing quartz and calcite with various calcium silicates occur in the limestone along the intrusive contact.

The limestone is medium to coarse grained and usually white with some grey streaks. A sample of randomly collected chips taken along 457 metres of limestone exposed in a roadcut contained 55.34 per cent CaO, 0.29 per cent MgO, 0.34 per cent insolubles, 0.10 per cent R2O3, 0.06 per cent Fe2O3, 0.01 per cent MnO, 0.03 per cent P2O5, 0.003 per cent sulphur and 43.49 per cent ignition loss (Minister of Mines Annual Report 1965, p. 265, Sample 3).

Limestone was produced from two small quarries near the south end of District Lot 2838 by Terrace Calcium Products between 1969 and 1982. A total of 2253 tonnes of limestone was quarried.

BIBLIOGRAPHY

EMPR AR *1965-264,265; 1966-267; 1967-308; 1968-309
EMPR EXPL 1975-201; 1978-288
EMPR GEM 1969-392; 1970-503; 1971-468; 1972-602; 1973-550
GSC MAP 11-1956; 278A; 1136A
GSC MEM 205, p. 5; 212, p. 5; 329, pp. 14-17
GSC OF 1136

DATE CODED: 1986/10/28
DATE REVISED: 1989/08/16

CODED BY: LDJ
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 166**

NATIONAL MINERAL INVENTORY:

NAME(S): **PORPH**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103108W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 28 24 N
LONGITUDE: 128 16 46 W
ELEVATION: 250 Metres

NORTHING: 6036426
EASTING: 546694

LOCATION ACCURACY: Within 1 KM
COMMENTS: Claims

COMMODITIES: Copper Silver

MINERALS

SIGNIFICANT: Unknown
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Unknown
TYPE: L04 Porphyry Cu ± Mo ± Au

HOST ROCK

DOMINANT HOSTROCK: Plutonic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Cretaceous-Tertiary			Coast Plutonic Complex

LITHOLOGY: Granodiorite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Plutonic Rocks

PHYSIOGRAPHIC AREA: Hazelton Ranges

CAPSULE GEOLOGY

The area is underlain by granodiorite of the Cretaceous to Tertiary Coast Plutonic Complex. No mineralization details are available.

BIBLIOGRAPHY

EMPR GEM 1972-499
EMPR MAP 8; 69-1
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329

DATE CODED: 1986/10/31
DATE REVISED: 1989/08/28

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 167**

NATIONAL MINERAL INVENTORY:

NAME(S): **SHAN**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103109W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 41 59 N
LONGITUDE: 128 25 16 W
ELEVATION: 900 Metres

NORTHING: 6061531
EASTING: 537306

LOCATION ACCURACY: Within 500M

COMMENTS: Mineralized zone, Dwg. G-8766 (Assessment Report 7932).

COMMODITIES: Molybdenum

MINERALS

SIGNIFICANT: Molybdenite Pyrite
ASSOCIATED: Quartz
ALTERATION: Kaolinite Sericite Malachite
ALTERATION TYPE: Argillic Sericitic Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: L05 Porphyry Mo (Low F- type)
SHAPE: Irregular
MODIFIER: Fractured
COMMENTS: Altered zone with mineralization.

HOST ROCK

DOMINANT HOSTROCK: Plutonic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Cretaceous-Tertiary			Coast Plutonic Complex

LITHOLOGY: Quartz Diorite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Hazelton Ranges

CAPSULE GEOLOGY

Volcanics of probable Triassic age are cut by quartz diorite of the Cretaceous to Tertiary Coast Plutonic Complex. Molybdenite occurs as flakes and disseminations within a 75 by 35 metre zone of altered and fractured quartz diorite. Alteration minerals include kaolinite and sericite. Quartz veins are present but are unmineralized. Scattered malachite was observed in three areas.

About 900 metres to the southwest are quartz veins with molybdenite and pyrite within unaltered quartz diorite.

BIBLIOGRAPHY

EMPR ASS RPT *7932, 8592
EMPR EXPL 1980-394
EMPR MAP 8; 69-1
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329

DATE CODED: 1986/12/19
DATE REVISED: / /

CODED BY: LDJ
REVISED BY:

FIELD CHECK: N
FIELD CHECK:

MINFILE NUMBER: **1031 168**

NATIONAL MINERAL INVENTORY:

NAME(S): **POES**, GROTTO

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103109W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 42 14 N
LONGITUDE: 128 21 56 W
ELEVATION: 440 Metres

NORTHING: 6062026
EASTING: 540883

LOCATION ACCURACY: Within 500M

COMMENTS: Description; No. 7 vein sketch map, (Mandy, 1940, Property File).

COMMODITIES: Copper Lead Zinc Silver Gold

MINERALS

SIGNIFICANT: Pyrite Galena Sphalerite Chalcopyrite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
SHAPE: Irregular
DIMENSION:

STRIKE/DIP: 050/80W

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Jurassic
Cretaceous-Tertiary

GROUP

Hazelton

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Coast Plutonic Complex

LITHOLOGY: Andesite
Granodiorite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1940

SAMPLE TYPE: Chip

COMMODITY

GRADE

Silver	209.0000	Grams per tonne
Gold	0.7000	Grams per tonne
Copper	4.5000	Per cent
Lead	6.8000	Per cent
Zinc	8.6000	Per cent

COMMENTS: The sample width is 38.0 centimetres.

REFERENCE: Minister of Mines Annual Report 1940, page 55.

CAPSULE GEOLOGY

Andesite of the Jurassic Hazelton Group is cut by porphyritic granodiorite of the Cretaceous to Tertiary Coast Plutonic Complex. A northeast trending quartz vein, 60 metres long and 20 to 35 centimetres wide contains pyrite, galena, sphalerite and chalcopyrite. A 38 centimetre sample assayed 0.7 grams per tonne gold, 209 grams per tonne silver, 4.5 per cent copper, 6.8 per cent lead and 8.6 per cent zinc (Minister of Mines Annual Report 1940).

BIBLIOGRAPHY

EMPR AR 1938-B27; 1939-69; *1940-55
EMPR MAP 8; 69-1
EMPR PF (*Maps & Rpt by J.T. Mandy, 1938; *Sketch Maps by J.T. Mandy, 1940)
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 212, p. 40; 329, p. 89

DATE CODED: 1986/12/22
DATE REVISED: / /

CODED BY: LDJ
REVISED BY:

FIELD CHECK: N
FIELD CHECK:

MINFILE NUMBER: **1031 169**

NATIONAL MINERAL INVENTORY:

NAME(S): **JEANETTE** JOS, JOS 1,
NOR, BILLY

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 103102E
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 09 59 N
LONGITUDE: 128 43 46 W
ELEVATION: 450 Metres

NORTHING: 6002068
EASTING: 517664

LOCATION ACCURACY: Within 500M

COMMENTS: Location of drill holes, Map 2 (Assessment Report 6629); located north of the junction of Dahl Creek and Little Wedeene River.

COMMODITIES: Copper Silver Gold

MINERALS

SIGNIFICANT: Pyrite Pyrrhotite Chalcopyrite
ASSOCIATED: Quartz
ALTERATION: Chlorite Sericite
ALTERATION TYPE: Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Massive Disseminated
CLASSIFICATION: Volcanogenic
TYPE: D03 Volcanic redbed Cu L01 Subvolcanic Cu-Ag-Au (As-Sb)
SHAPE: Irregular
MODIFIER: Sheared
DIMENSION: 0025 x 0003 Metres STRIKE/DIP: TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic	Hazelton	Telkwa	

LITHOLOGY: Andesite Porphyry
Quartz Sericite Chlorite Phyllite

HOSTROCK COMMENTS: Quartz-sericite-chlorite phyllite and silicified rhyolite.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Kitimat Ranges

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1986

SAMPLE TYPE: Chip

COMMODITY

GRADE

Gold

5.1800

Grams per tonne

Copper

1.8100

Per cent

COMMENTS: The sample width is 1.8 metres.

REFERENCE: Assessment Report 15528.

CAPSULE GEOLOGY

Pyrite, pyrrhotite and minor chalcopyrite occur as disseminations and fracture fillings in altered andesite porphyry and quartz-sericite-chlorite phyllite of the Lower Jurassic Hazelton Group, Telkwa Formation. The rocks are sheared and brecciated in places. A 3 metre drill intersection assayed 0.43 per cent copper, 3.4 grams per tonne silver and 0.2 grams per tonne gold (Assessment Report 6629).

George Cross Newsletter #25, 1974 reported a surface showing averaging 4.16 per cent copper and 6.5 grams per tonne gold across 15 metres and a drill hole intersection of 3.14 per cent copper and 1.2 grams per tonne gold over 4.6 metres. The anomalous area is reported to be 1350 by 150 metres. Recent stripping exposed a copper-bearing zone up to 3 metres wide and 25 metres long which strikes northeast and dips steeply northwest. A 1.8 metre sample assayed 1.21 per cent copper and 5.18 grams per tonne gold (Assessment Report 15528).

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RUN TIME: 12:06:33

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BIBLIOGRAPHY

EMPR ASS RPT *6629, *15528
EMPR EXPL 1977-207; 1987-C358
EMPR INF CIRC 1993-13
EMPR MAP 8
EMPR OF 1994-1
EMPR PF (Prospectus for Resolute Resources Ltd., pp. 10-13, Mar.4,
1987; Laramide Resources Ltd., Statement of Material Facts #78/87
May 29, 1987 pp. 4-6)
GSC MAP 1136A; 11-1956; 278A; 1385A
GSC MEM 329
GCNL Jan.17,22,30, Feb.5, 1974

DATE CODED: 1986/10/02
DATE REVISED: 1987/07/23

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 170**

NATIONAL MINERAL INVENTORY:

NAME(S): **HUMP**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103101W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 09 39 N
LONGITUDE: 128 26 06 W
ELEVATION: 1220 Metres

NORTHING: 6001564
EASTING: 536892

LOCATION ACCURACY: Within 500M
COMMENTS: Mineralized veins, Map 3 (Assessment Report 9423).

COMMODITIES: Molybdenum Copper Silver

MINERALS

SIGNIFICANT: Molybdenite Chalcopyrite Pyrite Magnetite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Epigenetic
TYPE: L05 Porphyry Mo (Low F- type)
SHAPE: Irregular

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Cretaceous-Tertiary			Coast Plutonic Complex

LITHOLOGY: Quartz Monzonite
Andesite
Diorite Dike

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Plutonic Rocks

PHYSIOGRAPHIC AREA: Kitimat Ranges

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY:	Assay/analysis	YEAR:	1981
SAMPLE TYPE:	Chip		
COMMODITY	GRADE		
Silver	0.6000	Grams per tonne	
Copper	0.0270	Per cent	
Molybdenum	0.2700	Per cent	

REFERENCE: Assessment Report 9423.

CAPSULE GEOLOGY

The area is underlain by quartz monzonite of the Cretaceous to Tertiary Coast Plutonic Complex. Andesite, aplite and diorite dykes cut the quartz monzonite. Molybdenite mineralization occurs in quartz veins and disseminated in the country rock. The veins are up to 10 centimetres wide and also contain pyrite, magnetite and minor chalcopyrite. A chip sample assayed 0.27 per cent molybdenum, 0.027 per cent copper and 0.6 grams per tonne silver (Assessment Report 9423).

North trending faults show normal displacement and may be related to molybdenite mineralization.

BIBLIOGRAPHY

EMPR ASS RPT *8938, 9423
EMPR EXPL 1981-390,391
EMPR MAP 8; 69-1
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329

DATE CODED: 1986/10/03
DATE REVISED: / /

CODED BY: LDJ
REVISED BY:

FIELD CHECK: N
FIELD CHECK:

MINFILE NUMBER: **1031 171**

NATIONAL MINERAL INVENTORY:

NAME(S): **KIT**

MINING DIVISION: Skeena

STATUS: Showing
 REGIONS: British Columbia
 NTS MAP: 103102E
 BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 01 34 N
 LONGITUDE: 128 36 26 W
 ELEVATION: 25 Metres

NORTHING: 5986498
 EASTING: 525730

LOCATION ACCURACY: Within 500M

COMMENTS: Vein 1, Figure 3 (Assessment Report 14322).

COMMODITIES: Lead Zinc Silver Gold Cadmium

MINERALS

SIGNIFICANT: Galena Sphalerite Chalcopryrite Pyrite

ASSOCIATED: Quartz Barite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Stockwork Disseminated Massive

CLASSIFICATION: Epigenetic

TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

SHAPE: Regular

MODIFIER: Fractured

DIMENSION: 61 x 14 x 1 Metres

STRIKE/DIP: 160/90

TREND/PLUNGE:

COMMENTS: Vein 1.

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Cretaceous			Coast Plutonic Complex

LITHOLOGY: Granodiorite
 Diorite
 Hornblende Diorite

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline

PHYSIOGRAPHIC AREA: Kitimat Trench

TERRANE: Plutonic Rocks

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1985

SAMPLE TYPE: Channel

COMMODITY

COMMODITY	GRADE	UNIT
Silver	241.4000	Grams per tonne
Gold	0.4100	Grams per tonne
Lead	3.6400	Per cent
Zinc	6.0100	Per cent

COMMENTS: The sample width is 13.0 centimetres.

REFERENCE: Assessment Report 14322.

CAPSULE GEOLOGY

A barite-quartz system (eleven veins) is mineralized with galena, sphalerite, chalcopryrite and pyrite, within parallel fractures and fault zones. The veins strike 158 to 162 degrees and dip vertically. Host rocks are Cretaceous age, granodiorites and hornblende diorite of the Coast Plutonic Complex.

Vein 1 strikes 160 degrees and dips vertically. It is exposed for 61 metres long, 0.3 to 1.4 metres wide, and over 13.7 metres deep. The vein contains massive sulphide pods (2.5 to 5.0 centimetres by 5 to 15 centimetres) of galena, sphalerite and minor chalcopryrite, with quartz and barite gangue. A 68 centimetre channel sample assayed 1.93 per cent lead, 1.85 per cent zinc and 4.1 grams per tonne silver (Assessment Report 14322). A 13 centimetre channel sample assayed 3.64 per cent lead, 6.01 per cent zinc, 241.4 grams per tonne silver and 0.41 grams per tonne gold.

The remaining veins, which are smaller, are exposed along a creek for about 450 metres in an east-southeast direction. The average of several grab and channel samples assayed 2.94 per cent lead, 1.94 per cent zinc, 61.7 grams per tonne silver and 0.24 grams per tonne gold. One grab sample assayed 1.15 per cent cadmium

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RUN TIME: 12:06:33

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CAPSULE GEOLOGY

(Assessment Report 14322).

BIBLIOGRAPHY

EMPR AR 1928-68,69
EMPR ASS RPT *14322
EMPR EXPL 1985-C371
EMPR MAP 8
GSC MAP 1136A; 1385A; 11-1956; 278A
GSC MEM 329

DATE CODED: 1986/10/02
DATE REVISED: / /

CODED BY: LDJ
REVISED BY:

FIELD CHECK: N
FIELD CHECK:

MINFILE NUMBER: **1031 172**

NATIONAL MINERAL INVENTORY:

NAME(S): **JOAN**, BOWBYES

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103102E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 04 59 N
LONGITUDE: 128 43 06 W
ELEVATION: 360 Metres

NORTHING: 5992799
EASTING: 518426

LOCATION ACCURACY: Within 1 KM
COMMENTS: Approximate claim location.

COMMODITIES: Tungsten Iron Copper Nickel

MINERALS

SIGNIFICANT: Magnetite Pyrite Chalcopyrite Scheelite

COMMENTS: Probable mineralogy.

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown

CLASSIFICATION: Industrial Min.

TYPE: K01 Cu skarn
 K03 Fe skarn

K05 W skarn

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Andesite

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Kitimat Trench

CAPSULE GEOLOGY

Mineralization consisting of probable scheelite, magnetite, chalcopyrite and pyrite occurs in volcanic rocks of the Jurassic Hazelton Group.

BIBLIOGRAPHY

EMPR EXPL 1975-176; *1987-B67-B70
EMPR GEM 1969-72; 1970-98; 1971-112; 1973-485; 1974-324
EMPR MAP 8
EMPR OF 1991-17
GSC MAP 11-1956; 278A; *1136A; 1385A
GSC MEM 329

DATE CODED: 1986/10/02
DATE REVISED: 1989/08/28

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 173**

NATIONAL MINERAL INVENTORY:

NAME(S): **HAT**, DRUM, KM

MINING DIVISION: Skeena

STATUS: Showing
 REGIONS: British Columbia
 NTS MAP: 103114E
 BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 47 29 N
 LONGITUDE: 129 00 26 W
 ELEVATION: 1430 Metres

NORTHING: 6071578
 EASTING: 499536

LOCATION ACCURACY: Within 500M

COMMENTS: Quartz vein (Assessment Report 10821).

COMMODITIES: Gold Silver Lead Zinc Copper

MINERALS

SIGNIFICANT: Arsenopyrite Galena Pyrite Chalcopyrite Sphalerite
 ASSOCIATED: Quartz Dolomite Akerite
 ALTERATION: Limonite
 ALTERATION TYPE: Oxidation
 MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
 CLASSIFICATION: Epigenetic
 TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
 SHAPE: Irregular
 DIMENSION:

STRIKE/DIP: 120/45N

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Plutonic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Jurassic-Cretaceous	Bowser Lake	Undefined Formation	Coast Plutonic Complex
Cretaceous-Tertiary			

LITHOLOGY: Diorite
 Granodiorite
 Siltstone
 Shale
 Argillite
 Conglomerate
 Sandstone
 Tuff

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
 TERRANE: Plutonic Rocks

Bowser Lake

PHYSIOGRAPHIC AREA: Kitimat Ranges

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis	YEAR: 1982
SAMPLE TYPE: Chip	
<u>COMMODITY</u>	<u>GRADE</u>
Silver	9587.8000 Grams per tonne
Gold	41.1000 Grams per tonne
Copper	1.0000 Per cent
Lead	1.0000 Per cent

COMMENTS: Lead and copper assays are greater than 1.0 per cent.
 REFERENCE: Assessment Report 10821.

CAPSULE GEOLOGY

Jurassic to Cretaceous Bowser Lake Group sediments are intruded by granodiorite and diorite of the Cretaceous to Tertiary Coast Plutonic Complex. The sediments consist of a northeast striking, southeast dipping sequence of banded siltstone, shale, argillite and minor conglomerate, sandstone and tuff.

Quartz veins within the diorite carry arsenopyrite, galena, chalcopyrite, sphalerite and pyrite. A vein exposed for 30 metres and up to 0.5 metres wide assayed up to 41.1 grams per tonne gold and 9587.8 grams per tonne silver. The vein strikes 120 degrees and dips 45 northeast. Other groups of mineralized veins occur 450 metres to the east southeast and 1000 metres to the northeast. These veins are low in metal values (Assessment Report 10821).

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GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 746
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BIBLIOGRAPHY

EMPR ASS RPT 10045, *10821
EMPR EXPL 1981-189; 1982-370,371
EMPR MAP 8
EMR MP CORPFILE (Prism Resources Ltd.)
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329
PR REL Eagle Plains Resources Ltd., Feb.20, 2003

DATE CODED: 1986/09/24
DATE REVISED: 1989/08/28

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 174**

NATIONAL MINERAL INVENTORY: 103115 Au2

NAME(S): **CHRIS, ORO, IKE,
 BEAVER, MAYOU, LAURA**

STATUS: Showing
 REGIONS: British Columbia
 NTS MAP: 103115W
 BC MAP:
 LATITUDE: 54 48 09 N
 LONGITUDE: 128 58 31 W
 ELEVATION: 1350 Metres
 LOCATION ACCURACY: Within 500M
 COMMENTS: Main vein, Figure #4 (Assessment Report 10523).

MINING DIVISION: Skeena
 UTM ZONE: 09 (NAD 83)
 NORTHING: 6072814
 EASTING: 501589

COMMODITIES: Gold Silver Lead

MINERALS

SIGNIFICANT: Arsenopyrite Galena Pyrite Chalcopyrite Sphalerite
 ASSOCIATED: Quartz
 ALTERATION: Limonite Scorodite
 ALTERATION TYPE: Oxidation
 MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Massive
 CLASSIFICATION: Epigenetic Hydrothermal
 TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
 SHAPE: Regular
 DIMENSION: 0300 x 0025 x 0001 Metres STRIKE/DIP: 075/75N TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
 Jurassic-Cretaceous Bowser Lake Undefined Formation

LITHOLOGY: Siltstone
 Greywacke
 Granodiorite
 Dioritic Dike

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline PHYSIOGRAPHIC AREA: Kitimat Ranges
 TERRANE: Bowser Lake

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
 CATEGORY: Assay/analysis YEAR: 1981
 SAMPLE TYPE: Chip
 COMMODITY GRADE
 Silver 80.5700 Grams per tonne
 Gold 11.2500 Grams per tonne
 Lead 1.4000 Per cent

COMMENTS: Average chip sample over 300 metre length.
 REFERENCE: Assessment Report 10523.

CAPSULE GEOLOGY

Jurassic to Cretaceous Bowser Lake Group sediments, predominantly siltstone with interbeds of greywacke, are intruded by granodiorite bodies and diorite dykes of the Cretaceous to Tertiary Coast Plutonic Complex. The sediments strike 030 degrees and dip 35 degrees southeast.

A gold bearing quartz vein, the Main vein, strikes 075 degrees and dips 75 degrees north within the siltstones. The vein is 300 metres long, 0.3 to 1.34 metres wide, averaging 0.6 metres and is up to 25 metres vertical depth. The vein consists of alternating layers of grey-white quartz, grey host siltstone layers, and massive mineralized layers of arsenopyrite, galena, pyrite and minor chalcopyrite and sphalerite. Average chip samples over the 300 metre length assayed 11.25 grams per tonne gold, 80.57 grams per tonne silver and 1.4 per cent lead (Assessment Report 10523).

A second similar vein, 40 metres to the south is 35 metres long and 0.16 to 0.52 metres wide, averaging 2.09 grams per tonne gold, 8.23 grams per tonne silver and 0.1 per cent lead (Assessment Report 10523).

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BIBLIOGRAPHY

EMPR AR 1918-50; 1928-71,72; *1950-80,81; 1959-15; 1962-15
EMPR ASS RPT 8393, 10045, *10523
EMPR EXPL 1980-397; 1981-317
EMPR GEM 1970-96
EMPR MAP 8
EMR MP CORPFILE (Prism Resources Ltd.)
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329
PR REL Eagle Plains Resources Ltd., Feb.20, 2003

DATE CODED: 1984/09/24
DATE REVISED: 1989/08/29

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 175**

NATIONAL MINERAL INVENTORY: 10319 Cu36

NAME(S): **ANNETTE 2**, BIG BOY

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103109W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 34 04 N
LONGITUDE: 128 16 56 W
ELEVATION: 390 Metres

NORTHING: 6046933
EASTING: 546407

LOCATION ACCURACY: Within 500M

COMMENTS: Fracture zone, Figure 3a (Assessment Report 5962).

COMMODITIES: Copper Titanium

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Industrial Min.
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

L01 Subvolcanic Cu-Ag-Au (As-Sb)

SHAPE: Irregular
MODIFIER: Fractured

DIMENSION:
COMMENTS: Fractured zone.

STRIKE/DIP: 045/65S TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE GROUP
Jurassic Hazelton

FORMATION
Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Argillite
Greywacke

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1976

SAMPLE TYPE: Rock

COMMODITY

COMMODITY	GRADE	UNIT
Copper	0.0200	Per cent
Titanium	0.8000	Per cent

REFERENCE: Assessment Report 5962.

CAPSULE GEOLOGY

The area is underlain by argillites and greywackes of the Jurassic Hazelton Group. A 120 metre long, northeast striking, and 65 degree south dipping fracture zone occurs in argillite. The fractures contain quartz veins and are mineralized with pyrite and chalcopyrite. A selected sample assayed 0.03 per cent copper and 0.8 per cent titanium (Assessment Report 5962).

BIBLIOGRAPHY

EMPR AR 1932-84
EMPR ASS RPT 2325, *5962, 6533
EMPR EXPL 1976-163; 1977-208; 1978-235; 1980-393
EMPR MAP 8; 69-1
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329

DATE CODED: 1986/11/25
DATE REVISED: 1989/08/29

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 176**

NATIONAL MINERAL INVENTORY: 10319 Ti1

NAME(S): **ANNETTE**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103109W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 33 54 N
LONGITUDE: 128 17 01 W
ELEVATION: 490 Metres

NORTHING: 6046623
EASTING: 546320

LOCATION ACCURACY: Within 500M
COMMENTS: Sampling area.

COMMODITIES: Titanium

MINERALS

SIGNIFICANT: Anatase Rutile
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Industrial Min.
TYPE: C01 Surficial placers
COMMENTS: Sampling area of 500 by 500 metres.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Gravel
Sand
Argillite
Greywacke

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Chip
COMMODITY: Titanium

GRADE	YEAR: 1977
Titanium 0.7200	Per cent

COMMENTS: This is the average of 31 samples over a 500 by 500 metre area.
REFERENCE: Assessment Report 6533.

CAPSULE GEOLOGY

The area is underlain by argillites and greywackes of the Jurassic Hazelton Group. Titanium, as anatase and rutile, occurs in sand and gravel overlying the sediments. Sampling of a 500 by 500 metre area averaged 0.72 per cent TiO₂ from 31 samples (Assessment Report 6533). Titanium also occurs in fractures in the underlying bedrock.

BIBLIOGRAPHY

EMPR ASS RPT 2325, 5962, *6533
EMPR EXPL 1976-163; 1977-208; 1978-235; 1980-393
EMPR MAP 8; 69-1
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329

DATE CODED: 1986/11/25
DATE REVISED: 1989/08/29

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 177**

NATIONAL MINERAL INVENTORY: 10318 Ag1

NAME(S): **LEAD KING**, THORN 6

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103108W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 27 09 N
LONGITUDE: 128 24 06 W
ELEVATION: 1100 Metres

NORTHING: 6034034
EASTING: 538794

LOCATION ACCURACY: Within 500M

COMMENTS: Description from Minister of Mines Annual Report 1927, page 124; property is located north of Mount Attree, in the southeast wall of a basin near the head of a west fork of Eight Mile Creek.

COMMODITIES: Silver Lead Zinc Gold Copper

MINERALS

SIGNIFICANT: Galena Pyrite Sphalerite Arsenopyrite Chalcopyrite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
SHAPE: Regular
DIMENSION:
COMMENTS: Quartz vein 20 by 1 metre. STRIKE/DIP: 135/45S TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Cretaceous-Tertiary Coast Plutonic Complex

LITHOLOGY: Granodiorite
Volcanic

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Hazelton Ranges
TERRANE: Plutonic Rocks

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1927
SAMPLE TYPE: Rock
COMMODITY GRADE
Silver 737.1000 Grams per tonne
Gold 5.5000 Grams per tonne
Lead 34.0000 Per cent
Zinc 0.5000 Per cent

COMMENTS: Assays obtained from a "selected" sample.
REFERENCE: Minister of Mines Annual Report 1927, page 124.

CAPSULE GEOLOGY

Granodiorite of the Cretaceous to Tertiary Coast Plutonic Complex includes small roof pendants of Paleozoic age volcanic rocks cut by a 0.6 metre wide quartz vein. The vein, striking 135 degrees for 20 metres, and dipping 45 degrees southwest, is mineralized with galena, pyrite, sphalerite and minor arsenopyrite and chalcopyrite. A selected sample assayed 737.1 grams per tonne silver, 34 per cent lead, 0.5 per cent zinc and 5.5 grams per tonne gold (Minister of Mines Annual Report 1927).

BIBLIOGRAPHY

EMPR AR *1927-124
EMPR ASS RPT 13104, 14560
EMPR MAP 8; 69-1
GSC MAP 278A; 11-1956; 1136A; 1385A
GSS MEM 329
GSC P 36-20, p. 29
GSC SUM RPT *1926A, p. 42
Allen, D.G. (1984): Geological and Geochemical Report on the Mount Thornhill Gold Prospect in Prospectus for Seaster Resource

RUN DATE: 26-Jun-2003
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MINFILE MASTER REPORT
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PAGE: 752
REPORT: RGEN0100

BIBLIOGRAPHY

Corporation Oct. 23, 1984

DATE CODED: 1986/10/30
DATE REVISED: 1989/08/29

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 753
REPORT: RGEN0100

MINFILE NUMBER: **1031 178**

NATIONAL MINERAL INVENTORY: 10319 Au13

NAME(S): **BRUNSING**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103109W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 31 39 N
LONGITUDE: 128 26 36 W
ELEVATION: 300 Metres

NORTHING: 6042357
EASTING: 536026

LOCATION ACCURACY: Within 1 KM

COMMENTS: Description from Geological Survey of Canada Summary Report 1925 Part A, page 115.

COMMODITIES: Gold Copper

MINERALS

SIGNIFICANT: Pyrite Pyrrhotite Chalcopyrite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal
TYPE: I02 Intrusion-related Au pyrrhotite veins

L01 Subvolcanic Cu-Ag-Au (As-Sb)

HOST ROCK

DOMINANT HOSTROCK: Plutonic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Cretaceous-Tertiary			Coast Plutonic Complex

LITHOLOGY: Diorite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Plutonic Rocks

PHYSIOGRAPHIC AREA: Hazelton Ranges

CAPSULE GEOLOGY

A shear zone in diorite of the Cretaceous to Tertiary Coast Plutonic Complex contains numerous quartz stringers sparsely mineralized with pyrite, pyrrhotite and chalcopyrite. The veins carry gold.

BIBLIOGRAPHY

EMPR MAP 8; 69-1
GSC MAP 278A; 11-1956; 1136A; 1385A
GSC MEM 329
GSC P 36-20, p. 29
GSC SUM RPT *1925A, p. 115

DATE CODED: 1986/10/27
DATE REVISED: 1989/08/29

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 178**

MINFILE NUMBER: **1031 179**

NATIONAL MINERAL INVENTORY: 10319 Cu25

NAME(S): **INDEPENDENT**, RAINBOW

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103109E
BC MAP:

MINING DIVISION: Omineca

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 39 49 N
LONGITUDE: 128 13 26 W
ELEVATION: 1100 Metres

NORTHING: 6057636
EASTING: 550061

LOCATION ACCURACY: Within 500M

COMMENTS: Description from Minister of Mines Annual Report 1914, map page 120.

COMMODITIES: Copper Silver

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Galena Bornite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Replacement
TYPE: D03 Volcanic redbed Cu L01 Subvolcanic Cu-Ag-Au (As-Sb)

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE: Jurassic GROUP: Hazelton FORMATION: Undefined Formation IGNEOUS/METAMORPHIC/OTHER:

LITHOLOGY: Andesite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Grab

YEAR: 1914

COMMODITY	GRADE	
Silver	27.4000	Grams per tonne
Copper	4.0000	Per cent

COMMENTS: Sample from 1.5 metre mineralized zone.
REFERENCE: Minister of Mines Annual Report 1914, page 136.

CAPSULE GEOLOGY

Pyrite, chalcopyrite and galena occur over a width of 1.5 metres in andesite of the Jurassic Hazelton Group. A typical sample assayed 4.0 per cent copper and 27.4 grams per tonne silver (Minister of Mines Annual Report 1914).

On the adjacent Rainbow claim, located at a slightly higher elevation, stringers of chalcopyrite and bornite are reported to occur in fractured Hazelton Group rocks.

BIBLIOGRAPHY

EMPR AR *1914, p. 136, Map P120
EMPR MAP 8; 69-1
GSC MAP 278A; 11-1956; 1136A; 1385A
GSC MEM 329
GSC P 36-17

DATE CODED: 1986/11/24
DATE REVISED: 1989/08/29

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

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MINFILE NUMBER: **1031 180**

NATIONAL MINERAL INVENTORY: 103116 Zn1

NAME(S): **HERCULES**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103116W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 58 29 N
LONGITUDE: 128 15 36 W
ELEVATION: 1800 Metres

NORTHING: 6092229
EASTING: 547366

LOCATION ACCURACY: Within 1 KM
COMMENTS: Symbol #103 (Geological Survey of Canada Map 36-17).

COMMODITIES: Zinc Copper Silver Lead

MINERALS

SIGNIFICANT: Sphalerite Pyrrhotite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Concordant Stratiform
CLASSIFICATION: Unknown
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Jurassic-Cretaceous Bowser Lake Undefined Formation

LITHOLOGY: Argillite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Bowser Lake

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Rock

YEAR: 1979

COMMODITY	GRADE	
Silver	4.8000	Grams per tonne
Copper	0.2300	Per cent
Lead	0.0400	Per cent
Zinc	6.6500	Per cent

REFERENCE: Assessment Report 9147.

CAPSULE GEOLOGY

Sphalerite and pyrrhotite occur as small seams along bedding planes in argillites of the Jurassic to Cretaceous Bowser Lake Group. The sediments are intruded by dykes related to a granitic stock to the northeast.

A sample taken from exploratory adits, in the area, returned values of 6.65 per cent zinc, 0.23 per cent copper and 4.8 grams per tonne silver and 0.21 per cent zinc, 0.23 per cent copper and 1.4 grams per tonne silver (Assessment Report 9147).

BIBLIOGRAPHY

EMPR AR *1927-128
EMPR ASS RPT 9147
EMPR EXPL 1981-9
EMPR MAP 8; 69-1
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329
GSC P 36-17

DATE CODED: 1986/10/22
DATE REVISED: 1989/08/12

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 180**

MINFILE NUMBER: **1031 181**

NATIONAL MINERAL INVENTORY: 103115 Au7

NAME(S): **GULD**, ALICE

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103115E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 49 19 N
LONGITUDE: 128 38 16 W
ELEVATION: 1320 Metres

NORTHING: 6075038
EASTING: 523273

LOCATION ACCURACY: Within 500M

COMMENTS: Vein, Figure 5 (Geological Survey of Canada Memoir 205).

COMMODITIES: Gold Silver

MINERALS

SIGNIFICANT: Pyrite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Concordant
CLASSIFICATION: Hydrothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
DIMENSION:

STRIKE/DIP: 030/65W TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Jurassic-Cretaceous	Bowser Lake	Undefined Formation	

LITHOLOGY: Conglomerate
Argillite
Greywacke

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Bowser Lake

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1930
SAMPLE TYPE: Grab
COMMODITY: Gold GRADE: 12.0000 Grams per tonne

COMMENTS: One metre selected sample.
REFERENCE: Minister of Mines Annual Report 1930, page 76.

CAPSULE GEOLOGY

The area is underlain by argillite, greywacke, and conglomerate of the Jurassic to Cretaceous Bowser Lake Group. Narrow quartz veins lie conformably below a 35 to 75 metre wide conglomerate bed which strikes northeast and dips 50 to 75 degrees southeast. A 6 metre long, 0.5 metre wide quartz vein occurs in a sheared zone in the conglomerate. It strikes 030 degrees and dips 65 degrees west. A 1 metre sample assayed 12 grams per tonne gold (Annual Report 1930).

BIBLIOGRAPHY

EMPR AR *1930-76
EMPR ASS RPT 21742
EMPR BULL 1 (1932) pp. 22,30
EMPR MAP 8
EMPR OF 1994-14
GSC MAP 1136A; 11-1956; 278A; 1385A
GSC MEM *205, pp. 19,20; 329, pp. 75,76
GSC P 36-17, p. 29
GSC SUM RPT 1923, pp. 42-44

DATE CODED: 1986/10/15
DATE REVISED: 1989/08/29

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 757
REPORT: RGEN0100

MINFILE NUMBER: **1031 182**

NATIONAL MINERAL INVENTORY: 10319 Ag4

NAME(S): **RIDGE**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103109W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 41 49 N
LONGITUDE: 128 23 16 W
ELEVATION: 910 Metres

NORTHING: 6061241
EASTING: 539457

LOCATION ACCURACY: Within 500M
COMMENTS: Description.

COMMODITIES: Tungsten

MINERALS

SIGNIFICANT: Scheelite Pyrite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Hydrothermal
TYPE: L07 Porphyry W
SHAPE: Irregular
MODIFIER: Fractured
DIMENSION:

STRIKE/DIP: 150/90

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE GROUP
Cretaceous-Tertiary

FORMATION

IGNEOUS/METAMORPHIC/OTHER
Coast Plutonic Complex

LITHOLOGY: Granodiorite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Plutonic Rocks

PHYSIOGRAPHIC AREA: Hazelton Ranges

CAPSULE GEOLOGY

Several quartz veins cut granodiorite of the Cretaceous to Tertiary Coast Plutonic Complex. The veins, which strike 150 degrees and dip vertical, are related to a north trending fault. Pyrite and scheelite occur as disseminations within the quartz veins. The highest assay was 0.06 per cent tungsten (Property File - Byers, 1942). The mineralized zone measures 250 by 30 metres.

BIBLIOGRAPHY

EMPR BULL 10(REV), p. 59
EMPR MAP 8; 69-1
EMPR OF 1991-17
EMPR PF (*Rpt by R.A. Byers, 1942)
GSC EC GEOL No. 17, p. 45
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329

DATE CODED: 1986/12/22
DATE REVISED: / /

CODED BY: LDJ
REVISED BY:

FIELD CHECK: N
FIELD CHECK:

MINFILE NUMBER: **1031 182**

MINFILE NUMBER: **1031 183**

NATIONAL MINERAL INVENTORY: 10319 Cu34

NAME(S): **USK**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103109W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 38 19 N
LONGITUDE: 128 22 56 W
ELEVATION: 360 Metres

NORTHING: 6054753
EASTING: 539872

LOCATION ACCURACY: Within 500M

COMMENTS: Description (Geological Survey of Canada Memoir 205, page 46).

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Bornite Chalcopyrite Galena Pyrite Chalcocite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated

CLASSIFICATION: Unknown

TYPE: D03 Volcanic redbed Cu

L01 Subvolcanic Cu-Ag-Au (As-Sb)

SHAPE: Irregular

MODIFIER: Fractured

DIMENSION:

STRIKE/DIP: 125/20N

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Jurassic

GROUP

Hazelton

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Andesite
Albite Dike

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Hazelton Ranges

CAPSULE GEOLOGY

Andesite rocks of the Jurassic Hazelton Group are cut by albite dykes. An east trending, north dipping altered zone contains disseminated bornite, chalcopyrite, galena, chalcocite, and pyrite over a 1 metre width. This zone is likely the one described north of Emma Creek in Geological Survey of Canada Memoir 205.

BIBLIOGRAPHY

EMPR AR 1923-102; 1924-89; 1927-125
EMPR MAP 8
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM *205, p. 46; 329
GSC P 36-20, p. 39
GSC SUM RPT 1925A, p. 116

DATE CODED: 1986/12/09
DATE REVISED: 1989/08/29

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 184**

NATIONAL MINERAL INVENTORY: 10318 Cu3

NAME(S): **SOCIETY GIRL**, SADIE, THORN

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103108W
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 28 59 N
LONGITUDE: 128 25 51 W
ELEVATION: 1335 Metres

NORTHING: 6037418
EASTING: 536875

LOCATION ACCURACY: Within 500M

COMMENTS: Location of old showing is poorly documented. Mineralized sample JT20 Fig. 6b (Assessment Report 14560). Pre 1986 1031-J184. Assessment Report 15115 refers to the Society Girl showing which, according to old references, is likely the St. Paul showing (1031 098).

COMMODITIES: Gold Silver Copper Lead Zinc

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Galena Freibergite Sphalerite
Covellite Arsenopyrite
ASSOCIATED: Quartz
ALTERATION: Malachite Azurite Silica
ALTERATION TYPE: Silicific'n Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Cretaceous-Tertiary Coast Plutonic Complex

LITHOLOGY: Felsite
Biotite Granodiorite
Andesite
Lamprophyre Dike

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Plutonic Rocks

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1984
SAMPLE TYPE: Rock
COMMODITY GRADE
Silver 13.7000 Grams per tonne
Gold 0.3000 Grams per tonne
Copper 0.0100 Per cent
Lead 1.0800 Per cent
Zinc 0.0200 Per cent
REFERENCE: Assessment Report 13114.

CAPSULE GEOLOGY

A 4.5 to 6.0 metre wide, east trending, felsite dyke cuts massive biotite granodiorite and lamprophyre dykes of the Cretaceous to Tertiary Coast Plutonic Complex. Quartz veins, 0.2 to 1.4 metres wide, occur for several hundred metres along either side of the dyke.

The Society Girl vein, a continuation to the west of the St. Paul vein (1031 098), occurs on the hangingwall side of the dyke. The vein is sparsely mineralized with pyrite, chalcopyrite, and galena. A 76 centimetre sample assayed 6.9 grams per tonne gold and 17.1 grams per tonne silver (Minister of Mines, Annual Report 1914). A sample of a quartz vein, which is likely part of the Society Girl vein, assayed 0.3 grams per tonne gold, 13.7 grams per tonne silver, 0.01 per cent copper, 1.08 per cent lead, and 0.02 per cent zinc (Assessment Report 13104).

In 1986, sample TT-45 was collected from the quartz vein exposed in the adit on the Society Girl claim and assayed 1.19 grams

CAPSULE GEOLOGY

per tonne gold. The quartz vein contains massive pyrite and trace to 2.0 per cent chalcopyrite and galena across a 70 centimetre width (Di Spirito, et al., 1986).

The Sadie showing, located just north of the Society Girl, is comprised of a 1.0 metre wide quartz vein containing chalcopyrite, pyrite, malachite and azurite. A 30 centimetre sample taken from this vein in 1929, assayed trace gold, 55 grams per tonne silver and 9.0 per cent copper (Minister of Mines Annual Report 1929, page 78).

Mineralogical studies of the Society Girl quartz vein shows that it also contains small amounts of covellite and arsenopyrite. Sphalerite is locally abundant within this vein. Chalcopyrite occurs as irregular masses up to 2 centimeters in diameter with associated malachite and azurite. Goethite occurs as a minor alteration product of pyrite in the western portion of the Society Girl vein (DiSpirito et al. 1986).

BIBLIOGRAPHY

- EMPR AR *1914-113; 1918-51; 1921-45; 1924-49; 1925-71; 1926-75;
1929-78; 1930-78
EMPR ASS RPT *13104, 14560, *15115
EMPR BULL 1, 1932, p. 30
EMPR EXPL 1984-375; 1986-C427
EMPR MAP 8; 69-1
EMPR PF (*DiSpirito, F. et al. (1986): Geophysical, Geochemical and
Geological Surveys on the Thorn Project in Prospectus for Castello
Resources Ltd., Jul.13, 1987)
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 205; 212 ;329
GSC P 36-20, p. 25
GSC SUM RPT 1925A, p. 118; 1926A, pp. 41,42

DATE CODED: 1986/10/30
DATE REVISED: 1989/08/10

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 185**

NATIONAL MINERAL INVENTORY:

NAME(S): **GAZELLE**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103108W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 20 44 N
LONGITUDE: 128 19 41 W
ELEVATION: 1160 Metres

NORTHING: 6022178
EASTING: 543680

LOCATION ACCURACY: Within 500M

COMMENTS: Mineralized zone, Maps 1 & 2 (Assessment Report 14076).

COMMODITIES: Gold Silver Copper Lead Zinc

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Sphalerite Galena Pyrrhotite
ASSOCIATED: Quartz Calcite Epidote
ALTERATION: Limonite Jarosite Silica
ALTERATION TYPE: Silicific'n Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated Massive
CLASSIFICATION: Epigenetic Epithermal Hydrothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
SHAPE: Irregular
MODIFIER: Sheared
DIMENSION: STRIKE/DIP: 010/80E TREND/PLUNGE:
COMMENTS: Mineralized zone.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Pennsylvan.-Permian
Lower Jurassic

GROUP

Unnamed/Unknown Group
Hazelton

FORMATION

Unnamed/Unknown Formation
Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Rhyolite
Tuff
Andesite
Limestone
Siltstone
Dacitic Dike
Andesitic Breccia
Dioritic Dike
Granodiorite
Greisen

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Kitimat Ranges

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Rock
COMMODITY

YEAR: 1984

COMMODITY	GRADE	
Silver	6.0000	Grams per tonne
Gold	7.1100	Grams per tonne
Copper	0.0800	Per cent
Zinc	0.0200	Per cent

REFERENCE: Assessment Report 12717.

CAPSULE GEOLOGY

The area is underlain by late Paleozoic greenstone, andesite-rhyolite tuff, and massive andesite, Permian age limestone and siltstone, and Lower Jurassic Hazelton Group andesitic breccia. The rocks are intruded by andesite, dacite, and diorite dykes and granodiorite plutons of the Cretaceous to Tertiary Coast Plutonic Complex. A major fault, trending 010 degrees and dipping 80 to 90 degrees east, cuts the volcanics, and has associated mineralized shear zones and quartz veins (2 to 10 centimetres wide).

The mineralized zone is 500 by 100 metres and contains lenses and disseminations of sphalerite, galena, pyrite, chalcopyrite, and

CAPSULE GEOLOGY

pyrrhotite. Gangue minerals include epidote, quartz, and calcite and alteration minerals include limonite and jarosite. A quartz vein in foliated green andesite assayed 7.11 grams per tonne gold, 6.0 grams per tonne silver, 0.08 per cent copper, and 0.02 per cent zinc and a sample, likely from float, assayed 20 grams per tonne silver, 0.70 grams per tonne gold, 0.326 per cent copper, 1.13 per cent lead, and 4.13 per cent zinc (Assessment Report 12717). The mineralization is likely primary with secondary enrichment occurring during silicification by epithermal activity (Assessment Report 12717).

BIBLIOGRAPHY

EMPR ASS RPT *12717, 14076
EMPR EXPL 1984-376; 1985-C372
EMPR MAP 8; 69-1
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329

DATE CODED: 1986/10/27
DATE REVISED: 1987/07/23

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 186**

NATIONAL MINERAL INVENTORY: 10319 Cu4

NAME(S): **PEERLESS**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103109E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 32 09 N
LONGITUDE: 128 03 36 W
ELEVATION: 1330 Metres

NORTHING: 6043548
EASTING: 560822

LOCATION ACCURACY: Within 500M

COMMENTS: Descriptions from Geological Survey of Canada Summary Report 1925 Part A, page 114.

COMMODITIES: Copper Silver Gold

MINERALS

SIGNIFICANT: Chalcocite Bornite Chalcopyrite Magnetite

ASSOCIATED: Quartz Calcite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein

CLASSIFICATION: Hydrothermal

TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb)

D03 Volcanic redbed Cu

SHAPE: Irregular

MODIFIER: Sheared

DIMENSION:

STRIKE/DIP: 025/75W

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Jurassic

GROUP

Hazelton

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Andesite
Intrusive Dike

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1925

SAMPLE TYPE: Rock

COMMODITY

GRADE

Silver

157.7000

Grams per tonne

Gold

1.4000

Grams per tonne

Copper

11.9300

Per cent

COMMENTS: The sample width is 1.2 metres.

REFERENCE: Geological Survey of Canada, Summary Report 1925A, page 114.

CAPSULE GEOLOGY

Andesitic volcanics of the Jurassic Hazelton Group are cut by intrusive dykes and northeast trending shear zones. A shear zone, dipping 75 degrees west and up to 2 metres wide, contains quartz-calcite veinlets mineralized with lenses of chalcocite, bornite, magnetite, and chalcopyrite. A 1.2 metre sample assayed 11.93 per cent copper, 157.7 grams per tonne silver, and 1.4 grams per tonne gold (Geological Survey of Canada, Summary Report 1925A).

BIBLIOGRAPHY

EMPR AR 1914-122-123, Map P120; 1917-96; 1920-83; 1924-89; 1928-147; 1930-136
EMPR MAP 8
EMPR PF (Map, 1929; Map by J. Willman, Feb. 1929)
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329
GSC P 36-17
GSC SUM RPT 1925A, p. 114

DATE CODED: 1986/11/07
DATE REVISED: 1989/08/29

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 187**

NATIONAL MINERAL INVENTORY: 103115 Au9

NAME(S): **COMSTOCK**, VIRGINIA

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103115E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 49 39 N
LONGITUDE: 128 36 36 W
ELEVATION: 1500 Metres

NORTHING: 6075666
EASTING: 525055

LOCATION ACCURACY: Within 1 KM

COMMENTS: Symbol 93 (Geological Survey of Canada, Map 36-17).

COMMODITIES: Gold Lead Zinc

MINERALS

SIGNIFICANT: Pyrite Sphalerite Galena Chalcopyrite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Jurassic-Cretaceous	Bowser Lake	Undefined Formation	

LITHOLOGY: Argillite
Albite Dioritic Dike

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Bowser Lake

PHYSIOGRAPHIC AREA: Hazelton Ranges

CAPSULE GEOLOGY

A narrow, low-dipping dyke of albite-rich diorite intrudes argillites of the Jurassic to Cretaceous Bowser Lake Group. The dyke contains quartz veins with pyrite, sphalerite, galena, and minor chalcopyrite. Assays indicate low gold content.

BIBLIOGRAPHY

EMPR MAP 8
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329
GSC P *36-17; 36-20, p. 49

DATE CODED: 1986/10/16
DATE REVISED: 1989/08/29

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 188**

NATIONAL MINERAL INVENTORY: 103116 Ag5

NAME(S): **BRENTFORD, HEDLEY (L.6324), PAYNE, PAINE, SATURN 2, SATURN**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103116W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 49 49 N
LONGITUDE: 128 23 06 W
ELEVATION: 280 Metres

NORTHING: 6076078
EASTING: 539506

LOCATION ACCURACY: Within 500M
COMMENTS: Hedley claim (L.6324); quartz veins.

COMMODITIES: Silver Gold Lead Zinc Copper

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Galena Sphalerite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
DIMENSION:

STRIKE/DIP: 030/80E TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Jurassic-Cretaceous Unknown	Bowser Lake	Undefined Formation	Unnamed/Unknown Informal

LITHOLOGY: Diorite
Tuff
Argillite

HOSTROCK COMMENTS: Diorite intrusive cuts sediments.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Bowser Lake

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: DUMP

REPORT ON: N

CATEGORY:	Assay/analysis	YEAR:	1932
SAMPLE TYPE:	Grab		
COMMODITY	GRADE		
Silver	377.0000	Grams per tonne	
Gold	1.4000	Grams per tonne	
Copper	1.0000	Per cent	
Lead	11.0000	Per cent	
Zinc	8.0000	Per cent	

COMMENTS: The sample was selected from a dump.
REFERENCE: Minister of Mines, Annual Report 1932, pages 84,85.

CAPSULE GEOLOGY

Two parallel quartz veins, about 30 metres apart, occur in a small diorite intrusive which cuts tuffs and argillites of the Jurassic to Cretaceous Bowser Lake Group. The veins, which strike 030 degrees and dip steeply east, are 1 to 2 metres wide and are mineralized with pyrite, chalcopyrite, galena, and sphalerite. A 30 centimetre sample assayed 1.7 grams per tonne gold, 261 grams per tonne silver, and 1.1 per cent copper (Minister of Mines Annual Report 1914) and a selected sample from a dump assayed 1.4 grams per tonne gold, 377 grams per tonne silver, 11 per cent lead, 8 per cent zinc, and 1 per cent copper (Minister of Mines Annual Report 1932).

BIBLIOGRAPHY

EMPR AR *1914-138-139; 1915-78; 1916-90; 1920-349;
1925-133; *1932-84-85; 1967-83
EMPR ASS RPT 10033, 16160, 19349, 20344, 21894
EMPR EXPL 1987-C351
EMPR MAP 8; 69-1
EMPR OF 1994-14

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 766
REPORT: RGEN0100

BIBLIOGRAPHY

GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329
GSC P 36-17

DATE CODED: 1986/10/17
DATE REVISED: 1987/12/23

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 189**

NATIONAL MINERAL INVENTORY: 10319 Ag3

NAME(S): **HELEN**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103109W
BC MAP:

MINING DIVISION: Omineca
UTM ZONE: 09 (NAD 83)

LATITUDE: 54 44 19 N
LONGITUDE: 128 21 36 W
ELEVATION: 750 Metres

NORTHING: 6065893
EASTING: 541205

LOCATION ACCURACY: Within 1 KM
COMMENTS: Description and Geological Survey of Canada Map 36-17.

COMMODITIES: Silver Copper Zinc

MINERALS

SIGNIFICANT: Chalcopyrite Galena Sphalerite Pyrite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Concordant
CLASSIFICATION: Hydrothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
SHAPE: Irregular
MODIFIER: Sheared
DIMENSION:

STRIKE/DIP: 125/35W TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Jurassic-Cretaceous Bowser Lake Undefined Formation

LITHOLOGY: Argillite
 Quartzite
 Basalt
 Andesite
 Granodiorite
 Dioritic Sill

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Bowser Lake Stikine
COMMENTS: Cover rocks of the Stikinia Terrane.

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1932
SAMPLE TYPE: Rock
COMMODITY GRADE
Silver 356.0000 Grams per tonne
Copper 3.5000 Per cent
Zinc 4.0000 Per cent

COMMENTS: The sample width is 1 metre.
REFERENCE: Minister of Mines, Annual Report 1932, page 84.

CAPSULE GEOLOGY

Jurassic to Cretaceous argillites and quartzites of the Bowser Lake Group overlie basalts and andesites of the Jurassic Hazelton Group. The rocks are cut by granodiorite and diorite sills of the Cretaceous to Tertiary Coast Plutonic Complex.

Chalcopyrite, galena, sphalerite, pyrite and quartz are irregularly distributed along the argillite bed which strikes 125 degrees and dips 35 degrees southwest. The zone is up to 2 metres wide and a one metre sample assayed trace gold, 356 grams per tonne silver, 3.5 per cent copper, and 4 per cent zinc (Minister of Mines Annual Report 1932).

BIBLIOGRAPHY

EMPR AR 1931-71; *1932-84
EMPR MAP 8
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM *212, pp. 40,41; 329

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 768
REPORT: RGEN0100

BIBLIOGRAPHY

GSC P 36-17; *36-20, p. 37

DATE CODED: 1986/12/16
DATE REVISED: 1989/08/29

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 190**

NATIONAL MINERAL INVENTORY: 10319 Ag10

NAME(S): **HALLIDAY**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103109E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 38 19 N
LONGITUDE: 128 08 56 W
ELEVATION: 1580 Metres

NORTHING: 6054910
EASTING: 554932

LOCATION ACCURACY: Within 1 KM

COMMENTS: Description from Minister of Mines Annual Report 1917, page 101.

COMMODITIES: Silver Gold Copper

MINERALS

SIGNIFICANT: Galena Pyrite Chalcopyrite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic
TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb)
SHAPE: Irregular

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Andesite
Pyroxene Quartz Diorite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1917

SAMPLE TYPE: Rock

COMMODITY

GRADE

Silver

393.0000

Grams per tonne

Gold

4.1000

Grams per tonne

Copper

0.0500

Per cent

COMMENTS: The sample width is 0.8 metres.

REFERENCE: Minister of Mines, Annual Report 1917, page 101.

CAPSULE GEOLOGY

Jurassic Hazelton Group volcanics are intruded by a pyroxene quartz diorite stock of the Cretaceous to Tertiary Coast Plutonic Complex. A 0.6 to 1.2 metre wide quartz vein occurs along the contact between green andesites and red andesites of the Hazelton Group. The vein is mineralized with minor galena, pyrite, and chalcopyrite. A 0.8 metre sample across the vein assayed 343 grams per tonne silver, 4.1 grams per tonne gold, and 0.5 per cent copper (Minister of Mines Annual Report 1917).

BIBLIOGRAPHY

EMPR AR 1916-101; *1917-101; 1919-100; 1921-97
EMPR MAP 8
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329

DATE CODED: 1986/11/19
DATE REVISED: 1989/08/29

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 191**

NATIONAL MINERAL INVENTORY: 10319 Ag12

NAME(S): **COFFEE POT**, GREY COPPER

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103109E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 36 49 N
LONGITUDE: 128 08 36 W
ELEVATION: 1570 Metres

NORTHING: 6052133
EASTING: 555324

LOCATION ACCURACY: Within 500M

COMMENTS: Description from Minister of Mines Annual Report 1923, page 103.

COMMODITIES: Silver Copper Gold Lead

MINERALS

SIGNIFICANT: Tetrahedrite Chalcopyrite Galena Bornite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb)
SHAPE: Irregular

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Andesite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N

CATEGORY: Assay/analysis	YEAR: 1923
SAMPLE TYPE: Rock	
<u>COMMODITY</u>	<u>GRADE</u>
Silver	2091.0000 Grams per tonne
Gold	1.4000 Grams per tonne
Copper	3.6000 Per cent

COMMENTS: The sample width is 15 centimetres.
REFERENCE: Ministry of Mines, Annual Report 1923, page 103.

CAPSULE GEOLOGY

Volcanic rocks of the Jurassic Hazelton Group are intruded by a diorite stock of the Cretaceous to Tertiary Coast Plutonic Complex. Several narrow quartz veins, mineralized with tetrahedrite, chalcopyrite, galena, and bornite, occur in the volcanic rocks. A sample from a 15 centimetre wide vein assayed 2091 grams per tonne silver, 1.4 grams per tonne gold, and 3.6 per cent copper (Annual Report 1923).

BIBLIOGRAPHY

EMPR AR *1923-103; 1924-88-93; 1925-127-128; 1926-125
EMPR ASS RPT 15985
EMPR EXPL 1987-C359
EMPR MAP 8
GSC MAP 11-1956; 278A; 1136A; 1385A;
GSC MEM 329
GSC P 36-17
GSC SUM RPT 1923A, p. 113
CMJ Oct. 30, 1921

DATE CODED: 1986/11/10
DATE REVISED: 1989/08/29

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 192**

NATIONAL MINERAL INVENTORY:

NAME(S): **HAL**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103107E
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 24 29 N
LONGITUDE: 128 37 06 W
ELEVATION: 300 Metres

NORTHING: 6028991
EASTING: 524773

LOCATION ACCURACY: Within 1 KM

COMMENTS: Centre of claim group (Geology, Exploration and Mining in B.C. 1971, page 113).

COMMODITIES: Copper Molybdenum Zinc Iron

MINERALS

SIGNIFICANT: Chalcopyrite Molybdenite Sphalerite Magnetite

ASSOCIATED: Epidote Garnet

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated

CLASSIFICATION: Skarn Replacement Industrial Min. K07 Mo skarn
TYPE: K01 Cu skarn
 K03 Fe skarn

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Permian
Cretaceous-Tertiary

GROUP

Undefined Group

FORMATION

Unnamed/Unknown Formation

IGNEOUS/METAMORPHIC/OTHER

Coast Plutonic Complex

LITHOLOGY: Limestone
 Diorite
 Granodiorite
 Skarn

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Stikine

Plutonic Rocks

PHYSIOGRAPHIC AREA: Kitimat Trench

CAPSULE GEOLOGY

Paleozoic volcanic rocks and sediments are intruded by diorite and granodiorite of the Cretaceous to Tertiary Coast Plutonic Complex. Mineralization is likely similar to nearby showings (refer to Lady Luck - 103I 013) and consists of disseminated and patchy chalcopyrite, molybdenite, magnetite, and sphalerite in skarn zones.

BIBLIOGRAPHY

EMPR GEM *1971-113
EMPR MAP 8
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329

DATE CODED: 1986/10/08
DATE REVISED: 1989/08/29

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 193**

NATIONAL MINERAL INVENTORY:

NAME(S): **CHLORE**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103108E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 24 59 N
LONGITUDE: 128 02 06 W
ELEVATION: 300 Metres

NORTHING: 6030280
EASTING: 562621

LOCATION ACCURACY: Within 5 KM
COMMENTS: Description.

COMMODITIES: Clay

MINERALS

SIGNIFICANT: Clay
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Massive Unconsolidated
CLASSIFICATION: Sedimentary Industrial Min.
TYPE: B06 Fireclay

E07 Sedimentary kaolin

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Quaternary			Unnamed/Unknown Informal

LITHOLOGY: Clay

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Hazelton Ranges

CAPSULE GEOLOGY

A fine plastic purplish-brown clay of very absorbent quality and with a low coefficient of expansion occurs over the divide from Williams Creek to Chlore River. The clay hardens very rapidly on drying with a normal temperature and takes on a brilliant polish without burning or glazing.

BIBLIOGRAPHY

EMPR AR *1930-79-80
EMPR MAP 8; 69-1
GSC MAP 278A; 1136A; 1385A; 11-1956
GSC MEM 329

DATE CODED: 1986/12/08
DATE REVISED: / /

CODED BY: LDJ
REVISED BY:

FIELD CHECK: N
FIELD CHECK:

MINFILE NUMBER: **1031 194**

NATIONAL MINERAL INVENTORY:

NAME(S): **AIRPORT**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103107E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 28 59 N
LONGITUDE: 128 36 06 W
ELEVATION: 150 Metres
LOCATION ACCURACY: Within 1 KM
COMMENTS: Description.

NORTHING: 6037342
EASTING: 525807

COMMODITIES: Clay

MINERALS

SIGNIFICANT: Clay
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Massive Unconsolidated
CLASSIFICATION: Sedimentary Industrial Min.
TYPE: B06 Fireclay
SHAPE: Tabular

E07 Sedimentary kaolin

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Quaternary			Unnamed/Unknown Informal

LITHOLOGY: Clay

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Kitimat Trench

CAPSULE GEOLOGY

Light brown to grey, fine-grained clay is exposed with a thickness of more than 25 metres in finely stratified beds. It is very plastic and works well but tends to crack on drying. Firing characteristics are 15 per cent absorption, 3 per cent shrinkage, a cone 06 clay, and a dark salmon colour.

BIBLIOGRAPHY

EMPR BULL *30, pp. 16,55
EMPR MAP 8
GSC MAP 278A; 1136A; 1385A; 11-1956
GSC MEM 329
Falconbridge File

DATE CODED: 1986/12/08
DATE REVISED: / /

CODED BY: LDJ
REVISED BY:

FIELD CHECK: N
FIELD CHECK:

MINFILE NUMBER: **1031 195**

NATIONAL MINERAL INVENTORY:

NAME(S): **TURNER'S RANCH**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103I10E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 33 59 N
LONGITUDE: 128 37 06 W
ELEVATION: 150 Metres

NORTHING: 6046608
EASTING: 524677

LOCATION ACCURACY: Within 1 KM
COMMENTS: Description.

COMMODITIES: Clay

MINERALS

SIGNIFICANT: Clay
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Massive Unconsolidated
CLASSIFICATION: Sedimentary Industrial Min.
TYPE: B06 Fireclay
SHAPE: Tabular

E07 Sedimentary kaolin

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Quaternary			Unnamed/Unknown Informal

LITHOLOGY: Glacial Clay

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Kitimat Trench

CAPSULE GEOLOGY

Glacial clay is exposed north of Terrace. It is a fine, very plastic chocolate-brown clay.

BIBLIOGRAPHY

EMPR AR *1930-79
EMPR BULL *30, pp. 16,55
EMPR MAP 8
GSC MAP 278A; 1136A; 1385A; 11-1956
GSC MEM 329

DATE CODED: 1986/12/08
DATE REVISED: / /

CODED BY: LDJ
REVISED BY:

FIELD CHECK: N
FIELD CHECK:

MINFILE NUMBER: **1031 196**

NATIONAL MINERAL INVENTORY: 10319 Cu36

NAME(S): **BIG BOY, ANNETTE**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103109W
BC MAP:

MINING DIVISION: Omineca

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 34 29 N
LONGITUDE: 128 19 06 W
ELEVATION: 350 Metres

NORTHING: 6047682
EASTING: 544065

LOCATION ACCURACY: Within 1 KM

COMMENTS: Description from Minister of Mines Annual Report 1932, page 84.

COMMODITIES: Copper Silver

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Unknown
TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb)
SHAPE: Irregular
MODIFIER: Sheared

D03 Volcanic redbed Cu

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Andesite
Aplite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Rock

YEAR: 1932

COMMODITY	GRADE	
Silver	137.1000	Grams per tonne
Copper	7.0000	Per cent

REFERENCE: Minister of Mines, Annual Report 1932, page 84.

CAPSULE GEOLOGY

Andesitic rock of the Jurassic Hazelton Group is intruded by aplite. A shear zone in the andesite is mineralized with pyrite and minor chalcopyrite. A sample assayed trace gold, 137.1 grams per tonne silver, and 7 per cent copper (Minister of Mines, Annual Report 1932). The aplite contains seams of solid pyrite several centimetres thick.

BIBLIOGRAPHY

EMPR AR *1932-84
EMPR MAP 8
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329
GSC P 36-20, p. 39

DATE CODED: 1986/12/24
DATE REVISED: 1989/08/29

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 197**

NATIONAL MINERAL INVENTORY:

NAME(S): **DARDANELLE**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103108E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 28 53 N
LONGITUDE: 128 12 15 W
ELEVATION: 760 Metres

NORTHING: 6037375
EASTING: 551562

LOCATION ACCURACY: Within 5 KM

COMMENTS: Location centered on surface trace of limestone band on Zymoetz River, east of Dardanelle Creek as shown on GSC Open File 1136 map.

COMMODITIES: Limestone

MINERALS

SIGNIFICANT: Calcite
ASSOCIATED: Mica Clay Quartz
COMMENTS: Contained in insoluble residue.

MINERALIZATION AGE: Lower Permian

ISOTOPIC AGE: DATING METHOD: Fossil

MATERIAL DATED: Fusulinids

DEPOSIT

CHARACTER: Stratiform Massive
CLASSIFICATION: Sedimentary Evaporite Industrial Min.
TYPE: R09 Limestone
DIMENSION: 5000 Metres
COMMENTS: Limestone band trends northeast.

STRIKE/DIP: TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Lower Permian Undefined Group

Undefined Formation

DATING METHOD: Fossil
MATERIAL DATED: Fusulinids

LITHOLOGY: Limestone
Argillaceous Limestone
Granite
Granodiorite
Breccia
Tuff
Flow

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

PHYSIOGRAPHIC AREA: Hazelton Ranges

TERRANE: Stikine

COMMENTS: Situated along contact between Intermontane & Coastal Plutonic belts.

CAPSULE GEOLOGY

A 5 kilometre long, northeast trending band of limestone outcrops on both sides of the Zymoetz River, 1 to 5 kilometres west of its confluence with Dardanelle Creek. The band is bounded to the north by Jurassic aged granite and granodiorite and overlain to the south by basaltic to rhyolitic flows, tuff and breccia of the Upper Triassic to Lower Jurassic aged Telkwa Formation. The band is truncated to the northeast and southwest by several faults.

The deposit is comprised of a 15 to 30 metre thick bed of pure white, fossiliferous limestone that is conformably underlain by argillaceous limestone and overlain by 6 to 15 metres of impure limestone with large white fusulinids in a rose coloured matrix of carbonate and iron oxide. Eight samples of the pure limestone averaged 2.3 percent in insoluble residues, which contained mica, clay, silt and some quartz grains.

BIBLIOGRAPHY

GSC MAP 11-1956; 278A; 1136A
GSC MEM *329, pp. 15,16
GSC OF 1136

DATE CODED: 1986/10/27
DATE REVISED: 1989/08/16

CODED BY: LDJ
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 198**

NATIONAL MINERAL INVENTORY:

NAME(S): **MT. ATTREE**

MINING DIVISION: Omineca
Skeena
UTM ZONE: 09 (NAD 83)
NORTHING: 6032043
EASTING: 544270

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103108W
BC MAP:

LATITUDE: 54 26 03 N
LONGITUDE: 128 19 03 W
ELEVATION: 1433 Metres

LOCATION ACCURACY: Within 5 KM

COMMENTS: Location centered on surface trace of limestone outcrop east of Mt. tree as shown on GSC Open File 1136 map.

COMMODITIES: Limestone

MINERALS

SIGNIFICANT: Calcite
MINERALIZATION AGE: Lower Permian

DEPOSIT

CHARACTER: Stratiform Massive
CLASSIFICATION: Sedimentary Evaporite Industrial Min.
TYPE: R09 Limestone
DIMENSION: 5600 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: Bedding dips 45 to 67 degrees northeast to southeast.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Lower Permian	Undefined Group	Undefined Formation	

LITHOLOGY: Limestone
Greenstone
Tuff
Shale
Argillaceous Limestone
Breccia
Flow

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Hazelton Ranges

CAPSULE GEOLOGY

Lower Permian aged limestone outcrops 5.6 kilometres along a northwest trending ridge just east of Mt. Attree, 19 kilometres southwest of Terrace. The bed is conformably overlain by greenstone, tuff, shale and argillaceous limestone to the north. To the south it is thrust faulted over basaltic to rhyolitic flows, tuff and breccia of the Upper Triassic to Lower Jurassic aged Telkwa Formation. Bedding dips 45 to 67 degrees northeast to southeast.

BIBLIOGRAPHY

EMPR IND MIN FILE (Limestone Occurrences in British Columbia by J.W. McCammon, 1973, p. 31 (in Ministry Library))
GSC MAP 11-1956; 278A; 1136A
GSC MEM 329, pp. 14-17
GSC OF 1136

DATE CODED: 1986/10/27
DATE REVISED: 1989/08/16

CODED BY: LDJ
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 200**

NATIONAL MINERAL INVENTORY:

NAME(S): **ZYMOETZ RIVER**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103109W
BC MAP:
LATITUDE: 54 31 32 N
LONGITUDE: 128 25 09 W
ELEVATION: 300 Metres
LOCATION ACCURACY: Within 5 KM
COMMENTS: Location centered on site of sample taken from road cut on the south side of Zymoetz River as described in Annual Report 1962 p. 153.

MINING DIVISION: Omineca
Skeena
UTM ZONE: 09 (NAD 83)
NORTHING: 6042153
EASTING: 537592

COMMODITIES: Limestone

MINERALS

SIGNIFICANT: Calcite
ASSOCIATED: Silica
MINERALIZATION AGE: Lower Permian
ISOTOPIC AGE:

DATING METHOD: Fossil

MATERIAL DATED: Fusulinids

DEPOSIT

CHARACTER: Stratiform
CLASSIFICATION: Sedimentary
TYPE: R09 Limestone
SHAPE: Regular
MODIFIER: Faulted
DIMENSION: Metres
COMMENTS: Limestone faulted into a series of west to northwest trending thrust sheets.

Massive
Evaporite Industrial Min.

STRIKE/DIP: 123/30N
TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Permian	Undefined Group	Undefined Formation	

DATING METHOD: Fossil
MATERIAL DATED: Fusulinids

LITHOLOGY: Limestone
Argillaceous Limestone
Greenstone
Tuff
Breccia
Flow

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: SAMPLE
REPORT ON: N
CATEGORY: Assay/analysis
SAMPLE TYPE: Chip
COMMODITY: Limestone
GRADE: 49.7300 Per cent
COMMENTS: Taken across 30 metres of limestone. Grade given for CaO.
REFERENCE: Minister of Mines Annual Report 1962, page 153.

CAPSULE GEOLOGY

A bed of Lower Permian aged limestone outcrops discontinuously on both sides of the Zymoetz River between 10 and 18 kilometres east of Terrace. The bed is faulted up into a series of west to northwest trending thrust sheets up to 5 kilometres long between Permian aged greenstone, tuff and breccia and Upper Triassic to Lower Jurassic aged basaltic to rhyolitic flows, tuff and breccia of the Telkwa Formation. Bedding just northeast of the Zymoetz River strikes 123 degrees and dips 30 degrees northeast. This carbonate unit is composed of white to pale green, medium to fine grained limestone underlain by argillaceous limestone and overlain by impure, fusulinid bearing, rose coloured limestone. The limestone is locally silicious. A few andesitic dykes intrude the deposit. A sample taken across 30 metres of limestone exposed in a roadcut on the south side of the Zymoetz River contained 49.73% CaO,

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

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REPORT: RGEN0100

CAPSULE GEOLOGY

0.70% MgO, 9.28% insolubles, 0.60% R2O3, 0.70% Fe2O3, 0.019% MnO,
0.019% P2O5, 0.004% sulphur and 39.44% ignition loss (Annual Report
1962, p. 153).

BIBLIOGRAPHY

EMPR AR *1962-153
GSC MAP 11-1956; 278A; 1136A
GSC MEM 205, p. 5; 329, pp. 14-17
GSC OF 1136

DATE CODED: 1986/10/27
DATE REVISED: 1989/08/16

CODED BY: LDJ
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 201**

NATIONAL MINERAL INVENTORY:

NAME(S): **REDCAP MOUNTAIN**, KATEEN RIVER

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 10312W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 42 59 N
LONGITUDE: 129 45 36 W
ELEVATION: 1520 Metres

NORTHING: 6063497
EASTING: 451042

LOCATION ACCURACY: Within 1 KM

COMMENTS: Lineament, Map 1472 A (Geological Survey of Canada Memoir 394).

COMMODITIES: Limestone Marble Building Stone

MINERALS

SIGNIFICANT: Calcite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound
CLASSIFICATION: Sedimentary Industrial Min.
TYPE: R09 Limestone R04 Dimension stone - marble
SHAPE: Regular
MODIFIER: Folded

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Mesozoic	Undefined Group	Unnamed/Unknown Formation	

LITHOLOGY: Marble
Amphibolite Schist
Quartzite
Hornblende Biotite Schist

HOSTROCK COMMENTS: Unit 2F- Geological Survey of Canada, Map 1472A.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline PHYSIOGRAPHIC AREA: Kitimat Ranges
TERRANE: Undivided Metamorphic Assembl.
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Amphibolite

CAPSULE GEOLOGY

On the flat-topped mountain northwest of Redcap Mountain, the lithologies are predominantly dark, impure quartzite and hornblende-biotite schist with local impure marble zones up to 3 metres thick. A thick zone, up to 30 metres, contains intercalated amphibolite schists.

BIBLIOGRAPHY

EMPR IND MIN FILE (Limestone Occurrences in BC (in Ministry Library))
EMPR MAP 8
GSC MAP 12-1966; 1472A; 1136A; 1385A
GSC MEM 394, p. 31; 329
GSC P 66-33

DATE CODED: 1986/10/01
DATE REVISED: 1986/10/01

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 782
REPORT: RGEN0100

MINFILE NUMBER: **1031 202**

NATIONAL MINERAL INVENTORY:

NAME(S): **TYEE**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103104W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 12 29 N
LONGITUDE: 129 56 41 W
ELEVATION: 100 Metres

NORTHING: 6007082
EASTING: 438384

LOCATION ACCURACY: Within 1 KM

COMMENTS: Centre of L.5103, quarry base.

COMMODITIES: Granite Dimension Stone Building Stone

MINERALS

SIGNIFICANT: Unknown
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Massive
CLASSIFICATION: Magmatic Industrial Min.
TYPE: R03 Dimension stone - granite
SHAPE: Regular

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Upper Cretaceous			Ecstall Pluton

LITHOLOGY: Quartz Diorite

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Plutonic Rocks

PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)

CAPSULE GEOLOGY

The area lies in the northern part of the Ecstall pluton.
The quarry rock is a quartz diorite with a specific gravity of 2.777.

BIBLIOGRAPHY

EMPR IND MIN FILE (Granite Occurrences in BC (in Ministry Library))
GSC MAP 278A; 1136A; 1385A; 11-1956; 1868A
GSC MEM 329
CANMET RPT *#452, pp. 95,97-100

DATE CODED: 1986/09/09
DATE REVISED: 1989/08/29

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 202**

MINFILE NUMBER: **1031 203**

NATIONAL MINERAL INVENTORY:

NAME(S): **SKEENA**, GRAPHITE

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103106W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 17 59 N
LONGITUDE: 129 20 06 W
ELEVATION: 200 Metres

NORTHING: 6016921
EASTING: 478199

LOCATION ACCURACY: Within 1 KM

COMMENTS: Symbol, Geological Survey of Canada Map 278A.

COMMODITIES: Graphite Gold

MINERALS

SIGNIFICANT: Graphite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound Disseminated
CLASSIFICATION: Industrial Min.

TYPE: P04 Crystalline flake graphite P03 Microcrystalline graphite
 I02 Intrusion-related Au pyrrhotite veins

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic-Mesozoic			Central Gneiss Complex

LITHOLOGY: Gneiss
 Amphibolite

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Undivided Metamorphic Assembl.
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)

RELATIONSHIP: GRADE: Amphibolite

CAPSULE GEOLOGY

The area is underlain by biotite hornblende gneiss and amphibolite of the Paleozoic to Mesozoic Central Gneiss Complex. Graphite occurs as disseminations and along fractures within the gneissic rocks. A 120 metre sample collected across the gneissic bands assayed 3.0 per cent graphite. Other samples collected assayed up to 3.0 grams per tonne gold (Minister of Mines Annual Report 1921, page 41).

BIBLIOGRAPHY

EMPR AR *1921-41
EMPR IND MIN FILE (Graphite Occurrences in BC (in Ministry Library))
GSC MAP 278A; 1136A; 1385A; 11-1956
GSC MEM 329

DATE CODED: 1986/09/16
DATE REVISED: 1989/08/29

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 204**

NATIONAL MINERAL INVENTORY: 103115 Au10

NAME(S): **DOUGLAS CREEK**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 103115E
BC MAP:
LATITUDE: 54 50 29 N
LONGITUDE: 128 43 37 W
ELEVATION: 430 Metres
LOCATION ACCURACY: Within 1 KM
COMMENTS: Descriptions.

Open Pit

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

NORTHING: 6077176
EASTING: 517536

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Jurassic-Cretaceous	Bowser Lake	Undefined Formation	

LITHOLOGY: Gravel
Argillite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Bowser Lake

PHYSIOGRAPHIC AREA: Hazelton Ranges

CAPSULE GEOLOGY

The area is underlain by sediments of the Jurassic to Cretaceous Bowser Lake Group. Auriferous quartz veins are probable sources of placer gold in the Douglas Creek bed. The largest nugget recovered was 195 grams in 1933 (Bulletin 21). Coarse gold has been recovered from gravels above bedrock in the creek bed and from remnants of old channel ground on low bench and bar sections.

Recorded production for the period 1886-1940 totals 10,937 grams of placer gold.

BIBLIOGRAPHY

EMPR AR 1886-201, table; *1914-107-108; 1918-49-50; 1923-48; 1924-48; 1925-70; 1926-73; 1927-65; 1930-76-77; 1931-36; *1932-51; 1933-45; 1934-B11
EMPR BULL 1, 1931, pp. 47-48; 1, 1933, p. 25; 21, p. 17; *28, p. 48
EMPR MAP 8
GSC MAP 278A; 11-1956; 1136A; 1385A
GSC MEM 205, pp. 1,8; *329, pp. 69,71
GSC P 36-20, p. 11
GSC SUM RPT 1922A, p. 49; 1923A, pp. 42-44

DATE CODED: 1986/09/26
DATE REVISED: / /

CODED BY: LDJ
REVISED BY:

FIELD CHECK: N
FIELD CHECK:

MINFILE NUMBER: **1031 205**

NATIONAL MINERAL INVENTORY:

NAME(S): **PORCUPINE CREEK, QUILL CREEK**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 10316W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 56 19 N
LONGITUDE: 128 25 46 W
ELEVATION: 280 Metres

NORTHING: 6088109
EASTING: 536553

LOCATION ACCURACY: Within 500M
COMMENTS: Descriptions.

COMMODITIES: Gold Silver

MINERALS

SIGNIFICANT: Gold Pyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE: Jurassic-Cretaceous GROUP: Bowser Lake FORMATION: Undefined Formation IGNEOUS/METAMORPHIC/OTHER:

LITHOLOGY: Gravel
Argillite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Bowser Lake

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis YEAR: 1931
SAMPLE TYPE: Bulk Sample
COMMODITY:

COMMODITY	GRADE	
Silver	27.4000	Grams per tonne
Gold	39.0000	Grams per tonne

COMMENTS: Sampling of coarse pyrite from sluice operations.
REFERENCE: Geological Survey of Canada Memoir 329, page 72.

CAPSULE GEOLOGY

The area is underlain by sediments of the Jurassic to Cretaceous Bowser Lake Group. Auriferous quartz veins are probable sources of coarse gold found in benches along Porcupine and Quill creeks. Sampling of coarse pyrite from sluicing operations, assayed 39 grams per tonne gold, and 27.4 grams per tonne silver (Geological Survey of Canada, Memoir 329).

BIBLIOGRAPHY

EMPR AR 1931-79-80
EMPR BULL 21, p. 18; 28, p. 43
EMPR MAP 8; 69-1
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 212, p. 54; *329, p. 72

DATE CODED: 1986/09/29
DATE REVISED: / /

CODED BY: LDJ
REVISED BY:

FIELD CHECK: N
FIELD CHECK:

MINFILE NUMBER: **1031 206**

NATIONAL MINERAL INVENTORY:

NAME(S): **FIDDLER CREEK**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 103116W
BC MAP:
LATITUDE: 54 50 29 N
LONGITUDE: 128 27 06 W
ELEVATION: 200 Metres
LOCATION ACCURACY: Within 5 KM
COMMENTS: Fiddler Creek.

Open Pit

MINING DIVISION: Omineca
UTM ZONE: 09 (NAD 83)
NORTHING: 6077279
EASTING: 535214

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE GROUP
Jurassic-Cretaceous Bowser Lake

FORMATION
Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Glacial Gravel
Argillite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Bowser Lake

PHYSIOGRAPHIC AREA: Hazelton Ranges

CAPSULE GEOLOGY

The area is underlain by argillites of the Jurassic to Cretaceous Bowser Lake Group. Auriferous quartz veins are probable sources for placer gold along Fiddler Creek.

BIBLIOGRAPHY

EMPR AR 1927-65
EMPR BULL 28, pp. 43,44
EMPR MAP 8; 69-1
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329, pp. 69,71
GSC SUM RPT 1923A, p. 42

DATE CODED: 1986/09/29
DATE REVISED: / /

CODED BY: LDJ
REVISED BY:

FIELD CHECK: N
FIELD CHECK:

MINFILE NUMBER: **1031 207**

NATIONAL MINERAL INVENTORY:

NAME(S): **SKEENA RIVER**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103109W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 44 49 N
LONGITUDE: 128 16 16 W
ELEVATION: 120 Metres

NORTHING: 6066876
EASTING: 546919

LOCATION ACCURACY: Within 1 KM

COMMENTS: Description from Minister of Mines Annual Report 1932, page 82.

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Cretaceous-Tertiary			Coast Plutonic Complex

LITHOLOGY: Sand
Granodiorite

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Plutonic Rocks

PHYSIOGRAPHIC AREA: Hazelton Ranges

CAPSULE GEOLOGY

The area is underlain by granodiorite of the Cretaceous to Tertiary Coast Plutonic Complex. Locally, fine gold occurs on a bench within silt and fine sand along the Skeena River.

BIBLIOGRAPHY

EMPR AR 1932-86
EMPR MAP 8; 69-1
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 212; 329
GSC P 36-20

DATE CODED: 1986/09/29
DATE REVISED: 1989/08/29

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 208**

NATIONAL MINERAL INVENTORY:

NAME(S): **KLEANZA CREEK**, GOLD CREEK, CASSIAR HYDRAULIC

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103109W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 35 39 N
LONGITUDE: 128 22 16 W
ELEVATION: 120 Metres

NORTHING: 6049814
EASTING: 540634

LOCATION ACCURACY: Within 1 KM

COMMENTS: Descriptions from Minister of Mines Annual Reports.

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Jurassic
Cretaceous-Tertiary

GROUP

Hazelton

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Coast Plutonic Complex

LITHOLOGY: Glacial Gravel
Argillite
Granodiorite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

Plutonic Rocks

PHYSIOGRAPHIC AREA: Hazelton Ranges

CAPSULE GEOLOGY

The area is underlain by granodiorite of the Cretaceous to Tertiary Coast Plutonic Complex and minor argillite of the Jurassic Hazelton Group. Placer gold occurs in drift-filled preglacial channels along Kleanza Creek.

BIBLIOGRAPHY

EMPR AR 1912-115; 1913-109; *1914-128-129,175,Map, p. 121; 1922-97,98; 1932-86
EMPR BULL 21, p. 18; 28, p. 43
EMPR MAP 8; 69-1
GSC MAP 278A; 11-1956; 1136A; 1385A
GSC MEM *212, p. 54; *329, pp. 69,71,72
GSC P 36-20, p. 11
Placer Dome File

DATE CODED: 1986/09/29
DATE REVISED: 1989/08/29

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 209**

NATIONAL MINERAL INVENTORY:

NAME(S): **GOLDEN CACHE**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103109W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 42 29 N
LONGITUDE: 128 18 36 W
ELEVATION: 230 Metres

NORTHING: 6062523
EASTING: 5444458

LOCATION ACCURACY: Within 1 KM

COMMENTS: Description from Minister of Mines Annual Report 1932, page 83.

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal
TYPE: I02 Intrusion-related Au pyrrhotite veins

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Andesite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Hazelton Ranges

CAPSULE GEOLOGY

A quartz vein containing free gold occurs in andesite of the Lower Jurassic Hazelton Group.

BIBLIOGRAPHY

EMPR AR *1932-83
EMPR MAP 8; 69-1
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329
GSC P 36-20, p. 38

DATE CODED: 1986/12/24
DATE REVISED: 1989/08/29

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 210**

NATIONAL MINERAL INVENTORY:

NAME(S): **ALGOMA**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103109W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 41 59 N
LONGITUDE: 128 16 06 W
ELEVATION: 1000 Metres

NORTHING: 6061623
EASTING: 547152

LOCATION ACCURACY: Within 1 KM

COMMENTS: Description from Minister of Mines Annual Report 1931, page 71.

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Epigenetic
TYPE: D03 Volcanic redbed Cu

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Lower Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Andesite
Granodiorite Dike

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Hazelton Ranges

CAPSULE GEOLOGY

Andesite flows of the Lower Jurassic Hazelton Group are intruded by a 60 metre wide granodiorite dyke. Copper mineralization is disseminated within the volcanic rocks.

BIBLIOGRAPHY

EMPR AR *1931-71
EMPR MAP 8; 69-1
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM *212, pp. 36-37; 329
GSC P 36-20, p. 38; 36-17

DATE CODED: 1986/12/24
DATE REVISED: 1989/08/29

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 211**

NATIONAL MINERAL INVENTORY:

NAME(S): **BURN**, KALUM LAKE, PORTLAND

MINING DIVISION: Skeena

STATUS: Showing
 REGIONS: British Columbia
 NTS MAP: 103110W
 BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 43 59 N
 LONGITUDE: 128 49 11 W
 ELEVATION: 260 Metres

NORTHING: 6065102
 EASTING: 511609

LOCATION ACCURACY: Within 500M

COMMENTS: Located 32 kilometres north of Terrace; location of second showing from Assessment Report 13303, Figure 3.

COMMODITIES: Gold Silver Copper Lead

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite
 ASSOCIATED: Quartz
 ALTERATION: Epidote Chlorite Hematite
 ALTERATION TYPE: Propylitic Silicific'n Epidote
 MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
 CLASSIFICATION: Epigenetic Hydrothermal
 TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au I02 Intrusion-related Au pyrrhotite veins

HOST ROCK

DOMINANT HOSTROCK: Plutonic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Jurassic-Cretaceous	Bowser Lake	Undefined Formation	
Cretaceous-Tertiary			Coast Plutonic Complex

LITHOLOGY: Granodiorite
 Argillite

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
 TERRANE: Plutonic Rocks
 Bowser Lake
 PHYSIOGRAPHIC AREA: Kitimat Trench

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
 YEAR: 1984
 CATEGORY: Assay/analysis
 SAMPLE TYPE: Grab
 COMMODITY GRADE
 Silver 80.1000 Grams per tonne
 Gold 16.7000 Grams per tonne
 Copper 0.5000 Per cent
 Lead 0.1500 Per cent

REFERENCE: Assessment Report 13303.

CAPSULE GEOLOGY

The area is underlain by Upper Jurassic to Lower Cretaceous sediments of the Bowser Lake Group comprised mainly of argillite, greywackes and conglomerates. Generally, the sediments strike east-west and dip 75 degrees to the north. Stocks comprised of granodiorite, diorite and quartz monzonite of the Late Cretaceous to Tertiary Coast Plutonic Complex intrude the Bowser Lake sediments. Alteration in the granodioritic intrusive is directly related to the density of veining and shearing. The predominant type is propylitic with lesser silicification and epidote-hematite alteration. Locally, mineralization consisting of epigenetic quartz veining with pyrite, chalcopyrite, tetrahedrite and galena with associated values in gold and silver occurs on the west shore of Kitsumkalum Lake. This vein-type mineralization is exposed on the Kalum Lake-Portland property (refer to Portland - 103I 019). Similar mineralization occurs about 2.25 kilometres southwest of the main Portland showing. The area is underlain by granodiorite which shows intense propylitic alteration caused by a high density of quartz veining and shearing. The quartz veining hosts pyrite and chalcopyrite and a grab sample from a trench assayed up to 16.8 grams per tonne gold and 242.1 grams per tonne silver (Cavey and Chapman, 1987).

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 792
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR AR 1922-47; 1923-47; 1925-69; 1927-63; 1930-74
EMPR ASS RPT 8299, *13303, *16026
EMPR EXPL 1980-397; 1984-377; 1987-C359
EMPR MAP 8; 69-1
EMPR PF (*Collins, D.A. and Arnold, R.R., (1987): Report on the Kalum Lake Property, in Statement of Material Facts #31/88 for Terracamp Developments Ltd., Apr. 25, 1988; *Cavey, G. and Chapman, J., (1987): Report on the 1987 Drilling Program for the Kalum Lake Claims, in Prospectus for Terracamp Developments Ltd., Jul. 22, 1987; Statement of Material Facts #52/88 for Terracamp Developments Ltd., Jun. 15, 1988)
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 205; 329
GSC P 36-17, p. 22
GCNL #174, 1987
PR REL Eagle Plains Resources Ltd., Feb.20, 2003

DATE CODED: 1986/09/23
DATE REVISED: 1989/08/10

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 212**

NATIONAL MINERAL INVENTORY:

NAME(S): **BOLT**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103101W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 10 29 N
LONGITUDE: 128 26 11 W
ELEVATION: 1020 Metres

NORTHING: 6003108
EASTING: 536789

LOCATION ACCURACY: Within 500M

COMMENTS: Mineralized vein, Map 4 (Assessment Report 10625).

COMMODITIES: Copper Molybdenum Silver

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Molybdenite Specularite Magnetite
ASSOCIATED: Quartz Specularite
ALTERATION: Pyrite Limonite Hematite Kaolinite Chlorite
ALTERATION TYPE: Oxidation Argillic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Epigenetic Porphyry Hydrothermal
TYPE: L04 Porphyry Cu ± Mo ± Au L05 Porphyry Mo (Low F- type)
SHAPE: Irregular
COMMENTS: Quartz vein width.

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Cretaceous-Tertiary			Coast Plutonic Complex

LITHOLOGY: Granodiorite
Granite
Dioritic Dike
Aplite Dike

HOSTROCK COMMENTS: Leucogranite.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Plutonic Rocks

PHYSIOGRAPHIC AREA: Kitimat Ranges

INVENTORY

ORE ZONE: VEIN

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Chip

YEAR: 1982

COMMODITY	GRADE	
Silver	6.6000	Grams per tonne
Copper	0.4400	Per cent
Molybdenum	0.0700	Per cent

COMMENTS: The average of 3 samples taken across a 5 metre quartz vein.
REFERENCE: Assessment Report 10625.

CAPSULE GEOLOGY

Light coloured granodiorite and intrusive leucogranite of the Upper Cretaceous to Early Tertiary age Coast Plutonic Complex are cut by quartz veins and aplite, diorite, and diabase dykes. Alteration minerals such as pyrite, limonite, hematite, kaolinite and chlorite are widespread, particularly within the granodiorite.

The quartz veins are mineralized with varying amounts of specular hematite, magnetite, pyrite, and lesser amounts of disseminated chalcopyrite and molybdenite. A 5 metre wide quartz vein, cutting granodiorite, assayed 0.44 per cent copper, 0.07 per cent molybdenum, and 7.2 grams per tonne silver (Assessment Report 10625). One kilometre north northeast of the main quartz vein is an 800 metre by 800 metre primary dispersion halo underlain by the leucogranite, with rock chip values up to 0.06 per cent molybdenum and 0.025 per cent copper (Assessment Reports 9387, 10625).

BIBLIOGRAPHY

EMPR ASS RPT 8578, *9387, *10625
EMPR EXPL 1980-391; 1982-370

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 794
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR MAP 8
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329

DATE CODED: 1986/10/03
DATE REVISED: 1989/08/29

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 213**

NATIONAL MINERAL INVENTORY: 103115 Au11

NAME(S): **MISTY**, MOSS, CREEK

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103I10W
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 44 54 N
LONGITUDE: 128 53 26 W
ELEVATION: 1000 Metres

NORTHING: 6066792
EASTING: 507045

LOCATION ACCURACY: Within 500M

COMMENTS: Mineralized showings from Assessment Report 10827, Figure 5, located on the south slopes of Mt. Allard.

COMMODITIES: Gold Silver

MINERALS

SIGNIFICANT: Pyrite Gold Arsenopyrite
ASSOCIATED: Quartz
ALTERATION: Limonite Hematite
ALTERATION TYPE: Oxidation Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Stockwork
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: I02 Intrusion-related Au pyrrhotite veins I05 Polymetallic veins Ag-Pb-Zn±Au
SHAPE: Irregular
DIMENSION: STRIKE/DIP: 120/90 TREND/PLUNGE:
COMMENTS: Vein system.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Upper Jurassic
Cretaceous-Tertiary

GROUP

Bowser Lake

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Coast Plutonic Complex

LITHOLOGY: Argillite
Siltstone
Diorite
Shale
Sandstone
Siltstone
Feldspar Porphyry

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Bowser Lake

Plutonic Rocks

PHYSIOGRAPHIC AREA: Kitimat Ranges

INVENTORY

ORE ZONE: MISTY VEIN

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Chip

YEAR: 1982

COMMODITY

GRADE

Gold

21.6000

Grams per tonne

COMMENTS: The sample width is 60 centimetres.
REFERENCE: Assessment Report 15455.

ORE ZONE: CREEK VEIN

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Channel

YEAR: 1987

COMMODITY

GRADE

Gold

3.2200

Grams per tonne

COMMENTS: Channel sample taken from the Creek vein.
REFERENCE: Property File - Saunders, 1987.

CAPSULE GEOLOGY

Upper Jurassic Bowser Lake Group sediments are intruded by Cretaceous to Tertiary granodioritic to dioritic intrusions of the Coast Plutonic Complex. The sediments are comprised mainly of argillite, shale, greywacke, conglomerate, sandstone and siltstone which are cut by Tertiary age feldspar porphyry dykes which trend east to northeast in direction.

CAPSULE GEOLOGY

Mineralization occurs in quartz veins in shear structures and in quartz stringers in areas of fractured rock. Some of these veins are in the sediments and others are hosted by the intrusives. The gold-bearing quartz veins include tiny stringers, occasionally in areas of intense silicification; veins which range a few centimetres in width and a few metres in length; and two large veins, the 'Creek' and the 'Moss', which are greater than 1.0 metre in width and about 200 metres in length. These larger veins contain sugary quartz with pyrite, arsenopyrite, and locally, intense limonitic staining. Gold is reported to occur as flakes, nuggets, and occasionally as dendritic masses having crystal faces. Mimetite may be present in some of the quartz veins.

The Moss vein averages 1.0 metre in width, strikes west-northwest and dips moderately to the northeast. The Creek vein strikes north-northwest, dips steeply to the northeast, and varies from 1.0 to 2.5 metres in width. Four of eight channel samples taken from this vein assayed between 0.27 and 3.22 grams per tonne gold (Saunders, 1987).

Quartz stringer zones are exposed in trenches on the Misty 1 claim. A chip sample taken across 60 centimetres assayed 21.6 grams per tonne gold. Drilling below the trenches returned lower values in gold. One drill core sample assayed 4.7 grams per tonne gold across 77 centimetres. Poor drill core recoveries and the coarse nature of the gold may account for the poor correlation between surface and drill core assay results (Assessment Report 15455).

BIBLIOGRAPHY

EMPR ASS RPT 8201, 9239, 10128, *10827, *15455, 16302, 17952
EMPR EXPL 1979-253-254; 1980-395; 1981-211; 1982-371; 1987-C359;
1988-C201
EMPR MAP 8
EMPR PF (*Saunders, C.R. (1987): Report on the Misty Property in
Prospectus for Galloway Resources Ltd., May 27, 1988)
EMR MP CORPFILE (Mascot Gold Mines Limited)
GSC MAP 11-1956, 278A, 1136A, 1385A
GSC MEM 329; 394
PR REL Eagle Plains Resources Ltd., Feb.20, 2003
Placer Dome File

DATE CODED: 1986/09/23
DATE REVISED: 1989/08/10

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 214**

NATIONAL MINERAL INVENTORY:

NAME(S): **BILL**, MOUNTAIN GOAT, ZYM

MINING DIVISION: Omineca

STATUS: Showing
 REGIONS: British Columbia
 NTS MAP: 103108E
 BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 25 39 N
 LONGITUDE: 128 08 36 W
 ELEVATION: Metres

NORTHING: 6031425
 EASTING: 555577

LOCATION ACCURACY: Within 500M

COMMENTS: Mineralized sample location, Figure 326-3 (Assessment Report 12728).

COMMODITIES: Copper Silver Gold

MINERALS

SIGNIFICANT:	Bornite	Chalcopyrite	Chalcocite	Copper	Pyrite
ASSOCIATED:	Quartz	Calcite			
ALTERATION:	Malachite	Epidote	Carbonate		
ALTERATION TYPE:	Epidote	Carbonate		Oxidation	
MINERALIZATION AGE:	Unknown				

DEPOSIT

CHARACTER:	Vein	Disseminated	Breccia	
CLASSIFICATION:	Hydrothermal			
TYPE:	D03	Volcanic redbed Cu	L01	Subvolcanic Cu-Ag-Au (As-Sb)
SHAPE:	Irregular			
MODIFIER:	Fractured			

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Tuff
 Andesite
 Rhyolite
 Breccia

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
 TERRANE: Stikine

PHYSIOGRAPHIC AREA: Hazelton Ranges

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis
 SAMPLE TYPE: Chip

YEAR: 1984

<u>COMMODITY</u>	<u>GRADE</u>	
Silver	1.7100	Grams per tonne
Copper	1.2400	Per cent

COMMENTS: The sample width is 30 centimetres.
 REFERENCE: Assessment Report 12728.

CAPSULE GEOLOGY

The area is underlain by felsic to basic tuffs, breccias, flows and fragmental volcanic rocks of the Jurassic age Hazelton Group. The strata trends generally north-south and dips moderately to the east. Several fault related, felsic to basic dykes cut the volcanics.

Mineralization, consisting of pyrite, chalcopyrite, bornite, native copper, and malachite, occurs as disseminations and in quartz-carbonate veins, related to major north-south, steeply east dipping structural trends. The quartz-carbonate veins are accompanied by intense epidote and carbonate alteration of the wallrock. Isolated showings occur over an area of about 1 kilometre. A 0.3 metre chip sample of a pod of native copper in a quartz-carbonate vein assayed 1.24 per cent copper and 1.7 grams per tonne silver (Assessment Report 12728). A fault related breccia zone, 650 metres to the east, assayed 0.04 per cent copper and 0.5 grams per tonne silver over 5 metres and a 2.0 metre sample, 440 metres to the southeast assayed 0.28 per cent copper and 2.6 grams per tonne silver (Assessment Report 12728). A sample 700 metres to the northwest assayed 1.06 per cent copper (Assessment Report 10541) and trenching on the south side of a creek, 200 metres to the south, revealed zones of minerali-

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RUN TIME: 12:06:33

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PAGE: 798
REPORT: RGEN0100

CAPSULE GEOLOGY

zation, earlier known as the Mountain Goat Showing. A 1.5 metre sample assayed 0.35 per cent copper, 17.1 grams per tonne silver and 2.4 grams per tonne gold (Assessment Report 2394).

BIBLIOGRAPHY

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EMPR EXPL 1984-375; 1987-C358
EMPR GEM 1970-189-193
EMPR MAP 8; 69-1
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329

DATE CODED: 1986/11/04
DATE REVISED: 1989/08/29

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 215**

NATIONAL MINERAL INVENTORY:

NAME(S): **DICK, HEPLER, KIT 1-2**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103I14E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 51 19 N
LONGITUDE: 129 12 06 W
ELEVATION: 440 Metres

NORTHING: 6078706
EASTING: 487053

LOCATION ACCURACY: Within 500M
COMMENTS: Main showing, Figure 2.

COMMODITIES: Gold Silver Copper Zinc

MINERALS

SIGNIFICANT: Pyrrhotite Sphalerite Chalcopyrite Galena Pyrite
Tetrahedrite Bornite Arsenopyrite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au I02 Intrusion-related Au pyrrhotite veins
SHAPE: Regular
MODIFIER: Faulted
DIMENSION: STRIKE/DIP: 160/40W TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Upper Jurassic	Bowser Lake	Undefined Formation	Ponder Pluton
Eocene			

ISOTOPIC AGE: 47 Ma
DATING METHOD: Potassium/Argon
MATERIAL DATED: Biotite

LITHOLOGY: Argillite
Greywacke
Quartzite
Lamprophyre Dike
Biotite Hornblende Diorite
Andesite Dike

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Bowser Lake
METAMORPHIC TYPE: Contact
COMMENTS: Bowser Lake rocks overlie the Stikinia Terrane rock assemblage.
PHYSIOGRAPHIC AREA: Kitimat Ranges
RELATIONSHIP: Plutonic Rocks
GRADE: Hornfels

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1985
SAMPLE TYPE: Grab
COMMODITY: Gold GRADE: 22.0000 Grams per tonne
REFERENCE: Assessment Report 14572.

CAPSULE GEOLOGY

Upper Jurassic sedimentary rocks of the Bowser Lake Group are intruded by the Tertiary Ponder Pluton. The sediments are dominated by pyritic, carbonaceous argillite, which is hornfelsed near the intrusive contact, and minor beds of greywacke and quartzite. The intrusives are comprised of a medium-grained biotite-hornblende granodiorite which is cut by aplite, andesite and lamprophyre dykes. A major north trending fault is cut by post-mineralization crossfaults.

The main showing is a 0.3 to 1.0 metre wide quartz-sulphide vein at the contact between the sediments and granodiorite. The vein is independent of the complex contact relationships. Mineralization consists of coarse pods and disseminations of pyrite, pyrrhotite, sphalerite, chalcopyrite, galena, bornite, arsenopyrite and tetrahedrite. It has been traced for 20 metres and grades up to 18.5

CAPSULE GEOLOGY

grams per tonne gold over a thickness of 0.35 metres (Assessment Report 14572). The north trending vein dips 30 to 45 degrees to the west.

A possible continuation of the vein occurs 60 metres to the north, striking north-south for 30 metres and grading up to 22 grams per tonne gold over a 0.30 metre thickness. A small vein, 180 metres north of the main showing, assayed 1.37 grams per tonne gold over 1.0 metres. A sample of quartz-sulphide vein float assayed 70 grams per tonne gold, 82 grams per tonne silver, 1.12 per cent copper and 1.51 per cent zinc (Assessment Report 14572).

BIBLIOGRAPHY

EMPR ASS RPT 8406, 14140, *14572
EMPR EXPL 1980-396; 1985-C373,C374
EMPR PF (*Prospectus for Commander Resources Ltd., dated Feb.9, 1989)
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 394; 329
GCNL #120, 1981; #142, 1982
N MINER Mar.5, 1981

DATE CODED: 1986/09/17
DATE REVISED: 1987/07/23

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 216**

NATIONAL MINERAL INVENTORY:

NAME(S): **APRIL AND MAY**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103109W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 38 09 N
LONGITUDE: 128 25 36 W
ELEVATION: 100 Metres

NORTHING: 6054420
EASTING: 537007

LOCATION ACCURACY: Within 1 KM

COMMENTS: Description from Minister of Mines Annual Report 1932, page 83.

COMMODITIES: Lead

Zinc

MINERALS

SIGNIFICANT: Pyrite Galena Sphalerite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
SHAPE: Irregular
MODIFIER: Sheared

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Lower Jurassic

GROUP

Hazelton

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Volcanic
Aplite Dike

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Hazelton Ranges

CAPSULE GEOLOGY

Volcanic rocks of the Lower Jurassic Hazelton Group are intruded by an aplite dyke. A 1.5 metre wide shear zone is mineralized with pyrite, galena, sphalerite, and quartz.

BIBLIOGRAPHY

EMPR AR *1932-83
EMPR MAP 8; 69-1
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329
GSC P 36-20, p. 23

DATE CODED: 1986/12/24
DATE REVISED: 1989/08/29

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 217**

NATIONAL MINERAL INVENTORY:

NAME(S): **BARITE** BILLY 5

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103102E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 07 49 N
LONGITUDE: 128 43 36 W
ELEVATION: 600 Metres

NORTHING: 5998051
EASTING: 517861

LOCATION ACCURACY: Within 500M

COMMENTS: West of Bowbys Creek. Sample location (Assessment Report 15528).

COMMODITIES: Barite

MINERALS

SIGNIFICANT: Barite
ALTERATION: Silica Pyrite
ALTERATION TYPE: Silicific'n Pyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Massive
CLASSIFICATION: Volcanogenic Industrial Min.
TYPE: I10 Vein barite E17 Sediment-hosted barite

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic	Hazelton	Telkwa	

LITHOLOGY: Tuff
Breccia
Andesitic Agglomerate
Rhyolite Agglomerate

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Stikine
METAMORPHIC TYPE: Regional
PHYSIOGRAPHIC AREA: Kitimat Ranges
RELATIONSHIP:
GRADE:

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1986
SAMPLE TYPE: Grab
COMMODITY
Barite GRADE 37.7000 Per cent
REFERENCE: Assessment Report 15528.

CAPSULE GEOLOGY

White to grey, dense to thinly laminated semi-massive barite occurs in foliated, silicified and pyritized breccia and tuff. The barite showing appears to be concordantly underlain by a coarse quartz-eye rhyolite. Andesitic and rhyolitic agglomerates occur along strike to the south. These rocks are part of the Lower Jurassic Hazelton Group, Telkwa Formation. Selected samples of the mineralization assayed up to 37.7 per cent barium (64 per cent BaSO4) (Assessment Report 15528).

BIBLIOGRAPHY

EMPR ASS RPT *15528, *16693, 16664
EMPR EXPL *1987-B67-B70,C358; 1988-C200
EMPR PF (Laramide Resources Statement of Material Facts #78/87,
May 29, 1987, pp. 4-6)
GSC MAP 1136A; 1385A; 11-1956; 278A
GSC MEM 329
GCNL #34, 1987

DATE CODED: 1987/07/21
DATE REVISED: 1987/07/21

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 218**

NATIONAL MINERAL INVENTORY:

NAME(S): **BILLY, GOLD, KITIMAT**

MINING DIVISION: Skeena

STATUS: Showing
 REGIONS: British Columbia
 NTS MAP: 103102E
 BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 07 59 N
 LONGITUDE: 128 43 06 W
 ELEVATION: 600 Metres

NORTHING: 5998362
 EASTING: 518404

LOCATION ACCURACY: Within 500M

COMMENTS: Located between Bowbyes Creek and the Wedeene River, about 10 kilometres northwest of Kitimat. Showings on property from same zone along about 1 kilometre of strike.

COMMODITIES: Gold Silver Lead Zinc

MINERALS

SIGNIFICANT: Galena Pyrite
 ASSOCIATED: Pyrite
 ALTERATION: Epidote Quartz Chlorite Silica Pyrite
 ALTERATION TYPE: Silicific'n Epidote Pyrite
 MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stockwork Breccia
 CLASSIFICATION: Epigenetic
 TYPE: I02 Intrusion-related Au pyrrhotite veins 105 Polymetallic veins Ag-Pb-Zn±Au
 DIMENSION: 4000 Metres STRIKE/DIP: 045/60 TREND/PLUNGE:
 COMMENTS: Strike length up to 4 kilometres defined by surface exploration.

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic	Hazelton	Telkwa	

LITHOLOGY: Lapilli Tuff
 Coarse Grained Volcanic Breccia
 Basaltic Dike
 Hornblende Porphyritic Andesitic Dike
 Quartz Feldspar Porphyritic Dike

HOSTROCK COMMENTS: Intermediate tuffs are mapped as Telkwa Formation by Woodsworth and Van der Heyden (GSC OF 1136) and are generally altered.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline PHYSIOGRAPHIC AREA: Kitimat Ranges
 TERRANE: Stikine
 METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist
 COMMENTS: Occurrence is within eastern portion of the Coast Crystalline Belt.

INVENTORY

ORE ZONE: SAMPLE	REPORT ON: N
CATEGORY: Assay/analysis	YEAR: 1987
SAMPLE TYPE: Grab	
COMMODITY	GRADE
Silver	32.9000 Grams per tonne
Gold	5.1800 Grams per tonne
Lead	0.7000 Per cent
Zinc	0.2000 Per cent

REFERENCE: Assessment Report 15528.

CAPSULE GEOLOGY

The Billy property is underlain by intermediate lapilli-lithic tuffs and medium to coarse-grained volcanic breccias of the Lower Jurassic Hazelton Group, Telkwa Formation. There are at least three phases of dyking in the area clearly defined by crosscutting and offsetting relationships. The dykes are dark green, massive basalt, hornblende-porphyritic andesite, and bleached white quartz eye-feldspar porphyritic. Fracturing is common in the area with some schistose-fabric, chlorite-rich rocks as well. Regional low-grade metamorphism has overprinted the geology in the area and "fresh" rocks are very rare on the property. Surrounding the property are granite to granodiorite plutons of the Cretaceous to Tertiary Coast Crystalline Belt.

CAPSULE GEOLOGY

The exploration targets are the "gold" and "quartz-sericite" zones. They lie on the same structurally controlled fracture zone which strikes northeast and dips northwest. The gold zone has 5 metres of pervasively silicified, epidotized, and brecciated rock with minor pyrite and trace galena. The quartz-sericite zone has up to 70 metres of 10 to 20 per cent pyrite in a sericite schistose rock. The zones are separated by about 1 kilometre. Surface sampling of the gold zone ran 2.4 grams per tonne gold over 5 metres. Drill intersections were less significant with 0.27 grams per tonne over 2 metres. A grab sample near the base of the zone assayed 5.18 grams per tonne gold, 32.9 grams per tonne silver, 0.7 per cent lead and 0.2 per cent zinc (Assessment Report 15528). Gold mineralization does not appear to extend along strike or down dip.

BIBLIOGRAPHY

EMPR ASS RPT *15528, 16664, *16693
EMPR EXPL *1987-B67-B70,C358; 1988-C200
EMPR PF (Laramide Resources Statement of Material Facts #78/87,
May 29, 1987, pp. 4-6)
GSC MAP 1136A; 1385A; 278A; 11-1956
GSC MEM 329
GCNL #34, 1987

DATE CODED: 1987/07/21
DATE REVISED: 1987/12/11

CODED BY: LDJ
REVISED BY: MHG

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **1031 219**

NATIONAL MINERAL INVENTORY:

NAME(S): **KWINAMASS PEAK**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103I12E 103I11W 103I13E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 42 29 N
LONGITUDE: 129 35 06 W
ELEVATION: 1250 Metres

NORTHING: 6062462
EASTING: 462307

LOCATION ACCURACY: Within 5 KM

COMMENTS: A northwest striking zone about 35 kilometres in length. Coordinates for centre of zone (Area 1, Figure 9, Open File 1988-26).

COMMODITIES: Sillimanite Garnet

MINERALS

SIGNIFICANT: Sillimanite Garnet
ASSOCIATED: Biotite Muscovite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Layered Stratabound
CLASSIFICATION: Syngenetic Metamorphic Industrial Min.
TYPE: P02 Kyanite-sillimanite schists
SHAPE: Tabular
MODIFIER: Folded

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Unknown			Central Gneiss Complex

LITHOLOGY: Sillimanite Garnet Mica Gneiss

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Plutonic Rocks
METAMORPHIC TYPE: Regional
PHYSIOGRAPHIC AREA: Kitimat Ranges
RELATIONSHIP: Syn-mineralization
GRADE: Amphibolite

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1982
SAMPLE TYPE: Grab
COMMODITY GRADE
Garnet 15.0000 Per cent
Sillimanite 50.0000 Per cent
COMMENTS: Garnet-sillimanite gneisses.
REFERENCE: Geological Survey of Canada, Memoir 394.

CAPSULE GEOLOGY

Pelitic schists and gneisses of uncertain age and affiliation occur in abundance as inliers and adjacent to granitic plutons in the Prince Rupert-Skeena River-Douglas Channel-Hectate Strait area, north-western British Columbia. The Central Gneiss Complex of the Prince Rupert-Skeena map area contains layers of biotite-garnet-sillimanite-muscovite gneisses 30 to 300 metres thick in the area south of Mount Ponder and southeast of Redcap Mountain, the area northeast of Kwinamass Peak and north of the headwaters of the the Kateen River (Area 1, Figure 9, Open File 1988-26). Within this zone sillimanite forms up to 50 per cent of the rock and garnets up to 0.75 centimetres in diameter form an additional 15 to 20 per cent (Geological Survey of Canada, Memoir 394).

BIBLIOGRAPHY

EMPR OF *1988-26, p. 15
GSC MAP 3-1965; 12-1966; 1136A; 1385A
GSC MEM *394; 329
GSC P 66-33

DATE CODED: 1988/03/28
DATE REVISED: 1989/02/01

CODED BY: JP
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 220**

NATIONAL MINERAL INVENTORY: 10313 Sil1

NAME(S): **KHTADA LAKE**, KHTADA GARNET-SILLIMANITE

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103103W
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 07 54 N
LONGITUDE: 129 27 06 W
ELEVATION: 610 Metres

NORTHING: 5998265
EASTING: 470487

LOCATION ACCURACY: Within 1 KM

COMMENTS: Part of a 20 kilometre zone, striking northwest-southeast. Location from showings on Khtada Lake (Area 2, Figure 9, Open File 1988-26).

COMMODITIES: Sillimanite Garnet

MINERALS

SIGNIFICANT: Sillimanite Garnet
ASSOCIATED: Biotite Quartz Feldspar
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Layered Stratabound
CLASSIFICATION: Syngenetic Metamorphic Industrial Min.
TYPE: P02 Kyanite-sillimanite schists

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic			Central Gneiss Complex

LITHOLOGY: Garnet Sillimanite Gneiss
Biotite Quartz Feldspar Gneiss
Biotite Hornblende Gneiss
Amphibolite

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)
TERRANE: Undivided Metamorphic Assembl. Plutonic Rocks
METAMORPHIC TYPE: Regional RELATIONSHIP: Syn-mineralization GRADE: Amphibolite

CAPSULE GEOLOGY

The area around Khtada Lake is dominantly underlain by grey biotite, plus or minus hornblende gneiss, amphibolite and minor sillimanite, plus or minus garnet gneiss of the Paleozoic (?) Central Gneiss Complex. The garnet-sillimanite-quartz-feldspar gneisses occur in a zone approximately 20 kilometres in length, extending from Kwin-itsa (refer to 104B 011) southeast through Khtada Lake to Big Falls Creek (Area 2, Figure 9, Open File 1988-26), apparently forming a continuous zone.

The garnet-sillimanite-biotite-quartz-feldspar gneisses outcrop along the north and south shores of Khtada Lake and on a ridge top 3 kilometres south of the south end of Khtada Lake. These gneisses host between 5 to 30 per cent garnet and 5 to 30 per cent sillimanite. The sillimanite occurs in densely felted layers ranging from 0.2 to 2.5 centimetres in thickness (Geological Survey of Canada, Memoir 394).

BIBLIOGRAPHY

EMPR OF *1988-26, p. 15
GSC MAP 3-1965; 12-1966; 1136A; 1385A; 1868A
GSC MEM *394; 329
GSC P 66-33

DATE CODED: 1988/02/01
DATE REVISED: 1989/08/29

CODED BY: LLD
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 808
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR ASS RPT *16860
EMPR EXPL 1988-C200
EMPR MAP 8
EMPR OF 1999-2
GSC MAP 11-1956; 278A; 1136A; 1385A
GSC MEM 329

DATE CODED: 1989/08/14
DATE REVISED: 1989/08/18

CODED BY: LLD
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 222**

NATIONAL MINERAL INVENTORY: 103115 Ag2

NAME(S): **HUNTER**, BLUE GROUSE, RELIEF

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103115W
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 59 09 N
LONGITUDE: 128 48 57 W
ELEVATION: 427 Metres

NORTHING: 6093230
EASTING: 511785

LOCATION ACCURACY: Within 1 KM

COMMENTS: Showings are located on the south side of Egan Creek, a tributary of the Cedar River.

COMMODITIES: Silver Lead Zinc Copper

MINERALS

SIGNIFICANT: Tetrahedrite Galena Sphalerite Chalcopyrite
ASSOCIATED: Quartz Calcite
ALTERATION: Silica Carbonate
ALTERATION TYPE: Silicific'n Carbonate
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Breccia
CLASSIFICATION: Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
DIMENSION: STRIKE/DIP: 310/55N TREND/PLUNGE:
COMMENTS: Mineralized vein strikes 310 degrees and dips 55 degrees northeast.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Jurassic-Cretaceous Bowser Lake Undefined Formation

LITHOLOGY: Bedded Sandstone
Greywacke
Graphitic Shale
Breccia
Aplite Dike

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline PHYSIOGRAPHIC AREA: Kitimat Trench
TERRANE: Bowser Lake

INVENTORY

ORE ZONE: VEIN REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1930
SAMPLE TYPE: Grab
COMMODITY GRADE
Silver 78.8500 Grams per tonne
Copper 0.8000 Per cent
Lead 3.2000 Per cent
Zinc 0.5000 Per cent

COMMENTS: A 0.6 metre sample of the best mineralized section of the vein.
REFERENCE: Minister of Mines Annual Report 1930, page 76.

CAPSULE GEOLOGY

The area is underlain by Jurassic to Cretaceous Bowser Lake Group sediments comprised of bedded sandstones, greywacke, graphitic shales and breccia. Locally, a fine-grained aplite dyke cuts the sediments.

On the Hunter claim group, a quartz vein cuts brecciated sediments and strikes 310 degrees and dips 55 degrees to the northeast. The vein averages about 76 centimetres in width, and locally contains calcite. Mineralization consists of irregular patches and specks of tetrahedrite, chalcopyrite, galena and sphalerite. In 1930, a 0.6 metre sample of the best mineralized section of the vein assayed trace gold, 78.85 grams per tonne silver, 3.2 per cent lead, 0.5 per cent zinc and 0.8 per cent copper (Minister of Mines Annual Report 1930, page 76).

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EMPR AR 1918-50; 1919-43; 1920-42; 1921-45; 1922-49; 1923-48;

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

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GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 810
REPORT: RGEN0100

BIBLIOGRAPHY

1924-48;1925-70; 1927-64; *1928-73; *1930-76
EMPR BULL 1, 1932 p. 21
EMPR MAP 8
GSC MAP 11-1956; 278A; *1136A; 1385A
GSC MEM 205, pp. 9-11; 329
GSC SUM RPT 1922A, p. 48

DATE CODED: 1989/08/08
DATE REVISED: 1989/08/29

CODED BY: LLD
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1031 223**

NATIONAL MINERAL INVENTORY:

NAME(S): **TERRACE AIRPORT**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103107E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 27 55 N
LONGITUDE: 128 41 11 W
ELEVATION: 91 Metres

NORTHING: 6035336
EASTING: 520327

LOCATION ACCURACY: Within 5 KM

COMMENTS:

COMMODITIES: Limestone

MINERALS

SIGNIFICANT: Calcite
ASSOCIATED: Silica
MINERALIZATION AGE: Lower Permian
ISOTOPIC AGE:

DATING METHOD: Fossil

MATERIAL DATED: Various fossils

DEPOSIT

CHARACTER: Stratiform
CLASSIFICATION: Sedimentary
TYPE: R09 Limestone

Massive
Evaporite Industrial Min.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Permian	Undefined Group	Undefined Formation	

DATING METHOD: Fossil
MATERIAL DATED: Various Fossils

LITHOLOGY: Limestone

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Kitimat Trench

CAPSULE GEOLOGY

Three small hills of Lower Permian aged limestone project above the surrounding Pleistocene sediments along a road 5 to 8 kilometres west of the Terrace Airport. The deposits are composed of medium grained, flesh grey, silicious limestone.

BIBLIOGRAPHY

EMPR IND MIN FILE (Limestone Occurrences in British Columbia by J.W. McCammon, 1973, p. 31 (in Ministry Library))
GSC MAP 11-1956; 278A; 1136A
GSC MEM 329, pp. 14-17
GSC OF 1136

DATE CODED: 1989/08/16
DATE REVISED: / /

CODED BY: PSF
REVISED BY:

FIELD CHECK: N
FIELD CHECK:

MINFILE NUMBER: **1031 224**

NATIONAL MINERAL INVENTORY:

NAME(S): **ZYMOETZ RIVER ZEOLITE**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103108E 093L05W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 24 59 N
LONGITUDE: 128 00 06 W
ELEVATION: Metres

NORTHING: 6030310
EASTING: 564784

LOCATION ACCURACY: Within 5 KM

COMMENTS: Zeolitized unit in the upper member of the Telkwa Formation, location is the approximate center of the area (Property File - Mihalynuk and Ghent, 1986).

COMMODITIES: Zeolite

MINERALS

SIGNIFICANT: Laumontite
MINERALIZATION AGE: Triassic-Jurassic

DEPOSIT

CHARACTER: Massive
CLASSIFICATION: Metamorphic
TYPE: D01 Open-system zeolites

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Triassic-Jurassic	Hazelton	Telkwa	

LITHOLOGY: Tuff
Lapilli Tuff
Vitric Ash Tuff
Crystal Ash Tuff

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Hazelton Ranges

RELATIONSHIP: Syn-mineralization GRADE: Zeolite

CAPSULE GEOLOGY

The Zymoetz River Zeolite occurrence comprises the zeolitized portion of the upper member of the Telkwa Formation (Upper Triassic to Middle Jurassic Hazelton Group).

The upper member contains 190 metres of red zeolitized lithic lapilli and vitric ash tuffs and 115 metres of zeolitized quartz and feldspar-rich (15 and 50 per cent respectively) crystal ash tuff. In some of the layers, laumontite is the main component.

BIBLIOGRAPHY

EMPR PF (*Mihalynuk and Ghent 1986): Stratigraphy, deformation and low grade metamorphism of the Telkwa Formation)
Mihalynuk, M. (1986) M. Sc. Thesis, University of Calgary

DATE CODED: 1994/01/12
DATE REVISED: / /

CODED BY: DEJ
REVISED BY:

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103J 001**

NATIONAL MINERAL INVENTORY:

NAME(S): **PEARSE IS**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103J16W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 47 19 N
LONGITUDE: 130 23 06 W
ELEVATION: 30 Metres

NORTHING: 6072148
EASTING: 410941

LOCATION ACCURACY: Within 500M

COMMENTS: Limestone zone, Map 1472A (Geological Survey of Canada Memoir 394).
Pre 1986 103I-J210.

COMMODITIES: Limestone

MINERALS

SIGNIFICANT: Calcite

ASSOCIATED: Biotite Hornblende Garnet

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Massive Stratabound
CLASSIFICATION: Sedimentary Industrial Min.

TYPE: R09 Limestone

SHAPE: Regular

DIMENSION: 0003 Metres

COMMENTS: Width of zones.

STRIKE/DIP:

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic-Mesozoic	Unnamed/Unknown Group	Unnamed/Unknown Formation	

LITHOLOGY: Limestone
Pelitic Schist

HOSTROCK COMMENTS: Unit 2c - Geological Survey of Canada Map 1472A.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline

PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)

TERRANE: Undivided Metamorphic Assembl.

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Amphibolite

CAPSULE GEOLOGY

Several zones of limestone, 1 to 3 metres thick, occur along the southeast coast of Pearse Island. The limestone is intercalated with pelitic schists comprising mainly of biotite, hornblende and garnet.

Although the age of the strata (Unit 2C), in which the limestone occurs, or the time of their metamorphism is unknown, the unit probably includes Paleozoic and possibly Early Mesozoic strata (Geological Survey of Canada Memoir 394).

BIBLIOGRAPHY

EMPR IND MIN FILE (Limestone Occurrences in British Columbia by
McCammon, J.W. 1973, p. 33 (in Ministry Library))
GSC MAP 12-1966; 1385A; 1472A
GSC MEM 394, p. 31
GSC P 66-33

DATE CODED: 1986/09/02
DATE REVISED: / /

CODED BY: LDJ
REVISED BY:

FIELD CHECK: N
FIELD CHECK:

MINFILE NUMBER: **103J 002**

NATIONAL MINERAL INVENTORY:

NAME(S): **WALES ISLAND**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103J10E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 42 49 N
LONGITUDE: 130 33 16 W
ELEVATION: 10 Metres

NORTHING: 6064032
EASTING: 399862

LOCATION ACCURACY: Within 500M

COMMENTS: Shore line exposure of marble, Map 1472A (Geological Survey of Canada, Memoir 394), Wales Island.

COMMODITIES: Limestone Marble Building Stone

MINERALS

SIGNIFICANT: Calcite
ASSOCIATED: Hornblende
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Massive Stratabound
CLASSIFICATION: Sedimentary Industrial Min.
TYPE: R09 Limestone
SHAPE: Regular
MODIFIER: Folded
DIMENSION: 10 Metres
COMMENTS: Maximum extent of zone.

STRIKE/DIP: TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic			Central Gneiss Complex

LITHOLOGY: Marble
Hornblende Gneiss

HOSTROCK COMMENTS: Unit 1d - Geological Survey of Canada, Map 1472A.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Undivided Metamorphic Assembl.
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Teslin Plateau

RELATIONSHIP: GRADE: Amphibolite

CAPSULE GEOLOGY

Tightly folded marble zones, up to 10 metres thick, interlayered with hornblende gneiss occur within the Paleozoic Central Gneiss Complex. The zone is traced intermittently for 8 kilometres in a northwest trend along the southwest part of Wales Island.

BIBLIOGRAPHY

EMPR IND MIN FILE (Limestone Occurrences in British Columbia by McCammon, J.W. 1973, p. 33 (in Ministry Library))
GSC MAP 12-1966; 1385A; 1472A
GSC MEM 394, p. 14
GSC P 66-33

DATE CODED: 1986/09/02
DATE REVISED: 1988/12/22

CODED BY: LDJ
REVISED BY: JNR

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103J 003**

NATIONAL MINERAL INVENTORY:

NAME(S): **DUNDAS ISLAND**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103J10W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 36 19 N
LONGITUDE: 130 52 16 W
ELEVATION: 10 Metres

NORTHING: 6052477
EASTING: 379143

LOCATION ACCURACY: Within 1 KM

COMMENTS: Limestone zone, Map 1472A (Geological Survey of Canada, Memoir 394).
North end of Dundas Island.

COMMODITIES: Limestone

MINERALS

SIGNIFICANT: Calcite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Massive
CLASSIFICATION: Sedimentary
TYPE: R09 Limestone
SHAPE: Regular
DIMENSION: 3500 Metres
COMMENTS: Length of zone.

Stratabound
Industrial Min.

STRIKE/DIP: TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic-Mesozoic	Undefined Group	Unnamed/Unknown Formation	

LITHOLOGY: Limestone
Chlorite Amphibole Schist

HOSTROCK COMMENTS: Unit 3f - Geological Survey of Canada, Map 1472A.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Alexander
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Milbanke Strandflat

RELATIONSHIP: GRADE: Greenschist

CAPSULE GEOLOGY

A limestone zone, trending northeast for about 3.5 kilometres occurs in chlorite amphibole schist, within an unnamed Paleozoic-Mesozoic formation on the north end of Dundas Island.

BIBLIOGRAPHY

EMPR IND MIN FILE (Limestone Occurrences in British Columbia by
McCammon, J.W. 1973, page 33 (in Ministry Library))
GSC MAP 12-1966; 1385A; 1472A
GSC MEM 394
GSC P 66-33

DATE CODED: 1986/09/02
DATE REVISED: 1988/12/22

CODED BY: LDJ
REVISED BY: JNR

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 816
REPORT: RGEN0100

MINFILE NUMBER: **103J 004**

NATIONAL MINERAL INVENTORY:

NAME(S): **GRACE POINT**, WORK CHANNEL

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103J09W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 34 49 N
LONGITUDE: 130 20 36 W
ELEVATION: 30 Metres

NORTHING: 6048916
EASTING: 413177

LOCATION ACCURACY: Within 1 KM
COMMENTS: Grace Point, Work Channel.

COMMODITIES: Limestone Marble Building Stone

MINERALS

SIGNIFICANT: Calcite
ASSOCIATED: Hornblende
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Massive Stratabound
CLASSIFICATION: Sedimentary Industrial Min.
TYPE: R09 Limestone
SHAPE: Regular
MODIFIER: Folded
DIMENSION: 10 Metres
COMMENTS: Maximum width.

STRIKE/DIP: TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic			Central Gneiss Complex

LITHOLOGY: Marble
Hornblende Gneiss

HOSTROCK COMMENTS: Unit 1c - Geological Survey of Canada, Map 1472A.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Alexander
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)

RELATIONSHIP: GRADE: Amphibolite

CAPSULE GEOLOGY

Tightly folded marble zones, up to 10 metres thick, are inter-layered with hornblende gneiss of the Paleozoic Central Gneiss Complex.

BIBLIOGRAPHY

EMPR IND MIN FILE (Limestone Occurrences in British Columbia by McCammon, J.W. 1973, p. 33 (in Ministry Library))
GSC MAP 12-1966; 1385A; 1472A
GSC MEM 394, p. 14
GSC P 66-33

DATE CODED: 1986/09/02
DATE REVISED: 1988/12/22

CODED BY: LDJ
REVISED BY: JNR

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103J 004**

MINFILE NUMBER: **103J 005**

NATIONAL MINERAL INVENTORY:

NAME(S): **MINERAL REEF**, POOR BOY, GRANT 1

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103J07W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 27 59 N
LONGITUDE: 130 45 41 W
ELEVATION: 1 Metres

NORTHING: 6036842
EASTING: 385842

LOCATION ACCURACY: Within 500M

COMMENTS: Shaft, Map K-1 (Assessment Report 12777). East Coast Dunira Island.

COMMODITIES: Zinc Lead Copper Silver

MINERALS

SIGNIFICANT: Sphalerite Galena Chalcopyrite
ASSOCIATED: Quartz Carbonate Actinolite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Concordant
CLASSIFICATION: Hydrothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au G04 Besshi massive sulphide Cu-Zn
SHAPE: Regular
MODIFIER: Sheared
DIMENSION:
COMMENTS: Shear zone. STRIKE/DIP: 060/75S TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic-Mesozoic	Undefined Group	Unnamed/Unknown Formation	

LITHOLOGY: Tuff
Rhyolite
Pyroxene Porphyry

HOSTROCK COMMENTS: Unit 3 - Geological Survey of Canada, Map 1472A.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline PHYSIOGRAPHIC AREA: Milbanke Strandflat
TERRANE: Alexander
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE	REPORT ON: N
CATEGORY: Assay/analysis	YEAR: 1984
SAMPLE TYPE: Rock	
COMMODITY	GRADE
Copper	0.0930 Per cent
Lead	1.1600 Per cent
Zinc	2.5300 Per cent

REFERENCE: Assessment Report 12777.

CAPSULE GEOLOGY

The area is underlain by several interfingering and lensoid bodies of pyroxene porphyry tuff and rhyolite of an unnamed Mesozoic to Paleozoic formation. Sphalerite, galena and chalcopyrite mineralization occur in carbonate and conformable quartz veins within shears, oriented 060 degrees and dipping 75 degrees southeast. Northwest of the intense shear zone, the shears are oriented 020 degrees.

A sample of sheared pyroxene porphyry with conformable carbonate lenses assayed 5.8 per cent zinc, 0.18 per cent lead and 0.115 per cent copper. A sample of sheared rhyolite, 80 metres to the north-east, assayed 2.53 per cent zinc, 1.16 per cent lead and 0.093 per cent copper (Assessment Report 12777).

A shaft is reported at this showing (Assessment Report 22764).

BIBLIOGRAPHY

EMPR ASS RPT 12197, *12777, 16036, 22764
EMPR EXPL 1983-504; 1984-378; 1987-C362
GSC MAP 12-1966; 1385A; 1472A
GSC MEM 394

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 818
REPORT: RGEN0100

BIBLIOGRAPHY

GSC P 66-33

DATE CODED: 1986/09/05
DATE REVISED: 1988/12/22

CODED BY: LDJ
REVISED BY: JNR

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103J 006**

NATIONAL MINERAL INVENTORY:

NAME(S): **KATHLEEN 3**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103J07W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 25 39 N
LONGITUDE: 130 44 46 W
ELEVATION: 5 Metres

NORTHING: 6032491
EASTING: 386725

LOCATION ACCURACY: Within 500M

COMMENTS: Sample location (Assessment Report 16036). Located near the south-east shore of Dunira Island.

COMMODITIES: Zinc Copper

MINERALS

SIGNIFICANT: Pyrite Pyrrhotite Chalcopyrite Sphalerite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated Stratiform
CLASSIFICATION: Sedimentary
TYPE: G04 Besshi massive sulphide Cu-Zn

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE: Paleozoic-Mesozoic
GROUP: Undefined Group
FORMATION: Unnamed/Unknown Formation
IGNEOUS/METAMORPHIC/OTHER:

LITHOLOGY: Graphitic Shale

HOSTROCK COMMENTS: Unit 3b - Geological Survey of Canada Map 1472A.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Alexander

PHYSIOGRAPHIC AREA: Milbanke Strandflat

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Rock

YEAR: 1987

COMMODITY: Zinc

GRADE: 0.5200 Per cent

REFERENCE: Assessment Report 16036.

CAPSULE GEOLOGY

The area is underlain by an overturned sequence of mafic and felsic volcanoclastics and volcanic rock with thin graphitic shale beds (Unit 3) that may include Early Paleozoic to Early Mesozoic strata. The shale contains disseminated pyrite, pyrrhotite, chalcopyrite and likely sphalerite. A sample assayed 0.52 per cent zinc (Assessment Report 16036).

BIBLIOGRAPHY

EMPR ASS RPT *16036, 22764
EMPR OF 1999-2
GSC MAP 12-1966; 1385A; 1472A
GSC MEM 394
GSC P 66-33

DATE CODED: 1987/09/08
DATE REVISED: / /

CODED BY: LDJ
REVISED BY:

FIELD CHECK: N
FIELD CHECK:

MINFILE NUMBER: **103J 007**

NATIONAL MINERAL INVENTORY:

NAME(S): **TUCK INLET**, TUCK INLET GARNET

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103J08W 103J08E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 24 29 N
LONGITUDE: 130 15 06 W
ELEVATION: 1 Metres

NORTHING: 6029645
EASTING: 418760

LOCATION ACCURACY: Within 1 KM

COMMENTS: Twelve kilometre long zone along shores of Tuck Inlet (Open File 1988-26, Figure 9).

COMMODITIES: Garnet

MINERALS

SIGNIFICANT: Garnet
ASSOCIATED: Kyanite Mica
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Layered Stratabound
CLASSIFICATION: Metamorphic Syngenetic Industrial Min.
TYPE: P02 Kyanite-sillimanite schists
SHAPE: Tabular
MODIFIER: Folded

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic-Mesozoic			Unnamed/Unknown Informal

LITHOLOGY: Mica Pelitic Schist

HOSTROCK COMMENTS: Lower Mesozoic and/or Paleozoic metasedimentary rocks of amphibolite facies (Unit 2, Figure 9, Open File 1988-26).

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Alexander
METAMORPHIC TYPE: Regional
PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)
RELATIONSHIP: Syn-mineralization
GRADE: Amphibolite

CAPSULE GEOLOGY

On Tsimpsean Peninsula, Lower Mesozoic (?) and/or Paleozoic (?) metasedimentary rocks of amphibolite facies occur. Outcroppings of micaceous pelitic schists along the shores of Tuck Inlet and near Port Simpson, may contain up to 43 per cent garnet porphyroblasts and minor kyanite. Along the shores of Tuck Inlet, the garnet porphyroblasts range up to 5 centimetres in diameter (Geological Survey of Canada, Memoir 394).

BIBLIOGRAPHY

EMPR OF *1988-26, p. 15
GSC MAP 3-1965; 12-1966; 1385A; 1472A
GSC MEM 394
GSC P 66-33

DATE CODED: 1988/03/28
DATE REVISED: 1989/01/23

CODED BY: JP
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103J 008**

NATIONAL MINERAL INVENTORY:

NAME(S): **ENGLESTONE**, MORNING STAR

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103J08W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 24 29 N
LONGITUDE: 130 17 06 W
ELEVATION: 1 Metres

NORTHING: 6029684
EASTING: 416597

LOCATION ACCURACY: Within 1 KM
COMMENTS: West side Tuck Inlet.

COMMODITIES: Silver Gold Copper

MINERALS

SIGNIFICANT: Pyrite Pyrrhotite Chalcopyrite
ASSOCIATED: Quartz
ALTERATION TYPE: Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb) I06 Cu±Ag quartz veins

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Permian-Triassic	Undefined Group	Unnamed/Unknown Formation	

LITHOLOGY: Graphitic Schist

HOSTROCK COMMENTS: Unit 2d - Geological Survey of Canada, Map 1472A.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Alexander
METAMORPHIC TYPE: Regional
PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)
RELATIONSHIP:
GRADE: Amphibolite

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1928
SAMPLE TYPE: Chip
COMMODITY
Silver 75.4000 Grams per tonne
Gold 0.7000 Grams per tonne
COMMENTS: 1.2 metre chip sample.
REFERENCE: Minister of Mines, Annual Report 1928-70.

CAPSULE GEOLOGY

The area is underlain by pyritic, graphitic schists, or a Permo-Triassic unnamed formation striking north-northwest and dipping 45 degrees east. Several shear zones with quartz veins carrying pyrrhotite and minor chalcopyrite occur in the schists. The veins are 1 to 2 metres wide and a 1.2 metre sample of a vein assayed 75.4 grams per tonne silver and an estimated 0.7 grams per tonne gold (Minister of Mines, Annual Report 1928-70).

BIBLIOGRAPHY

EMPR AR *1928-70,71; 1930-73; 1931-36
GSC MAP 12-1966; 1385A; 1472A
GSC MEM 394
GSC P 66-33

DATE CODED: 1986/09/05
DATE REVISED: 1988/12/22

CODED BY: LDJ
REVISED BY: JNR

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103J 009**

NATIONAL MINERAL INVENTORY:

NAME(S): **DRUMHARVEY**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103J08W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 22 59 N
LONGITUDE: 130 15 46 W
ELEVATION: 180 Metres

NORTHING: 6026877
EASTING: 417989

LOCATION ACCURACY: Within 1 KM

COMMENTS: West of Prince Rupert Harbour, east of Mount Morse.

COMMODITIES: Silver Gold Lead Zinc Copper

MINERALS

SIGNIFICANT: Sphalerite Galena Pyrite Pyrrhotite Chalcopyrite
ASSOCIATED: Quartz
ALTERATION: Chlorite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
COMMENTS: Quartz vein.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Permian-Triassic Undefined Group Unnamed/Unknown Formation

LITHOLOGY: Felsite Schist

HOSTROCK COMMENTS: Unit 2e - Geological Survey of Canada, Map 1472A.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)
TERRANE: Alexander
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Amphibolite

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1929
SAMPLE TYPE: Rock
COMMODITY GRADE
Silver 85.7000 Grams per tonne
Gold 0.3400 Grams per tonne
Lead 4.3000 Per cent
Zinc 2.8200 Per cent

COMMENTS: The sample width is 3.7 metres.
REFERENCE: Minister of Mines, Annual Report 1929, pages 75-76.

CAPSULE GEOLOGY

Sphalerite, galena, pyrite, pyrrhotite and minor chalcopyrite occur within an unnamed Permo-Triassic formation along small chloritized seams in quartz veins within felsic schist. The vein is about 120 metres long, in a west direction. A 3.7 metre sample reportedly assayed 85.7 grams per tonne silver, 0.34 grams per tonne gold, 4.3 per cent lead, 2.82 per cent zinc and trace copper (Minister of Mines Annual Report 1929, page 75).

BIBLIOGRAPHY

EMPR AR *1929-75,76; 1930-73; 1931-36
GSC MAP 12-1966; 1385A; 1472A
GSC MEM 394
GSC P 66-33

DATE CODED: 1986/09/05
DATE REVISED: 1988/12/22

CODED BY: LDJ
REVISED BY: JNR

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103J 010**

NATIONAL MINERAL INVENTORY:

NAME(S): **PRINCE RUPERT**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103J08W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 17 29 N
LONGITUDE: 130 17 06 W
ELEVATION: Metres

NORTHING: 6016704
EASTING: 416360

LOCATION ACCURACY: Within 5 KM

COMMENTS: The exact location is not reported but is in the vicinity of Prince Rupert (Geological Survey of Canada Memoir 47).

COMMODITIES: Clay

MINERALS

SIGNIFICANT: Clay
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated Massive
CLASSIFICATION: Sedimentary Industrial Min.
TYPE: B06 Fireclay

E07 Sedimentary kaolin

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Quaternary	Undefined Group	Undefined Formation	

LITHOLOGY: Clay

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Undivided Metamorphic Assembl.
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Milbanke Strandflat

RELATIONSHIP:

GRADE: Amphibolite

CAPSULE GEOLOGY

Glacial clays occur near Prince Rupert. Underlying bedrock is amphibolite facies metasedimentary rock of an unnamed Permo-Triassic formation.

The clay though gritty is very plastic. A sample tested worked up with 22 per cent of water to a mass that could be easily molded. Its average shrinkage is 5.1 per cent and average tensile strength is 126 pounds per square inch. The clay burns to a deep but not bright red body and would likely make a good serviceable brick (Geological Survey of Canada Memoir 47).

BIBLIOGRAPHY

GSC MAP 12-1966; 1385A; 1472A
GSC MEM *47, p. 63; 394
GSC P 66-33
Placer Dome File

DATE CODED: 1986/09/09
DATE REVISED: 1989/03/01

CODED BY: LDJ
REVISED BY: GJP

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103J 011**

NATIONAL MINERAL INVENTORY:

NAME(S): **FREDERICK POINT**, DIGBY ISLAND

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103J08W
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 15 19 N
LONGITUDE: 130 21 46 W
ELEVATION: Metres

NORTHING: 6012782
EASTING: 411221

LOCATION ACCURACY: Within 500M

COMMENTS: Location centered on Frederick Point, south end of Digby Island
(Canmet Report 452, page 172).

COMMODITIES: Limestone Marble Building Stone

MINERALS

SIGNIFICANT: Calcite
ASSOCIATED: Amphibole Mica
ALTERATION: Mica
MINERALIZATION AGE: Permian-Triassic

DEPOSIT

CHARACTER: Stratiform Massive
CLASSIFICATION: Sedimentary Industrial Min.
TYPE: R09 Limestone
DIMENSION: 180 Metres STRIKE/DIP: 130/35N TREND/PLUNGE:
COMMENTS: Strikes 115 to 130 degrees, dips 35 to 65 degrees northeast.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Permian-Triassic	Undefined Group	Unnamed/Unknown Formation	

LITHOLOGY: Limestone
Marble
Graphitic Schist
Amphibolite Schist

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline PHYSIOGRAPHIC AREA: Milbanke Strandflat
TERRANE: Alexander
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Amphibolite

CAPSULE GEOLOGY

A band of limestone, at least 180 metres wide, is exposed at Frederick Point on the south end of Digby Island, 1.5 kilometres southwest of Prince Rupert. The limestone is enclosed in graphitic schist within a broad belt of Permian-Triassic meta-sediments in the Coast Plutonic Complex. The limestone strikes 115 to 130 degrees and dips 35 to 65 degrees northwest.

The deposit is generally composed of white to bluish grey, medium grained, banded limestone containing thin zones of darker, more resistant siliceous limestone that become more numerous towards the margins of the band. Some secondary mica is developed in the limestone.

BIBLIOGRAPHY

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GSC MEM 394
GSC P 66-33
CANMET RPT *#452, Vol.5, pp. 127,173,174; *#811, Part 5, p. 175

DATE CODED: 1986/09/03
DATE REVISED: 1989/07/28

CODED BY: LDJ
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103J 012**

NATIONAL MINERAL INVENTORY:

NAME(S): **SMITH ISLAND**, COLUMBIA CELLULOSE

STATUS: Past Producer Open Pit

MINING DIVISION: Skeena

REGIONS: British Columbia

NTS MAP: 103J01E

BC MAP:

LATITUDE: 54 10 09 N

LONGITUDE: 130 12 16 W

ELEVATION: 150 Metres

LOCATION ACCURACY: Within 500M

COMMENTS: Limestone quarry Map 1472A (Geological Survey of Canada, Memoir 394).
Located on the north side of Tsum Tsadai Inlet on Smith Island.

UTM ZONE: 09 (NAD 83)

NORTHING: 6003014

EASTING: 421371

COMMODITIES: Limestone Marble Building Stone

MINERALS

SIGNIFICANT: Calcite Graphite
ASSOCIATED: Quartz Mica Garnet Staurolite Tremolite
Pyrite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Massive Stratabound
CLASSIFICATION: Sedimentary Evaporite Industrial Min.

TYPE: R09 Limestone

SHAPE: Regular

DIMENSION:

COMMENTS: Discontinuous band.

STRIKE/DIP: 050/53N

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Permian-Triassic

GROUP

Undefined Group

FORMATION

Unnamed/Unknown Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY:

Marble
Limestone
Quartzite
Biotite Muscovite Schist

HOSTROCK COMMENTS: Unit 2f - Geological Survey of Canada, Map 1472A.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline

TERRANE: Alexander

METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Teslin Plateau

RELATIONSHIP:

GRADE: Amphibolite

INVENTORY

ORE ZONE: QUARRY

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1944

SAMPLE TYPE: Rock

COMMODITY

GRADE

Limestone

97.5500

Per cent

COMMENTS: Sample of purer limestone. Grade given for CaCO3.

REFERENCE: Canmet Report #811, page 176, Sample 39.

CAPSULE GEOLOGY

A limestone band at least 30 metres wide enclosed in Permo-Triassic biotite-muscovite schists follows the north shore of Tsum Tsadai Inlet on the west side of Smith Island for 1.0 kilometres. The bed strikes 050 degrees and dips 53 degrees northeast.

The deposit is comprised of bluish white, coarse grained limestone that becomes interbedded with schist along the margins of the band. The deposit is frequently contaminated with thin beds of highly siliceous limestone and calcareous quartzite. Some brown mica, white tremolite and pyrite are also present in the limestone. A sample of the purer limestone contained 54.64 per cent CaO, 0.38 per cent MgO, 0.98 per cent SiO2, 0.11 per cent Al2O3, 0.08 per cent Fe2O3 and nil sulphur (Canada Bureau of Mines Report 811, p. 176, Sample 39).

An extension of the band outcrops 1.5 kilometres to the east and continues along the north shore of the inlet for 2.5 kilometres. A quarry was opened on this part of the deposit in 1950 by Columbia Cellulose Company. The quarry was abandoned in 1952 because of the

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 826
REPORT: RGEN0100

CAPSULE GEOLOGY

impurities in the limestone. Total production between 1950 and 1952 amounted to 9459 tonnes.

BIBLIOGRAPHY

EMPR AR 1948-189; 1950-223,224; 1951-220
GSC MAP 12-1966; 1385A; 1472A
GSC MEM 394, pp. 28,30,98
GSC P 66-33, pp. 22,23
GSC SUM RPT 1922A, p. 12
CANMET RPT #452, pp. 127,172; *#811, pp. 174-176

DATE CODED: 1986/09/03
DATE REVISED: 1988/12/22

CODED BY: LDJ
REVISED BY: JNR

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103J 013**

NATIONAL MINERAL INVENTORY: 103J2 Au3

NAME(S): **EAGLE** DAWSON, EDYE,
PORCHER ISLAND

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103J02E
BC MAP:

MINING DIVISION: Skeena
UTM ZONE: 09 (NAD 83)

LATITUDE: 54 01 29 N
LONGITUDE: 130 35 36 W
ELEVATION: 75 Metres

NORTHING: 5987447
EASTING: 395624

LOCATION ACCURACY: Within 500M

COMMENTS: Dawson tunnel, Map page 71 (Minister of Mines Annual Report 1930).
Located near Surf Point Mine (103J 017), northwest corner of Porcher Island.

COMMODITIES: Gold Silver

MINERALS

SIGNIFICANT: Pyrite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I02 Intrusion-related Au pyrrhotite veins

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE

Paleozoic-Mesozoic
Cretaceous-Tertiary

GROUP

Undefined Group

FORMATION

Unnamed/Unknown Formation

IGNEOUS/METAMORPHIC/OTHER

Coast Plutonic Complex

LITHOLOGY: Greenstone
Quartz Diorite
Basic Dike

HOSTROCK COMMENTS: Unit 3 - Geological Survey of Canada, Map 1472A.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Alexander
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Milbanke Strandflat

RELATIONSHIP:

GRADE: Greenschist

INVENTORY

ORE ZONE: DRILLHOLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Drill Core
COMMODITY

YEAR: 1988

Gold

GRADE
8.9100

Grams per tonne

COMMENTS: Over a 4.3 metre drill section.

REFERENCE: George Cross Newsletter #92, May 12, 1988.

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Grab
COMMODITY

YEAR: 1932

Silver

GRADE

31.0000
120.0000

Grams per tonne
Grams per tonne

REFERENCE: Minister of Mines, Annual Report 1932, page 50.

CAPSULE GEOLOGY

The Eagle showing occurs near the northwest corner of Porcher Island near the Surf Point Mine (103J 017).

Mineralization occurs at the contact between a Cretaceous to Tertiary quartz diorite stock and Paleozoic-Mesozoic greenstones from an unnamed formation. Auriferous pyrite occurs in a north-east striking quartz vein, within a shear zone up to 0.6 metres wide. The vein occurs largely in the greenstone and is cut-off by a basic dyke. A representative sample of the mineralization assayed 120 grams per tonne gold and 31 grams per tonne silver (Minister of Mines Annual Report 1932, page 50).

Cathedral Gold's new Edye Zone appears to be coincidentally located

CAPSULE GEOLOGY

with the old Eagle (Dawson) workings, both occurring about 400 metres west-northwest of the Surf Point Mine (AT Zone, 103J 017). Drill hole 11 apparently intersected the old Eagle (Dawson) zone, cutting a quartz vein in diorite adjacent a basalt dyke (Assessment Report 16735).

The Edge Zone is reported to have similar mineralization to that of the AT Zone (Surf Point Mine). At least seven drill holes have been completed on the Edge Zone with best intersection grading 8.91 grams per tonne gold over 4.3 metres (George Cross Newsletter #92, May 12, 1988).

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*1932-50; 1933-42; 1934-B8,B9; 1935-B26
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EMPR BULL No. 1, 1932, pp. 21,29,39
EMPR EXPL 1975-176,177; 1977-208; 1978-236; 1979-256-257; 1980-401;
1985-C375
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GSC MEM 394
GSC P 66-33
GSC SUM RPT *1922A, pp. 27-29
GCNL #51,*#92, 1988

DATE CODED: 1986/09/12
DATE REVISED: 1989/02/28

CODED BY: LDJ
REVISED BY: GJP

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103J 014**

NATIONAL MINERAL INVENTORY:

NAME(S): **PROMISE**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103J02E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 01 39 N
LONGITUDE: 130 34 46 W
ELEVATION: 30 Metres

NORTHING: 5987736
EASTING: 396540

LOCATION ACCURACY: Within 1 KM

COMMENTS: Located in the northwest corner of Porcher Island.

COMMODITIES: Gold Silver

MINERALS

SIGNIFICANT: Pyrite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I02 Intrusion-related Au pyrrhotite veins
DIMENSION:

STRIKE/DIP: 090/60S

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Cretaceous-Tertiary			Coast Plutonic Complex

LITHOLOGY: Quartz Diorite
Meta Sediment/Sedimentary

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Plutonic Rocks

PHYSIOGRAPHIC AREA: Milbanke Strandflat

CAPSULE GEOLOGY

The Promise showing occurs in the northwest corner of Porcher Island, a few hundred metres northwest of the Edye Pass Mine (103J 015).

A sheared quartz vein, 30 centimetres wide, strikes east and dips 60 degrees south within Cretaceous to Tertiary quartz diorite of the Coast Plutonic Complex near its contact with Paleozoic-Mesozoic metasediments. Mineralization consists of blebs and streaks of auriferous pyrite.

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EMPR ASS RPT 16735, 17076, 25073
GSC MAP 12-1966; 1385A; 1472A
GSC MEM 394
GSC P 66-33

DATE CODED: 1986/09/12
DATE REVISED: 1989/02/28

CODED BY: LDJ
REVISED BY: GJP

FIELD CHECK: N
FIELD CHECK: N

BIBLIOGRAPHY

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1985-C375; 1987-C362; 1996-B8
EMPR GEM 1974-325
EMPR MAP 64; 65 (1989)
EMPR OF 1992-1
EMPR PF (*Nelson, N.E. (1935); Dolmage, V. (1936); Waterland, T.M.
(1939); Smith, A. (1943); James, G.L. (1974); Porcher Island Gold
Corporation Website (Nov.1997): The Porcher Island Gold Project,
4 pp., in 103J 017)
EMR MIN BULL MR 223 B.C. 293
EMR MP CORPFILE (Reward Mining Company, Limited; Porcher Island Gold
Mines, Limited; E & B Explorations Ltd.)
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GSC SUM RPT 1922 Part A, pp. 27,28
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CIM Jubilee *Vol. 1948, pp. 94-99
N MINER Jan.18, 1988
W MINER Aug., 1946, pp. 40-42
WWW <http://www.porcher-pig.com/project.html>;
http://www.infomine.com/index/properties/PORCHER_ISLAND.html
Falconbridge File

DATE CODED: 1986/09/11
DATE REVISED: 1989/02/28

CODED BY: LDJ
REVISED BY: GJP

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103J 016**

NATIONAL MINERAL INVENTORY:

NAME(S): **MASCOT**, DC

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103J02E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 01 29 N
LONGITUDE: 130 34 11 W
ELEVATION: 45 Metres

NORTHING: 5987412
EASTING: 397170

LOCATION ACCURACY: Within 1 KM
COMMENTS:

COMMODITIES: Gold Silver

MINERALS

SIGNIFICANT: Pyrite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I02 Intrusion-related Au pyrrhotite veins
DIMENSION:

STRIKE/DIP: 050/80N TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Cretaceous-Tertiary			Coast Plutonic Complex

LITHOLOGY: Quartz Diorite

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Plutonic Rocks

PHYSIOGRAPHIC AREA: Milbanke Strandflat

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY:	Assay/analysis	YEAR:	1933
SAMPLE TYPE:	Grab		
COMMODITY	GRADE		
Silver	41.0000	Grams per tonne	
Gold	27.0000	Grams per tonne	

REFERENCE: Minister of Mines Annual Report 1933, page 42.

CAPSULE GEOLOGY

The Mascot showing occurs near the northwest corner of Porcher Island about 1.5 kilometres east of the Surf Point Mine (103J 017). A quartz vein, striking 050 degrees and dipping 80 degrees north, occurs in Cretaceous to Tertiary quartz diorite of the Coast Plutonic Complex near its contact with Paleozoic to Mesozoic mixed volcanic and plutonic rock. The vein is sheared and is up to 1 metre wide and 20 metres long. Mineralization consists of stringers of pyrite. A selected sample assayed 27 grams per tonne gold and 41 grams per tonne silver (Minister of Mines Annual Report 1933, page 42).

BIBLIOGRAPHY

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EMPR AR *1933-42; 1934-B9
GSC MAP 12-1966; 1385A; 1472A
GSC MEM 394
GSC P 66-33

DATE CODED: 1986/09/12
DATE REVISED: 1988/12/22

CODED BY: LDJ
REVISED BY: JNR

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103J 017**

NATIONAL MINERAL INVENTORY: 103J2 Au1

NAME(S): **PORCHER ISLAND, SURF POINT, SURF POINT MINE,
AT, TRIXIE, PATTERSON,
CATHEDRAL GOLD**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 103J02E
BC MAP:
LATITUDE: 54 01 24 N
LONGITUDE: 130 35 16 W
ELEVATION: 0150 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: See also Edey Pass (103J 015).

Underground
MINING DIVISION: Skeena
UTM ZONE: 09 (NAD 83)
NORTHING: 5987284
EASTING: 395984

COMMODITIES: Gold Silver Copper

MINERALS

SIGNIFICANT: Pyrite Telluride Tetradymite Gold Chalcopyrite
ASSOCIATED: Quartz
ALTERATION: Ankerite Calcite Sericite Chlorite
ALTERATION TYPE: Carbonate Chloritic
MINERALIZATION AGE: Unknown
ISOTOPIC AGE: 106.2 +/- 1.3 Ma
DATING METHOD: Uranium/Lead
MATERIAL DATED: Zircon

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: I01 Au-quartz veins I02 Intrusion-related Au pyrrhotite veins
SHAPE: Bladed
MODIFIER: Sheared
DIMENSION: 300 x 200 x 30 Metres
COMMENTS: Area of vein stockwork; general attitude of veins. Biotite hornblende tonalite.

STRIKE/DIP: 080/70N
TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic-Mesozoic	Unnamed/Unknown Group	Unnamed/Unknown Formation	Coast Plutonic Complex
Mesozoic-Cenozoic			

LITHOLOGY: Quartz Diorite
Hornblende Quartz Diorite
Chlorite Schist
Meta Sediment/Sedimentary
Meta Volcanic

HOSTROCK COMMENTS: Unit F - Geological Survey of Canada Map 1472A.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Plutonic Rocks
PHYSIOGRAPHIC AREA: Milbanke Strandflat

INVENTORY

ORE ZONE: AT
CATEGORY: Inferred
QUANTITY: 816500 Tonnes
COMMODITY: Gold
GRADE: 6.8600 Grams per tonne
REFERENCE: Northern Miner April 21, 1997.
REPORT ON: Y
YEAR: 1997

ORE ZONE: AT
CATEGORY: Indicated
QUANTITY: 544300 Tonnes
COMMODITY: Gold
GRADE: 6.8600 Grams per tonne
COMMENTS: Based on 66 holes, totalling 12,192 metres.
REFERENCE: Northern Miner April 21, 1997.
REPORT ON: Y
YEAR: 1997

INVENTORY

ORE ZONE: PORCHER ISLAND REPORT ON: Y
CATEGORY: Combined YEAR: 1994
QUANTITY: 300000 Tonnes
COMMODITY: Gold GRADE: 7.8000 Grams per tonne
COMMENTS: Proven and probable reserves.
REFERENCE: Information Circular 1995-1, page 14.

ORE ZONE: PORCHER ISLAND REPORT ON: Y
CATEGORY: Inferred YEAR: 1994
QUANTITY: 190000 Tonnes
COMMODITY: Gold GRADE: 7.8000 Grams per tonne
COMMENTS: Possible reserves. Further possible deep reserves are estimated at
800,000 tonnes grading 6.9 grams per tonne gold.
REFERENCE: Information Circular 1995-1, page 14.

CAPSULE GEOLOGY

Porcher Island is located approximately 45 kilometres southwest of the city of Prince Rupert on the northern coast of British Columbia. Early exploration of Porcher Island began in 1916. Records show that mining from 1919 to 1939 resulted in 61,567 tonnes of ore, yielding 639,914 grams of gold, 225,994 tonnes of silver and 4161 kilograms of copper from the Surf Point Mine and the Edye Pass Mine (103J 015), one kilometre to the north.

The past producing Surf Point/Edye Pass mine on Porcher Island is presently (August 2000) owned by Cathedral Gold Corp. and was, until recently, under option to Tetra Metals Ltd., who were unable to attract the financing.

The mines produced ore from near-surface workings between 1919 and 1939, when Reward Mining Company built a 50 ton per day mill to replace a smaller structure that burnt down the previous year. The operation probably closed as a result of staff shortages induced by the war. The Surf Point mine operated between 1934 and 1937 (inclusive) and the Edye Pass mine operated from 1919 to 1939.

Between 1975 and 1994 several mining companies, including Tombil Mines, Banwan Gold Mines and Cathedral Gold Corporation conducted exploration and developmental work on the Porcher Island gold mine site.

A quartz diorite stock of the Tertiary-Jurassic Coast Plutonic Complex intrudes Paleozoic-Mesozoic metasediments and metavolcanics. The stock is about 2.8 kilometres in diameter, with a 300-metre wide outer hornblende quartz diorite phase and a quartz diorite core. The metamorphosed rocks consist of chlorite schist and grey metasediments striking northwest and dipping moderately northeast. All rocks are intruded by mafic dykes.

The ore came from numerous, steeply-dipping, shear-controlled, quartz-pyrite-gold "ladder veins" that formed near the apical tip of a composite flow-banded quartz diorite pluton intruded into schist during Tertiary uplift and deformation. The veins are short, narrow and hard to project with any degree of certainty, so continuity can be a problem. There is almost no wall-rock alteration and the veins are tightly bonded to the diorite. The deposit is very similar to Harrison Gold.

The short and irregularly distributed veins or lenses of auriferous pyrite and chalcopyrite in quartz veins occur largely within the quartz diorite. Small amounts of sericite, ankerite, calcite and chlorite can be observed in the veins. Under the microscope, tetradymite may be seen accompanied by free gold. The veins strike 070 to 090 degrees, dip 60 to 90 degrees north and seldom exceed 120 metres length. Widths average 30 centimetres and seldom exceed 1 metre.

The deposit lies in a 300 by 200 by 30 metre zone along an arch of flow layers with an axial plane that strikes about 020 degrees and dips about 85 degrees southeast. A primary joint system in the stock is related to the orientation (030 degree trend, 50 degree plunge) of flow lines which lie within the plane of the flow layers. The ore-bearing solutions entered soon after the formation of the fractures. A northeast trending shear zone forms the southern limit of the deposit.

Work on the deposit by Cathedral Gold Corporation has resulted in the discovery of the AT zone, about 50 metres west of Adit No. 4 portal. Mineralization is persistent to a depth of 550 metres and remains open. The zone also remains open along strike. Based on 66 holes, totalling 12,192 metres, the AT zone contains 544,300 tonnes

CAPSULE GEOLOGY

of indicated reserves grading 6.86 grams per tonne gold, plus an additional 816,500 tonnes of inferred reserves at the same grade. (Northern Miner April 21, 1997)

Proven and probable reserves are estimated at 300,000 tonnes grading 7.8 grams per tonne gold; possible reserves are estimated at 190,000 tonnes grading 7.8 grams per tonne gold; and further possible deep reserves are estimated at 800,000 tonnes grading 6.9 grams per tonne gold. Included in these reserves are 82,000 tonnes of direct-shipping ore grading 13.7 grams per tonne gold, all accessible above the existing mine levels (Information Circular 1995-1, page 14).

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EMPR ASS RPT 5728, *6195, 7194, 14602, 15225, 15411, 16735, 17076, 25073, 18737
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EMPR GEM 1974-325
EMPR INF CIRC 1994-19, p. 14; 1995-1, p. 14
EMPR MAP 64; 65 (1989)
EMPR MEIP 78/79 Surface Diamond Drilling Prog., Dec.8, 1978
EMPR OF 1992-1
EMPR PF (In 103J 015:*Nelson, N.E. (1935), Dolmage, V. (1936), Legg, R.E. (1936), Waterland, T.M. (1939), Smith, A. (1943); James, G.L. (1974); Warren, H.V. and Cummings, J.M. (1936): Mineralogy of the Surfpoint and Hunter Veins, The Miner, June, 1936; Porcher Island Gold Corporation Website (Nov. 1997): The Porcher Island Gold Project, 4 pp.)
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GSC MEM 394, p. 98
GSC P 66-33, pp. 22,23
GSC SUM RPT 1922 Part A, pp. 27,28
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CMH 1986-87, p. 191
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N MINER Jan.18, Nov.7, 1988; Feb.20, Apr.10, 1989; June 4, 1990; Apr.11, 1994; Mar.6, 1995; Dec.9, 1996; Apr.21, 1997
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WWW <http://www.porcher-pig.com/project.html>;
http://www.infomine.com/index/properties/PORCHER_ISLAND.html
Falconbridge File

DATE CODED: 1986/09/11
DATE REVISED: 1989/02/28

CODED BY: LDJ
REVISED BY: GJP

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103J 018**

NATIONAL MINERAL INVENTORY:

NAME(S): **BELL MTN**, SANTA CLAUS, BR 1

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103J02E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 00 34 N
LONGITUDE: 130 34 41 W
ELEVATION: 320 Metres

NORTHING: 5985725
EASTING: 396587

LOCATION ACCURACY: Within 1 KM

COMMENTS: Located about 1.5 kilometres south-southeast of the Surf Point Mine (103J 017).

COMMODITIES: Gold Silver

MINERALS

SIGNIFICANT: Pyrite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I02 Intrusion-related Au pyrrhotite veins
DIMENSION:

STRIKE/DIP: 090/80N

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Cretaceous-Tertiary

Coast Plutonic Complex

LITHOLOGY: Quartz Diorite
Meta Volcanic

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Plutonic Rocks

PHYSIOGRAPHIC AREA: Milbanke Strandflat

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1933

SAMPLE TYPE: Rock

COMMODITY

GRADE

Silver

6.8000

Grams per tonne

Gold

35.0000

Grams per tonne

REFERENCE: Minister of Mines Annual Report 1933, page 43.

CAPSULE GEOLOGY

The Bell Mountain showing is located in the northwest of Porcher Island about 1.5 kilometres south-southeast of the Surf Point Mine (103J 017).

Two east striking, steep dipping sheared quartz veins occur in altered Cretaceous to Tertiary quartz diorite of the Coast Plutonic Complex near its contact with Paleozoic-Mesozoic metavolcanics. The veins, 200 metres apart, are 0.3 to 1 metre wide and are mineralized with lenses of pyrite. Selected samples assayed 35 grams per tonne gold and 6.8 grams per tonne silver (Minister of Mines Annual Report 1933).

BIBLIOGRAPHY

EMPR AR *1933-43
EMPR ASS RPT 15225, 16735, 17076
EMPR EXPL 1986-C429
GSC MAP 12-1966; 1385A; 1472A
GSC MEM 394
GSC P 66-33

DATE CODED: 1986/09/12
DATE REVISED: 1989/02/28

CODED BY: LDJ
REVISED BY: GJP

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103J 020**

NATIONAL MINERAL INVENTORY:

NAME(S): **COPPER COIN, JOLT**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103J02E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 00 29 N
LONGITUDE: 130 36 46 W
ELEVATION: 45 Metres

NORTHING: 5985622
EASTING: 394308

LOCATION ACCURACY: Within 1 KM

COMMENTS: Description (Minister of Mines Annual Report 1930). Located about 2.0 kilometres southwest of the Surf Point Mine (103J 017) on Porcher Island.

COMMODITIES: Gold Silver Copper

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite
ASSOCIATED: Quartz
ALTERATION: Feldspar Silica
ALTERATION TYPE: Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Replacement Epigenetic
TYPE: I02 Intrusion-related Au pyrrhotite veins
DIMENSION: STRIKE/DIP: 105/45N TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Paleozoic-Mesozoic Undefined Group Unnamed/Unknown Formation

LITHOLOGY: Chlorite Schist

HOSTROCK COMMENTS: Unit 3 - Geological Survey of Canada Map 1472A.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline PHYSIOGRAPHIC AREA: Milbanke Strandflat
TERRANE: Alexander
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1930
SAMPLE TYPE: Rock
COMMODITY GRADE
Silver 6.9000 Grams per tonne
Gold 1.7000 Grams per tonne

COMMENTS: The sample width is 80 centimetres.
REFERENCE: Minister of Mines Annual Report 1930, page 72.

CAPSULE GEOLOGY

The Copper Coin showing occurs near the northwest corner of Porcher Island about 2.0 kilometres southwest of the Surf Point Mine (103J 017).

A 2 to 3.7 metre wide quartzose shear zone strikes about 105 degrees and dips 45 degrees north within Paleozoic-Mesozoic chlorite schist. Cretaceous to Tertiary intrusions of the Coast Plutonic Complex occur just over 1.0 kilometre to the west. Within the shear zone, a quartz vein about 75 metres long is mineralized with auriferous pyrite and minor chalcopyrite. A 0.8 metre sample assayed 1.7 grams per tonne gold, 6.9 grams per tonne silver and trace copper (Minister of Mines Annual Report 1930, page 72).

About 500 metres north of the quartz vein, along the shore, a siliceous and feldspathic replacement zone is mineralized with pyrite and chalcopyrite.

BIBLIOGRAPHY

EMPR AR *1930-71-73; 1931-35; 1932-49
EMPR ASS RPT 17861
EMPR BULL No. 1, 1932, pp. 21,29,39
GSC MAP 12-1966; 1385A; 1472A

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

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BIBLIOGRAPHY

GSC MEM 394
GSC P 66-33

DATE CODED: 1986/09/12
DATE REVISED: 1989/02/28

CODED BY: LDJ
REVISED BY: GJP

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103J 021**

NATIONAL MINERAL INVENTORY: 103J2 Au4

NAME(S): **IXL (L.6517)**, WRIGHT

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103J02E
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 01 14 N
LONGITUDE: 130 35 31 W
ELEVATION: 120 Metres

NORTHING: 5986981
EASTING: 395704

LOCATION ACCURACY: Within 500M

COMMENTS: Centre of Lot 6517. Within a few hundred metres of the Surf Point Mine (103J 017), northwest corner of Porcher Island.

COMMODITIES: Gold Silver Copper

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Stockwork
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I02 Intrusion-related Au pyrrhotite veins
DIMENSION:

STRIKE/DIP: 110/85N TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Cretaceous-Tertiary			Coast Plutonic Complex

LITHOLOGY: Quartz Diorite

HOSTROCK COMMENTS: Unit F - Geological Survey of Canada Map 1472A.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline

TERRANE: Plutonic Rocks

PHYSIOGRAPHIC AREA: Milbanke Strandflat

INVENTORY

ORE ZONE: DUMP

REPORT ON: N

CATEGORY:	Assay/analysis	YEAR:	1930
SAMPLE TYPE:	Grab		
COMMODITY	GRADE		
Silver	55.0000	Grams per tonne	
Gold	208.0000	Grams per tonne	

COMMENTS: The sample was "selected" from a dump.

REFERENCE: Minister of Mines Annual Report 1930, page 72.

CAPSULE GEOLOGY

The IXL showing occurs in the northwest corner of Porcher Island, a few hundred metres southwest of the Surf Point Mine (103J 017).

Several east-southeast striking auriferous pyritic quartz veins are associated with shear zones in the western part of a 2.8 kilometre diameter Cretaceous to Tertiary quartz diorite stock of the Coast Plutonic Complex. The stock intrudes Paleozoic to Mesozoic mixed volcanic and older plutonic rocks. The veins vary in width from 5 centimetres to 1 metre and up to 24 metres in length. A representative sample from an ore dump assayed 208 grams per tonne gold and 55 grams per tonne silver (Minister of Mines Annual Report 1930, page 72).

BIBLIOGRAPHY

EM ASS RPT 25073
EMPR AR *1922-46; 1924-46; 1925-67; 1926-72; 1927-62; 1928-70;
*1930-71,72
EMPR BULL No. 1, 1932, pp. 21,29,39
GSC MAP 12-1966; 1385A; 1472A
GSC MEM 394
GSC P 66-33
GSC SUM RPT *1922A, pp. 27-29

DATE CODED: 1986/09/12
DATE REVISED: 1988/12/23

CODED BY: LDJ
REVISED BY: JNR

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103J 021**

MINFILE NUMBER: **103J 022**

NATIONAL MINERAL INVENTORY:

NAME(S): **WREN, CC**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103J02E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 00 09 N
LONGITUDE: 130 35 42 W
ELEVATION: 400 Metres

NORTHING: 5984977
EASTING: 395459

LOCATION ACCURACY: Within 1 KM

COMMENTS: Description (Minister of Mines Annual Report 1933). Located on Porcher Island about 2.5 kilometres south of the Surf Point Mine (103J 017).

COMMODITIES: Gold Silver Copper

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Bornite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I02 Intrusion-related Au pyrrhotite veins

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE

Paleozoic-Mesozoic
Cretaceous-Tertiary

GROUP

Undefined Group

FORMATION

Unnamed/Unknown Formation

IGNEOUS/METAMORPHIC/OTHER

Coast Plutonic Complex

LITHOLOGY: Schist
Quartz Diorite

HOSTROCK COMMENTS: Mineralization occurs in quartz veins that cut schist near a quartz diorite stock.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Alexander
METAMORPHIC TYPE: Regional

Plutonic Rocks
RELATIONSHIP:

PHYSIOGRAPHIC AREA: Milbanke Strandflat

GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Rock

YEAR: 1933

COMMODITY

Silver

Gold

GRADE

21.0000

79.0000

Grams per tonne

Grams per tonne

COMMENTS: The results were obtained from a "selected" sample.
REFERENCE: Minister of Mines Annual Report 1933, pages 43,44.

CAPSULE GEOLOGY

The Wren showing occurs on Porcher Island about 2.5 kilometres south of the Surf Point Mine (103J 017).

Three sub-parallel sheared quartz veins occur in Paleozoic-Mesozoic altered schists. Quartz diorite of the Cretaceous to Tertiary Coast Plutonic Complex has intruded the country rock to the immediate east. The veins strike east to northeast and dip 60 to 90 degrees north. Widths vary from 0.3 to 2 metres and lengths are up to 100 metres. Mineralization consists of pyrite, chalcopyrite and minor bornite. A selected sample assayed 79 grams per tonne gold and 21 grams per tonne silver (Minister of Mines Annual Report 1933, pages 43,44).

BIBLIOGRAPHY

EMPR AR *1932-50; *1933-43,44; 1934-B9
EMPR BULL No. 3, 1932, p. 7
GSC MAP 12-1966; 1385A; 1472A
GSC MEM 394

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BIBLIOGRAPHY

GSC P 66-33

DATE CODED: 1986/09/12
DATE REVISED: 1988/12/23

CODED BY: LDJ
REVISED BY: JNR

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103J 023**

NATIONAL MINERAL INVENTORY:

NAME(S): **POR**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103J01W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 05 04 N
LONGITUDE: 130 24 56 W
ELEVATION: 5 Metres

NORTHING: 5993844
EASTING: 407402

LOCATION ACCURACY: Within 500M

COMMENTS: Samples, Map 1 (Assessment Report 13051).

COMMODITIES: Zinc Copper Silver Gold

MINERALS

SIGNIFICANT: Sphalerite Chalcopyrite Pyrite
ASSOCIATED: Calcite Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Skarn Replacement Epigenetic
TYPE: K01 Cu skarn K02 Pb-Zn skarn

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE

Paleozoic-Mesozoic
Cretaceous-Tertiary

GROUP

Undefined Group

FORMATION

Unnamed/Unknown Formation

IGNEOUS/METAMORPHIC/OTHER

Coast Plutonic Complex

LITHOLOGY: Tuff
Greenstone
Limestone
Argillite
Quartzite
Diorite
Dioritic Dike
Skarn

HOSTROCK COMMENTS: Units 3a,f - Geological Survey of Canada Map 1472A.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Alexander
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Milbanke Strandflat

RELATIONSHIP:

GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Chip

YEAR: 1984

COMMODITY

GRADE

Silver	2.0000	Grams per tonne
Gold	0.1000	Grams per tonne
Copper	0.2600	Per cent
Zinc	7.0000	Per cent

COMMENTS: Sample description is not available.
REFERENCE: Assessment Report 13051.

CAPSULE GEOLOGY

Narrow zones of metasediments, composed of limestone, quartzite and argillite occur in a wide belt of metavolcanics composed of tuffs and greenstones. The rocks are from an unnamed Paleozoic-Mesozoic formation which trends northwest and are intruded by Cretaceous to Tertiary diorite stocks and dykes of the Coast Plutonic Complex.

Sphalerite and chalcopyrite occur in skarn zones within the metavolcanics. A rock chip sample assayed 7.0 per cent zinc, 0.26 per cent copper and 2.0 grams per tonne silver (Assessment Report 13051).

BIBLIOGRAPHY

EMPR ASS RPT 12238, *13051
EMPR EXPL 1983-504; 1984-378
GSC MEM 394

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

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REPORT: RGEN0100

BIBLIOGRAPHY

GSC MAP 1385A

DATE CODED: 1986/09/08
DATE REVISED: 1988/12/23

CODED BY: LDJ
REVISED BY: JNR

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103J 025**

NATIONAL MINERAL INVENTORY:

NAME(S): **ELLIOTT ISLAND**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103J01W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 02 29 N
LONGITUDE: 130 16 06 W
ELEVATION: 5 Metres

NORTHING: 5988871
EASTING: 416946

LOCATION ACCURACY: Within 500M

COMMENTS: Centre of limestone band, Geological Survey of Canada Map 12-1966,
Elliot Island.

COMMODITIES: Limestone Marble Building Stone

MINERALS

SIGNIFICANT: Calcite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Massive Stratabound Concordant
CLASSIFICATION: Sedimentary Evaporite Syngenetic Industrial Min.
TYPE: R09 Limestone
SHAPE: Tabular
DIMENSION: STRIKE/DIP: 170/65E TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Permian-Triassic Undefined Group Unnamed/Unknown Formation

LITHOLOGY: Limestone
Schist
Marble
Quartz Muscovite Schist
Meta Volcanic

HOSTROCK COMMENTS: Unit 2f - Geological Survey of Canada Map 1472A.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline PHYSIOGRAPHIC AREA: Teslin Plateau
TERRANE: Alexander
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Amphibolite

CAPSULE GEOLOGY

The east half of Elliott Island is underlain by Upper Paleozoic to Triassic schistose metavolcanic rocks with intercalated marble and quartz-muscovite schist. The marble is generally white with variations in tint from bluish to yellowish and is variable in grain size from medium to very fine. The zone strikes 170 degrees and dips 65 degrees northeast.

BIBLIOGRAPHY

GSC MAP 12-1966; 1385A; 1472A
GSC MEM 394
GSC P 66-33
CANMET RPT #452, pp. 127,172,173

DATE CODED: 1986/09/09
DATE REVISED: 1988/12/23

CODED BY: LDJ
REVISED BY: JNR

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103J 026**

NATIONAL MINERAL INVENTORY: 103J1 Cu1

NAME(S): **BALD MOUNTAIN**, YOUNG BULL (L.6502)

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103J01W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 01 09 N
LONGITUDE: 130 26 36 W
ELEVATION: 200 Metres

NORTHING: 5986618
EASTING: 405437

LOCATION ACCURACY: Within 500M

COMMENTS: Located west of Salt Lagoon, Porcher Island.

COMMODITIES: Copper Gold Silver Zinc Molybdenum

MINERALS

SIGNIFICANT: Chalcopyrite Pyrrhotite Pyrite Bornite Sphalerite
Molybdenite
ASSOCIATED: Quartz Garnet Epidote Calcite Pyroxene
ALTERATION: Garnet Epidote Pyroxene
COMMENTS: Alteration primarily due to metamorphism.
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Concordant Massive
CLASSIFICATION: Replacement
TYPE: G04 Besshi massive sulphide Cu-Zn
SHAPE: Irregular
DIMENSION:
COMMENTS: Mineralized length with isolated bodies.

STRIKE/DIP: 135/70E

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Permian-Triassic
Cretaceous-Tertiary

GROUP

Undefined Group

FORMATION

Unnamed/Unknown Formation

IGNEOUS/METAMORPHIC/OTHER

Coast Plutonic Complex

LITHOLOGY: Marble
Amphibolite
Quartzite
Pegmatite
Hornblende Schist
Amphibolite
Quartz Porphyry
Granodiorite

HOSTROCK COMMENTS: Unit 2c - Geological Survey of Canada Map 1472A.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline

PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)

TERRANE: Alexander

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Amphibolite

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1916

SAMPLE TYPE: Rock

COMMODITY

GRADE

Silver	27.4300	Grams per tonne
Gold	1.7000	Grams per tonne
Copper	0.2000	Per cent

COMMENTS: The sample width is 1.2 metres.

REFERENCE: Minister of Mines Annual Report 1916, pages 50,51.

CAPSULE GEOLOGY

The area is underlain by a northwest trending, northeast dipping belt of Upper Paleozoic-Triassic metasediments consisting of hornblende-biotite schist, quartzites and impure marble. Cretaceous to Tertiary granodiorite of the Coast Plutonic Complex lies west of the metasediments and quartz porphyry and pegmatitic dykes intrude the metasediments.

Clots and small lenses of chalcopyrite, pyrite and pyrrhotite with minor sphalerite, bornite and molybdenite occur in small carbonate-rich zones within hornblende schists and amphibolite. Isolated bodies, up to 2 metres wide and a few metres long, lie along

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CAPSULE GEOLOGY

a 1.6 kilometre northwest trend. A 1.2 metre sample of the Young Bull showing assayed 6.2 per cent copper, 1.7 grams per tonne gold and 27.43 grams per tonne silver (Minister of Mines Annual Report 1916, pages 50,51).

BIBLIOGRAPHY

EMPR AR *1916-50,51; 1917-43; 1920-39; 1922-354; 1923-386; 1933-44
EMPR EXPL 1978-236
EMPR OF 1999-2
EMR MP CORPFILE (Dimac Resources Corp.)
GSC MAP 12-1966; 1385A; 1472A
GSC MEM 394, p. 98
GSC P 66-33, p. 23
GSC SUM RPT *1922A, p. 26

DATE CODED: 1986/09/08
DATE REVISED: 1988/12/23

CODED BY: LDJ
REVISED BY: JNR

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103J 027**

NATIONAL MINERAL INVENTORY:

NAME(S): **ETTA**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103J01W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 04 34 N
LONGITUDE: 130 25 11 W
ELEVATION: 25 Metres

NORTHING: 5992922
EASTING: 407111

LOCATION ACCURACY: Within 500M

COMMENTS: Surface showings, Map 2 (Assessment Report 5027).

COMMODITIES: Zinc Copper Silver

MINERALS

SIGNIFICANT: Sphalerite Chalcopyrite Pyrite Pyrrhotite
ALTERATION: Calcite Epidote Magnetite
ALTERATION TYPE: Skarn
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Concordant
CLASSIFICATION: Skarn Hydrothermal Replacement Epigenetic
TYPE: K02 Pb-Zn skarn K01 Cu skarn
G04 Besshi massive sulphide Cu-Zn
SHAPE: Irregular
MODIFIER: Sheared

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Mesozoic	Undefined Group	Unnamed/Unknown Formation	Coast Plutonic Complex
Cretaceous-Tertiary			

LITHOLOGY: Tuff
Greenstone
Limestone
Quartzite
Argillite
Diorite
Dioritic Dike

HOSTROCK COMMENTS: Units 3a,f - Geological Survey of Canada Map 1472A.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Alexander
METAMORPHIC TYPE: Regional
PHYSIOGRAPHIC AREA: Milbanke Strandflat
RELATIONSHIP:
GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1974
SAMPLE TYPE: Rock
COMMODITY GRADE
Silver 1.3700 Grams per tonne
Copper 0.1100 Per cent
Zinc 8.0000 Per cent

REFERENCE: Assessment Report 5027.

CAPSULE GEOLOGY

Narrow zones of Paleozoic to Mesozoic metasedimentary rocks, consisting of limestone, laminated quartzite and argillite occur in a wide belt of weakly metamorphosed volcanic rocks consisting of tuffs and greenstones. The rocks are intruded by Cretaceous to Tertiary diorite stocks and dykes of the Coast Plutonic Complex.

Sphalerite, chalcopyrite, pyrite and pyrrhotite occur in skarn zones, quartz veins and shear and fracture zones in the metavolcanic rocks. A surface sample assayed 8.0 per cent zinc, 0.11 per cent copper and 1.37 grams per tonne silver (Assessment Report 5027).

BIBLIOGRAPHY

EMPR ASS RPT 4401, *5027, 12238, 13051
EMPR EXPL 1983-504; 1984-378
EMPR GEM 1973-487,488; 1974-324,325

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

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ENERGY AND MINERALS DIVISION

PAGE: 850
REPORT: RGEN0100

BIBLIOGRAPHY

GSC MAP 12-1966; 1385A; 1472A
GSC MEM 394, p. 98
GSC P 66-33

DATE CODED: 1986/09/08
DATE REVISED: 1988/12/23

CODED BY: LDJ
REVISED BY: JNR

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103J 028**

NATIONAL MINERAL INVENTORY:

NAME(S): **JITNEY**, ETTA

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 103J01W
BC MAP:

Underground

MINING DIVISION: Skeena

LATITUDE: 54 04 39 N
LONGITUDE: 130 26 01 W
ELEVATION: 30 Metres

UTM ZONE: 09 (NAD 83)

NORTHING: 5993095
EASTING: 406205

LOCATION ACCURACY: Within 500M
COMMENTS: Map (Mitchell, 1969, Property File).

COMMODITIES: Copper Zinc Silver Gold

MINERALS

SIGNIFICANT: Chalcopyrite Pyrrhotite Pyrite Sphalerite
ASSOCIATED: Quartz
ALTERATION: Chlorite Epidote
ALTERATION TYPE: Chloritic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Replacement Epigenetic
TYPE: G04 Besshi massive sulphide Cu-Zn
SHAPE: Irregular
MODIFIER: Sheared

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic-Mesozoic	Undefined Group	Unnamed/Unknown Formation	

LITHOLOGY: Greenstone
Argillite
Tuff
Limestone
Quartzite
Diorite
Dioritic Dike

HOSTROCK COMMENTS: Units 3a - Geological Survey of Canada Map 1472A.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Alexander
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Milbanke Strandflat

RELATIONSHIP:

GRADE: Greenschist

CAPSULE GEOLOGY

Narrow zones of Paleozoic to Mesozoic metasediments comprised of limestone, quartzite and argillite occur in a wide belt of meta-volcanics comprising tuff and greenstone. The rocks are intruded by diorite stocks and dykes of the Coast Plutonic Complex.

Chalcopyrite, pyrrhotite, pyrite and minor sphalerite occur in a narrow north trending shear zone within altered andesite or greenstone. A selected sample from an ore dump assayed 12.5 per cent copper, 0.4 per cent zinc, 85 grams per tonne silver and 0.7 grams per tonne gold. A 2 metre sample of a shear zone, 120 metres to the east, assayed 0.45 per cent copper, 0.84 per cent zinc and trace gold and silver (Property File: Mitchell, 1969).

BIBLIOGRAPHY

EMPR AR *1917-44
EMPR ASS RPT 4401, 12238, 13051
EMPR EXPL 1983-504; 1984-378
EMPR GEM 1973-487,488
EMPR PF (Mitchell, J.A., (1969): *Report on Etta Group)
GSC MAP 12-1966; 1385A; 1472A
GSC MEM 394, p. 98
GSC P 66-33
GSC SUM RPT *1922A, p. 27

DATE CODED: 1986/09/08
DATE REVISED: 1988/12/23

CODED BY: LDJ
REVISED BY: JNR

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103J 029**

NATIONAL MINERAL INVENTORY:

NAME(S): **PORCHER ISLAND LIMESTONE**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103J01W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 03 59 N
LONGITUDE: 130 21 06 W
ELEVATION: 10 Metres

NORTHING: 5991753
EASTING: 411542

LOCATION ACCURACY: Within 500M

COMMENTS: Limestone zone, Map 1472A (Geological Survey of Canada Memoir 394).

COMMODITIES: Limestone Iron Magnetite

MINERALS

SIGNIFICANT: Calcite Magnetite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Massive Stratabound
CLASSIFICATION: Sedimentary Industrial Min.

TYPE: R09 Limestone

K03 Fe skarn

SHAPE: Regular

DIMENSION: 4000 Metres

STRIKE/DIP: 140/50E

TREND/PLUNGE:

COMMENTS: Length of zone.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Paleozoic-Mesozoic

GROUP

Undefined Group

FORMATION

Unnamed/Unknown Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Limestone
Quartzite
Argillite
Chlorite Amphibole Schist

HOSTROCK COMMENTS: Unit 3f - Geological Survey of Canada Map 1472A.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline

PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)

TERRANE: Alexander

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

CAPSULE GEOLOGY

The area is underlain mainly by Paleozoic-Mesozoic metavolcanics consisting of chlorite amphibole schist and narrow zones of meta-sediments comprised of limestone, quartzite and argillite. The crystalline limestone, up to 3 metres thick, trends northwest for about 1 kilometre and dips 45 degrees to 60 degrees east. Magnetite in quartzite and limestone represents the northwest extension of a 4 kilometre long magnetite zone (see Star 103J 031).

BIBLIOGRAPHY

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EMPR IND MIN FILE (Limestone Occurrences in BC (in Ministry Library))
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GSC MEM 394, p. 37
GSC P 66-33
CANMET RPT #452, pp. 127,172; #811, p. 174

DATE CODED: 1986/09/02
DATE REVISED: 1988/12/23

CODED BY: LDJ
REVISED BY: JNR

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 853
REPORT: RGEN0100

MINFILE NUMBER: **103J 030**

NATIONAL MINERAL INVENTORY:

NAME(S): **SMITH ISLAND**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103J01E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 08 39 N
LONGITUDE: 130 09 26 W
ELEVATION: 10 Metres

NORTHING: 6000181
EASTING: 424409

LOCATION ACCURACY: Within 1 KM

COMMENTS: Description of quarry locations.

COMMODITIES: Granite Dimension Stone Building Stone

MINERALS

SIGNIFICANT: Unknown
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Massive
CLASSIFICATION: Magmatic Industrial Min.
TYPE: R03 Dimension stone - granite
SHAPE: Regular

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Cretaceous-Tertiary Coast Plutonic Complex

LITHOLOGY: Granodiorite

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Plutonic Rocks

PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)

CAPSULE GEOLOGY

The area is underlain by the northern edge of the Cretaceous to Tertiary Smith Island Pluton. The rock is a medium to fine-grained grey granodiorite with a specific gravity of 2.79. Near vertical joints strike 160 degrees and infrequent cross joints strike 075 degrees.

BIBLIOGRAPHY

GSC MAP 12-1966; 1385A; 1472A
GSC MEM 394
GSC P 66-33
CANMET RPT *#452, pp. 95-97

DATE CODED: 1986/09/09
DATE REVISED: 1988/12/23

CODED BY: LDJ
REVISED BY: JNR

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103J 030**

MINFILE NUMBER: **103J 031**

NATIONAL MINERAL INVENTORY: 103J1 Fe1

NAME(S): **STAR, RUPERT**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103J01W
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 02 49 N
LONGITUDE: 130 19 06 W
ELEVATION: 50 Metres

NORTHING: 5989549
EASTING: 413683

LOCATION ACCURACY: Within 500M

COMMENTS: Magnetite zone in the centre of mineralized area, extending for 5 kilometres in a northwesterly direction along the west shore of Chismore Passage in the northeast corner of Porcher Island.

COMMODITIES: Iron Magnetite

MINERALS

SIGNIFICANT: Magnetite
ASSOCIATED: Calcite Quartz Pyrite
ALTERATION: Epidote Chlorite Garnet
ALTERATION TYPE: Skarn
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Massive Disseminated Stratiform
CLASSIFICATION: Skarn Replacement Industrial Min.
TYPE: K03 Fe skarn
SHAPE: Irregular
DIMENSION: 4000 x 0060 x 0045 Metres STRIKE/DIP: 135/65E TREND/PLUNGE:
COMMENTS: Area of intermittent magnetite exposure.

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Mesozoic	Undefined Group	Unnamed/Unknown Formation	

LITHOLOGY: Chlorite Sericite Schist
Limestone
Quartzite

HOSTROCK COMMENTS: Unit 3d - Geological Survey of Canada Map 1472A.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)
TERRANE: Alexander
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist

CAPSULE GEOLOGY

Isolated magnetite exposures occur along a 5-kilometre, northwest strike, within Paleozoic-Mesozoic metavolcanics and metasediments consisting of chlorite-sericite schists and intercalated limestones and quartzites. The rocks dip about 65 degrees northeast and, in places, contain epidote, garnet and pyrite. The mineralized zone has a maximum width of 60 metres and a drill indicated depth of 45 metres.

The individual outcrops vary in character. Schists bearing discontinuous streaks of fine granular magnetite form zones a few metres wide and less than 15 metres long, and massive magnetite occurs up to 4 metres thick, but less than 10 metres long. The streakiness and lenticularity of the occurrences allowed only grades of about 35 per cent iron.

BIBLIOGRAPHY

EMPR AR *1956-128,129
GSC EC GEOL *Series #3, Vol. 1, pp. 21-24
GSC MAP 3-1965; 12-1966; 1385A; 1472A
GSC MEM 394, p. 98
GSC P 66-33, p. 23; 69-54, Table 1

DATE CODED: 1986/09/05
DATE REVISED: 1988/12/23

CODED BY: LDJ
REVISED BY: JNR

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103J 032**

NATIONAL MINERAL INVENTORY:

NAME(S): **HANMER ISLAND**, WHITECLIFF ISLAND

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103J01E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 03 24 N
LONGITUDE: 130 15 06 W
ELEVATION: 10 Metres

NORTHING: 5990551
EASTING: 418067

LOCATION ACCURACY: Within 500M

COMMENTS: Marble zone, Map 1472A (Geological Survey of Canada Memoir 394).
Quarrying attempt in 1878, Hanmer Island.

COMMODITIES: Limestone Marble Building Stone

MINERALS

SIGNIFICANT: Calcite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Massive Stratabound
CLASSIFICATION: Sedimentary Syngenetic Industrial Min.
TYPE: R09 Limestone R04 Dimension stone - marble
SHAPE: Regular
MODIFIER: Folded

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Permian-Triassic Undefined Group Unnamed/Unknown Formation

LITHOLOGY: Marble
Quartzite
Dioritic Dike
Limestone
Schist

HOSTROCK COMMENTS: Unit 2f - Geological Survey of Canada Map 1472A.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)
TERRANE: Alexander
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Amphibolite

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1944
SAMPLE TYPE: Rock
COMMODITY GRADE
Limestone 91.1400 Per cent
REFERENCE: Canmet Report 811.

CAPSULE GEOLOGY

Upper Paleozoic to Triassic marble and intercalated quartzite are exposed on the south tip of Hanmer Island. The marble is highly contorted and quartzite, which may be meta-cherts, is laminated and frequently boudinaged. The band of pinkish, medium-grained calcium limestone forms a cliff 30 metres high. The limestone is bounded by schist and intruded by diorite dykes. A sample analysed 91.14 per cent CaCO₃, 1.07 per cent MgCO₃, 6.12 per cent SiO₂, 0.49 per cent Fe₂O₃, 0.51 per cent Al₂O₃ and 0.04 per cent Ca₃(PO₄)₂ (Canmet Report 811).

BIBLIOGRAPHY

GSC MAP 12-1966; 1385A; 1472A
GSC MEM 394, p. 30
GSC P 66-33
CANMET RPT *#452, pp. 127,174,175; #811, pp. 174,175

DATE CODED: 1986/09/02
DATE REVISED: 1988/12/23

CODED BY: LDJ
REVISED BY: JNR

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103J 034**

NATIONAL MINERAL INVENTORY:

NAME(S): **CLOUGH**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103J01E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 00 29 N
LONGITUDE: 130 05 06 W
ELEVATION: 50 Metres

NORTHING: 5984963
EASTING: 428894

LOCATION ACCURACY: Within 1 KM

COMMENTS: Marble zone, Map 1472A (Geological Survey of Canada Memoir 394).

COMMODITIES: Limestone Marble Building Stone

MINERALS

SIGNIFICANT: Calcite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Massive Stratabound
CLASSIFICATION: Sedimentary Industrial Min.
TYPE: R04 Dimension stone - marble R09 Limestone
SHAPE: Regular

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Permian-Triassic	Undefined Group	Unnamed/Unknown Formation	

LITHOLOGY: Marble
Quartzite
Feldspar Schist

HOSTROCK COMMENTS: Unit 2f - Geological Survey of Canada Map 1472A.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)
TERRANE: Alexander
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Amphibolite

CAPSULE GEOLOGY

A north trending zone of marble and intercalated quartzite occurs within Upper Paleozoic to Triassic feldspathic schist.

BIBLIOGRAPHY

EMPR IND MIN FILE (*Limestone Occurrences in British Columbia by McCammon, J.W. 1973, p. 32 (in Ministry Library))
GSC MAP 12-1966; 1385A; 1472A
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GSC P 66-33

DATE CODED: 1986/09/03
DATE REVISED: 1988/12/23

CODED BY: LDJ
REVISED BY: JNR

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103J 035**

NATIONAL MINERAL INVENTORY: 103J4 Au1

NAME(S): **FIFE POINT**, CAPE FIFE, BLACK SANDS

STATUS: Past Producer Open Pit

MINING DIVISION: Skeena

REGIONS: British Columbia, Queen Charlotte Islands

UTM ZONE: 09 (NAD 83)

NTS MAP: 103J04E

BC MAP:

LATITUDE: 54 06 24 N

NORTHING: 5998492

LONGITUDE: 131 40 06 W

EASTING: 325663

ELEVATION: 20 Metres

LOCATION ACCURACY: Within 500M

COMMENTS: Symbol, Figure 34 (Bulletin 54). Near the northeast tip of Graham Island.

COMMODITIES: Gold

Iron

Titanium

Zirconium

MINERALS

SIGNIFICANT: Gold Magnetite Ilmenite Zircon Titanite
ASSOCIATED: Rutile Hematite Garnet Epidote Staurolite
Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Sedimentary Residual Industrial Min.
TYPE: C03 Marine placers
SHAPE: Irregular

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Quaternary			Unnamed/Unknown Informal

LITHOLOGY: Unconsolidated Sediment/Sedimentary
Sandstone
Clay
Gravel
Conglomerate

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Overlap Assemblage

PHYSIOGRAPHIC AREA: Queen Charlotte Lowland

CAPSULE GEOLOGY

The black sands of northeast Graham Island were discovered to contain gold as early as 1877. The Cape Fife showing is located 8 kilometres south of Rose Point on the east coast of Graham Island.

In 1906 the black sands were examined and in 1909, 15 hydraulic placer lenses were granted; some sluicing was attempted. In 1910 Sandhurst Gold Mines, Limited, obtained 13 placer leases. In the summer of 1924, 57 test holes 0.9 x 1.5 metres and 1.8 to 4 metres deep were sunk, revealing 2-20 inches of black sand. Assays indicated \$1.50 per yard in gold values. Work in 1925 was financed by Tretheway-Tough Mining Syndicate, Limited. Tests showed a recovery of 81 per cent of gold by amalgamation and cyanidation. Assay results ranged from nil to \$9.43 a ton of gold in 61 samples. In 1932, Gold Beach Mines, Limited, absorbed the assets of Gold Star Mines, Limited. In a test of the area, 102 cubic yards of workable sand.

Mogul Mining Corporation Limited in about 1956 acquired placer mining leases covering about 88 square kilometres. In June 1957 Lexindin Gold Mines, Limited, acquired from Mogul a 65 per cent interest in the property. Beach sand and cyanide tailings samples were sent to the Mines Branch, Ottawa, in December 1956 and June 1957 for tests for concentrates of magnetite, ilmenite, rutile, and zircon. A chemical analysis of 2 head samples gave averages of 41.48 per cent iron and 8.38 per cent titanium dioxide.

Pleistocene to Recent deposits of unconsolidated to semi-consolidated sands, clays, sandy clays, gravels, conglomerates, and a basal blue-grey glacial clay overlie Tertiary Skonun Formation.

Black sand deposits have a lenticular and varying distribution along the base of bordering beach-bluffs. The black sands, derived from the erosion of the bluffs and subsequent concentration by wave and wind action, contain magnetite, titaniferous-hematite, ilmenite, rutile, zircon, and gold.

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 859
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR AR 1906-75,77; 1909-72; 1910-85; 1911-78; 1918-37,104; 1922-40; 1924-43; 1925-65; 1926-65,66; 1928-63; *1929-62-65; 1930-63; 1932-38,39; 1933-40; 1935-B27
EMPR BULL 1(1933), pp. 24-25(Placer); 2(1930), pp. 28-31(Placer); 21, p. 17; 28, p. 48; *54, p. 174
EMPR PF (*Various Reports on Black Sands)
EMR MP CORPFILE (The Queen Charlotte Islands Collieries, Limited; Tretheway-Tough Mining Syndicate, Limited)
GSC EC. GEOL. 25, p. 131
GSC MAP 278A; 1385A
GSC MEM 88, pp. 173,174
GSC P 69-54, Table 1
B.C. MINER Nov., 1933, pp. 714-718
CANMET IR No. MD 3177, Oct., 1957
CANMET MR 31, 1959, p. 142
CMJ Nov.28, 1924, p. 1165
Dawson, G.M., (1879): Queen Charlotte Islands, Reports of Progress, 1878-1879; GSC, p. 33B
Falconbridge File

DATE CODED: 1986/06/03
DATE REVISED: 1988/12/23

CODED BY: LDJ
REVISED BY: JNR

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: 103J 035

MINFILE NUMBER: **103J 036**

NATIONAL MINERAL INVENTORY:

NAME(S): **FATHER POINT**, WORK CHANNEL

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103J09W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 39 19 N
LONGITUDE: 130 26 16 W
ELEVATION: 30 Metres

NORTHING: 6057382
EASTING: 407244

LOCATION ACCURACY: Within 1 KM

COMMENTS: At the mouth of Work Channel.

COMMODITIES: Limestone Marble Building Stone

MINERALS

SIGNIFICANT: Calcite
ASSOCIATED: Hornblende
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Massive Stratabound
CLASSIFICATION: Sedimentary Industrial Min.
TYPE: R09 Limestone R04 Dimension stone - marble
SHAPE: Regular
MODIFIER: Folded
COMMENTS: Maximum width is 10 metres.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic			Central Gneiss Complex

LITHOLOGY: Marble
Hornblende Gneiss

HOSTROCK COMMENTS: Unit 1d - Geological Survey of Canada Map 1472A.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)
TERRANE: Undivided Metamorphic Assembl.
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Amphibolite

CAPSULE GEOLOGY

Tightly folded marble zones, up to 10 metres thick are inter-layered with hornblende gneiss of the Paleozoic Central Gneiss Complex.

BIBLIOGRAPHY

EMPR IND MIN FILE (Limestone Occurrences in British Columbia
by McCammon, J.W. 1973, p. 33 (in Ministry Library))
GSC MAP 1385A; 1472A
GSC MEM 394, p. 14

DATE CODED: 1986/09/02
DATE REVISED: 1988/12/23

CODED BY: LDJ
REVISED BY: JNR

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103J 037**

NATIONAL MINERAL INVENTORY: 103J10,7 Lst1,Grp1

NAME(S): **RANDALL ISLAND**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103J07W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 29 49 N
LONGITUDE: 130 46 26 W
ELEVATION: 15 Metres

NORTHING: 6040262
EASTING: 385118

LOCATION ACCURACY: Within 500M

COMMENTS: Limestone zone, Map 1472A (Geological Survey of Canada Memoir 394),
Randall Island.

COMMODITIES: Limestone Graphite

MINERALS

SIGNIFICANT: Calcite Graphite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Massive Stratabound
CLASSIFICATION: Sedimentary Industrial Min.

TYPE: R09 Limestone P03 Microcrystalline graphite

SHAPE: Regular

DIMENSION: STRIKE/DIP: 170/70E TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Paleozoic-Mesozoic

GROUP

Undefined Group

FORMATION

Unnamed/Unknown Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Limestone
Quartzite
Rhyolite
Dolomite
Graphitic Schist

HOSTROCK COMMENTS: Unit 3f - Geological Survey of Canada Map 1472A. Conodonts date some
of the limestone as mid-Pennsylvanian and Norian (Late Triassic).

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline

TERRANE: Alexander

PHYSIOGRAPHIC AREA: Milbanke Strandflat

CAPSULE GEOLOGY

A north trending, moderate east dipping zone of Paleozoic to Mesozoic layered to massive buff-weathered limestone and a dull-grey massive dolomitic limestone is bounded to the east by rhyolite, chlorite schist and minor black graphitic schist and to the west by well-layered (2.5 to 5 centimetres) impure quartzites. A northwest trending shear zone, 0.1 to 10 metres wide, likely separates, by left lateral movement, the limestones on the east shore of Dunira Island (103J 038), 5.5 kilometres to the southeast.

BIBLIOGRAPHY

EMPR ASS RPT 12197, *12777, 22766
GSC MAP 12-1966; 1385A; 1472A
GSC MEM *394, pp. 37-39,42
GSC P 66-33
Placer Dome File

DATE CODED: 1986/09/03
DATE REVISED: 1988/12/23

CODED BY: LDJ
REVISED BY: JNR

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103J 038**

NATIONAL MINERAL INVENTORY: 103J7 Lst1,Grp1

NAME(S): **DUNIRA ISLAND**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103J07W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 26 39 N
LONGITUDE: 130 45 16 W
ELEVATION: 15 Metres

NORTHING: 6034359
EASTING: 386230

LOCATION ACCURACY: Within 500M

COMMENTS: Limestone zone, Map 1472A (Geological Survey of Canada Memoir 394),
Dunira Island.

COMMODITIES: Limestone Graphite

MINERALS

SIGNIFICANT: Calcite Graphite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Massive Stratabound
CLASSIFICATION: Sedimentary Industrial Min.

TYPE: R09 Limestone P03 Microcrystalline graphite

SHAPE: Regular

DIMENSION: STRIKE/DIP: 045/40E TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Paleozoic-Mesozoic

GROUP

Undefined Group

FORMATION

Unnamed/Unknown Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Limestone
Dolomite
Quartzite
Chlorite Schist
Graphitic Schist

HOSTROCK COMMENTS: Unit 3f-Geological Survey of Canada Map 1472A. Early Pennsylvanian
conodonts & Norian(Upper Triassic) conodonts are present in limestone.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline

TERRANE: Alexander

PHYSIOGRAPHIC AREA: Milbanke Strandflat

CAPSULE GEOLOGY

The area is underlain, from north to south, by Paleozoic to Mesozoic layered quartzites interbedded with minor layers, up to 1 metre wide, of limestone, buff-weathered layered limestone, dull grey dolomitic limestone, and calcareous chloritic schists with minor graphitic schists. The strata trends northeast and dips about 40 degrees east. A northwest trending shear zone, 0.1 to 10 metres wide, likely separates, by left lateral movement, the limestones on Randell Island (103J 037), 5.5 kilometres to the northwest. Norian (Late Triassic) ammonoids have also been noted within limestones on the east shore of Dunira Island.

BIBLIOGRAPHY

EMPR ASS RPT 12197, 12777, 22764
GSC MAP 3-1965; 12-1966; 1385A; 1472A
GSC MEM 394, pp. 37,39,42
GSC P 66-33

DATE CODED: 1986/09/03
DATE REVISED: 1988/12/23

CODED BY: LDJ
REVISED BY: JNR

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103J 040**

NATIONAL MINERAL INVENTORY:

NAME(S): **DIGBY ISLAND**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103J08W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 18 29 N
LONGITUDE: 130 27 06 W
ELEVATION: 15 Metres

NORTHING: 6018769
EASTING: 405551

LOCATION ACCURACY: Within 500M

COMMENTS: Limestone zone, Map 1472A (Geological Survey of Canada Memoir 394), Digby Island.

COMMODITIES: Limestone

MINERALS

SIGNIFICANT: Calcite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Massive
CLASSIFICATION: Sedimentary
TYPE: R09 Limestone
SHAPE: Regular

Stratabound
Industrial Min.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic-Mesozoic	Undefined Group	Unnamed/Unknown Formation	

LITHOLOGY: Limestone
Dolomite
Phyllitic Schist

HOSTROCK COMMENTS: Unit 4 - Geological Survey of Canada Map 1472A.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Alexander

PHYSIOGRAPHIC AREA: Milbanke Strandflat

CAPSULE GEOLOGY

A north trending zone about 1 kilometre long, of well-bedded brown-weathering, dolomitic limestone underlies the eastern shore of a small inlet 0.8 kilometres northeast of Straith Point on Digby Island. The limestone lies within Paleozoic to Mesozoic phyllitic schists.

BIBLIOGRAPHY

GSC MAP 12-1966; 1385A; 1472A
GSC MEM 394, p. 42
GSC P 66-33

DATE CODED: 1986/09/03
DATE REVISED: 1988/12/23

CODED BY: LDJ
REVISED BY: JNR

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103J 041**

NATIONAL MINERAL INVENTORY: 103J8,9 Grp1

NAME(S): **DIGBY ISLAND**, TSIMPSEAN PENINSULA

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103J08W
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 19 39 N
LONGITUDE: 130 25 46 W
ELEVATION: 15 Metres

NORTHING: 6020903
EASTING: 407041

LOCATION ACCURACY: Within 1 KM

COMMENTS: North end of Digby Island; several graphite showings occur on the island and Tsimpsean Peninsula.

COMMODITIES: Graphite

MINERALS

SIGNIFICANT: Graphite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound
CLASSIFICATION: Industrial Min.
TYPE: P03 Microcrystalline graphite

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic-Mesozoic	Undefined Group	Unnamed/Unknown Formation	

LITHOLOGY: Phyllite
Greywacke
Sericite Chlorite Schist
Conglomerate
Argillaceous Schist

HOSTROCK COMMENTS: Units 2d,4a - Geological Survey of Canada Map 1472A.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Alexander
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Milbanke Strandflat

RELATIONSHIP:

GRADE: Amphibolite

CAPSULE GEOLOGY

Several occurrences of graphite, noted on Map 12-1966, are located on Digby Island and along the west shore of Tsimpsean Peninsula. Paleozoic-Mesozoic dark argillaceous schists are chiefly thick-bedded phyllites and schists, which are locally graphitic. In zones up to 15 metres wide, the dark schist sequence is composed of intraformational conglomerate, well-bedded greywacke and pale sericite-chlorite schists.

BIBLIOGRAPHY

GSC MAP 3-1965; 12-1966; 1385A; 1472A
GSC MEM 394, p. 41
GSC P 66-33

DATE CODED: 1986/09/04
DATE REVISED: 1988/12/23

CODED BY: LDJ
REVISED BY: JNR

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103J 042**

NATIONAL MINERAL INVENTORY:

NAME(S): **CLAM BAY**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103J07W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 29 24 N
LONGITUDE: 130 47 21 W
ELEVATION: Metres

NORTHING: 6039515
EASTING: 384109

LOCATION ACCURACY: Within 500M

COMMENTS: Mineralized quartz vein (Map I-1, Assessment Report 12777), Baron Island.

COMMODITIES: Lead Silver Zinc

MINERALS

SIGNIFICANT: Galena Sphalerite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein

CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

DIMENSION:

STRIKE/DIP: 145/70N

TREND/PLUNGE:

COMMENTS: Quartz vein.

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE

Paleozoic-Mesozoic

GROUP

Undefined Group

FORMATION

Unnamed/Unknown Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY:

Tuff
Shale
Granodiorite
Pyroxene Tuff
Chert
Diorite

HOSTROCK COMMENTS: Unit 3d - Geological Survey of Canada Map 1472A.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline

PHYSIOGRAPHIC AREA: Milbanke Strandflat

TERRANE: Alexander

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1984

SAMPLE TYPE: Grab

COMMODITY

Silver

GRADE

13.0000

Grams per tonne

Lead

0.4300

Per cent

REFERENCE: Assessment Report 12777.

CAPSULE GEOLOGY

The area is underlain mainly by diorite with discontinuous bands of Paleozoic to Mesozoic sediments and minor volcanics. A major fault, striking 060 degrees, cuts off the north striking sills and sediments with granodiorite occurring northwest of the fault. To the east, are pyroxene porphyry tuffs, with lenses of cherty sediment and graphitic shale.

A sphalerite-galena quartz vein, striking 145 degrees and dipping 70 degrees northeast, occurs in pyroxene porphyry tuffs on the east shore of Clam Bay. A sample assayed 0.43 per cent lead and 13 grams per tonne silver. On the west shore of the bay, a grab sample of black graphitic shale assayed 0.05 per cent zinc, 0.01 per cent copper and 1.8 grams per tonne silver (Assessment Report 12777).

BIBLIOGRAPHY

EMPR ASS RPT 12197, *12777
GSC MAP 12-1966; 1385A; 1472A
GSC MEM 394

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
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BIBLIOGRAPHY

GSC P 66-33

DATE CODED: 1986/09/04
DATE REVISED: 1988/12/23

CODED BY: LDJ
REVISED BY: JNR

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103J 043**

NATIONAL MINERAL INVENTORY:

NAME(S): **BARON ISLAND**

MINING DIVISION: Skeena

STATUS: Showing
 REGIONS: British Columbia
 NTS MAP: 103J07W
 BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 28 34 N
 LONGITUDE: 130 47 11 W
 ELEVATION: Metres

NORTHING: 6037965
 EASTING: 384249

LOCATION ACCURACY: Within 500M

COMMENTS: Mineralized quartz vein, Map H-1 (Assessment Report 12777), Baron Island.

COMMODITIES: Silver Lead Zinc Copper Gold

MINERALS

SIGNIFICANT: Chalcopyrite Galena Sulphur Arsenopyrite Pyrite

Pyrrhotite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
 CLASSIFICATION: Hydrothermal Epigenetic
 TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Plutonic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Cretaceous-Tertiary			Coast Plutonic Complex

LITHOLOGY: Diorite
 Granodiorite
 Quartz Diorite
 Dioritic Gabbro
 Pyroxene Tuff
 Agglomerate
 Volcanic Flow
 Rhyolite
 Sediment/Sedimentary

HOSTROCK COMMENTS: Unit A - Geological Survey of Canada Map 1472A.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
 TERRANE: Plutonic Rocks

Alexander

PHYSIOGRAPHIC AREA: Milbanke Strandflat

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1984

SAMPLE TYPE: Grab

COMMODITY

GRADE

Silver	73.0000	Grams per tonne
Copper	0.1300	Per cent
Lead	1.5500	Per cent
Zinc	0.1200	Per cent

REFERENCE: Assessment Report 12777.

CAPSULE GEOLOGY

The area is dominated by a Cretaceous to Tertiary diorite pluton and quartz diorite to dioritic gabbro sills of the Coast Plutonic Complex. Thin, discontinuous rafts of sedimentary rocks occur within the intrusions. Younger granodiorite sills intrude the sediments and diorites. To the northeast, lie a thick (>300 metres) sequence of pyroxene porphyry tuffs, flows and agglomerates with rhyolite lenses. Strike slip faults, with offsets of up to 100 metres are numerous and strike 060 to 080 degrees.

Quartz veins in diorite contain galena stringers, chalcopyrite, pyrrhotite and sphalerite. A grab sample assayed 1.55 per cent lead, 73.0 grams per tonne silver, 0.12 per cent zinc and 0.13 per cent copper. A quartz vein in granodiorite with pyrite and arsenopyrite, 100 metres to the south, assayed 0.24 grams per tonne gold. Graphitic sediments, 400 metres to the south, assayed 0.07 per cent zinc (Assessment Report 12777).

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BIBLIOGRAPHY

EMPR ASS RPT 12197, *12777
GSC MAP 12-1966; 1385A; 1472A
GSC MEM 394
GSC P 66-33

DATE CODED: 1986/09/04
DATE REVISED: 1988/12/23

CODED BY: LDJ
REVISED BY: JNR

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103J 044**

NATIONAL MINERAL INVENTORY:

NAME(S): **DUN 10**, GRANT 4

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103J07W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 27 29 N
LONGITUDE: 130 47 16 W
ELEVATION: 30 Metres

NORTHING: 6035958
EASTING: 384108

LOCATION ACCURACY: Within 500M

COMMENTS: Mineralized showing, Map J-1 (Assessment Report 12777), Dunira Island.

COMMODITIES: Zinc Copper Silver

MINERALS

SIGNIFICANT:	Pyrite	Chalcopyrite	Sphalerite			
ASSOCIATED:	Quartz	Calcite	Cuprite			
ALTERATION:	Silica	Pyrite	Sericite	Malachite	Epidote	
	Kaolinite	Chlorite				
ALTERATION TYPE:	Silicific'n		Sericitic	Oxidation	Propylitic	Argillic
MINERALIZATION AGE:	Unknown					

DEPOSIT

CHARACTER:	Vein	Disseminated	Stratabound		
CLASSIFICATION:	Hydrothermal	Syngenetic			
TYPE:	I05	Polymetallic veins Ag-Pb-Zn±Au			
DIMENSION:			STRIKE/DIP:	G04	Besshi massive sulphide Cu-Zn
COMMENTS:	Pyritic chert horizon.			020/38E	TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic-Mesozoic	Undefined Group	Unnamed/Unknown Formation	

LITHOLOGY: Graphitic Chert
Rhyolite
Dacite
Crystal Tuff
Lapilli Tuff
Pyroxene Porphyry
Diorite

HOSTROCK COMMENTS: Unit 3 - Geological Survey of Canada Map 1472A.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Alexander

PHYSIOGRAPHIC AREA: Milbanke Strandflat

INVENTORY

ORE ZONE:	SAMPLE	REPORT ON:	N
CATEGORY:	Assay/analysis	YEAR:	1984
SAMPLE TYPE:	Grab		
COMMODITY		GRADE	
Silver		1.0000	Grams per tonne
Copper		0.0900	Per cent
REFERENCE:	Assessment Report 12777.		

CAPSULE GEOLOGY

The area is dominated by a north trending continuous Mesozoic and/or Paleozoic cherty sediment horizon. To the east, are intercalated rhyolite and dacite crystal and crystal lapilli tuffs and volcanogenic sediments with chlorite, sericite and epidote alteration. Above these are a thick (130 metres) massive rhyolite unit and a massive pyroxene porphyry. To the west, lie diorite and pyroxene porphyry.

A horizon of the pyritic cherty sediment assayed 0.14 per cent zinc. Two hundred metres to the east of the chert horizon, chalcopyrite in quartz veins within crystal tuffs assayed 0.09 per cent copper and 1.0 grams per tonne silver (Assessment Report 12777). These veins also contain malachite, cuprite and kaolinite and have sericite-pyrite alteration envelopes.

BIBLIOGRAPHY

EMPR ASS RPT 12197, *12777, 16036, 22764

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

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GEOLOGICAL SURVEY BRANCH
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PAGE: 871
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR EXPL 1983-504; 1084-378
EMPR OF 1999-2
GSC MAP 12-1966; 1385A; 1472A
GSC MEM 394
GSC P 66-33

DATE CODED: 1986/09/05
DATE REVISED: 1988/12/28

CODED BY: LDJ
REVISED BY: JNR

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103J 045**

NATIONAL MINERAL INVENTORY:

NAME(S): **DUN 9**, KATHLEEN 1

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103J07W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 26 24 N
LONGITUDE: 130 46 31 W
ELEVATION: 90 Metres

NORTHING: 6033929
EASTING: 384868

LOCATION ACCURACY: Within 500M

COMMENTS: Mineralized sample, Map A-1 (Assessment Report 12777), Dunira Island.

COMMODITIES: Zinc Copper Silver Gold

MINERALS

SIGNIFICANT: Pyrite Sphalerite Pyrrhotite Chalcopyrite
ASSOCIATED: Graphite
ALTERATION: Pyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated Stratiform
CLASSIFICATION: Replacement
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic-Mesozoic	Undefined Group	Unnamed/Unknown Formation	
Cretaceous-Tertiary			Coast Plutonic Complex

LITHOLOGY: Graphitic Phyllitic Shale
Granodiorite
Dioritic Sill
Gabbroic Sill
Chert
Siltstone
Phyllite

HOSTROCK COMMENTS: Unit 3f - Geological Survey of Canada Map 1472A.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline PHYSIOGRAPHIC AREA: Milbanke Strandflat
TERRANE: Alexander
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N

CATEGORY: Assay/analysis YEAR: 1984
SAMPLE TYPE: Grab

COMMODITY	GRADE	
Gold	1.8000	Grams per tonne
Zinc	0.6400	Per cent

REFERENCE: Assessment Report 12777.

CAPSULE GEOLOGY

A band of Mesozoic and/or Paleozoic metasedimentary and meta-volcanic rocks, trending north and dipping 45 degrees east, is surrounded by intrusive rocks of the Coast Plutonic Complex. To the west, the metasediments are thrust on top of younger granodiorite and to the east, the succession is invaded by thick dioritic to gabbroic sills. The metasedimentary rocks consist of cherts, siltstones and phyllites with lenses of graphitic shales.

Mineralization consists of disseminated pyrite, pyrrhotite, chalcopyrite, and sphalerite within the black graphitic phyllitic shales. A grab sample assayed 0.64 per cent zinc and 1.8 grams per tonne gold (Assessment Report 12777).

BIBLIOGRAPHY

EMPR ASS RPT 12197, *12777, 16036, 22764
EMPR EXPL 1983-504; 1984-378; 1987-C362
GSC MAP 12-1966; 1385A; 1472A
GSC MEM 394

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BIBLIOGRAPHY

GSC P 66-33

DATE CODED: 1986/09/04
DATE REVISED: 1988/12/28

CODED BY: LDJ
REVISED BY: JNR

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103J 046**

NATIONAL MINERAL INVENTORY:

NAME(S): **CONDUCTOR ISLAND**, GRANT 3

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103J07W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 24 24 N
LONGITUDE: 130 48 16 W
ELEVATION: Metres

NORTHING: 6030269
EASTING: 382882

LOCATION ACCURACY: Within 500M

COMMENTS: Mineralized showing, Map F-1 (Assessment Report 12777).

COMMODITIES: Zinc Silver

MINERALS

SIGNIFICANT: Pyrrhotite Sphalerite Pyrite
ASSOCIATED: Graphite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated Stratabound
CLASSIFICATION: Hydrothermal
TYPE: G04 Besshi massive sulphide Cu-Zn

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE: Paleozoic-Mesozoic GROUP: Undefined Group FORMATION: Unnamed/Unknown Formation IGNEOUS/METAMORPHIC/OTHER:

LITHOLOGY: Chert
Conglomerate
Dacitic Tuff
Rhyolite Tuff
Dioritic Dike

HOSTROCK COMMENTS: Unit 3 - Geological Survey of Canada Map 1472A.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Alexander
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Milbanke Strandflat

RELATIONSHIP: GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1984
SAMPLE TYPE: Grab
COMMODITY: GRADE: Grams per tonne
Silver 0.8000 Per cent
Zinc 0.1900

REFERENCE: Assessment Report 12777.

CAPSULE GEOLOGY

"Conductor" Island is underlain by isoclinally folded and faulted package of Mesozoic to Paleozoic graphitic-pyrrhotitic cherts and chert pebble conglomerates, dacite tuffs, rhyolite flows and diorite dykes.

A sample of a chert pebble conglomerate, with a pyrrhotite rich matrix with minor sphalerite, assayed 0.19 per cent zinc and 0.8 grams per tonne silver (Assessment Report 12777).

BIBLIOGRAPHY

EMPR ASS RPT 12197, *12777, 16036
EMPR EXPL 1983-504; 1984-378; 1987-C362
EMPR OF 1999-2
GSC MAP 12-1966; 1385A; 1472A
GSC MEM 394
GSC P 66-33

DATE CODED: 1986/09/04
DATE REVISED: 1988/12/23

CODED BY: LDJ
REVISED BY: JNR

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103J 047**

NATIONAL MINERAL INVENTORY:

NAME(S): **MELVILLE ZINC**, KATHLEEN 4

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103J07E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 23 29 N
LONGITUDE: 130 42 06 W
ELEVATION: 1 Metres

NORTHING: 6028403
EASTING: 389511

LOCATION ACCURACY: Within 500M

COMMENTS: Showing, Map E-1 (Assessment Report 12777), Melville Island.

COMMODITIES: Zinc Silver Copper Lead

MINERALS

SIGNIFICANT: Pyrite Sphalerite Pyrrhotite Galena Chalcopyrite
ASSOCIATED: Graphite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated Concordant
CLASSIFICATION: Hydrothermal Replacement Epigenetic
TYPE: G04 Besshi massive sulphide Cu-Zn
SHAPE: Irregular
MODIFIER: Sheared
DIMENSION:
COMMENTS: Shear zone. STRIKE/DIP: 060/90 TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic-Mesozoic	Undefined Group	Unnamed/Unknown Formation	

LITHOLOGY: Graphitic Pyrrhotite Chert
Pyroxene Porphyry
Rhyolite Crystal Tuff
Dacitic Crystal Tuff
Volcanic Flow

HOSTROCK COMMENTS: Unit 3 - Geological Survey of Canada Map 1472A.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline PHYSIOGRAPHIC AREA: Milbanke Strandflat
TERRANE: Alexander
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1984
SAMPLE TYPE: Grab
COMMODITY GRADE
Silver 1.7000 Grams per tonne
Copper 0.0170 Per cent
Zinc 0.1500 Per cent

REFERENCE: Assessment Report 12777.

CAPSULE GEOLOGY

The area is underlain by Upper Paleozoic to Jurassic cherts and rhyolite/dacite crystal tuffs and flows, with minor pyroxene porphyry. A block of graphitic chert, with minor sphalerite and galena mineralization in thin (10 centimetres) shears, is bounded by a 060 degree fault and a northwest trending fault. Pyrite, pyrrhotite and chalcopyrite are also present.

To the north, 150 metres, graphitic pyrrhotitic cherts occur containing sphalerite. A grab sample assayed 0.15 per cent zinc, 1.7 grams per tonne silver and 0.017 per cent copper (Assessment Report 12777).

A sample of siliceous nodules in cherty sediments, 400 metres to the northwest, assayed 0.22 per cent zinc and 0.6 grams per tonne silver (Assessment Report 12777).

BIBLIOGRAPHY

EMPR ASS RPT 12197, *12777, 16036, 22765
EMPR EXPL 1983-504; 1984-378; 1987-C362

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BIBLIOGRAPHY

EMPR OF 1999-2
GSC MAP 12-1966; 1385A; 1472A
GSC MEM 394
GSC P 66-33

DATE CODED: 1986/09/04
DATE REVISED: 1989/01/20

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103J 048**

NATIONAL MINERAL INVENTORY:

NAME(S): **ALDER**, PORCHER ISLAND

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103J02E
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 54 01 40 N
LONGITUDE: 130 35 25 W
ELEVATION: 40 Metres

NORTHING: 5987782
EASTING: 395832

LOCATION ACCURACY: Within 500M

COMMENTS: Located about 350 metres to the west of Edey Pass Mine (103J 015), Porcher Island.

COMMODITIES: Gold Copper

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite
COMMENTS: Mineralization based on reported similarity to Surf Pt. Mine (103J 017).
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I02 Intrusion-related Au pyrrhotite veins

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Cretaceous-Tertiary			Coast Plutonic Complex

LITHOLOGY: Quartz Diorite
Meta Sediment/Sedimentary
Meta Volcanic

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Plutonic Rocks

PHYSIOGRAPHIC AREA: Milbanke Strandflat

INVENTORY

ORE ZONE: DRILLHOLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1988
SAMPLE TYPE: Drill Core
COMMODITY Gold GRADE 19.0600 Grams per tonne
COMMENTS: From a 1.2 metre drill interval.
REFERENCE: George Cross Newsletter #92, May 12, 1988.

CAPSULE GEOLOGY

The centre of the Alder Zone is located about 350 metres west of the Edey Pass Mine (103J 015). The area is underlain by a Cretaceous to Tertiary quartz diorite stock of the Coast Plutonic Complex that has intruded Paleozoic to Mesozoic metasediments and meta-volcanics. The zone trends for about 300 metres in a northeast direction.

Few details of the zone are reported except that mineralization is similar to that of the AT Zone (Surf Point Mine, 103J 017). At least 3 holes have been drilled on the Alder Zone with the best intersection grading 19.06 grams per tonne gold over 1.2 metres (George Cross Newsletter #92, May 12, 1988).

AT Zone mineralization is presumed to be the same as the general description for the Surf Point Mine: ie. the deposit consists of short and irregularly distributed lenses of auriferous pyrite and chalcopyrite in quartz veins, largely within quartz diorite.

BIBLIOGRAPHY

EMPR AR 1930-71
EMPR ASS RPT 16735, 17076, 25073
GSC MAP 12-1966; 1472A
GSC MEM 394
GSC P 66-33
GSC SUM RPT 1922A, pp. 27-29

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BIBLIOGRAPHY

GCNL *#51,*#92, 1988

DATE CODED: 1989/03/02
DATE REVISED: / /

CODED BY: GJP
REVISED BY:

FIELD CHECK: N
FIELD CHECK:

MINFILE NUMBER: **103K 001**

NATIONAL MINERAL INVENTORY: 103K2 Mn1

NAME(S): **SHAG ROCK**, KLASHWUN POINT, SHAG

STATUS: Prospect
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103K02E
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 08 (NAD 83)

LATITUDE: 54 08 54 N
LONGITUDE: 132 39 36 W
ELEVATION: 5 Metres

NORTHING: 6002374
EASTING: 652940

LOCATION ACCURACY: Within 500M

COMMENTS: Location is the centre of showing, Figure 5, Sheet 2 (Bulletin 54).
Located on the east side of Klashwun Point near Shag Rock on the northern tip of Graham Island.

COMMODITIES: Manganese

MINERALS

SIGNIFICANT: Manganite Pyrolusite Hausmannite Jacobsite

COMMENTS: Trace hausmannite and jacobsite.

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Massive Breccia
CLASSIFICATION: Replacement Epigenetic Industrial Min.
TYPE: H06 Epithermal Mn
SHAPE: Regular
MODIFIER: Faulted
DIMENSION: 168 x 4 Metres STRIKE/DIP: 015/80E
COMMENTS: Occurrence can be traced for 168 metres, widths vary from 1.5 to 4.5 metres.

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Tertiary	Undefined Group	Masset	

LITHOLOGY: Amygdaloidal Basalt
Basalt Flow
Porphyritic Andesite
Calcareous Shale
Calcareous Sandstone

HOSTROCK COMMENTS: Masset Formation ranges from Oligocene to Pliocene in age.

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Wrangell

PHYSIOGRAPHIC AREA: Queen Charlotte Lowland

INVENTORY

ORE ZONE: SHAG ROCK

REPORT ON: Y

CATEGORY: Unclassified
QUANTITY: 13607 Tonnes
COMMODITY: Manganese
GRADE: 15.0000 Per cent
YEAR: 1965

COMMENTS: Visual estimate of tonnage and grade.
REFERENCE: Source unknown.

CAPSULE GEOLOGY

The property is located at Klashwun Point, at the north end of Graham Island, Queen Charlotte Islands. The showings occur along the shoreline for about 152 metres, just north of Indian Reserve 13.

Two claims were located on the showing in 1955 by Joseph Pauloski. He shipped a 200 pound sample to the Mines Branch, Ottawa in 1961; the sample assayed 23.4 per cent manganese.

In 1965 the property consisted of 17 recorded claims held under the name Naden Harbour Manganese Ltd. During May 1965 Falconbridge Nickel Mines Limited took out bulk samples of the order of 150 to 200 tons of fresh material and drilled 77 metres in two packsack diamond-drill holes. The positions of the holes did not provide conclusive results. One hole may have penetrated the fault zone; the other hole intersected it at a narrow locality, although the breccia lens adjacent on the surface is large. A visual estimate of tonnage and grade is 15,000 tons at 15 per cent manganese.

The property was held in 1980 as the Shag 1-2 claims (35 units)

CAPSULE GEOLOGY

by Glen White, of Richmond. Work included a geochemical soil survey comprising 220 samples.

The area is underlain by Tertiary volcanics of the Masset Formation consisting of amygdaloidal basalts, basalt flows and porphyritic andesite sills which strike north to northeast and dip 15 to 20 degrees east. A fault, striking 015 degrees and dipping 80 degrees east, crosscuts the lavas. East of the fault, the lavas are underlain by 23 metres of dark-grey shale and buff-coloured, calcareous shale to sandstone, which resembles the Queen Charlotte Group, Cretaceous Skidegate Formation.

The fault is filled with 1.5 to 4.5 metres of volcanic breccia, cemented by manganese minerals comprised mainly of manganite, pyrolusite, hausmannite and jacobsonite. Veinlets of manganite also extend into the volcanic rocks in the footwall. The showing is exposed along shore for about 168 metres. The manganese values assay up to 50 per cent and average 15 per cent manganese. At the northern end of the exposure a higher-grade lens measuring 15 by 2.4 by 1.5 metres contains between 30 to 40 per cent manganese (Minister of Mines Annual Report 1960, page 11).

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EMR MIN BULL MR 223 B.C. 294
GSC MAP 1385A
GSC P 88-1E, pp. 221-227, 269-274; 89-1H, pp. 73-79; 90-10, pp. 305-324
CANMET IR 61-47
Falconbridge File

DATE CODED: 1986/06/02
DATE REVISED: 1989/01/23

CODED BY: LDJ
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103K 002**

NATIONAL MINERAL INVENTORY: 103K/1 Col 1

NAME(S): **SKONUM POINT**

MINING DIVISION: Skeena

STATUS: Prospect
REGIONS: British Columbia, Queen Charlotte Islands
NTS MAP: 103K01E
BC MAP:

UTM ZONE: 08 (NAD 83)

LATITUDE: 54 01 53 N
LONGITUDE: 132 03 36 W
ELEVATION: 5 Metres

NORTHING: 5990833
EASTING: 692659

LOCATION ACCURACY: Within 500M
COMMENTS: Type locality at Skonum Point east of Masset.

COMMODITIES: Coal

MINERALS

SIGNIFICANT: Coal
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratiform
CLASSIFICATION: Fossil Fuel Sedimentary
TYPE: A02 Lignite
SHAPE: Irregular
MODIFIER: Folded Faulted
DIMENSION: 6 Metres
COMMENTS: Aggregate thickness of beds. See Capsule Geology field for structural comments.

STRIKE/DIP: TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Tertiary	Undefined Group	Skonun	

LITHOLOGY: Lignite
Coal
Sandstone
Siltstone
Shale
Conglomerate
Marl

GEOLOGICAL SETTING

TECTONIC BELT: Insular
TERRANE: Overlap Assemblage
METAMORPHIC TYPE: Regional
PHYSIOGRAPHIC AREA: Queen Charlotte Lowland
RELATIONSHIP: Post-mineralization
GRADE: Lignite

INVENTORY

ORE ZONE: SKONUN POINT
REPORT ON: Y
CATEGORY: Inferred
QUANTITY: 61000000 Tonnes
COMMODITY: Coal
YEAR: 1946
GRADE: 49.7500 Per cent

COMMENTS: Grade for average volatile matter.
REFERENCE: Royal Commission on Coal, Ottawa, 1946.

CAPSULE GEOLOGY

Skonun Point is located on the northeast coast of Graham Island 6.4 kilometres east of Masset.

In 1910, The Queen Charlotte Islands Collieries, Limited, was incorporated for the purpose of acquiring, developing and working 15,540 hectares of coal measures situated near Masset Inlet.

In 1913, the American-Canadian Coal Company, Limited, drilled an inclined bore-hole to a depth of 305 metres. Analysis from an air dried sample from the thickest seam gave these results: water, 11.03 per cent; volatile matter, 49.75 per cent; fixed carbon, 35.94 per cent; ash, 3.28 per cent; coke, 39.22 per cent; and a fuel ratio of 0.72. Reserves were estimated in 1913 at 60,000,000 long tons.

A preliminary estimate of probable mineable reserves by Mackay for the Royal Commission on coal, in 1946, was 67,200,000 tons.

In 1958 detailed drilling was done by Richfield Oil Corporation of Canada Ltd.

Shell Canada Limited investigated the property in the mid 1960's.

CAPSULE GEOLOGY

Lignite of Tertiary Age occurs in the Skonun Formation in the northeast portion of Graham Island. The Skonun Formation is comprised mainly of sandstone, shale and siltstone, with less conglomerate, lignite and marl. The lignite outcrops at various locations with the type locality being at Skonun Point. The coal has also been encountered in drillholes in various parts of the region.

Nine beds of lignite are exposed at Skonun Point interbedded with sandstone and silty shale. The thickest bed is 0.9 metres thick and the aggregate thickness is approximately 6.1 metres. Thirteen beds were intersected in a nearby drillhole. One of the seams is 1.8 metres thick but the aggregate thickness for this drillhole has not been recorded. The lignite at Skonun Point contains 11.03 per cent to 22.5 per cent water, 37.5 per cent to 49.75 per cent volatile matter, 31.5 per cent to 36.5 per cent fixed carbon, 1.0 per cent to 3.5 per cent ash, and 0.3 per cent sulphur (ultimate analysis). The carbonaceous deposits vary from a tough fibrous or woody lignite to black shiny coal with concoidal fracture.

The lignites at Skonun Point occur within an east-west trending anticline which plunges west. The north limb dips approximately 20 degrees north and dips on the south limb vary from 50 degrees south near the fold axis to 25 degrees south further south. The anticline is faulted along the axis.

The Tertiary Basin in northeastern Graham Island is separated into two subbasins by an east-west ridge just south of Masset. Lignite has been encountered at Skonun Point, Yakan Point, Tow Hill and Masset in the northern subbasin and at Nadu, Cape Ball, Gold Creek, Tlell and Lawnhill in the southern subbasin. No thick coal beds are reported in the southern basin while in the north the aggregate thickness of thin seams may be considerable.

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- EMPR BULL *54, pp. 118-127
- EMPR COAL ASS RPT *93
- EMR MP CORPFILE (The Queen Charlotte Island Collieries, Limited)
- GSC MAP 176A; 922; *1420; 1385A
- GSC MEM *69; *88, pp 18,156-158
- GSC P 88-1E, pp. 221-227, 255-258; 89-1H, pp. 87-94; 90-10, pp. 337-371, 381-451
- GSC PROG RPT 1878-1879, p. 86-B
- GSC SUM RPT 1912, pp. 16,38-39
- Report on the Royal Commission on Coal, pp. 51,641, Ottawa, 1946

DATE CODED: 1986/05/21
DATE REVISED: 1989/01/23

CODED BY: EVK
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 883
REPORT: RGEN0100

MINFILE NUMBER: **1030 001**

NATIONAL MINERAL INVENTORY:

NAME(S): **HOWARD**

MINING DIVISION: Alaska, USA

STATUS: Showing
REGIONS: British Columbia, Alaska
NTS MAP: 103O16E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 59 31 N
LONGITUDE: 130 03 36 W
ELEVATION: 192 Metres

NORTHING: 6205690
EASTING: 433878

LOCATION ACCURACY: Within 1 KM

COMMENTS: Open cuts, 7.6 kilometres north-northwest of Stewart on the east side of Salmon River and the road, 0.75 kilometres north of the summit of Mountain View (United States Geological Survey Bulletin 807).

COMMODITIES: Lead Zinc

MINERALS

SIGNIFICANT: Galena Sphalerite Pyrite
ASSOCIATED: Quartz Barite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
DIMENSION:
COMMENTS: Shear zone.

110 Vein barite
STRIKE/DIP: 330/40E TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Plutonic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Lower Jurassic			Texas Creek Plutonic Suite

LITHOLOGY: Granodiorite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Plutonic Rocks Stikine

PHYSIOGRAPHIC AREA: Boundary Ranges

CAPSULE GEOLOGY

The area is underlain by the Lower Jurassic Texas Creek Plutonic Suite consisting of granodiorite. At the Howard showing, a quartz vein and stringers occur in a shear zone striking 330 degrees and dipping 40 degrees northeast. The veins are exposed for 46 metres by several open cuts and stripping. A few of the quartz stringers locally contain barite. One quartz body is 3 metres long, 30 centimetres wide and is moderately mineralized with galena, pyrite and sphalerite.

BIBLIOGRAPHY

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EMPR FIELDWORK 1983, pp. 149-165; 1984, pp. 316-342; 1985, pp. 217-219; 1990, pp. 235-243
EMPR MAP 8
EMPR OF 1987-22
GSC MAP 1385A
GSC MEM 175
USGS BULL *807, p. 76

DATE CODED: 1985/07/24
DATE REVISED: 1989/12/07

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1030 001**

MINFILE NUMBER: **1030 002**

NATIONAL MINERAL INVENTORY:

NAME(S): **SIXMILE**

MINING DIVISION: Alaska, USA

STATUS: Showing
 REGIONS: British Columbia, Alaska
 NTS MAP: 103016E
 BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 59 18 N
 LONGITUDE: 130 03 43 W
 ELEVATION: 79 Metres

NORTHING: 6205290
 EASTING: 433750

LOCATION ACCURACY: Within 1 KM

COMMENTS: Open cut in the bed of a gulch, 7 kilometres north-northwest of Stewart on the east side of Salmon River and the road, at the base of Mountain View (United States Geological Survey Bulletin 807).

COMMODITIES: Gold Silver Lead Zinc Copper

MINERALS

SIGNIFICANT: Gold Galena Chalcopyrite Sphalerite
 ASSOCIATED: Quartz Pyrite
 MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
 CLASSIFICATION: Hydrothermal Epigenetic
 TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
 DIMENSION:
 COMMENTS: Vein

102 Intrusion-related Au pyrrhotite veins
 STRIKE/DIP: 310/70N TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic			Texas Creek Plutonic Suite

LITHOLOGY: Granodiorite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
 TERRANE: Plutonic Rocks Stikine
 PHYSIOGRAPHIC AREA: Boundary Ranges

INVENTORY

ORE ZONE: VEIN REPORT ON: N

CATEGORY:	Assay/analysis	YEAR:	1929
SAMPLE TYPE:	Grab		
COMMODITY		GRADE	
Silver		287.9500	Grams per tonne
Gold		23.3100	Grams per tonne
Lead		8.7000	Per cent

COMMENTS: Sample of quartz vein.
 REFERENCE: United States Geological Survey Bulletin 807.

CAPSULE GEOLOGY

The property is underlain by the Lower Jurassic Texas Creek Plutonic Suite consisting of granodiorite. Narrow quartz stringers and veins are hosted in shear zones up to 1.5 metres wide. Visible free gold occurs within the borders of the quartz stringers and in the granodiorite wallrock. Some of the stringers carry galena with flakes of gold within the galena. Minor pyrite is disseminated in the granodiorite and where quartz veins occur the shattered wallrock is impregnated with pyrite and galena along fractures.

At the Sixmile showing, two adits were driven in 1925 along shear zones. The southern adit, 10 metres long, is along a quartz vein striking 310 degrees and dipping 70 degrees northeast. The vein is a fraction of a centimetre wide at the portal and widens to 15 centimetres in the adit. A shattered zone at the face of the adit contains quartz stringers mineralized with galena, pyrite, chalcopyrite and free gold.

A second adit 4.5 metres to the north of the first and 10 metres long, follows a shear zone 1.5 metres wide containing narrow quartz stringers. The main quartz vein, 2.5 to 20 centimetres wide, is mineralized with galena, pyrite, chalcopyrite and sparse sphalerite.

An open cut in a bed of a gulch exposes a shear zone 38 to 50 centimetres wide with quartz stringers mineralized with pyrite and galena. The vein strikes 318 degrees and dips steeply northeast. A

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GEOLOGICAL SURVEY BRANCH
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CAPSULE GEOLOGY

heavy pyritic quartz stringer assayed 2.05 grams per tonne gold and 20.56 grams per tonne silver; where galena occurs an assay returned 23.31 grams per tonne gold, 287.95 grams per tonne silver and 8.7 per cent lead (United States Geological Survey Bulletin 807).

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EMPR OF 1987-22
GSC MAP 1385A
GSC MEM 175
USGS BULL *807, pp. 76,77

DATE CODED: 1985/07/24
DATE REVISED: 1989/12/08

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1030 003**

NATIONAL MINERAL INVENTORY:

NAME(S): **LAST SHOT**

MINING DIVISION: Alaska, USA

STATUS: Showing
 REGIONS: British Columbia, Alaska
 NTS MAP: 103O16E
 BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 59 51 N
 LONGITUDE: 130 03 25 W
 ELEVATION: 396 Metres

NORTHING: 6206305
 EASTING: 434078

LOCATION ACCURACY: Within 1 KM

COMMENTS: Crosscut adit, 7.8 kilometres north-northwest of Stewart, east of Salmon River, 1.25 kilometres north of the summit of Mountain View (United States Geological Survey Bulletin 807).

COMMODITIES: Silver Lead Zinc Copper Gold
 Tungsten

MINERALS

SIGNIFICANT: Galena Pyrite Chalcopyrite Sphalerite Tetrahedrite
 Freibergite Scheelite
 ASSOCIATED: Quartz Pyrite Pyrrhotite
 MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
 CLASSIFICATION: Hydrothermal Epigenetic
 TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
 DIMENSION:
 COMMENTS: Vein

STRIKE/DIP: 112 W veins
 300/45N TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
 Lower Jurassic Texas Creek Plutonic Suite

LITHOLOGY: Granodiorite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Boundary Ranges
 TERRANE: Plutonic Rocks Stikine

INVENTORY

ORE ZONE: VEIN REPORT ON: N
 CATEGORY: Assay/analysis YEAR: 1951
 SAMPLE TYPE: Channel
 COMMODITY GRADE
 Silver 387.3600 Grams per tonne
 Gold 2.7400 Grams per tonne
 Copper 4.8500 Per cent
 Lead 6.2000 Per cent

COMMENTS: Sample across 66 centimetre wide sulphide vein.
 REFERENCE: United States Geological Survey Bulletin 1024-F.

CAPSULE GEOLOGY

The area is underlain by the Lower Jurassic Texas Creek Plutonic Suite consisting of granodiorite cut by a northwest striking mylonite shear zone known as the Lindeborg shear zone. Two quartz veins are exposed and strike northwest at the Last Shot showing. One vein has been traced by surface exposures, pits and open cuts for 182 metres and a vertical distance of 22 metres. The vein strikes 300 degrees and dips 45 degrees northeast. At its southeast end it is a couple of centimetres wide and contains disseminated sulphides; continuing along strike for 10 metres the vein widens to 45 centimetres and contains inclusions of country rock and 4 metres further is 3.6 metres wide in the face of a bluff. A shoot of almost solid sulphide 20 to 45 centimetres wide is exposed for a length of 9 metres in the footwall. The sulphides consist of galena, pyrite, sphalerite, pyrrhotite and chalcopyrite. Microscopic examination indicates that tetrahedrite and freibergite are also present. A crosscut adit 7.6 metres long had been driven just below the surface outcrop of the vein. At the face of the adit the quartz vein passes downward into a series of stringer veins with the mineralized sulphide shoot persisting. A channel sample across 66 centimetres of

CAPSULE GEOLOGY

sulphide assayed 387.36 grams per tonne silver, 6.2 per cent lead, 4.85 per cent copper and 2.74 grams per tonne gold (United States Geological Survey Bulletin 1024-F). Scattered grains of scheelite occur through 0.9 metres of the hangingwall adjacent to the sulphide vein. For 1.5 metres beneath the vein at the portal, many narrow reticulating quartz veins enclose pyritic and locally schistose granodiorite fragments. To the northwest of the adit two small pits expose a 91 centimetre quartz vein with sparse disseminated sulphides. A large quartz vein 3 to 4.5 metres wide, striking 350 degrees and dipping steeply west is exposed 30 metres below the adit. A small pocket of mineralized quartz is evident in the footwall.

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EMPR MAP 8
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GSC MAP 1385A
GSC MEM 175
USGS BULL *807, pp. 75,76; *1024-F, p. 136

DATE CODED: 1985/07/24
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FIELD CHECK: N
FIELD CHECK: N

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MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 888
REPORT: RGEN0100

MINFILE NUMBER: **1030 004**

NATIONAL MINERAL INVENTORY:

NAME(S): **BISHOP**

MINING DIVISION: Alaska, USA

STATUS: Showing
REGIONS: British Columbia, Alaska
NTS MAP: 103O16E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 59 29 N
LONGITUDE: 130 03 13 W
ELEVATION: 426 Metres

NORTHING: 6205622
EASTING: 434275

LOCATION ACCURACY: Within 1 KM

COMMENTS: Open cuts, 7.5 kilometres north-northwest of Stewart, west of Skookum
Creek on the east facing slope 1 kilometre north of the summit of
Mountain View (United States Geological Survey Bulletin 807).

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Pyrrhotite Pyrite Chalcopyrite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb)
DIMENSION:
COMMENTS: Vein

STRIKE/DIP: 315/50N

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Plutonic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Lower Jurassic			Texas Creek Plutonic Suite

LITHOLOGY: Granodiorite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Plutonic Rocks

Stikine

PHYSIOGRAPHIC AREA: Boundary Ranges

CAPSULE GEOLOGY

The area is underlain by the Lower Jurassic Texas Creek Plutonic Suite consisting of granodiorite. At the Bishop showing, a strong quartz vein striking 315 degrees and dipping 50 degrees northeast has been traced for 182 metres by open cuts and surface exposures. It is exposed over a vertical distance of 30 metres. On average, vein widths vary between 38 to 68 centimetres but is 2.1 metres wide on the slope to Skookum Creek. Mineralization is sparse and consists of pyrrhotite and pyrite with minor chalcopyrite.

BIBLIOGRAPHY

EMPR BULL 58; 63
EMPR FIELDWORK 1983, pp. 149-165; 1984, pp. 316-342; 1985, pp. 217-219; 1990, pp. 235-243
EMPR MAP 8
EMPR OF 1987-22
GSC MAP 1385A
GSC MEM 175
USGS BULL *807, p. 67

DATE CODED: 1985/07/24
DATE REVISED: 1989/12/08

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1030 004**

MINFILE NUMBER: **1030 005**

NATIONAL MINERAL INVENTORY:

NAME(S): **FISH CREEK**, OLYMPIA, NEVADA,
STARBOARD

STATUS: Prospect
REGIONS: British Columbia, Alaska
NTS MAP: 103016E
BC MAP:

MINING DIVISION: Alaska, USA

LATITUDE: 55 59 29 N
LONGITUDE: 130 02 13 W
ELEVATION: 579 Metres

UTM ZONE: 09 (NAD 83)

NORTHING: 6205606
EASTING: 435315

LOCATION ACCURACY: Within 1 KM

COMMENTS: Adits, on the ridge between Skookum and Fish creeks, 1 kilometre north-northeast from the summit of Mountain View, 7 kilometres north-northwest of Stewart (United States Geological Survey Bulletin 807).

COMMODITIES: Gold Silver Lead Zinc Copper
Tungsten

MINERALS

SIGNIFICANT: Galena Sphalerite Pyrrhotite Pyrite Tetrahedrite

ASSOCIATED: Chalcopyrite Freibergite Scheelite

MINERALIZATION AGE: Unknown

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Massive
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

DIMENSION: Veins

STRIKE/DIP: 112 W veins
310/45N

TREND/PLUNGE:

COMMENTS: Veins

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic	Hazelton	Undefined Formation	Texas Creek Plutonic Suite
Lower Jurassic			

LITHOLOGY: Granodiorite
Greenstone
Greywacke
Argillite
Quartz Diorite Dike

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Plutonic Rocks
METAMORPHIC TYPE: Regional

Stikine
RELATIONSHIP:

PHYSIOGRAPHIC AREA: Boundary Ranges

GRADE: Greenschist

INVENTORY

ORE ZONE: STOCKPILE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1916

SAMPLE TYPE: Bulk Sample

COMMODITY

GRADE

COMMODITY	GRADE	UNIT
Silver	9999.9999	Grams per tonne
Gold	12.6800	Grams per tonne
Copper	7.6800	Per cent
Lead	32.2000	Per cent

COMMENTS: Sorted ore (18 tonnes) from veins on the Olympia claim; silver actually assayed 10,832.48 grams per tonne.

REFERENCE: United States Geological Survey Bulletin 807.

CAPSULE GEOLOGY

The area is underlain by Lower Jurassic Texas Creek Plutonic Suite granodiorite in contact with north trending Lower Jurassic Hazelton Group greenstone, tuff, tuffaceous greywacke and argillite. Quartz veins occur predominantly in the granodiorite but in part cross the contact and are evident to a minor extent in Hazelton Group rocks. Two types of mineralization occur; the first are predominant quartz veins with galena, sphalerite, pyrite, tetrahedrite, chalcopyrite, microscopic freibergite and sparse scheelite; the second are lenticular bodies of pyrrhotite with minor amounts of chalcopyrite, pyrite and arsenopyrite. Scheelite occurs as scattered crystals in the quartz veins and locally are 2.5 centimetres across.

CAPSULE GEOLOGY

There are approximately four parallel quartz veins lying just at the contact between granodiorite and Hazelton Group rocks but almost wholly within the granodiorite. The veins occur within a distance of 609 metres of each other. The veins strike from 310 to 320 degrees and dip between 45 to 70 degrees northeast. Vein widths vary from 0.48 to 1.21 metres and locally break up into a number of narrow quartz stringers which sometime extend into the wallrock. The veins carry local shoots of sulphides 7 to 30 centimetres wide and are lean for considerable lengths. A local fault striking 030 degrees with a vertical dip locally cuts off a vein at the contact of granodiorite and Hazelton Group rocks. A quartz vein up to 38 centimetres wide strikes 290 degrees and dips 45 degrees north in greenstone which is cut by a quartz diorite dyke. Numerous quartz stringer veins occur in the footwall and are up to 60 centimetres wide. Mineralization consists of galena with minor chalcopyrite, sphalerite and tetrahedrite.

Seven adits and drifts have developed the quartz veins. Eighteen tonnes of sorted ore taken from veins on the Olympia claim assayed 12.68 grams per tonne gold, 10,832.48 grams per tonne silver, 32.2 per cent lead and 7.68 per cent copper (United States Geological Survey Bulletin 807).

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EMPR BULL 58; 63
EMPR FIELDWORK 1983, pp. 149-165; 1984, pp. 316-342; 1985, pp. 217-219; 1990, pp. 235-243
EMPR MAP 8
EMPR OF 1987-22; 1991-17
GSC MAP 1385A
GSC MEM 175
USGS BULL *807, p. 68-71; *1024-F, p. 138

DATE CODED: 1985/07/24
DATE REVISED: 1989/12/08

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1030 006**

NATIONAL MINERAL INVENTORY: 103P13 Au6

NAME(S): **GLORY EXTENSION 2**, CARDOZO, WOOD 5

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103O16E 103P13W
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 49 38 N
LONGITUDE: 130 00 09 W
ELEVATION: 853 Metres

NORTHING: 6187305
EASTING: 437199

LOCATION ACCURACY: Within 500M

COMMENTS: Located 24.5 kilometres south of Stewart near the headwaters of the Georgie River (Minister of Mines Annual Report 1927).

COMMODITIES: Zinc Lead

MINERALS

SIGNIFICANT: Pyrite Sphalerite Galena
ASSOCIATED: Quartz
ALTERATION: Silica
ALTERATION TYPE: Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
DIMENSION:
COMMENTS: Silicified zone

STRIKE/DIP: 008/30E

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Jurassic			Bulldog Creek Pluton

ISOTOPIC AGE: 181 +/- 8 Ma
DATING METHOD: Potassium/Argon
MATERIAL DATED: Hornblende

LITHOLOGY: Granodiorite

HOSTROCK COMMENTS: Isotopic age data from GSC Open File 2996.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Plutonic Rocks

PHYSIOGRAPHIC AREA: Boundary Ranges

CAPSULE GEOLOGY

The Glory Extension 2 showing consists of a 1.1 metre wide silicified zone in granodiorite of the Jurassic Bulldog Creek pluton. The zone strikes 008 degrees and dips 30 to 35 degrees east and contains numerous quartz stringers and abundant pyrite with traces of sphalerite and galena. See also Gloria (103P 011) and Glory Extension (103P 184).

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EMPR MAP 8
EMPR OF 1986-2; 1987-22
GSC MAP 1385A
GSC MEM 175, p. 93
GSC OF 2996

DATE CODED: 1985/07/24
DATE REVISED: 1999/06/17

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1030 007**

NATIONAL MINERAL INVENTORY:

NAME(S): **MOUNTAIN VIEW**, FISH CREEK NO. 2 VEIN

STATUS: Past Producer
REGIONS: British Columbia, Alaska
NTS MAP: 103O16E
BC MAP:

Underground

MINING DIVISION: Alaska, USA

LATITUDE: 55 59 28 N
LONGITUDE: 130 03 00 W
ELEVATION: 304 Metres

UTM ZONE: 09 (NAD 83)

NORTHING: 6205588
EASTING: 434500

LOCATION ACCURACY: Within 1 KM

COMMENTS: Fish Creek No. 2 vein in main tunnel on the ridge between Fish and Skookum creeks, 500 metres north-northeast of Mountain View, 6.8 kilometres north-northwest of Stewart (United States Geological Survey Bulletin 1024-F).

COMMODITIES: Silver Gold Tungsten Lead Copper
 Zinc Molybdenum

MINERALS

SIGNIFICANT: Pyrite Pyrrhotite Scheelite Chalcopyrite Galena
 Sphalerite Tetrahedrite Freibergite Molybdenite

COMMENTS: Rare molybdenite in dykes.
ASSOCIATED: Quartz Pyrite Barite Arsenopyrite

COMMENTS: Trace arsenopyrite.

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
 TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au I12 W veins
SHAPE: Tabular

DIMENSION: STRIKE/DIP: 315/50N TREND/PLUNGE:
COMMENTS: Fish Creek No. 2 vein

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic	Hazelton	Undefined Formation	Texas Creek Plutonic Suite
Lower Jurassic			Hyder Pluton
Eocene			

LITHOLOGY: Granodiorite
 Tuffaceous Greywacke
 Greywacke
 Argillite
 Granodiorite Porphyry Dike
 Lamprophyre Dike
 Aplite Dike

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Plutonic Rocks
METAMORPHIC TYPE: Contact

PHYSIOGRAPHIC AREA: Boundary Ranges
Stikine
RELATIONSHIP: GRADE: Hornfels

INVENTORY

ORE ZONE: VEIN REPORT ON: N

CATEGORY: Assay/analysis YEAR: 1944
SAMPLE TYPE: Channel
COMMODITY GRADE
Silver 219.3900 Grams per tonne
Gold 3.4200 Grams per tonne
Tungsten 1.2300 Per cent

COMMENTS: Average of 43 channel samples across a 42 centimetre quartz vein along a 39 metre length.

REFERENCE: United States Geological Survey Bulletin 1024-F.

CAPSULE GEOLOGY

The area is underlain by Lower Jurassic Texas Creek Plutonic Suite granodiorite in contact with Lower Jurassic Hazelton Group argillite, tuffaceous greywacke and greywacke. Quartz veins occur in a shear zone up to 30 metres wide in the granodiorite within a hundred metres west of the contact with the Hazelton Group. Some veins occur in hornfelsed Hazelton Group greywacke and tuffaceous

CAPSULE GEOLOGY

greywacke at the contact with granodiorite. Granodiorite porphyry dykes correlative to the Eocene Hyder Pluton and lamprophyre dykes crosscut some quartz veins. Locally, a mineralized quartz vein cuts a white aplite dyke. Underground work at the Mountain View mine is on three principal veins of which the Fish Creek No. 2 vein received the most development. Several other quartz veins and stringers are found on the property.

The quartz veins strike from 280 to 007 degrees and dip between 40 to 70 degrees northeast. The veins branch and split locally up to 3 metres apart in the footwall and hangingwall. Fragments of granodiorite and schistose Hazelton Group wallrock occur in some veins. Vein widths vary from 7 centimetres to 2.43 metres and contain disseminated sulphides and seams and pockets up to 60 centimetres wide. Mineralization consists of pyrite, pyrrhotite, scheelite, chalcopyrite, galena, sphalerite, tetrahedrite, freibergite and local trace arsenopyrite and free gold. Gangue mineralogy is mainly quartz with minor interbanded barite. Rare molybdenite flakes occur in a granodiorite porphyry dyke and aplite dyke. The Fish Creek No. 2 vein is the only vein that contains scheelite.

A weighted average W03 content of 43 channel samples taken underground from scheelite-bearing portions of the Fish Creek No. 2 vein assayed 1.23 per cent across an average vein width of 42 centimetres and along a strike length of 39 metres. This ore also averaged 3.42 grams per tonne gold and 219.39 grams per tonne silver (United States Geological Survey Bulletin 1024-F).

Past production statistics are not available.

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- EMPR FIELDWORK 1983, pp. 149-165; 1984, pp. 316-342; 1985, pp. 217-219; 1990, pp. 235-243
- EMPR MAP 8
- EMPR OF 1987-22; 1991-17
- GSC MAP 1385A
- GSC MEM 175
- USGS BULL *807, pp. 63-67; *1024-F, pp. 137,138

DATE CODED: 1985/07/24
DATE REVISED: 1989/12/11

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1030 008**

NATIONAL MINERAL INVENTORY:

NAME(S): **LUCKY BOY EXTENSION**

MINING DIVISION: Alaska, USA

STATUS: Showing
REGIONS: British Columbia, Alaska
NTS MAP: 103O16E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 59 02 N
LONGITUDE: 130 02 52 W
ELEVATION: 198 Metres

NORTHING: 6204782
EASTING: 434627

LOCATION ACCURACY: Within 1 KM

COMMENTS: Adit, just east of the junction of Skookum and Fish creeks on the bank of a small creek southeast of Fish Creek, 500 metres east-southeast of the summit of Mountain View, 6 kilometres north-northwest of Stewart (United States Geological Survey Bulletin 807).

COMMODITIES: Lead Zinc Copper

MINERALS

SIGNIFICANT: Pyrite Galena Sphalerite Chalcopyrite

COMMENTS: Trace chalcopyrite.

ASSOCIATED: Quartz Arsenopyrite

COMMENTS: Trace arsenopyrite.

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein

CLASSIFICATION: Hydrothermal Epigenetic

TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

DIMENSION:

STRIKE/DIP: 300/40N

TREND/PLUNGE:

COMMENTS: Vein

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Greywacke
Tuffaceous Greywacke

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Plutonic Rocks

Stikine

PHYSIOGRAPHIC AREA: Boundary Ranges

CAPSULE GEOLOGY

The area is underlain by Lower Jurassic Hazelton Group thinly bedded greywacke and tuffaceous greywacke. The Lucky Boy Extension showing consists of an adit driven to intersect quartz stringer veins hosted in a shear zone up to 0.91 metres wide. The stringer veins have an aggregate width of 15 to 40 centimetres and are locally mineralized with pyrite, galena, sphalerite and trace amounts of pyrrhotite and chalcopyrite. The vein strikes 300 degrees and dips 40 to 55 degrees north.

BIBLIOGRAPHY

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EMPR FIELDWORK 1983, pp. 149-165; 1984, pp. 316-342; 1985, pp. 217-219; 1990, pp. 235-243
EMPR MAP 8
EMPR OF 1987-22
GSC MAP 1385A
GSC MEM 175
USGS BULL *807, p. 67

DATE CODED: 1985/07/24
DATE REVISED: 1989/12/11

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1030 009**

NATIONAL MINERAL INVENTORY: 103P5 Cu3

NAME(S): **FRIDAY**, MAPLE BAY

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 103O08E 103P05W
BC MAP:

Open Pit

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 26 03 N
LONGITUDE: 130 00 55 W
ELEVATION: 0009 Metres

NORTHING: 6143576
EASTING: 435759

LOCATION ACCURACY: Within 500M

COMMENTS: Centre of surface trace of vein, 980 metres north of Maple Bay on the east shore of Portland Canal, about 55 kilometres south of Stewart and 12.5 kilometres due west of Anyox (Assessment Report 5550).

COMMODITIES: Silica

MINERALS

SIGNIFICANT: Quartz
ASSOCIATED: Pyrrhotite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic Industrial Min.
TYPE: I07 Silica veins
DIMENSION:
COMMENTS: Friday vein

STRIKE/DIP: 170/90

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Siltstone
Sandstone

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Stikine
METAMORPHIC TYPE: Regional

Wrangell
RELATIONSHIP:

PHYSIOGRAPHIC AREA: Boundary Ranges

GRADE: Greenschist

CAPSULE GEOLOGY

The area is underlain by the western margin of a 14.4 by 9.6 kilometre roof pendant within the Tertiary Coast Plutonic Complex. The rocks within the pendant are commonly correlated with the Lower Jurassic Hazelton Group but have also been correlated with the Upper Triassic Kunga Group.

The roof pendant in this area comprises a sequence of mafic and intermediate (andesitic-dacitic) volcanics interbedded with felsic tuffs, siltstones, silty argillites and fine-grained sandstones. The sequence strikes 010 to 035 degrees and dips 40 to 85 degrees southeast. The mafic volcanics have been variably foliated and chloritized to greenstone and chlorite-hornblende schist as a result of regional greenschist metamorphism.

At the Friday showing, a coarse-grained milky white quartz vein is hosted in interbedded dark grey siltstone and fine-grained sandstone of the Hazelton Group. Siltstone inclusions occur along the western margin of the vein. The Friday vein, 4 to 5 metres in width, strikes 170 degrees for up to 180 metres and dips near vertical. The quartz is considered to be of high purity.

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EMPR ASS RPT 5550
EMPR BULL 63
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EMPR PF (*Pell, J. (1982): Report)
GSC MAP 1385A

DATE CODED: 1985/07/24
DATE REVISED: 1989/12/11

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1030 010**

NATIONAL MINERAL INVENTORY: 103016 Ag1

NAME(S): **EMMA GORDON**, GOLD WEDGE

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103016E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 52 09 N
LONGITUDE: 130 01 28 W
ELEVATION: 25 Metres

NORTHING: 6191993
EASTING: 435893

LOCATION ACCURACY: Within 500M

COMMENTS: Adit, on the eastern shoreline of Portland Canal, just south of the mouth of Marmot River, 7.5 kilometres south of Stewart (Geological Survey of Canada Memoir 175).

COMMODITIES: Silver Gold Copper Zinc Lead

MINERALS

SIGNIFICANT: Galena Chalcopyrite Pyrite Sphalerite
ALTERATION: Silica
ALTERATION TYPE: Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stockwork
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Eocene _____ Hydor Pluton

LITHOLOGY: Granite
Diorite Dike
Diorite

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Plutonic Rocks

PHYSIOGRAPHIC AREA: Boundary Ranges

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
YEAR: 1914
CATEGORY: Assay/analysis
SAMPLE TYPE: Bulk Sample
COMMODITY GRADE
Silver 2276.1900 Grams per tonne
Gold 2.7400 Grams per tonne
Copper 0.5600 Per cent

COMMENTS: Trial shipment to Trail smelter.

REFERENCE: Minister of Mines Annual Report 1914, page K154.

CAPSULE GEOLOGY

The area is underlain by Tertiary Coast Plutonic Complex granite of the Eocene Hydor Pluton locally cut by a diorite dyke. The Emma Gordon showing consists of highly fractured and faulted granite with some silicification in the wallrock adjacent to major fractures. A diorite dyke cuts the granite and along its contacts hosts small stringers of sphalerite, pyrite, chalcopyrite and galena. A small trial shipment to the Trail smelter in 1914 assayed 2276.19 grams per tonne silver, 0.56 per cent copper and 2.74 grams per tonne gold (Minister of Mines Annual Report 1914).

BIBLIOGRAPHY

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EMPR ASS RPT 16905
EMPR FIELDWORK 1990, pp. 235-243
EMPR MAP 8
GSC MAP 1385A
GSC MEM *175, p. 113
GSC OF 2996

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 897
REPORT: RGEN0100

BIBLIOGRAPHY

CANMET IR 643

DATE CODED: 1985/07/24
DATE REVISED: 1999/06/17

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1030 011**

NATIONAL MINERAL INVENTORY: 103016 Cu1

NAME(S): **BIG MIKE**

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 103016E
BC MAP:

Underground

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 50 49 N
LONGITUDE: 130 02 46 W
ELEVATION: 50 Metres

NORTHING: 6189540
EASTING: 434500

LOCATION ACCURACY: Within 500M

COMMENTS: Main adit, just above the high tide mark along the east shore of
Portland Canal, south of Bulldog Creek, 10.5 kilometres south of
Stewart (Assessment Report 15580).

COMMODITIES: Gold Copper Lead Zinc Silver

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Galena Sphalerite Gold
ASSOCIATED: Quartz
ALTERATION: Silica Epidote
ALTERATION TYPE: Silicific'n Propylitic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
DIMENSION:
COMMENTS: Quartz vein 30 metres upslope from vein in Main adit.
STRIKE/DIP: 073/53N TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic Hazelton Undefined Formation Bulldog Creek Pluton
Jurassic

ISOTOPIC AGE: 181 +/- 8 Ma
DATING METHOD: Potassium/Argon
MATERIAL DATED: Hornblende

LITHOLOGY: Granodiorite
Diorite
Andesite
Siltstone
Slate
Hornblendite

HOSTROCK COMMENTS: Isotopic age from GSC Open File 2996.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline PHYSIOGRAPHIC AREA: Boundary Ranges
TERRANE: Plutonic Rocks Stikine

INVENTORY

ORE ZONE: VEIN REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1986
SAMPLE TYPE: Chip
COMMODITY GRADE
Silver 5.4800 Grams per tonne
Gold 6.8200 Grams per tonne
COMMENTS: Sample from Main adit.
REFERENCE: Assessment Report 15580.

CAPSULE GEOLOGY

The area is mainly underlain by diorite, minor quartz diorite and granodiorite of the Jurassic Bulldog Creek Pluton. These rocks have intruded and contain local remnants of Lower Jurassic Hazelton Group andesite, siltstone and slate. Silicification of Hazelton Group rocks has occurred at most places along the contact with the Coast Plutonic Complex. Locally, occasional andesite and rare quartz monzonite dykes intrude diorite and granodiorite dykes intrude Hazelton Group andesite.

At the Big Mike occurrence, short discontinuous quartz veins are emplaced along east to southeast striking, moderate to steeply north dipping faults or shears in granodiorite. The veins have sharp

CAPSULE GEOLOGY

contacts with wallrock but local silicification is evident. Epidote veinlets and patchy epidotization occasionally occur in the quartz veins and within Hazelton Group andesite and the intrusive rocks. Mineralization in the quartz veins consists of variable amounts of pyrite, chalcopyrite, galena and sphalerite with associated gold and silver values.

Two historic adits, the Main adit and South adit, are developed on a quartz vein and silicified fault, respectively. The Main adit is along an east trending fault or shear dipping 44 to 72 degrees north. The main quartz vein ranges from 26 to 34 centimetres wide and locally splits into subparallel, discontinuous quartz veinlets 1 millimetre wide. Some of the veinlets are randomly oriented and do not parallel the main vein. The main quartz vein locally contains lenticular inclusions of schistose granodiorite wallrock. Chip samples from the quartz vein in the Main adit assayed up to 6.82 grams per tonne gold and 5.48 grams per tonne silver (Prospectus, 1987). The South adit, 260 metres southwest of the Main adit, is developed in a highly silicified shear zone striking 166 degrees and dipping 67 degrees east. Two unmineralized quartz veinlets up to 3 millimetres wide and 25 centimetres long were encountered.

Up to 1400 metres south of the South adit, Hazelton Group andesite is locally highly fractured and silicified. Alteration mineralogy consists of quartz, epidote, carbonate, chlorite and limonite occurring as veinlets, pods and patches. Pyrite and pyrrhotite fill fractures and are locally disseminated.

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EMPR EXPL 1987-C362,C363
EMPR FIELDWORK 1990, pp. 235-243
EMPR MAP 8
EMPR PR (*Prospectus, Alexa Ventures Inc., July 5, 1987)
GSC MAP 1385A
GSC MEM *175, p. 88
GSC OF 2996

DATE CODED: 1985/07/24
DATE REVISED: 1999/06/17

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1030 012**

NATIONAL MINERAL INVENTORY: 103016 Cu2

NAME(S): **B.C. VERDE**, BC VERDE

MINING DIVISION: Skeena

STATUS: Showing
 REGIONS: British Columbia
 NTS MAP: 103016E
 BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 49 48 N
 LONGITUDE: 130 01 38 W
 ELEVATION: 1005 Metres

NORTHING: 6187637
 EASTING: 435655

LOCATION ACCURACY: Within 500M

COMMENTS: Open cuts on a crest of a ridge, just west of a small lake at the headwaters of Georgie River, 12.5 kilometres south of Stewart (Assessment Report 15580).

COMMODITIES: Copper Silver Gold Zinc

MINERALS

SIGNIFICANT: Pyrite Pyrrhotite Chalcopyrite Sphalerite
 ASSOCIATED: Quartz
 ALTERATION: Silica
 ALTERATION TYPE: Silicific'n
 MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
 CLASSIFICATION: Hydrothermal
 TYPE: I02 Intrusion-related Au pyrrhotite veins L01 Subvolcanic Cu-Ag-Au (As-Sb)

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic	Hazelton	Undefined Formation	Coast Plutonic Complex
Tertiary			

LITHOLOGY: Andesite
 Quartz Diorite
 Diorite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
 TERRANE: Stikine
 METAMORPHIC TYPE: Regional
 PHYSIOGRAPHIC AREA: Boundary Ranges
 PLUTONIC ROCKS RELATIONSHIP: Plutonic Rocks
 GRADE: Greenschist

INVENTORY

ORE ZONE: TRENCH REPORT ON: N
 CATEGORY: Assay/analysis YEAR: 1986
 SAMPLE TYPE: Chip

COMMODITY	GRADE	
Silver	69.1000	Grams per tonne
Copper	1.0700	Per cent
Zinc	0.2500	Per cent

 COMMENTS: Sample across 1.5 metres in a trench.
 REFERENCE: Assessment Report 15580.

CAPSULE GEOLOGY

The area is underlain by diorite, minor quartz diorite and granodiorite of the Tertiary Coast Plutonic Complex. These rocks have intruded and contain local remnants of Lower Jurassic Hazelton Group volcanic and sedimentary rocks.

The B.C. Verde showing is within silicified Hazelton Group andesite near the contact with Coast Plutonic Complex diorite and quartz diorite. Several open cuts and trenches expose siliceous lenses 0.91 to 3 metres wide hosting disseminated pyrite, pyrrhotite, chalcopyrite and sphalerite(?) with associated silver and minor gold values. A rock chip sample across 1.5 metres in a trench assayed 1.07 per cent copper, 69.1 grams per tonne silver, 0.25 per cent zinc and 0.22 grams per tonne gold (Assessment Report 15580). A 15 centimetre wide pyritic quartz vein also occurs on the property striking 155 degrees and dipping 52 degrees southwest.

BIBLIOGRAPHY

EMPR AR *1921-G60; *1927-C81
 EMPR ASS RPT *15580

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 901
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR EXPL 1987-C362,C363
EMPR FIELDWORK 1990, pp. 235-243
EMPR MAP 8
GSC MAP 1385A
GSC MEM 175, p. 88
GSC OF 2996

DATE CODED: 1985/07/24
DATE REVISED: 1989/12/11

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

ORE ZONE: SOUTHWEST

REPORT ON: Y

CATEGORY:	Combined	YEAR:	1989
QUANTITY:	276377 Tonnes		
COMMODITY		GRADE	
Gold		27.6300	Grams per tonne
Silver		20.9100	Grams per tonne

COMMENTS: All categories. See Capsule Geology for details.
REFERENCE: Exploration in BC 1995, Table 6, page 103.

CAPSULE GEOLOGY

Regionally the area lies adjacent to and includes moderately folded volcanic and sedimentary rocks of the Lower-Middle Jurassic Hazelton Group intruded by a succession of plutons of the Tertiary-Jurassic Coast Plutonic Complex. Hazelton Group rocks include a variety of sandstones, conglomerates and breccias as well as minor intercalated tuffs, siltstones and flow material. Granodiorite is the dominant rock of the Coast Plutonic Complex but stocks and plutons vary from quartz monzonite, quartz diorite to granite. Numerous dyke swarms range in composition from granite, quartz monzonite, granodiorite and quartz diorite.

The Georgia River property lies on the eastern contact of the Coast Plutonic Complex intruding Hazelton Group rocks. The area of the mine workings is underlain by an assemblage of epiclastic rocks with intercalated andesitic and basaltic flows. Thin bedded dark grey siltstones and black argillite with minor limestone and greywacke are also present. The epiclastic rocks consist of angular and unsorted andesitic fragments within a fine-grained sandstone or tuff matrix. The andesitic flows are generally green, massive and plagioclase porphyritic while basaltic flows are dark and massive. These Hazelton Group rocks have been subjected to strong shearing and are generally altered to a chloritic foliated rock in which original textures have been obscured. The Hazelton Group has been intruded by granodiorite dykes and/or sills correlative to the Coast Plutonic Complex and are generally less than 100 metres in width and follow regional trends.

Weak foliation and minor folds are evident in the Hazelton Group rocks. Local schist development is located in areas of faulting in close proximity to intrusive rocks. Foliation approximates bedding and strikes 140 degrees with 50 to 70 degree dips to the southwest. Three distinct fault systems, northwest, north and northeast striking, occur on the property. The first faulting is northwest striking followed by north striking faults, both containing quartz vein material. The northwest striking veins are generally more massive than the north striking veins. Later northeast faulting cuts into and deflects along the north striking faults. A major late northwest striking fault appears to cut off all the structures north of the mine workings. Significant gold, silver, lead, zinc and minor copper mineralization in quartz veins appear to be restricted to the zones of later faulting. Marked gold enrichment appears to be associated with areas of vein intersection.

Quartz veins are found in two distinct systems: wide shear zones striking 320 degrees consisting of quartz vein material and siliceous breccia and, narrower quartz-filled fault fissures with a north strike. Mineralization is concentrated in the quartz-filled north striking fault fissures at points of vein intersections. Seven vein systems have been historically discovered and explored. The northwest striking veins are the Main, Georgia and Gem; the north striking veins are the Southwest, Summit, Bullion and Camp. Recent exploration resulted in four new north striking veins: the Eastmark, East Bob, East and Cobbett; and five northwest striking veins: the CC #1, CC #2, Gem A, Gem Top and Pond. Two other veins, the Zinc and Granodiorite strike northeast with shallow dips to the southeast.

Three stages of faulting and quartz infusion appear to be related to mineralization at the Georgia River property. The first stage of northwest faulting was followed by later north trending faults. Chlorite schists developed along these fault zones with quartz veins subsequently introduced into the zones. The quartz is sparsely mineralized with pyrite, pyrrhotite, galena and sphalerite with minor arsenopyrite. The second stage is the introduction of granodiorite dykes, formation of fractures, brecciation of early quartz veins and stringers, and deposition of sulphides. The sulphide deposition comprise initial sphalerite-pyrite-rich veins and stringers, low in quartz, and deposited in sericite-altered fracture zones near the granodiorite dykes. This event produces veins generally low in gold and silver values.

Due to the brittle nature of rocks within areas of intersecting veins formed during the first stage, voids formed during brecciation related to the second stage. Marked gold enrichment is observed at these points of intersection. Brecciated quartz with low sulphide

CAPSULE GEOLOGY

content generally carries appreciable gold and silver values in contrast to unbrecciated quartz.

The main quartz phase deposition phase has produced quartz vein material containing seams of massive pyrite, pyrrhotite, sphalerite and galena with minor chalcopyrite and rare arsenopyrite. The quartz rock is brecciated with fracture-filled sulphides. Gold and silver values are related to the sulphides. Pyrite and pyrrhotite form 50 per cent of the sulphides with sphalerite and galena the remaining. Mariposite and/or fuchsite are commonly noted within the chlorite schist wallrock.

The final stage is post-mineralizing fault movement along the vein system and deposition of quartz-calcite veins. This has produced narrow drusy quartz-filled fractures within intrusive rocks. Calcite is commonly found filling fractures in wallrock.

A brief description of the veins is as follows:

1) Main vein - This vein consists of a large silicified shear zone striking 315 degrees and dipping 55 to 65 degrees southwest. It is a siliceous replacement zone composed of layers of siliceous material separated by bands of chlorite schist with silicification gradually fading into the wallrock. This zone has been traced along a strike length of 650 metres and exhibits an offset (6 metres) along the Southwest vein and along the Bullion vein (65 metres). Mineralization is sparse and consists of pyrite, pyrrhotite and minor arsenopyrite. Low gold values (0.1 grams per tonne) have been obtained from this vein (Assessment Report 8547).

2) Georgia vein - This vein strikes parallel to the Main vein about 300 metres north, and is approximately 1 metre in width and is exposed over a strike length of 450 metres. It appears to pinch out to the northwest into a series of quartz veinlets. The vein locally contains siliceous volcanic inclusions with several parallel short and narrow stringers. Mineralization consists of pyrite, pyrrhotite and local concentrations of sphalerite and minor galena. Sampling returned 0.17 grams per tonne gold (Assessment Report 8547). The vein is offset approximately 27 metres along the Southwest vein. 3) Gem, Gem Top and Gem A veins - The Gem vein strikes parallel to the Georgia vein approximately 150 metres to the north and is exposed over a length of 400 metres and is from 1 to 3 metres wide. Mineralization is sparse with local concentrations of pyrite, pyrrhotite, minor sphalerite and rare galena. Two nearby veins, the Gem Top and Gem A, are up to 2 metres wide and sparsely mineralized. Where the Gem vein appears to veer off from a northwest strike to a north strike, pyrite and sphalerite concentrations are higher. Trench samples over 2 metres assayed 8.22 grams per tonne gold (Assessment Report 8547).

4) Southwest vein - This vein has received the bulk of the property exploration work to 1997, being tested by 81 diamond drill holes. This vein has been exposed by trenching and drilling on surface for 595 metres and a vertical range of 258 metres and has been extensively explored by drifting on two levels (prior to 1937). Past production was from this vein. The vein consists of short, discontinuous and overlapping mineralized quartz lenses along a continuous zone within green chlorite schists. The zone varies from 1 to 4 metres wide and shows evidence of repeated movement along fault zones. Near the intersection of the Georgia, CC #1 and CC #2 veins, the Southwest vein, which consists of 1 to 3 overlapping gold-bearing quartz lenses, contains a zone 80 metres long and 0.94 metres wide averaging 33.25 grams per tonne gold and 38.39 grams per tonne silver (Assessment Report 8547). The individual lenses appear to vary in length from 8 to 30 metres and may have up to 20 metres depth extension.

5) Bullion vein - This vein is located along Bullion Creek and has been traced along strike for 609 metres. The vein is 0.1 to 0.35 metre wide and occurs along a fault zone. The fault zone contains up to 50 per cent green altered volcanic fragments generally up to 5 centimetres in size. Erratic gold values occur in discontinuous quartz lenses. Post-quartz vein faulting has resulted in coarse barren quartz fragments in a matrix of green chloritic gouge. The vein has been defined on two underground levels.

6) Summit vein - This vein is located northwest of the Southwest vein and consists of parallel narrow quartz lenses from 0.07 to 0.33 metre wide within an 11-metre wide zone. High gold values were obtained from this vein.

7) Camp vein - Not located.

8) CC #1 and CC #2 veins - These veins are parallel to and a short distance south of the Georgia vein. The CC #1 vein consists of quartz veins, stringers and boxworks and is sparsely mineralized. The CC #2 vein comprise stringers and lenses of massive pyrite, sphalerite and galena in a quartz gangue. Both veins are approximately 100 metres long and up to 1.5 metres wide. Low gold

CAPSULE GEOLOGY

values were obtained from both veins.

9) Pond vein - This vein consists of a wide zone similar to the Main vein and is comprised of zones of siliceous material separated by sericite-altered schists. The vein strikes 320 degrees and has been traced for 100 metres where it is cut off by a fault to the northwest and pinches into small quartz stringers to the southeast. Low gold values were obtained from a trench.

10) Cobbett vein - This vein parallels the Southwest vein and is comprised of a wide zone of quartz and calcite with sparse sulphides. Stringers of pyrite, galena and sphalerite striking into and along the Cobbett vein contain silver values. The vein occurs over a distance of 90 metres with widths up to 3 metres.

11) East and East Bob veins - East of the Bullion vein, a number of short discontinuous quartz lenses occur. The East vein consists of 3, possibly 4 short discontinuous veins, generally less than 20 metres in length, some of which carry gold values up to 102.84 grams per tonne. Individual lenses vary from 0.09 to 0.6 metre width. The East Bob vein is a quartz vein or stringer 10 metres long and 0.1 to 0.2 metre wide. Gold values over 34.28 grams per tonne were obtained (Assessment Report 8547).

12) Zinc and Granodiorite veins - These veins exhibit similarities in mineralogy and mode of occurrence but occur a distance from one another. Both are sphalerite-rich zones within sericite schist alteration zones generally near or contiguous to a granodiorite dyke. The Zinc vein is a zone 0.12 to 1.1 metres in width outlined over a length of 25 metres. The Granodiorite vein is a zone 250 metres in length and generally 0.25 to 0.4 metre in width. It parallels a granodiorite dyke and shows spotty gold values except in Bullion Creek where several samples returned 9.25 to 22.41 grams per tonne gold (Assessment Report 8547). Both veins have low lead values and pyrite may form up to 50 per cent of the sulphide component.

The Georgia River mine, staked in 1910, has been developed by various underground workings and 5 adits. In 1937, 454 tonnes were mined, producing 10,233 grams of gold, 12,752 grams of silver, and 3312 kilograms of lead.

The Bullion vein has unclassified reserves of 5619 tonnes grading 4.18 grams per tonne gold and 10.28 grams per tonne silver (Northwest Prospector Miners & Developers Bulletin, May/June 1989). Total combined (measured, indicated, inferred) reserves at Georgia River reported in 1989 were 290,272 tonnes grading 28.7 grams per tonne gold (George Cross News Letter May 11, 1989). Drill indicated reserves reported in 1995 were +272,130 tonnes grading 27.7 grams per tonne gold (George Cross News Letter No.118 (June 20), 1995).

Reserves from Exploration in BC 1995, Table 6, page 103:

VEINS	YEAR	CATEGORY	TONNES	GRADE (grams per tonne)	
				Gold	Silver
Southwest	1981	Drill Inferred	21 486	15.64	18.36
Southwest	1988	Drill Inferred	68 974	19.51	20.41
SW Zone 1	1989	Drill Inferred	76 356	17.73	18.67
SW Zone 2	1989	Drill Inferred	31 227	48.76	20.41
Southwest	1989	All	276 377	27.63	20.91
Southwest	1995	Drill Inferred	12 825	48.69	
Bullion	1988	Drill Inferred	5 620	4.18	10.29

- Aquaterre Mineral Development Ltd. drilled 19 holes, totalling 1838 metres in 1995 and 16 holes, totalling 1844 metres in 1996.

The mineralization is associated with Eocene north trending dikes, and not the early Jurassic east west dikes.

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 EMPR ASS RPT *8547, 19049, 19983, 20653, 24100, 24704
 EMPR BC METAL MM00736
 EMPR BULL 1 (1932), p. 39
 EMPR EXPL 1980-402; 1995-30, *100-106, 111-115
 EMPR FIELDWORK 1990, pp. 235-243; 2001, pp. 135-149
 EMPR INDEX 3-196
 EMPR MAP 8; 65 (1989)
 EMPR OF 1992-1
 EMPR PF (*Coats, J.F. (1932): Report on the Property of Georgia River Gold Mines Ltd.; Plan and geology maps of underground workings, 1933; see 1030 011 - Prospectus, Alexa Ventures Inc. July 5, 1987;

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*Aquaterra Mineral Development Ltd., prospectus, February 24, 1997)
EMR MIN BULL MR 223 B.C. 295
EMR MP CORPFILE (Georgia River Mining Company, Limited; American
Mining & Milling Company, Limited; Georgia River Gold Mines,
Limited; British American Holding & Development Company; Helena
Gold Mines, Limited; Gold Leasers, Limited; Extenuate Gold Mines,
Limited; Cannon Resources Ltd.)
GSC MAP 1385A
GSC MEM 175, p. 92
GSC OF 2996
GCNL #118(June 20), 1995; #91, 1989; #180,#221, 1988; #241, 1981;
#216,#245,#226, 1980; #182,#243, 1979; #? (May 11), 1989; #118
(June 20), 1995
N MINER Dec.24, 1981
NW PROSP October/November 1988; May/June 1989
WWW http://www.infomine.com/index/properties/SUMMIT_LAKE_MINE.html
Filing Statement, Sept. 19, 1989, Avatar Resource Corporation

DATE CODED: 1985/07/24
DATE REVISED: 1999/06/17

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1030 014**

NATIONAL MINERAL INVENTORY: 10309 Cu1

NAME(S): **JO, M.J., LUXOR,
MONTROSE, JJ**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103O16E 103O09E
BC MAP:

MINING DIVISION: Skeena
UTM ZONE: 09 (NAD 83)

LATITUDE: 55 45 05 N
LONGITUDE: 130 04 56 W
ELEVATION: 884 Metres

NORTHING: 6178941
EASTING: 432073

LOCATION ACCURACY: Within 500M

COMMENTS: Trenches along Copper Creek, west of Georgie River in the Colling Range, 3.25 kilometres east of Helen Bay on Portland Canal, 17 kilometres south of Stewart (Assessment Report 12630).

COMMODITIES: Copper Gold Silver

MINERALS

SIGNIFICANT:	Pyrrhotite	Pyrite	Chalcopyrite	Bornite	
ASSOCIATED:	Quartz	Magnetite			
ALTERATION:	Chlorite	Silica	Epidote	Carbonate	Sericite
ALTERATION TYPE:	Chloritic				
MINERALIZATION AGE:	Unknown				

DEPOSIT

CHARACTER: Stockwork Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: G04 Besshi massive sulphide Cu-Zn L01 Subvolcanic Cu-Ag-Au (As-Sb)

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE

Lower Jurassic
Tertiary

GROUP

Hazelton

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Hyder Pluton

LITHOLOGY: Andesitic Tuff
Andesitic Flow
Granodiorite Dike
Andesite

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Stikine
METAMORPHIC TYPE: Regional

Plutonic Rocks
RELATIONSHIP:

PHYSIOGRAPHIC AREA: Boundary Ranges

GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Grab

YEAR: 1983

COMMODITY

	<u>GRADE</u>	
Silver	48.6700	Grams per tonne
Gold	1.9100	Grams per tonne
Copper	22.6000	Per cent

COMMENTS: Sample of massive sulphides.
REFERENCE: Assessment Report 12630.

CAPSULE GEOLOGY

Regionally the area lies adjacent to and includes moderately folded volcanic and sedimentary rocks of the Lower Jurassic Hazelton Group intruded by a succession of plutons (Hyder) of the Tertiary Coast Plutonic Complex. Hazelton Group rocks include a variety of sandstones, conglomerates and breccias as well as minor intercalated tuffs, siltstones and flow material. Granodiorite is the dominant rock of the Coast Plutonic Complex but stocks and plutons vary from quartz monzonite, quartz diorite to granite. Numerous dyke swarms range in composition from granite, quartz monzonite, granodiorite and quartz diorite.

The Jo showing is underlain by north trending Hazelton Group andesitic tuffs and flows intruded by granodiorite dykes and possibly sills. The rocks have been locally subjected to strong shearing movements and are generally altered to a chloritic foliated rock. Two sets of lineaments strike 340 and 010 degrees with steep dips east and west.

CAPSULE GEOLOGY

Mineralization consists of pyrite, pyrrhotite, chalcopyrite, magnetite and minor bornite within shear zones, sometimes silicified, near granodiorite dykes. Chlorite and epidote alteration extends up to 2 metres into the wallrock. Carbonate and sericite are also evident. Quartz veining occurs in some zones with associated sulphide mineralization.

A northwest trending schistose shear zone 1.21 metres wide is exposed over a strike length of 28 metres. Grab samples of the sulphide-rich zone assayed up to 1.91 grams per tonne gold, 48.67 grams per tonne silver and 22.6 per cent copper (Assessment Report 12630).

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EMPR ASS RPT *489, 522, *4820, *12630, 20697
EMPR EXPL 1983-505,506
EMPR FIELDWORK 1990, pp. 235-243
EMPR GEM 1973-488
EMPR MAP 8
EMR MP CORPFILE (Inland Copper Ltd.)
GSC MAP 1385A
GSC MEM 175, p. 100
GSC OF 2996

DATE CODED: 1985/07/24
DATE REVISED: 1989/12/11

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1030 015**

NATIONAL MINERAL INVENTORY: 10309 Au1

NAME(S): **PEDRO GEORGIA**, PEDRO, IM,
BONUS

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 103016E 103009E
BC MAP:

Underground

MINING DIVISION: Skeena

LATITUDE: 55 45 11 N
LONGITUDE: 130 02 24 W
ELEVATION: 355 Metres

UTM ZONE: 09 (NAD 83)

NORTHING: 6179086
EASTING: 434726

LOCATION ACCURACY: Within 500M

COMMENTS: Adit, at the confluence of Koris Creek and Georgie River, east of
Portland Canal, 17 kilometres south of Stewart (Assessment Report
13350).

COMMODITIES: Silver Gold Lead Zinc Copper

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Pyrrhotite Galena Sphalerite
ASSOCIATED: Quartz Arsenopyrite
ALTERATION: Chlorite
ALTERATION TYPE: Chloritic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
DIMENSION:
COMMENTS: Vein

STRIKE/DIP: 137/65N

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic	Hazelton	Undefined Formation	
Eocene			Hyder Pluton

LITHOLOGY: Epiclastic Rock
Andesitic Flow
Andesitic Lapilli Tuff
Granodiorite
Granodiorite Dike
Andesite

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Stikine
METAMORPHIC TYPE: Regional

Plutonic Rocks
RELATIONSHIP:

PHYSIOGRAPHIC AREA: Boundary Ranges

GRADE: Greenschist

INVENTORY

ORE ZONE: VEIN

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Grab

YEAR: 1988

COMMODITY	GRADE	
Silver	188.8800	Grams per tonne
Gold	1.0900	Grams per tonne

COMMENTS: Sample of quartz vein in lower workings.
REFERENCE: Assessment Report 17705.

CAPSULE GEOLOGY

Regionally the area lies adjacent to and includes moderately folded volcanic and sedimentary rocks of the Lower Jurassic Hazelton Group intruded by a succession of plutons of the Tertiary Coast Plutonic Complex. Hazelton Group rocks include a variety of sandstones, conglomerates and breccias as well as minor intercalated tuffs, siltstones and flow material. Granodiorite is the dominant rock of the Coast Plutonic Complex but stocks and plutons vary from quartz monzonite, quartz diorite to granite. Numerous dyke swarms range in composition from granite, quartz monzonite, granodiorite and quartz diorite.

The Pedro Georgia property is underlain by an assemblage of sheared epiclastic rocks (lapilli tuffs) and andesitic flows of the Hazelton Group intruded by massive granodiorite and related dykes of

CAPSULE GEOLOGY

the Hyder Pluton. The epiclastic rocks consist of angular and unsorted andesitic fragments within either a fine-grained sandstone or tuff matrix. The rocks have been locally subjected to strong shearing movements (150 degree trend with west dips) and are generally altered to a chloritic foliated rock. Calcite and epidote stringers are common. Several fault zones are evident, the most prominent, striking 340 degrees and dipping 35 degrees south, is located along Koris Creek. This pyritic fault zone is up to 6 metres wide and consists of weakly silicified volcanic rock with fragments of altered granodiorite. Sulphide-bearing quartz veins are associated with northwest trending shears or fracture zones within Hazelton Group rocks near granodiorite intrusive rocks. The shear zones are generally occupied by sericitic to chloritic schists.

An adit follows a narrow sulphide-bearing quartz vein striking 137 degrees and dipping 65 degrees north to vertical at the confluence of Koris Creek and Georgie River. This vein represents part of the Pedro Georgia workings and varies from 1 to 40 centimetres wide. Mineralization consists of variably coarsely crystalline galena, coarse sphalerite, pyrite, minor chalcopyrite and arsenopyrite. Chlorite and calcite occurs along the shear zone. Grab samples of this vein assayed up to 0.20 grams per tonne and 300.97 grams per tonne silver (Assessment Report 13350).

Several adits have been developed on nearby mineralized quartz veins, some of which range to 3 metres in width. Recent exploration has rediscovered an upper and lower adit developed on a narrow shear zone containing short discontinuous quartz lenses 1 to 2 metres long and 0.5 metres wide. Sparse chalcopyrite, pyrrhotite and pyrite are evident. Grab samples of mineralized quartz vein material assayed up to 1.09 grams per tonne gold and 188.88 grams per tonne silver (Assessment Report 17705).

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EMPR ASS RPT *13350, 13860, 15107, 16405, 17644, *17705, 18933,
21790
EMPR EXPL 1984-380; 1985-C376; 1986-C430
EMPR FIELDWORK 1990, pp. 235-243
EMPR MAP 8
EMR MP CORPFILE (Extenuate Gold Mines, Limited)
GSC MAP 1385A
GSC MEM 175, p. 102
GSC OF 2996

DATE CODED: 1985/07/24
DATE REVISED: 1989/12/11

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1030 016**

NATIONAL MINERAL INVENTORY: 10309 Ag1

NAME(S): **BLACK KNIGHT**, BLUE POINT, VG

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103009E
BC MAP:

Underground

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 43 03 N
LONGITUDE: 130 04 29 W
ELEVATION: 152 Metres

NORTHING: 6175162
EASTING: 432485

LOCATION ACCURACY: Within 1 KM

COMMENTS: Open cuts-prospect shafts-adit, 2.5 kilometres from the shore of
Portland Canal on a tributary of the East Georgie River, 25 kilometres
south of Stewart (Assessment Report 15107).

COMMODITIES: Lead Zinc Silver Copper

MINERALS

SIGNIFICANT: Galena Sphalerite Pyrite Chalcopyrite
ASSOCIATED: Quartz
ALTERATION: Chlorite
ALTERATION TYPE: Chloritic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic	Hazelton	Undefined Formation	Coast Plutonic Complex
Tertiary			

LITHOLOGY: Epiclastic Rock
Granodiorite

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline PHYSIOGRAPHIC AREA: Boundary Ranges
TERRANE: Stikine Plutonic Rocks
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist

INVENTORY

ORE ZONE:	SAMPLE	REPORT ON:	N
CATEGORY:	Assay/analysis	YEAR:	1906
SAMPLE TYPE:	Grab		
COMMODITY		GRADE	
Silver		562.1900	Grams per tonne
Lead		43.0000	Per cent
Zinc		28.0000	Per cent

COMMENTS: Sample of massive galena and sphalerite.
REFERENCE: Minister of Mines Annual Report 1906, page H67.

CAPSULE GEOLOGY

Regionally the area lies adjacent to and includes moderately folded volcanic and sedimentary rocks of the Lower Jurassic Hazelton Group intruded by a succession of plutons of the Tertiary Coast Plutonic Complex. Hazelton Group rocks include a variety of sandstones, conglomerates and breccias as well as minor intercalated tuffs, siltstones and flow material. Granodiorite is the dominant rock of the Coast Plutonic Complex but stocks and plutons vary from quartz monzonite, quartz diorite to granite. Numerous dyke swarms range in composition from granite, quartz monzonite, granodiorite and quartz diorite.

The Black Knight property is underlain by an assemblage of epiclastic rocks of the Hazelton Group intruded by massive granodiorite and related dykes of the Coast Plutonic Complex. The epiclastic rocks have been locally subjected to strong shearing movements and are generally altered to a chloritic foliated rock.

Mineralization appears to be related to a shear zone where a quartz vein 1.32 metres wide has been developed by limited historic underground work and open cuts. The quartz vein is mineralized with galena, sphalerite, pyrite and chalcopyrite. A grab sample of nearly

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 912
REPORT: RGEN0100

CAPSULE GEOLOGY

solid galena and sphalerite with little gangue assayed 43 per cent lead, 28 per cent zinc and 562.19 grams per tonne silver (Minister of Mines Annual Report 1906).

BIBLIOGRAPHY

EM EXPL 2001-1-9
EMPR AR 1906-H67; *1910-K61; 1916-K520
EMPR ASS RPT 13350, *15107, 20697
EMPR EXPL 1986-C430; 1984-380
EMPR FIELDWORK 1990, pp. 235-243
EMPR MAP 8
GSC MAP 1385A
GSC OF 2996

DATE CODED: 1985/07/24
DATE REVISED: 1989/12/11

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **1030 017**

NATIONAL MINERAL INVENTORY: 10308 Lst1

NAME(S): **SWAMP POINT**, LAST LAUGH

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 103008E
BC MAP:

Open Pit

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 28 15 N
LONGITUDE: 130 02 09 W
ELEVATION: 0002 Metres

NORTHING: 6147675
EASTING: 434519

LOCATION ACCURACY: Within 500M

COMMENTS: Open pit, located at Swamp Point on the east shore of Portland Canal about 50 kilometres south of Stewart (CANMET Report 811, page 175).

COMMODITIES: Limestone

MINERALS

SIGNIFICANT: Carbonate

ASSOCIATED: Pyrite Actinolite Mica

MINERALIZATION AGE: Lower Jurassic

ISOTOPIC AGE:

DATING METHOD: Fossil

MATERIAL DATED: Microfossils (forams)

DEPOSIT

CHARACTER: Stratiform Massive
CLASSIFICATION: Sedimentary Industrial Min.

TYPE: R09 Limestone

SHAPE: Tabular

MODIFIER: Folded

DIMENSION:

STRIKE/DIP: 360/

TREND/PLUNGE:

COMMENTS: Limestone bed; steep east dips. Age date from Grove, T. 1989 (Pers. Comm.).

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Lower Jurassic

GROUP

Hazelton

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Limestone
Dike

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline

TERRANE: Stikine

METAMORPHIC TYPE: Regional

Wrangell

RELATIONSHIP:

PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)

GRADE: Greenschist

INVENTORY

ORE ZONE: OUTCROP

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1944

SAMPLE TYPE: Channel

COMMODITY

GRADE

Limestone

97.7700 Per cent

COMMENTS: Taken across limestone free of impurities; grade given for CaCO₃.

REFERENCE: CANMET Report 811, page 175, Sample A.

CAPSULE GEOLOGY

The area is underlain by the western margin of a 14.4 by 9.6 kilometre roof pendant within the Tertiary Coast Plutonic Complex. The rocks within the pendant are commonly correlated with the Lower Jurassic Hazelton Group but have also been correlated with the Upper Triassic Kunga Group. Foraminifera from this limestone unit have indicated a Lower Jurassic age (Grove, T. (1989), Personal Communication).

The roof pendant in this area comprises a sequence of mafic and intermediate (andesitic-dacitic) volcanics interbedded with felsic tuffs, siltstones, silty argillites and fine-grained sandstones. The sequence strikes 010 to 035 degrees and dips 40 to 85 degrees southeast. The mafic volcanics have been variably foliated and chloritized to greenstone and chlorite-hornblende schist as a result of regional greenschist metamorphism.

At Swamp Point a 60 metre thick bed of white to dark bluish-grey, medium to coarse-grained limestone strikes 360 degrees and dips steeply to the east. The bed is folded and cut by a few thin dykes. Silicious streaks containing pyrite, actinolite and mica are common throughout the limestone. A channel sample taken across limestone

CAPSULE GEOLOGY

free of the silicious bands contained 97.77 per cent CaCO₃, 0.53 per cent MgCO₃, 0.95 per cent SiO₂, 0.19 per cent Al₂O₃ and 0.27 per cent Fe₂O₃. A second channel sample taken across limestone with the siliceous streaks contained 93.12 per cent SiO₂, 0.94 per cent MgCO₃, 4.06 per cent SiO₂, 0.54 per cent Al₂O₃ and 0.92 per cent Fe₂O₃ (CANMET Report 811).

Limestone was produced between 1916 and 1922 from two quarries and used for flux at the Anyox copper smelter.

BIBLIOGRAPHY

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EMPR BULL 63

EMPR MAP 8

EMPR FIELDWORK 1990, pp. 235-243

GSC MAP 1385A

GSC MEM 175, p. 103

CANMET RPT *811, p. 175

Sharp, R.J. (1980): The Geology, Geochemistry & Sulphur Isotopes of the Anyox Massive Sulphide Deposits, University of Alberta M.Sc. Thesis

DATE CODED: 1985/07/24
DATE REVISED: 1989/12/11

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

CAPSULE GEOLOGY

metres in width. The Outsider vein lies along the contact between greenstone (hanging wall) and silicified argillite (footwall) and is conformable to the bedding of the host rocks.

Mineralization in the Outsider vein consists of chalcopyrite and pyrrhotite with minor pyrite and traces of sphalerite in a gangue of fine-grained grey to white quartz. Higher grade ore lies near the wall of the vein. The Star vein consists of fine-grained white quartz with pyrrhotite and lesser chalcopyrite. Locally, up to 50 per cent of the vein consists of sulphides.

Discovered in 1896 during the Gaillard Expedition, the Outsider vein was mined initially during 1906 and 1907 and shipped ore to the Brown-Alaska smelter in Alaska. Between 1924 and 1928, 112,966 tonnes of ore was produced for silica flux and copper smelting at Anyox. A total of 125,966 tonnes grading 1.9 per cent copper were produced from the Outsider vein between 1906 and 1928. In the last two years of production the ore averaged 0.139 grams per tonne gold and 10.29 grams per tonne silver. In 1917, the Star vein produced 4845 tonnes of quartz carrying minor copper, gold and silver values (Minister of Mines Annual Report 1917).

Unclassified reserves for the Outsider property are 181,440 tonnes grading 1.5 per cent copper (CIM Special Volume 37, page 183).

BIBLIOGRAPHY

- EMPR AR 1904-100,101; 1905-80; 1906-62-64; 1907-74; 1910-61; 1916-85;
1917-66; 1918-73-75; 1919-62; 1921-58,59; 1922-65; 1923-65-67;
1924-50; 1925-79; 1926-85; 1927-294; 1931-40; 1955-18; 1956-18,19
EMPR ASS RPT *5550
EMPR BC METAL MM00782
EMPR BULL 63
EMPR FIELDWORK 1990, pp. 235-243
EMPR GEM *1970-77-81; 1971-121; 1972-502,503; 1974-325
EMPR INDEX 3-208
EMPR MAP 8; 65 (1989)
EMPR OF 1987-15, p. 36; 1992-1; 1992-9
EMPR PF (Sargent, H. (1942): Report)
EMR MIN BULL MR 223 B.C. 301
EMR MP CORPFILE (Granby Mining Co. Ltd.; Maple Bay Copper Mines Ltd.)
GSC MAP 1385A
GSC MEM 32, p. 94; 175, pp. 100,101
GSC SUM RPT 1922 Part A, pp. 23-25

DATE CODED: 1985/07/24
DATE REVISED: 1991/06/21

CODED BY: GSB
REVISED BY: DJA

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

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MINFILE NUMBER: **1030 019**

NATIONAL MINERAL INVENTORY:

NAME(S): **STAR**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 103O08E
BC MAP:
LATITUDE: 55 26 10 N
LONGITUDE: 130 00 21 W
ELEVATION: 0094 Metres
LOCATION ACCURACY: Within 500M
COMMENTS:

Underground

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

NORTHING: 6143783
EASTING: 436359

COMMODITIES:

MINERALS

SIGNIFICANT:
MINERALIZATION AGE:

DEPOSIT

CHARACTER:
CLASSIFICATION:

HOST ROCK

DOMINANT HOSTROCK:

LITHOLOGY:

GEOLOGICAL SETTING

TECTONIC BELT:
TERRANE:

BIBLIOGRAPHY

DATE CODED: 1997/04/07
DATE REVISED: / /

CODED BY: DA
REVISED BY:

FIELD CHECK: Y
FIELD CHECK: N

MINFILE NUMBER: **1030 019**

MINFILE NUMBER: **103P 001**

NATIONAL MINERAL INVENTORY: 103P13 Ag9

NAME(S): **ALICE - BEN BOLT**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P13W
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 56 56 N
LONGITUDE: 129 53 28 W
ELEVATION: 914 Metres

NORTHING: 6200750
EASTING: 444351

LOCATION ACCURACY: Within 500M

COMMENTS: Location centered on showing as described in Minister of Mines
Annual Report 1932, page 59.

COMMODITIES: Zinc Gold Silver Copper Lead

MINERALS

SIGNIFICANT: Pyrite Pyrrhotite Sphalerite Galena Arsenopyrite

ASSOCIATED: Chalcopyrite

COMMENTS: Vein assumed to contain quartz.

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Middle Jurassic Hazelton Salmon River

LITHOLOGY: Argillite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

PHYSIOGRAPHIC AREA: Boundary Ranges

TERRANE: Stikine

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

COMMENTS: At western margin of the Stewart Complex (Island Arc Assemblage).

INVENTORY

ORE ZONE: VEIN

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1932

SAMPLE TYPE: Grab

COMMODITY

GRADE

Silver	189.0000	Grams per tonne
Gold	4.1000	Grams per tonne
Copper	0.7000	Per cent
Zinc	8.7000	Per cent

COMMENTS: Representative sample of vein.

REFERENCE: Minister of Mines Annual Report 1932, page 59.

CAPSULE GEOLOGY

The Alice-Ben Bolt showing is located at the headwaters of the south fork of Glacier Creek (Albany Creek) 6 kilometres east-northeast of Stewart. A vein carrying polymetallic mineralization was discovered here while investigating the southern portion of the Portland Canal fissure zone.

The showing consists of a 0.10 to 0.46 metre wide vein hosted in argillite of the Middle Jurassic Salmon River Formation (Hazelton Group). The vein occurs near the southwestern margin of an augite diorite stock. The vein is exposed in a trench for a length of 6.4 metres and is well mineralized with pyrite, pyrrhotite, sphalerite, galena, arsenopyrite and chalcopyrite. A representative sample assayed 4.1 grams per tonne gold, 189 grams per tonne silver, 0.7 per cent copper and 8.7 per cent zinc (Minister of Mines Annual Report 1932, page 591).

BIBLIOGRAPHY

EMPR AR 1930-106; *1932-59
EMPR BULL 58; 63
EMPR FIELDWORK 1983, pp. 149-163; 1984, pp. 316-341; 1985, pp. 217,218
1986, pp. 81-102; 1988, pp. 233-240; 1990, pp. 235-243

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BIBLIOGRAPHY

EMPR MAP 8
GSC MAP 215A; 307A; 315A; 1385A

DATE CODED: 1989/06/05
DATE REVISED: 1989/12/19

CODED BY: PSF
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 002**

NATIONAL MINERAL INVENTORY: 103P13 Au5

NAME(S): **MONDAY**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P13W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 48 39 N
LONGITUDE: 129 56 35 W
ELEVATION: 884 Metres

NORTHING: 6185429
EASTING: 440898

LOCATION ACCURACY: Within 500M

COMMENTS: Location based on description of showing in Minister of Mines Annual Report 1926, page 86.

COMMODITIES: Lead Silver Gold Zinc

MINERALS

SIGNIFICANT: Galena Sphalerite Pyrite

COMMENTS: Sulphides occur as massive veins.

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Massive
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Jurassic			Bulldog Creek Pluton

ISOTOPIC AGE: 181 +/- 8 Ma
DATING METHOD: Potassium/Argon
MATERIAL DATED: Hornblende

LITHOLOGY: Granodiorite

HOSTROCK COMMENTS: Isotopic age from GSC Open File 2996.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline

TERRANE: Plutonic Rocks

PHYSIOGRAPHIC AREA: Boundary Ranges

COMMENTS: Hosted in the Bulldog Creek Pluton of the Coast Plutonic Complex.

INVENTORY

ORE ZONE:	SAMPLE	REPORT ON:	N
CATEGORY:	Assay/analysis	YEAR:	1926
SAMPLE TYPE:	Grab		
COMMODITY		GRADE	
Silver		1200.0000	Grams per tonne
Gold		6.6000	Grams per tonne
Lead		50.0000	Per cent

REFERENCE: Minister of Mines Annual Report 1926, page 86.

CAPSULE GEOLOGY

The Monday showing is located at the headwaters of Bulldog Creek, 15 kilometres south-southeast of Stewart.

The showing consists of narrow veins of massive galena, sphalerite and pyrite hosted in granodiorite of the Jurassic Bulldog Creek Pluton. Samples assayed up to 6.6 grams per tonne gold, 1200 grams per tonne silver and 50 per cent lead (Minister of Mines Annual Report 1926, page 86).

BIBLIOGRAPHY

EMPR AR *1926-86; 1927-81,82; 1931-41; 1933-53
EMPR BULL 58; 63
EMPR FIELDWORK 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
EMPR OF 1986-2
GSC MAP 307A; 315A; 1385A
GSC MEM 175, p. 101
GSC OF 2996

DATE CODED: 1985/07/24
DATE REVISED: 1999/06/17

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 003**

NATIONAL MINERAL INVENTORY: 103P11 Zn2

NAME(S): **DEVLIN**, DAK

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P11W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 31 34 N
LONGITUDE: 129 26 16 W
ELEVATION: 415 Metres

NORTHING: 6153426
EASTING: 472364

LOCATION ACCURACY: Within 1 KM

COMMENTS: Location uncertain, based on report by A.J. Gaul, 1925 (Property File).

COMMODITIES: Zinc

MINERALS

SIGNIFICANT: Sphalerite Pyrite
COMMENTS: Occurs as bands in vein.

ASSOCIATED: Quartz
COMMENTS: Vein is assumed to contain quartz.

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Concordant
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
DIMENSION: 0045 x 0001 Metres
COMMENTS: Vein strikes approximately north-south for 61 metres.

STRIKE/DIP: /60E

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Lower Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Argillite
Quartzite
Argillaceous Quartzite
Volcanic Breccia
Tuff

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

PHYSIOGRAPHIC AREA: Boundary Ranges

TERRANE: Stikine

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

COMMENTS: Situated at south end of the Stewart Complex (Island Arc Assemblage).

INVENTORY

ORE ZONE: VEIN

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1925

SAMPLE TYPE: Chip

COMMODITY

GRADE

Zinc

18.0000

Per cent

COMMENTS: A 0.61 metre chip sample taken across vein.

REFERENCE: Property File: Report by A.J. Gaul, 1925, page 2.

CAPSULE GEOLOGY

The Devlin showing is situated on the northwest slope of Wilauks Mountain (Mt. McGrath) about 6.0 kilometres northeast of Alice Arm. This zinc showing was explored by underground drifts and crosscuts in 1925.

The area is underlain by an assemblage of volcanics and sediments belonging to the Upper Triassic Stuhini Group, the Lower Jurassic Hazelton Group and the Middle Jurassic Spatsizi Group. In the vicinity of Wilauks Mountain this sequence lies on the western flank of the north-northwest trending Mt. McGuire anticline. These rocks have been regionally metamorphosed up to greenschist facies.

The showing is hosted in a sequence of Hazelton Group argillites, quartzites, argillaceous quartzites, volcanic breccias and tuffs, all crosscut by dykes. The showing consists of a quartz vein, averaging 1.07 metres in width, that parallels the bedding of the host rock. It strikes approximately north-south, dips 60 degrees east and has been traced for 45 metres.

Mineralization occurs over a width of 0.61 metres and consists

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CAPSULE GEOLOGY

of bands of sphalerite with minor pyrite. A chip sample taken across the 0.61 metre width assayed 18 per cent zinc (Property File: Report by Gaul, A.J. 1925, page 2).

BIBLIOGRAPHY

EMPR AR 1925-78; 1966-47,48
EMPR BULL 63
EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
EMPR OF 1986-2
EMPR PF (*Report by Gaul, A.J. 1925)
GSC MAP 307A; 1385A
WWW http://www.infomine.com/index/properties/FH_CLAIMS.html

DATE CODED: 1986/03/05
DATE REVISED: 1989/03/07

CODED BY: GD
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 004**

NATIONAL MINERAL INVENTORY:

NAME(S): **OLH**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P12E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 32 16 N
LONGITUDE: 129 43 07 W
ELEVATION: 1189 Metres

NORTHING: 6154872
EASTING: 454649

LOCATION ACCURACY: Within 5 KM

COMMENTS: Location based on the approximate centre of the main outcrop of the North zone, (Assessment Report 8361, Figure 3).

COMMODITIES: Molybdenum Copper

MINERALS

SIGNIFICANT: Molybdenite Pyrite Ferrimolybdate Chalcopyrite Hematite

COMMENTS: Molybdenite associated with or in quartz veins.

ASSOCIATED: Quartz

ALTERATION: Quartz Chlorite

ALTERATION TYPE: Silicific'n Chloritic

MINERALIZATION AGE: Eocene

DEPOSIT

CHARACTER: Vein Stockwork

CLASSIFICATION: Porphyry Hydrothermal Epigenetic

TYPE: L05 Porphyry Mo (Low F- type)

DIMENSION: STRIKE/DIP: 200/25

COMMENTS: Two zones containing mineralized quartz veins commonly striking 010 to 040 degrees, dipping 27 to 54 degrees west.

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Eocene			Coast Plutonic Complex

LITHOLOGY: Alaskite
Quartz Monzonite
Biotite Granite
Aplite Pegmatite
Granodiorite
Quartz Biotite Schist

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline

TERRANE: Plutonic Rocks

COMMENTS: Situated in eastern margin of Coast Plutonic Complex.

PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1980

SAMPLE TYPE: Grab

COMMODITY

GRADE

Molybdenum 0.5040 Per cent

COMMENTS: Highest assay from seven representative grab samples.

REFERENCE: Assessment Report 8361, page 7.

CAPSULE GEOLOGY

The OLH showings are located on the west flank of Campbell Ridge, east of Hastings Arm on Observatory Inlet approximately 16.0 kilometres northwest of Alice Arm. The molybdenite showings were discovered by Noranda Exploration in 1979.

The occurrence is hosted in rocks of the Coast Plutonic Complex. Lithologies in the vicinity include medium-grained equigranular granodiorite (quartz diorite), biotite granite, alaskite (quartz monzonite) and aplite-pegmatite.

Mineralization is developed in two zones, the North and South zones, about 2 kilometres apart. The North zone is at least 600 metres wide and the South zone consists of two showings which occur over a distance of 250 metres. Mineralization comprises molybdenite, pyrite, ferrimolybdate, iron oxide with minor chalcopyrite and hematite. The mineralization occurs as fine films on fractures, as selvages along margins of veins, as disseminated flakes adjacent to

CAPSULE GEOLOGY

veins and as fine-grained masses in quartz veins. The molybdenite is in or associated with, two sets of quartz veins. The most common set strikes 010 to 040 degrees, dips 36 to 63 degrees west and the veins range from 2.5 to 15.3 centimetres in width. Fractures are usually only pyritic. Hydrothermal alteration of host rocks is evidenced by silicification and chloritization of biotite.

Seven grab samples of representative mineralization assayed 0.127 to 0.504 per cent molybdenum (Assessment Report 8361).

BIBLIOGRAPHY

EMPR ASS RPT *8361, 8545
EMPR BULL 63
EMPR FIELDWORK 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
EMPR OF 1986-2
GSC MAP 307A; 1385A

DATE CODED: 1986/03/17
DATE REVISED: 1989/01/26

CODED BY: GD
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 005**

NATIONAL MINERAL INVENTORY:

NAME(S): **MEZIADIN, DELNORTE, PORTER,
BULLION, BULLDOG, DEL NORTE**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P14W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 59 53 N
LONGITUDE: 129 28 01 W
ELEVATION: 770 Metres

NORTHING: 6205962
EASTING: 470876

LOCATION ACCURACY: Within 500M
COMMENTS: #60 on Diagram of Portland Canal Mining District, on Del Norte Creek
(Porter Creek).

COMMODITIES: Gold Silver Copper Zinc Lead

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Galena Sphalerite
ASSOCIATED: Quartz
ALTERATION: Silica
ALTERATION TYPE: Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
SHAPE: Irregular
MODIFIER: Sheared Fractured
DIMENSION: 0006 Metres STRIKE/DIP: 315/70E TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Jurassic Bowser Lake Undefined Formation

LITHOLOGY: Argillite
Siltstone

HOSTROCK COMMENTS: Bowser Lake Group is Middle to Upper Jurassic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Boundary Ranges
TERRANE: Stikine

INVENTORY

ORE ZONE: OPENCUT REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1939
SAMPLE TYPE: Chip
COMMODITY GRADE
Silver 27.4000 Grams per tonne
Gold 4.8000 Grams per tonne
Copper 1.6000 Per cent
Zinc 1.6000 Per cent

COMMENTS: Across 1.46 metres of open cut.
REFERENCE: EMPR Special Report by Mandy, J.T., 1939.

CAPSULE GEOLOGY

The Meziadin showing is located near the head of Del Norte Creek approximately 75 kilometres east of Stewart. The area was initially explored prior to 1913, again in 1922 and finally in 1938-1939.

The area is underlain by siltstone, greywacke, sandstone, calcarenite, argillite, conglomerate and minor limestone of the Middle Jurassic Salmon River Formation, Hazelton Group.

The showing comprises a fissured and partly silicified zone, 0.4 to 0.9 metres wide, in argillite. Along the footwall, a layer of quartz is interbanded with argillite. The quartz is locally copper stained and contains pyrite, galena and sphalerite with high values in gold and silver reported. Two other zones occur in the vicinity, 0.9 to 6.1 metres wide. These strike northwest, dip vertically and locally contain small silicified sections which contain small patches of sphalerite and chalcopyrite.

A 1.46 metre sample from one of these two other zones, assayed 4.8 grams per tonne gold, 27.4 grams per tonne silver, 1.6 per cent

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copper, 1.6 per cent zinc and nil lead (Mandy, J.T. (1939) Special Report #3). This was the best assay result from the program, most samples contained only trace gold and silver.

BIBLIOGRAPHY

EMPR AR 1922-77, 1939-67
EMPR BULL 63
EMPR FIELDWORK 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
EMPR PF (Geological Map and Assay Plan, Meziadin Group, 1939)
EMPR SPEC RPT *Mandy, J.T.(1939)
GSC MAP 307A, 1385A
GSC MEM *32-75, 175
GCNL #160, 1991

DATE CODED: 1985/07/24
DATE REVISED: 1989/11/28

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 006**

NATIONAL MINERAL INVENTORY: 103P14 Au

NAME(S): **WILLOUGHBY, WILBY, WILBY CREEK, WILLOUGHBY CREEK, BACK, DEL, GOLD MOUNTAIN, NORTH, MAIN, UPPER ICEFALL, LOWER ICEFALL, CCR, KIWI, EDGE, LEDGE, WILLOW**

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 103P13E 103P14W
BC MAP:
LATITUDE: 55 58 50 N
LONGITUDE: 129 35 07 W
ELEVATION: 1450 Metres
LOCATION ACCURACY: Within 1 KM
COMMENTS: Location of showing on the Del claim about 21 kilometres east of Stewart (Assessment Report 18096).

MINING DIVISION: Skeena
UTM ZONE: 09 (NAD 83)
NORTHING: 6204070
EASTING: 463479

COMMODITIES: Gold Silver Zinc Lead

MINERALS

SIGNIFICANT: Pyrite Pyrrhotite Sphalerite Galena Gold
ALTERATION: Arsenopyrite Dolomite Ankerite Sericite Chlorite Pyrite
ALTERATION TYPE: Carbonate Sericitic Chloritic Pyrite
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Vein Stockwork
CLASSIFICATION: Hydrothermal Epigenetic Disseminated Replacement Podiform
TYPE: G07 Subaqueous hot spring Ag-Au I05 Polymetallic veins Ag-Pb-Zn±Au
SHAPE: Irregular
MODIFIER: Faulted Sheared
DIMENSION: Metres STRIKE/DIP: TREND/PLUNGE: /

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic	Hazelton	Undefined Formation	
Triassic	Unnamed/Unknown Group	Unnamed/Unknown Formation	
Unknown			Unnamed/Unknown Informal

LITHOLOGY: Andesite
Andesitic Tuff
Hornblende Feldspar Porphyry
Limestone
Breccia
Silty Mudstone
Sandstone
Conglomerate
Basalt
Basaltic Flow

HOSTROCK COMMENTS: Rocks could belong to either the Bowser Lake Group or the Hazelton Group.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Boundary Ranges
TERRANE: Stikine Bowser Lake
COMMENTS: Bowser Lake sedimentary overlap on the Stikine Terrane.

INVENTORY

ORE ZONE: MAIN REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1994
SAMPLE TYPE: Drill Core
COMMODITY GRADE
Silver 12.3000 Grams per tonne
Gold 15.6000 Grams per tonne
COMMENTS: Over 4.2 metres. Also referred to as the Wilby zone.
REFERENCE: Assessment Report 23674.

CAPSULE GEOLOGY

The Willoughby prospect is located on a steep nunatak south of Meziadin Lake and 26 kilometres east of Stewart between the north and

CAPSULE GEOLOGY

central forks of the Willoughby Glacier. A mineralized zone carrying low grade gold and silver values was investigated in this area in 1941 and the Wilby group of claims was explored in 1945.

Mapping has shown the eastern-half of the property to be underlain by Triassic volcanoclastics while the western-half is dominated by Lower Jurassic Hazelton Group rocks. Triassic volcanoclastics are primarily composed of silty mudstone, sandstone and local conglomerate and debris flow conglomerate. At Pius Ridge, located on the south side of Willoughby Creek, Triassic basaltic flows and fine bedded epiclastic rocks host units of rhyolite tuff and heterolithic volcanoclastic rocks containing massive pyrite clasts. Hazelton Group rocks locally consist of andesitic volcanoclastics and conglomerate. At the northwest end of the Willoughby nunatak a Goldslide intrusions porphyry stock has intruded andesitic tuffs. The tuffs vary from ash to lapilli with bedding being randomly developed. Thin section work indicates that the porphyry contains minor quartz, primary biotite, apatite and rutile. Across the valley from the Willoughby nunatak, in the vicinity of the Willow zone, andesitic conglomerate is interbedded with fossiliferous limestone. A thin section study indicates that a microsyenite has intruded the area.

Variable carbonate +/- sericite +/- chlorite +/- pyrite hydrothermal alteration overprints both the stock and country rocks. Petrographic studies indicate that the altered rocks contain 20-40 per cent carbonate (dolomite and ankerite), 20-40 per cent sericite and up to 10 per cent chlorite. Silica content is low. In general, hornblende is altered to biotite and to sericite.

Structurally the area is complex with intense, closely-spaced faulting occurring throughout. Two dominant shear trends are indicated: 330 degrees that has right-lateral movement as indicated by calcite-filled tension gashes and a 040-060 degree trend.

In the vicinity of the mineralized zones bedding attitudes are highly variable. Distal to the mineralization, within crystal and ash tuffs, a north-northwesterly trending foliation with a west dip is developed that appears to be subparallel to primary bedding.

To date 11 mineralized occurrences have been located on the Willoughby property. Eight of the showings: North, Wilby (also referred to as Main), Upper Icefall, Lower Icefall, CCR, Kiwi, Edge and Ledge occur on the Willoughby nunatak, at the head of Willoughby Creek; two showings, Willow (previously referred to as Willoughby) and Back are situated across the valley to the northeast near Buffalo Ridge; and one showing, Pius, is located to the southeast at Pius Ridge. All of the zones are hosted by variable, pervasively sericite +/- carbonate +/- chlorite +/- pyrite altered rocks. Mineralization consisting of pyrite, pyrrhotite along with lesser sphalerite, galena and rare visible gold occurs in veins, stockwork and fracture fillings. In addition, pyrite and pyrrhotite occur as semimassive to massive occurrences in lenses and pods. Several of the zones appear to be intrusion related.

At the Willoughby nunatak all of the zones excluding the North zone occur within andesitic tuffs peripheral to the hornblende feldspar porphyry stock. The North zone occurs within the stock. With the exception of the North zone, the style of mineralization is similar consisting of replacement style pods and lenses of semimassive to massive pyrite and pyrrhotite and disseminated, stockwork and fracture controlled pyrite and pyrrhotite along with minor sphalerite, galena and arsenopyrite. In general the lenses are small, less than 5 metres in size, however, at the Wilby zone a sulphide lens has been traced for 65 metres with widths variable to 5 metres. At the North zone pyrite along with lesser sphalerite and minor galena occur in stockwork, as disseminations and as fracture fillings. Visible gold occurs within shear controlled veins by itself or in association with pyrite, galena or sphalerite.

At the Willow zone drilling indicates that disseminated auriferous pyrite occurs peripheral to a well mineralized, pyrite-sphalerite bearing breccia body. The Back prospect, consisting of small, up to one by five metre pods of semimassive pyrite along with minor sphalerite and galena, occurs in andesitic tuffs near the contact with limestone.

The Pius showing consists of volcanoclastic hosted, subangular blocks of massive pyrite. Individual blocks are up to 10 centimetres in size.

In 1994, Camnor Resources as part of a larger exploration program completed a 17 hole, 1753 metre drill program testing the North, Wilby, Upper Icefall and Willow zones. The North zone is a 30 by 250 metre zone of elevated geochemistry hosted by altered hornblende feldspar porphyry. Mineralization within the zone appears to be shear related. Drilling has tested a gold +/- silver bearing shoot for 40 metres along strike and for up to 50 metres downdip.

CAPSULE GEOLOGY

The shoot strikes northwesterly, appears to plunge steeply to the southeast, with the dip being moderate to the southwest. It is open along strike, down plunge and downdip. The best drill intersection averages 40.1 grams per tonne gold and 109.6 grams per tonne silver over 11.7 metres (Assessment Report 23674).

Mapping and drilling at the Wilby zone has shown a 20 by 60 metre northwest-trending zone to contain semimassive to massive pyrrhotite and pyrite pods within altered andesitic tuffs. Gold values occur within and immediately peripheral to the sulphides. The zone appears to be flat lying and is open along strike to the northwest. The best drill intercept averages 15.6 grams per tonne gold and 12.3 grams per tonne silver over 4.2 metres (Assessment Report 23674).

Drilling at the Upper Icefall zone located an extensive zone of variably altered andesitic tuffs. Mineralization consists of up to 20 per cent pyrite along with lesser sphalerite, galena and arsenopyrite. One hole tested the zone with the best intercept being a one metre sample assaying 17.8 grams per tonne gold and 44.2 grams per tonne silver (Assessment Report 23674).

Drilling at the Willow zone failed to intersect any significant intersections of interest. The zone either dies out or is at a different orientation than projected.

Work in 1995 by Camnor Resources included 3013.5 metres of surface diamond drilling in 27 holes and 1151 core assays. Best results obtained were 386.3 grams per tonne gold and 213.5 grams per tonne silver over 2.9 metres in the North zone, and 13.3 grams per tonne gold and 63.4 grams per tonne silver over 13 metres in the Wilby zone.

Camnor completed approximately 1750 metres of surface drilling in 1996 on the Kiwi, Lower Icefall, Wilby, Wilkie and Edge zones, as well as underground drilling (20 holes totalling 1697 metres) on the North and North-North zones. The underground adit on the North zone was advanced 40 metres for a total length of 90 metres. The drilling tested the zone along a strike length of 100 metres and a minimum dip length of 75 metres; widths are variable to 8 metres. Drilling on the Wilkie zone tested a 60 metre segment at down dip depths of up to 70 metres; widths are variable to 3 metres. In drill testing for the extension of the Wilby zone, a new sulphide lens consisting of pyrite and pyrrhotite was discovered and named the Northern Deep. Both the Wilby and Northern deep lenses have been traced for 150 metres along strike, with widths variable to 25 metres.

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- EMPR PF (*Brown, C.E.G. (1945): Report on Wilby Creek Group; Notes by D. Alldrick and M. Mallott on talk on the Willoughby Creek Area presented at the Minerals North Conference, April 12, 1991)
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- GSC MEM 32-76; 175
- GCNL *#190, 1989
- N MINER August 15, 1994
- WWW <http://www.infomine.com/>
- Falconbridge File

DATE CODED: 1985/07/24
DATE REVISED: 1996/07/15

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **103P 007**

NATIONAL MINERAL INVENTORY: 103P13 Au

NAME(S): **CAMB** LOST MOUNTAIN, MANDY,
HANDY, MIDDLE, R.H.S.

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P13E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 56 12 N
LONGITUDE: 129 43 35 W
ELEVATION: 1100 Metres

NORTHING: 6199269
EASTING: 454623

LOCATION ACCURACY: Within 1 KM

COMMENTS: Approximate location of veins on Camb 1 claim (Assessment Report 12275).

COMMODITIES: Molybdenum Lead Zinc Gold Silver

MINERALS

SIGNIFICANT: Pyrite Pyrrhotite Sphalerite Galena Chalcopyrite
Arsenopyrite Greenockite Boulangerite Tetrahedrite Molybdenite

ASSOCIATED: Quartz Calcite Siderite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Stockwork Disseminated Massive
CLASSIFICATION: Hydrothermal Epigenetic Porphyry
TYPE: G07 Subaqueous hot spring Ag-Au I05 Polymetallic veins Ag-Pb-Zn±Au
L05 Porphyry Mo (Low F- type)

SHAPE: Tabular

MODIFIER: Sheared

DIMENSION: 0800 x 0001 Metres

STRIKE/DIP: 325/70S

TREND/PLUNGE:

COMMENTS: Dimension and attitude of Handy vein.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Jurassic
Jurassic
Jurassic-Cretaceous

GROUP

Bowser Lake
Hazelton

FORMATION

Undefined Formation
Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Coast Plutonic Complex

LITHOLOGY: Argillite
Andesitic Volcaniclastic
Feldspar Porphyry
Andesite
Lamprophyre Dike
Lamprophyre Sill
Quartz Monzonite

HOSTROCK COMMENTS: Host rocks belong to either the Middle to Upper Jurassic Bowser Lake Group or the Jurassic Hazelton Group.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

Bowser Lake

PHYSIOGRAPHIC AREA: Boundary Ranges

INVENTORY

ORE ZONE: MANDY VEIN

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1986

SAMPLE TYPE: Bulk Sample

COMMODITY

GRADE

Silver

9.9800

Grams per tonne

Gold

2.4220

Grams per tonne

COMMENTS: 45 tonne composite bulk sample over 126 metres.

REFERENCE: George Cross Newsletter #59, Mar. 1986.

ORE ZONE: HANDY VEIN

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1986

SAMPLE TYPE: Bulk Sample

COMMODITY

GRADE

Silver

154.2600

Grams per tonne

Gold

24.6800

Grams per tonne

COMMENTS: 45 tonne bulk sample over 57.9 metres.

REFERENCE: George Cross Newsletter #59, Mar. 1986.

CAPSULE GEOLOGY

The Camb showings are located on a nunatak called Lost Mountain in Bromley Glacier, approximately 15 kilometres due east of Stewart. This area has been investigated periodically for molybdenum and precious metal mineralization between 1960 and 1986.

The area is underlain by argillite and andesitic volcaniclastics of the Middle to Upper Jurassic Bowser Lake Group (or possibly the Jurassic Hazelton Group) intruded by feldspar porphyry, andesite and lamprophyre sills and dykes. Quartz monzonite outcrops near the east edge of the nunatak.

The showings primarily comprise three quartz veins, the Handy, Mandy and Middle veins. However, the quartz monzonite to the east (on the RHS claims) is mineralized with pyrite, pyrrhotite and fracture filling and disseminated molybdenite. It has been speculated that the molybdenum bearing intrusive extends under the ice to McAdam Point (103P 220) where granodiorite containing molybdenite mineralization has been located. The Bromley Glacier is receding quite rapidly, 107 metres from 1960 to 1967, exposing more of the stock and mineralized quartz veins. The molybdenum and precious metal mineralization is considered to be closely related.

Three types of mineralization occurs in narrow but continuous quartz veins 1) high grade gold and silver veins cutting all rock types and locally associated with quartz stockworks 2) quartz veinlets with siderite and calcite occurring along fault zones forming, and extending into, wall areas of andesite dykes 3) Quartz stockworks in association with sulphide bearing yellow calcite within feldspar porphyry dykes. Quartz veins contain massive sulphides as fracture fillings and are locally banded with thin films of argillite and/or graphite. Mineralization consists of pyrite, pyrrhotite, sphalerite, galena, chalcopyrite, arsenopyrite, greenockite, boulangerite and tetrahedrite (in order of abundance). Mineralization in stockworks consists of coarse sphalerite and galena in yellow calcite as stringers and coarse blebs. The stockworks are considered to be an early mineralization phase with low gold and silver values and sulphides rarely comprising more than 5 per cent of the veins.

The Mandy vein has been traced for 330 metres, is 5 to 60 centimetres wide, strikes 325 degrees and dips 70 degrees southwest. A 45 tonne composite bulk sample over 126 metres assayed 2.422 grams per tonne gold and 9.98 grams per tonne silver (George Cross Newsletter #59, Mar. 1986).

The Handy vein, 150 metres north of and parallel to the Mandy vein, has been traced for 800 metres and is 0.02 to 1.2 metres wide. A 45 tonne bulk sample over 57.9 metres assayed 24.68 grams per tonne gold and 154.26 grams per tonne silver (George Cross Newsletter #59, Mar. 1986).

The Middle vein occurs in between the Handy and Mandy veins and had lower assay values.

Similar mineralization and values occur in quartz veins of similar orientation on the RHS claims slightly to the northeast.

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EMPR GEM 1973-491
EMPR MAP 8
GSC MAP 307A; 1385A
GSC MEM 175
GCNL #14, 1984; #41, #59, 1986
VSW June 10, 1987

DATE CODED: 1985/07/24
DATE REVISED: 1990/01/04

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 008**

NATIONAL MINERAL INVENTORY:

NAME(S): **MOOSE-LAMB** TORBRIT, TORIC,
KITSULT LAKE

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P11W 103P12E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 41 15 N
LONGITUDE: 129 30 04 W
ELEVATION: 680 Metres

NORTHING: 6171414
EASTING: 468495

LOCATION ACCURACY: Within 500M

COMMENTS: Location centered on adit portal (Devlin, B.D., 1987 Figure 3.1).

COMMODITIES: Silver Lead Zinc Copper

MINERALS

SIGNIFICANT: Pyrite Sphalerite Galena Chalcopyrite Pyrargyrite

 Argentite Tetrahedrite

COMMENTS: Sulphides laminated.

ASSOCIATED: Quartz Calcite Barite Hematite Jasper

 Siderite Magnetite Celestite

COMMENTS: Interlaminated with sulphides.

ALTERATION: Chlorite Epidote Quartz Carbonate

 Propylitic Silicific'n Carbonate

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratiform Concordant Massive

CLASSIFICATION: Volcanogenic Exhalative

TYPE: G07 Subaqueous hot spring Ag-Au G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn

F04 Bedded celestite

DIMENSION: 270 x 3 Metres STRIKE/DIP: 108/70N TREND/PLUNGE:

COMMENTS: The deposit, up to 3 metres wide, has been traced for 270 metres. Age of mineralization is probably Lower Jurassic (galena lead isotopes).

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic Hazelton Undefined Formation

LITHOLOGY: Andesitic Pyroclastic
Andesitic Ash Lapilli Tuff
Andesitic Vitric Tuff

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

PHYSIOGRAPHIC AREA: Boundary Ranges

TERRANE: Stikine

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

COMMENTS: Situated in Stewart Complex (Island Arc Assemblage).

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N

CATEGORY: Assay/analysis YEAR: 1923

SAMPLE TYPE: Grab

COMMODITY GRADE
Silver 411.0000 Grams per tonne

REFERENCE: Minister of Mines Annual Report 1923, page 60.

CAPSULE GEOLOGY

The Moose-Lamb occurrence is situated 0.5 kilometres east of the Kitsault River, 23 kilometres north of Alice Arm. This deposit was extensively explored between 1955 and 1957 for silver bearing volcanogenic exhalites similar to the Torbrit mine (103P 191) to the west.

The area is underlain by a sequence of volcanic and sedimentary rocks belonging to the Upper Triassic Stuhini Group, the Lower Jurassic Hazelton Group and the Middle Jurassic Spatsizi Group. The sequence is folded into a doubly plunging, north-northwest trending syncline (the Kitsault River syncline) and has been regionally metamorphosed to greenschist facies.

The Moose-Lamb deposit consists of a stratiform volcanogenic silver-zinc-lead-barite exhalative horizon developed in a section of andesitic pyroclastic Hazelton Group rocks. The deposit is overlain

CAPSULE GEOLOGY

by plagioclase porphyritic andesitic ash-lapilli tuff and underlain by andesitic vitric (shard) tuff that have been variably propylitized, carbonatized and silicified.

The deposit strikes 108 degrees, dips 70 degrees north and has been traced for 270 metres in a series of trenches. Exposed widths vary from 2.1 to 3.0 metres. The mineralogy is similar to the Torbrit deposit consisting of massive pyrite, sphalerite, galena, minor chalcopyrite and traces of pyrargyrite, argentite and tetrahedrite intercalated with laminations of quartz, calcite, barite, celestite, hematite, jasper, siderite and magnetite. Galena lead isotope data indicates that the mineralization is probably Lower Jurassic in age (Alldrick, D. 1989).

The mineralization is estimated to average 135 grams per tonne silver (Devlin, B.D., 1987: The Geology and Genesis of the Dolly Varden Silver Camp, page 29). Sampling has resulted in assays of up to 411 grams per tonne silver (Minister of Mines Annual Report 1923, page 60).

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pp. 235-243
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EMPR OF 1986-2
EMR MP CORPFILE (Torbrit Silver Mines Ltd.; Dolly Varden Resources)
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EG Vol. 54, 1959, p. 1470
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Silver Camp, Alice Arm Area, Northwestern British Columbia,
University of British Columbia, M.Sc. Thesis

DATE CODED: 1986/04/02
DATE REVISED: 1989/04/29

CODED BY: GD
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 009**

NATIONAL MINERAL INVENTORY:

NAME(S): **MAUDE MCPHEE**, KITSULT, SILVER DREAM

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P12E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 41 18 N
LONGITUDE: 129 31 15 W
ELEVATION: 460 Metres

NORTHING: 6171516
EASTING: 467256

LOCATION ACCURACY: Within 500M

COMMENTS: Location centered on portal of adit as shown in Assessment Report 15371, Figure 5A.

COMMODITIES: Silver Zinc

MINERALS

SIGNIFICANT: Pyrite Sphalerite Galena
ASSOCIATED: Quartz
ALTERATION: Sericite
ALTERATION TYPE: Sericitic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
DIMENSION: 0023 x 0003 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: Vein strikes northwest, dips steeply northeast, is 23 metres long and 3 metres wide.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic Hazelton Undefined Formation

LITHOLOGY: Andesite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Boundary Ranges
TERRANE: Stikine
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist
COMMENTS: Situated in Stewart Complex (Island Arc Assemblage).

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1986
SAMPLE TYPE: Chip
COMMODITY GRADE
Silver 162.0000 Grams per tonne
Zinc 0.1160 Per cent

COMMENTS: A 3.0 metre chip sample.
REFERENCE: Assessment Report 15371, page 22.

CAPSULE GEOLOGY

The Maude McPhee showing is situated on the east bank of Evindsen Creek, 0.5 kilometres west of the Kitsault River, 23 kilometres north of Alice Arm. This showing was explored in the past by an adit and was rediscovered by Dolly Varden Minerals in 1986.

The area is underlain by a sequence of volcanic and sedimentary rocks belonging to the Upper Triassic Stuhini Group, the Lower Jurassic Hazelton Group and the Middle Jurassic Spatsizi Group. The sequence is folded into a doubly plunging, north-northwest trending syncline (the Kitsault River syncline) and has been regionally metamorphosed to greenschist facies.

The Maude McPhee showing comprises a 23 metre long, 3 metre wide vein striking north-northwest and dipping steeply northeast. The vein is hosted in sericitized Hazelton Group andesite. Mineralization consists of pyrite with minor galena and sphalerite in quartz gangue. A 3.0 metre chip sample contained 162 grams per tonne silver and 0.1160 per cent zinc, and a second 2.0 metre chip sample assayed 18.0 grams per tonne silver (Assessment Report 15371, page 22).

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 935
REPORT: RGEN0100

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EMPR FIELDWORK 1985, pp. 219-224,327-330; 1988, pp. 233-240; 1990,
pp. 235-243
EMPR MAP 8
EMPR OF 1986-2
EMPR PF (Mitchell, M.A. (1973) Report)
GSC MAP 307A
Devlin, B.D., 1987: Geology and Genesis of the Dolly Varden Silver
Camp Alice Arm Area, Northwestern British Columbia, University of
British Columbia, M.Sc. Thesis

DATE CODED: 1986/04/21
DATE REVISED: 1989/04/23

CODED BY: DJA
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 010**

NATIONAL MINERAL INVENTORY: 103P12 Cu7

NAME(S): **RED POINT EXTENSION, V, NEW VEIN**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P12E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 41 37 N
LONGITUDE: 129 31 25 W
ELEVATION: 601 Metres

NORTHING: 6172104
EASTING: 467086

LOCATION ACCURACY: Within 500M

COMMENTS: Location centered on pyritic outcrop, Sample site T248 (Devlin, B.D., 1987, Figure 3.1).

COMMODITIES: Gold Silver Copper

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Galena Sphalerite

ASSOCIATED: Quartz Barite

ALTERATION: Chlorite Pyrite Quartz Sericite

COMMENTS: Product of alteration of "Copper Belt" andesite.

ALTERATION TYPE: Chloritic

Pyrite

Silicific'n

Sericitic

Oxidation

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated

CLASSIFICATION: Hydrothermal Epigenetic

TYPE: I02 Intrusion-related Au pyrrhotite veins

G06

Noranda/Kuroko massive sulphide Cu-Pb-Zn

G07 Subaqueous hot spring Ag-Au

SHAPE: Irregular

MODIFIER: Fractured

STRIKE/DIP: 050/75S

TREND/PLUNGE:

COMMENTS: Attitude of fractured V vein.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Lower Jurassic

GROUP

Hazelton

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Plagioclase Hornblende Porphyritic Andesite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

PHYSIOGRAPHIC AREA: Boundary Ranges

TERRANE: Stikine

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

COMMENTS: Situated in Stewart Complex (Island Arc Assemblage).

INVENTORY

ORE ZONE: V VEIN

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1970

SAMPLE TYPE: Chip

COMMODITY

Silver

GRADE

2317.0000

Grams per tonne

Gold

0.5100

Grams per tonne

Copper

0.0300

Per cent

COMMENTS: A 1.2 metre chip sample.

REFERENCE: Assessment Report 2887, page 15.

ORE ZONE: SHEAR

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1916

SAMPLE TYPE: Chip

COMMODITY

Silver

GRADE

27.0000

Grams per tonne

Gold

15.0000

Grams per tonne

Copper

2.4800

Per cent

COMMENTS: A 0.9 metre chip sample.

REFERENCE: Minister of Mines Annual Report 1916, page 81.

CAPSULE GEOLOGY

The Red Point Extension showing occurs 0.5 kilometres west of the Kitsault River, 24 kilometres north of Alice Arm. The area was initially explored for copper earlier this century and this showing is now being evaluated for precious metals.

CAPSULE GEOLOGY

The area is underlain by a sequence of volcanic and sedimentary rocks belonging to the Upper Triassic Stuhini Group, the Lower Jurassic Hazelton Group and the Middle Jurassic Spatsizi Group. The sequence is folded into a doubly plunging, north-northwest trending syncline (the Kitsault River syncline) and has been regionally metamorphosed to greenschist facies.

This occurrence consists of two showings, the Red Point Extension and the V vein. The Red Point Extension lies near the south end of the "Copper Belt", a 10 kilometre long north-northwest trending gossanous body. The gossan consists of Hazelton Group plagioclase-hornblende porphyritic andesite that has been extensively pyritized with variable silicification and sericitization along its length. The Red Point Extension consists of a shear zone which strikes 135 degrees and contains a quartz vein hosted in chloritized andesite mineralized with pyrite and blebs of chalcopyrite. The shear zone averages 3.63 grams per tonne gold over a strike length of 50.3 metres and a width of 3.7 metres (The Northern Miner Nov. 3, 1986). A 0.9 metre chip sample assayed 15 grams per tonne gold, 27 grams per tonne silver and 2.48 per cent copper (Minister of Mines Annual Report 1916, page 81).

The V vein discovered in 1970, lies 288 metres southeast (bearing 116 degrees) of the Red Point Extension showing. This quartz-barite-pyrite vein has been traced for 13.7 metres and is highly fractured. It strikes 050 degrees and dips 75 degrees south-east. Disseminated galena and sphalerite occur in the vein and in the enclosing wallrock. A 1.2 metre chip sample assayed 0.51 grams per tonne gold, 2317 grams per tonne silver and 0.03 per cent copper (Assessment Report 2887, page 15).

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N MINER Nov.3, 1986
Devlin, B.D., 1987: Geology and Genesis of the Dolly Varden Silver Camp, Alice Arm Area, Northwestern British Columbia, University of British Columbia, M.Sc. Thesis

DATE CODED: 1986/03/26
DATE REVISED: 1989/04/29

CODED BY: GD
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 939
REPORT: RGEN0100

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GSC MAP 307A; 315A; 1385A
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GSC OF 2996

DATE CODED: 1985/07/24
DATE REVISED: 1999/06/17

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 012**

NATIONAL MINERAL INVENTORY: 103P12 Pb1

NAME(S): **SADDLE** SAD

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 103P12W
BC MAP:

Underground

MINING DIVISION: Skeena

LATITUDE: 55 37 18 N
LONGITUDE: 129 50 44 W
ELEVATION: 1265 Metres

UTM ZONE: 09 (NAD 83)

NORTHING: 6164298
EASTING: 446751

LOCATION ACCURACY: Within 500M

COMMENTS: Location determined from westernmost shaft (Assessment Report 16299, Figure 4).

COMMODITIES: Gold Silver Copper Lead Zinc

MINERALS

SIGNIFICANT: Pyrite Galena Sphalerite Chalcopyrite Pyrrhotite

COMMENTS: Occurs as massive sulphides in lenses and streaks in quartz veins.

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Massive
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

DIMENSION: 0060 x 0001 Metres STRIKE/DIP: 315/60W

COMMENTS: Main vein has been traced for 60 metres and is up to 1.5 metres wide.

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Aphanitic Andesite
Welded Tuff

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline

TERRANE: Stikine

METAMORPHIC TYPE: Regional

COMMENTS: In a roof pendant at the eastern margin of the Coast Plutonic Complex.

PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)

RELATIONSHIP:

GRADE: Greenschist

INVENTORY

ORE ZONE: VEIN

REPORT ON: N

CATEGORY: Assay/analysis

SAMPLE TYPE: Channel

YEAR: 1983

COMMODITY

GRADE

COMMODITY	GRADE	UNIT
Silver	152.5000	Grams per tonne
Gold	0.6170	Grams per tonne
Copper	0.3500	Per cent
Lead	4.8500	Per cent
Zinc	6.3800	Per cent

COMMENTS: Across 1.0 metre of vein.

REFERENCE: Assessment Report 11076, page 61.

CAPSULE GEOLOGY

The Saddle occurrence is located about 37 kilometres south-southeast of Stewart, about 2 kilometres west of the head of Hastings Arm. After several years of development, a few tonnes of ore containing lead, copper and silver were shipped in 1929.

The occurrence is situated near the eastern margin of a 7 by 4 kilometre roof pendant in the Tertiary Coast Plutonic Complex. This roof pendant consists of mostly massive to schistose aphanitic andesitic flows with some variably foliated welded tuffs and clastic volcanics containing metamorphic banding. The sequence has been subjected to regional greenschist metamorphism and may belong to the Jurassic Hazelton Group. Hornfelsed chloritic schists and minor ultramafics occur in the vicinity of the volcanic/intrusive contact. The composition of the surrounding intrusive varies from coarse-grained diorite to granodiorite.

The occurrence consists of two major quartz veins developed in massive aphanitic andesite which contains some inclusions of welded tuff. The main vein strikes northwest and dips about 60 degrees

CAPSULE GEOLOGY

southwest. It has been traced for 60 metres and is up to 1.5 metres wide. A secondary branch vein, of similar orientation, has been traced along strike for 100 metres and is up to 1.3 metres wide. A few other, less significant, branch veins also occur.

Mineralization consists of discontinuous lenses, pockets and streaks of massive sulphides up to 0.6 metres thick within the veins. The massive sulphides consist primarily of pyrite, galena, sphalerite, chalcopyrite and minor pyrrhotite.

Assays indicate erratic precious metal values occurring with base metals. A metre long channel sample taken across the width of a quartz vein assayed 0.617 grams per tonne gold, 152.5 grams per tonne silver, 0.35 per cent copper, 4.85 per cent lead and 6.38 per cent zinc (Assessment Report 11076 p. 61). Other channel samples assayed up to 220 grams per tonne gold across 0.18 metre and up to 665 grams per tonne silver over 0.30 metre (Assessment Report 11527 p.2).

During 1929, 2.72 tonnes of ore with an average grade of 1058 grams per tonne silver, 1.62 per cent copper and 52.76 per cent lead were mined. Further development was halted in 1930.

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EMPR AR 1926-77; 1927-68; 1928-77; 1929-80,431; 1930-83,359
EMPR ASS RPT *11076, 11527, *16299, 23952, 25540
EMPR BC METAL MM00790
EMPR BULL 63
EMPR FIELDWORK 1988, pp. 233-240; 1990, pp. 235-243
EMPR INDEX 3-211
EMPR MAP 8
GSC MAP 307A; 315A; 1385A
GSC MEM 175, p. 103
GSC OF 2996

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/26

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 013**

NATIONAL MINERAL INVENTORY: 103P12 Pb1

NAME(S): **ELKHORN**, GEORGIA BAY, SAD

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P12W
BC MAP:
LATITUDE: 55 36 59 N
LONGITUDE: 129 49 38 W
ELEVATION: 457 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Location of old workings (Assessment Report, 16299, Figure 2).

MINING DIVISION: Skeena
UTM ZONE: 09 (NAD 83)
NORTHING: 6163696
EASTING: 447899

COMMODITIES: Gold Silver Lead Zinc

MINERALS

SIGNIFICANT: Pyrite Pyrrhotite Galena Sphalerite Gold
COMMENTS: Sulphides and native gold occur in a silicified skarn zone.
ASSOCIATED: Epidote Garnet Quartz
COMMENTS: Occur in a silicified skarn zone.
ALTERATION: Epidote Garnet Quartz
ALTERATION TYPE: Skarn Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Skarn Epigenetic
TYPE: K04 Au skarn
DIMENSION:
COMMENTS: Attitude of silicified skarn zone.
STRIKE/DIP: 163/80W
TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE: Jurassic
GROUP: Hazelton
FORMATION: Undefined Formation
IGNEOUS/METAMORPHIC/OTHER:

LITHOLOGY: Meta Andesite
Mica Schist

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Stikine
METAMORPHIC TYPE: Regional
COMMENTS: In a roof pendant at the eastern margin of Coast Plutonic Complex.
PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)
RELATIONSHIP: Syn-mineralization
GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE
REPORT ON: N
CATEGORY: Assay/analysis
SAMPLE TYPE: Grab
COMMODITY: Silver 17.0000 Grams per tonne
Gold 5.4800 Grams per tonne
COMMENTS: Sample of sulphides selected to avoid native gold.
REFERENCE: Minister of Mines Annual Report 1929, page 82.

CAPSULE GEOLOGY

The Elkhorn showing is located about 38 kilometres south-southeast of Stewart, about one kilometre west of the head of Hastings Arm in Observatory Inlet. The showing occurs just southeast of the Saddle occurrence (103P 012).

The occurrence is situated near the eastern margin of a 7 by 4 kilometre roof pendant within the Coast Plutonic Complex. The roof pendant consists of massive to schistose aphanitic andesite with some variably foliated tuffs and volcanoclastics containing metamorphic banding. This sequence may correlate with the Jurassic Hazelton Group. These volcanics have been subjected to regional greenschist metamorphism. Hornfelsed chloritic schists and minor ultramafics occur in the vicinity of the volcanic/intrusive contact. The surrounding intrusive consists of coarse-grained diorite to granodiorite.

The Elkhorn showing consists of a 1 metre wide silicified skarn zone containing epidote, garnet and quartz in altered andesite and mica schist. The zone strikes 163 degrees and dips steeply to the west. Mineralization consists of fine-grained pyrite and pyrrhotite

CAPSULE GEOLOGY

with minor galena and sphalerite. "Spectacular finely divided gold in streaks 6 to 25 millimetres wide have been found in isolated patches", a sample of the sulphides carefully selected to avoid native gold assayed 5.48 grams per tonne gold and 17 grams per tonne silver (Minister of Mines Annual Report 1929, p. 82).

Two similar zones occur 15 and 30 metres higher in elevation above the main zone. They parallel the main zone and are mineralized with pyrite, pyrrhotite and minor galena. A sample from the zone 30 metres above the main zone assayed 1.37 grams per tonne gold and 6.86 grams per tonne silver (Minister of Mines Annual Report 1929, page 82).

BIBLIOGRAPHY

EMPR AR *1929-82; 1930-83; 1934-B14
EMPR ASS RPT 16299, 23952, 25540
EMPR BULL 63
EMPR FIELDWORK 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
GSC MAP 307A; 315A; 1385A
GSC MEM 175, pp. 91-92
GSC OF 2996

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/30

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 014**

NATIONAL MINERAL INVENTORY:

NAME(S): **SEABEE**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P11W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 38 54 N
LONGITUDE: 129 22 45 W
ELEVATION: 1131 Metres

NORTHING: 6167006
EASTING: 476138

LOCATION ACCURACY: Within 1 KM

COMMENTS: Location centered on chip sample A4 (Map 1, Assessment Report 124).

COMMODITIES: Copper Gold

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Galena
COMMENTS: As widespread fine disseminations, in shear zones and in veinlets.
ASSOCIATED: Quartz Calcite Barite
COMMENTS: As veinlets.
ALTERATION: Epidote
COMMENTS: In altered andesite.
ALTERATION TYPE: Epidote
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: L03 Alkalic porphyry Cu-Au
DIMENSION: 0140 x 0043 Metres
COMMENTS: Gossan zones trend north to northeast.

L01 Subvolcanic Cu-Ag-Au (As-Sb)
STRIKE/DIP: TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Andesite
Rhyolite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine
METAMORPHIC TYPE: Regional
COMMENTS: At the southern end of the Stewart Complex (Island Arc Assemblage).

PHYSIOGRAPHIC AREA: Boundary Ranges
RELATIONSHIP:
GRADE: Greenschist

INVENTORY

ORE ZONE: VEINLETS REPORT ON: N

CATEGORY: Assay/analysis YEAR: 1956
SAMPLE TYPE: Chip
COMMODITY

COMMODITY	GRADE	
Gold	0.5100	Grams per tonne
Copper	0.7000	Per cent

COMMENTS: 9.1 metre chip sample across quartz veinlets.
REFERENCE: Assessment Report 124, page 8.

CAPSULE GEOLOGY

The Seabee occurrence is situated along the southwestern shore of Kinskuch Lake, 20 kilometres north-northeast of Alice Arm. Various gossan zones were explored in the area in 1956. The Kinskuch Lake area is underlain by volcanics and sediments of the Upper Triassic Stuhini Group and the Lower Jurassic Hazelton Group. These occur along the eastern limb of the north to northwest trending Mt. McGuire anticline and have been regionally metamorphosed to greenschist facies. The Seabee occurrence consists of widespread gossanous zones, more localized pyritic shear zones and veinlets containing variable quartz, calcite and barite hosted in Hazelton Group volcanics. The gossanous zones occur sporadically around the southwestern shore of Kinskuch Lake and are commonly hosted in light grey sodic rhyolite. In outcrop these zones tend to be elongate and trend north to north-east. Individual zones extend up to 140 metres and vary in width up to 43 metres. The pyritic shear zones occur more commonly in the dark green epidote altered andesite. Lenticular veins of variable

CAPSULE GEOLOGY

quartz, calcite and barite, up to 13 millimetres in width, are found in both volcanic types.

Mineralization in the gossan zones comprise widespread finely disseminated pyrite and minor chalcopyrite. The shear zones are more intensely pyritized and contain minor fine disseminated chalcopyrite. The quartz-calcite-barite veinlets often contain pods of pyrite with minor chalcopyrite and traces of galena. Chip and channel sampling revealed low copper values and trace gold. The best assay came from a 9.1 metre chip sample across a series of quartz veinlets containing visible pyrite and chalcopyrite which assayed 0.51 grams per tonne gold and 0.70 per cent copper (Assessment Report 124, page 8).

BIBLIOGRAPHY

EMPR AR 1966-47
EMPR ASS RPT *124
EMPR BULL 63
EMPR EXPL 1979-260
EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
EMPR OF 1986-2
GSC MAP 1385A
Gale, R.E. (1957): Geology of Kinskuch Lake Area, British Columbia, University of British Columbia, M.Sc. Thesis

DATE CODED: 1985/07/24
DATE REVISED: 1989/03/30

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 015**

NATIONAL MINERAL INVENTORY:

NAME(S): **MONARCH, ILLY**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P11W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 34 06 N
LONGITUDE: 129 16 00 W
ELEVATION: 1146 Metres

NORTHING: 6158070
EASTING: 483184

LOCATION ACCURACY: Within 500M

COMMENTS: Location of pit (Assessment Report 10115, Figures 4 and 5).

COMMODITIES: Copper Zinc Silver Lead

MINERALS

SIGNIFICANT: Galena Sphalerite Chalcopyrite Pyrite Tetrahedrite

COMMENTS: As veinlets, blebs and disseminations in vein. Trace gold.

ASSOCIATED: Quartz Carbonate Barite

COMMENTS: Contained in a vein within a shear zone.

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Breccia
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn

SHAPE: Tabular

MODIFIER: Faulted

DIMENSION: 0040 x 0020 Metres

STRIKE/DIP: 150/58S

TREND/PLUNGE:

COMMENTS: Vein is from 1.0 to 20.0 metres wide.

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE

Lower Jurassic

GROUP

Hazelton

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Andesitic Sericite Schist
Rhyolitic Sericite Schist

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

PHYSIOGRAPHIC AREA: Boundary Ranges

TERRANE: Stikine

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

COMMENTS: Situated at east boundary of Stewart Complex (Island Arc Assemblage).

INVENTORY

ORE ZONE: DRILLHOLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1968

SAMPLE TYPE: Drill Core

COMMODITY

GRADE

Silver	21.6000	Grams per tonne
Copper	0.4300	Per cent
Lead	1.0000	Per cent
Zinc	1.6800	Per cent

COMMENTS: Resampling of drill core over a 19.8 metre intersection.

REFERENCE: Assessment Report 10115, page 11.

CAPSULE GEOLOGY

The Monarch occurrence is located on the east bank of the Illiance River, about 17 kilometres northeast of Alice Arm. The area has been periodically explored since 1915 for copper, lead, silver and zinc.

The region is underlain by Lower Jurassic Hazelton Group volcanics and sediments situated on the east limb of the north-northwest trending Mt. McGuire anticline. These rocks have been regionally metamorphosed to greenschist facies.

The Monarch showing consists of a quartz-carbonate-barite vein hosted in a shear zone in andesitic to rhyolitic sericite schists. The vein strikes 150 degrees for 40 metres and dips 58 degrees southwest. The vein is terminated on its north end by a northeast trending fault and on the south end by a west striking fault which dips 50 degrees north. The vein varies in width from 1 metre on the north end to 20 metres in the central portion to 3 metres at its southern end.

CAPSULE GEOLOGY

Mineralization consists of galena, sphalerite, chalcopyrite, pyrite and tetrahedrite as veinlets, blebs and disseminations in a gangue of quartz carbonate (ankerite or siderite), barite and brecciated wall rock. Resampling of old drill core (1968) resulted in an assay of 21.6 grams per tonne silver, 0.43 per cent copper, 1.09 per cent lead and 1.68 per cent zinc over 19.8 metres (Assessment Report 10115, page 11).

An adit was driven east for 56.7 metres in 1916 and 1918, about 33 metres below the showing, but failed to intersect the vein. Two holes drilled in 1967 are reported to have encountered only minor mineralization (Minister of Mines Annual Report 1967, page 49).

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EMPR AR 1915-70; 1916-74; 1918-72; 1919-59,60; 1921-56; 1930-90,91;
*1965-66; 1967-49; 1968-65-68
EMPR ASS RPT *10115, 19459
EMPR BULL 63
EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp.
235-243
EMPR MAP 8
EMPR OF 1986-2
EMPR PF (Map of showing and notes, 1965; Great Northwest Resources
Corp. Prospectus, 1989)
EMR MP CORPFILE (Ponder Oils Ltd.)
GSC MAP 307A; 315A; 1385A
GSC MEM 175, p. 73
GSC SUM RPT 1922, p. 47A

DATE CODED: 1985/07/24
DATE REVISED: 1989/03/14

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 016**

NATIONAL MINERAL INVENTORY: 103P11 Cu2

NAME(S): **BIG BULK**, KINSKUCH, REINA BLANCA,
GOLD STRIKE, KITS-JADE, MIDNIGHT BLUE

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 103P11W
BC MAP:
LATITUDE: 55 39 47 N
LONGITUDE: 129 20 55 W
ELEVATION: 1311 Metres
LOCATION ACCURACY: Within 5 KM
COMMENTS: Location centered on collar of drill hole A1-Site A (Assessment Report 10798, Drill Hole Plan).

MINING DIVISION: Skeena
UTM ZONE: 09 (NAD 83)
NORTHING: 6168635
EASTING: 478069

COMMODITIES: Copper Gold

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite
COMMENTS: Disseminated in volcanics and in quartz vein stockwork.
ASSOCIATED: Quartz
ALTERATION: Albite Chlorite Epidote Carbonate Sericite
ALTERATION TYPE: Albite Propylitic Carbonate Sericitic Pyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated Stockwork
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: L03 Alkalic porphyry Cu-Au L01 Subvolcanic Cu-Ag-Au (As-Sb)
SHAPE: Irregular
MODIFIER: Faulted
DIMENSION: 0180 x 0120 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: Zones are up to 180 metres long and 120 metres wide. Host rocks strike northwest and dip east.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE: Lower Jurassic
GROUP: Hazelton
FORMATION: Undefined Formation
IGNEOUS/METAMORPHIC/OTHER:

LITHOLOGY: Andesitic Flow
Andesite
Lapilli Tuff
Volcanic Breccia

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Boundary Ranges
TERRANE: Stikine
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist
COMMENTS: At the south end of the Stewart Complex (Island Arc Assemblage)

INVENTORY

ORE ZONE: DRILLHOLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1965
SAMPLE TYPE: Drill Core
COMMODITY: Copper GRADE: 1.2200 Per cent
COMMENTS: Over a 16 metre length.
REFERENCE: Assessment Report 712, page 10.

CAPSULE GEOLOGY

The Big Bulk occurrence is situated on the southeast shore of Kinskuch Lake, 22 kilometres northeast of Alice Arm. The area has been explored extensively since 1938 for large tonnage, low grade copper deposits.

The Kinskuch Lake area is underlain by volcanics and sediments of the Upper Triassic Stuhini Group and the Lower Jurassic Hazelton Group. These units are situated on the eastern limb of the north to northwest trending Mt. McGuire anticline and have been regionally metamorphosed up to greenschist facies.

The Big Bulk occurrence encompasses a number of pyritic zones in northwest striking east dipping andesitic flows, lapilli tuffs and minor volcanic breccias of the Hazelton Group. The sequence is cut

CAPSULE GEOLOGY

by lamprophyre and quartz-feldspar porphyritic dykes. The pyritic zones are contained in a roughly crescent shaped 1.75 kilometre wide alteration halo centered on the southeast shore of Kinskuch Lake. The halo contains variable albite, chlorite-epidote (propylitic), carbonate and sericitic alteration.

Four chalcopyrite-bearing pyritic zones have been defined. These four zones are roughly elliptical and vary from 100 to 180 metres in length and 25 to 120 metres in width. Some of these zones are faulted at depth.

Mineralization comprises disseminated pyrite and chalcopyrite in quartz vein stockworks and in the volcanic country rock. Pyrite to chalcopyrite ratios vary from 1:2 to 10:1. Diamond drilling encountered copper values of up to 1.22 per cent copper over 16 metres (Assessment Report 712 p.10). Surface chip samples have resulted in assays of up to 0.715 per cent copper, 1.75 grams per tonne gold and 0.34 grams per tonne silver over a length of 13 metres (Assessment Report 8785, page 11).

Recent work has concentrated on the Big Bulk and Midnight Blue target areas. Work completed in 1990 outlined broad areas of anomalous gold and copper.

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- EMPR AR 1931-39; 1938-B3; 1939-67; 1955-20,21; 1956-21; 1965-65; *1966
- EMPR ASS RPT 119, *712, 2538, 8375, *8785, 10798, 21915
- EMPR BULL 63
- EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp. 235-243
- EMPR GEM 1970-90,91
- EMPR MAP 8
- EMPR OF 1986-2
- EMPR SPEC RPT 4, 1939
- GSC MAP 307A; 1385A
- GCNL #59, 1981; #164, 1991
- Gale, R.E. (1957): The Geology of Kinskuch Lake Area, British Columbia, University of British Columbia, M.Sc. Thesis

DATE CODED: 1985/07/24
DATE REVISED: 1989/03/20

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 017**

NATIONAL MINERAL INVENTORY: 103P14 Au

NAME(S): **WILLOUGHBY CREEK**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P14W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 56 15 N
LONGITUDE: 129 21 36 W
ELEVATION: 375 Metres

NORTHING: 6199182
EASTING: 477511

LOCATION ACCURACY: Within 500M

COMMENTS: #61 on Diagram of the Portland Canal Mining District (GSC Memoir 32).

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Middle Jurassic Tertiary	Hazelton	Salmon River	Glacial/Fluvial Gravels

LITHOLOGY: Unconsolidated Sediment/Sedimentary
Sediment/Sedimentary

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Bowser Lake

PHYSIOGRAPHIC AREA: Boundary Ranges

CAPSULE GEOLOGY

The Willoughby Creek placer showing is located approximately 40 kilometres east of Stewart. The creek was investigated, in several locations, for placer gold in the early 1900's.

Coarse gold is reported to have been found in a bar on this creek prior to 1913. A terrace on the left bank of the creek, covered with 7.6 metres of coarse gravel, was investigated by a tunnel driven part way across but no pay channel was located.

The area is underlain by sediments of the Middle Jurassic Salmon River Formation, Hazelton Group.

BIBLIOGRAPHY

EMPR BULL 28 p.47; 63
EMPR FIELDWORK 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
GSC MAP 1385A
GSC MEM 32-76

DATE CODED: 1985/07/24
DATE REVISED: 1989/11/28

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 018**

NATIONAL MINERAL INVENTORY: 103P12 Cu7

NAME(S): **KITSOL**, KITS SAUL, BONANZA

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 103P12E
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 41 38 N
LONGITUDE: 129 30 48 W
ELEVATION: 345 Metres

NORTHING: 6172131
EASTING: 467732

LOCATION ACCURACY: Within 500M

COMMENTS: Location of main outcrop of Kitsol vein (Devlin, B.D., 1987 fig. 3.1).

COMMODITIES: Silver Lead Zinc Copper

MINERALS

SIGNIFICANT: Pyrite Marcasite Galena Sphalerite Chalcocopyrite
 Pyrargyrite Silver
ASSOCIATED: Quartz Calcite Barite Jasper
COMMENTS: Colliform banded.
ALTERATION: Chlorite Epidote Carbonate Quartz
ALTERATION TYPE: Propylitic Carbonate Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratiform Concordant
CLASSIFICATION: Volcanogenic Exhalative
 TYPE: G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn 105 Polymetallic veins Ag-Pb-Zn±Au
DIMENSION: 0107 x 0091 x 0006 Metres STRIKE/DIP:
COMMENTS: Strikes northeast for 91 metres, dips near vertical, is 5.5 metres wide and has been traced downdip for 107 metres. TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic Hazelton Undefined Formation

LITHOLOGY: Andesitic Tuff
 Andesitic Breccia
 Andesite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Boundary Ranges
TERRANE: Stikine
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist
COMMENTS: Situated in the Stewart Complex (Island Arc Assemblage).

INVENTORY

ORE ZONE: DRILLHOLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1972
SAMPLE TYPE: Drill Core
COMMODITY GRADE
Silver 546.0000 Grams per tonne
COMMENTS: A 5.5 metre drill hole intersection.
REFERENCE: Property File - Dolly Varden Mines, 1972 Annual Report.

CAPSULE GEOLOGY

The Kitsol prospect is located on the west bank of the Kitsault River, 24 kilometres north of Alice Arm. The South Musketeer (103P 019), probably an extension of the Kitsol, lies just across the river on the east bank. The Kitsol prospect was extensively explored by Dolly Varden Mines in the early 1970's.

The area is underlain by a sequence of volcanic and sedimentary rocks of the Upper Triassic Stuhini Group, the Lower Jurassic Hazelton Group and the Middle Jurassic Spatsizi Group. The sequence is folded into the doubly plunging, north-northwest trending Kitsault River Syncline and has been regionally metamorphosed to greenschist facies.

The deposit comprises a stratiform volcanogenic silver-lead-zinc barite exhalite horizon hosted in Hazelton Group andesitic tuffs and breccias that have been variably propylitized, silicified and carbonatized. The horizon strikes north-northeast for 91 metres, dips near vertically, is approximately 5.5 metres wide and has been traced downdip for 107 metres.

CAPSULE GEOLOGY

The mineralogy of this deposit is similar to that of the Torbrit (103P 191), displaying colliform banded quartz, calcite, barite and jasper mineralized with pyrite, marcasite, galena, minor sphalerite, minor chalcopyrite and traces of pyrargyrite and native silver.

The deposit averages 340 grams per tonne silver over its 91 metre strike length on the surface (Geology, Exploration and Mining in B. C. 1973, p. 489). A 5.5 metre drill hole intersection 107 metres below the surface outcrop assayed 546.1 grams per tonne silver (Property File - Dolly Varden Mines 1972 Annual Report).

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- GSC MAP 307A; 1385A
- Devlin, B.D. (1987): Geology and Genesis of the Dolly Varden Silver Camp, Alice Arm Area, Northwestern British Columbia, University of British Columbia M.Sc. Thesis

DATE CODED: 1985/07/24
DATE REVISED: 1989/04/23

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 019**

NATIONAL MINERAL INVENTORY: 103P12 Ag9

NAME(S): **SOUTH MUSKETEER**, MUSKETEER

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P12E
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 41 47 N
LONGITUDE: 129 30 33 W
ELEVATION: 570 Metres

NORTHING: 6172407
EASTING: 467996

LOCATION ACCURACY: Within 500M

COMMENTS: Location centered on outcrop of quartz-pyrite vein (Devlin, B.D. (1987), Figure 3.1).

COMMODITIES: Silver Zinc Lead Copper

MINERALS

SIGNIFICANT: Pyrite Sphalerite Galena Chalcopyrite Pyrargyrite

ASSOCIATED: Argentite Tetrahedrite
Quartz Calcite Barite Hematite Jasper
Siderite Magnetite Chlorite

COMMENTS: Celestite also present.

ALTERATION: Chlorite Epidote Quartz Carbonate

ALTERATION TYPE: Propylitic Silicific'n Carbonate

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound Concordant
CLASSIFICATION: Volcanogenic Exhalative
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
I10 Vein barite

G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn

SHAPE: Tabular

DIMENSION: 0274 x 0259 x 0004 Metres

STRIKE/DIP: 041/62S

TREND/PLUNGE:

COMMENTS: Strike varies from 041 to 048 degrees, dip varies from 62 degrees southeast and 72 degrees northwest.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic Hazelton Undefined Formation

LITHOLOGY: Andesitic Tuff
Andesite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

PHYSIOGRAPHIC AREA: Boundary Ranges

TERRANE: Stikine

METAMORPHIC TYPE: Regional

RELATIONSHIP: Post-mineralization

GRADE: Greenschist

COMMENTS: Situated in the Stewart Complex (Island Arc Assemblage).

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1970

SAMPLE TYPE: Grab

COMMODITY

GRADE

Silver

822.7000

Grams per tonne

COMMENTS: Assay values of surface sampling were between 0.3 to 822.7 grams per tonne silver.

REFERENCE: George Cross Newsletter #147, 1970, page 2.

CAPSULE GEOLOGY

The South Musketeer occurrence lies on the east bank of the Kitsault River, 24 kilometres north of Alice Arm. The area has been explored since 1916 for its silver-lead-zinc mineralization.

The area is underlain by a sequence of volcanic and sedimentary rocks belonging to the Upper Triassic Stuhini Group, the Lower Jurassic Hazelton Group and the Middle Jurassic Spatsizi Group. The sequence is folded into a doubly plunging, north-northwest trending syncline (the Kitsault River syncline) and has been regionally metamorphosed to greenschist facies.

The showing comprises a volcanogenic silver-zinc-lead barite exhalative deposit hosted in propylitic, silica and carbonate altered andesitic tuffs of the Hazelton Group.

The deposit strikes between 041 and 048 degrees and dips are

CAPSULE GEOLOGY

variable between 62 degrees southeast and 72 degrees northwest. It has been traced along strike for 274 metres and down dip for 259 metres with an average width of 3.7 metres.

The mineralogy of the South Musketeer is similar to the Torbrit (103P 191) and Moose-Lamb (103P 008) deposits. Mineralization consists of pyrite, sphalerite, galena with minor chalcopyrite and traces of pyrargyrite, argentite and tetrahedrite in a gangue of quartz, calcite, barite, celestite, hematite, jasper, siderite, magnetite and chlorite. Surface sampling resulted in assay values between 0.3 to 822.7 grams per tonne silver (George Cross Newsletter #147, 1970).

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GCNL #147, 1970
W MINER Aug. 1970
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DATE CODED: 1986/04/02
DATE REVISED: 1989/04/29

CODED BY: GD
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 020**

NATIONAL MINERAL INVENTORY: 103P12 Au1

NAME(S): **MASTODON, MAST**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P12W
BC MAP:

Underground

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 37 32 N
LONGITUDE: 129 46 47 W
ELEVATION: 183 Metres

NORTHING: 6164682
EASTING: 450902

LOCATION ACCURACY: Within 500M

COMMENTS: Location based on north adit on Mastodon 2 claim (Minister of Mines Annual Report 1934, page B13).

COMMODITIES: Gold Silver Zinc Lead

MINERALS

SIGNIFICANT: Pyrite Sphalerite Galena

ASSOCIATED: Quartz

COMMENTS: Quartz occurs as erratic veins, veinlets, patches and blebs.

ALTERATION: Silica

ALTERATION TYPE: Silicific'n

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein

CLASSIFICATION: Hydrothermal Replacement Epigenetic

TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au 102 Intrusion-related Au pyrrhotite veins

COMMENTS: Siliceous replacement zone trends northwest.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Lower Jurassic
Eocene

GROUP

Undefined Group

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Coast Plutonic Complex

LITHOLOGY: Meta Sediment/Sedimentary
Granite Intrusive

HOSTROCK COMMENTS: Mineralized zone hosted in metasedimentary rocks within granitic Coast Plutonic rocks.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline

PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)

TERRANE: Plutonic Rocks

COMMENTS: Situated at the eastern margin of the Coast Plutonic Complex.

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1935

SAMPLE TYPE: Chip

COMMODITY

GRADE

Silver

3.4000

Grams per tonne

Gold

11.0000

Grams per tonne

COMMENTS: Sample taken over 0.46 metre.

REFERENCE: Minister of Mines Annual Report 1934, page B13.

CAPSULE GEOLOGY

The Mastodon showing is located east of Hastings Arm approximately 19 kilometres north of Anyox on Observatory Inlet. It has been evaluated in the past for gold and silver mineralization.

The showing consists of a siliceous replacement zone 0.3 to 1.8 metres wide in a 30 to 60 metre wide belt of Lower Jurassic metasedimentary rocks hosted in granitic rocks of the Coast Plutonic Complex. This zone trends northwest for 820 metres between elevations of 120 and 260 metres on the north side of Granite Creek. The zone consists of erratic veins, veinlets, patches and blebs of quartz mineralized in places with pyrite, and less frequently with sphalerite and minor galena. Mineralization is best developed in the central part of the zone at an elevation of 180 metres. Trenching and stripping revealed that this zone continues across Granite Creek to the southeast.

Precious metal assays range from trace gold and silver over 1.5 metres to 11.0 grams per tonne gold and 3.4 grams per tonne silver over 0.46 metre (Minister of Mines Annual Report 1934, page B13).

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 956
REPORT: RGEN0100

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EMPR MAP 8
GSC MAP 1385A

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/27

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

CAPSULE GEOLOGY

1936.

The area is underlain by the western margin of a 14.4 by 9.6 kilometre roof pendant within the Tertiary-Jurassic Coast Plutonic Complex. Recent geochronology and fossil research by the Geological Survey of Canada have helped define the age of the pendant. These pendant rocks have been correlated with Lower to lower Middle Jurassic Hazelton Group rocks and overlying upper Middle to Upper Jurassic Bowser Lake Group sedimentary rocks (GSC Open File 3454). The Hazelton rocks consist of variably chloritized pillowed and massive basalt with minor mafic tuffs. The overlying Bowser Lake sediments consist of siltstone and sandstone with minor chert and limestone.

There are two observable phases of folding in the area, an initial north-northeast trending phase followed by a later east-northeast trending phase.

The Anyox deposit consists of eight distinct massive sulphide bodies, numbered 1 to 8, and a quartz vein stockwork containing disseminated sulphides. The underlying volcanics consist of tholeiitic pillow basalts and basaltic tuffs, with the frequency of tuff lenses and layers increasing upwards through the sequence. Chloritization, quartz veining and sulphide impregnation also increases upwards. A chert horizon, followed by a turbidite sequence of quartzofeldspathic silt and pelite metamorphosed to argillite, overlies the volcanics and massive sulphides.

The structure is dominated by an asymmetrical overturned anticline/syncline pair. The Number 1, 4, 5, 6, 7 and 8 orebodies occur along the volcanic/sediment contact, around the nose of the anticline which plunges north at 30 degrees. The Number 2 and 3 orebodies occur in volcanics, 30 to 100 metres west of the volcanic/sediment contact, on the west limb of a north plunging asymmetrical fold. A north striking, steeply east dipping fault separates the Number 2 and 3 orebodies, which formed a single body before being displaced 90 metres vertically and 60 metres horizontally. The Number 2 and 3 orebodies strike north and dip steeply to the east and the Number 1 body strikes north to northeast and dips 50 to 90 degrees to the west. The dimensions of the massive sulphide bodies range from 500 by 400 by 76 metres for the Number 1 deposit to 150 by 100 by 21 metres for the Number 6 deposit.

Two types of massive sulphide bodies are distinguished at Anyox. The more common type, which includes the Number 1, 4, 5, 6, 7 and 8 orebodies, consists of stratiform tabular to elongate massive sulphide orebodies interbedded with cherty metasediments on the volcanic/sediment contact. Mineralization consists primarily of pyrite and lesser pyrrhotite with chalcopyrite and sphalerite occurring as fine disseminations or as massive layers and lenses within the pyrite and pyrrhotite. The sulphides form massive layers up to 75 metres thick. Gangue minerals consist of quartz, chlorite, actinolite, tremolite, calcite, biotite and sericite.

The Number 2 and 3 orebodies characterize the second type which consists of massive stratabound layers and lenses of sulphides in basaltic tuff. The tuff has been altered to chlorite or chlorite-actinolite schist. Mineralization consists of massive pyrrhotite, variable amounts of chalcopyrite and minor pyrite. The mineralization forms layers, lenses and disseminations in the tuff. Gangue minerals consist of quartz, chlorite, actinolite, hornblende, epidote and albite.

West of the Number 2 and 3 deposits, a stockwork of epigenetic quartz veins forms a low grade, unmined and poorly defined copper orebody. Mineralization consists of pyrrhotite, chalcopyrite, minor pyrite and trace sphalerite occurring as disseminations and blebs in chloritized metabasalt and quartz veins.

Between 1914 and 1936, 21,725,524 tonnes of copper ore were produced from the Number 1 to 6 bodies. The average grade was 1.4 per cent copper, 0.17 gram per tonne gold and 9.5 grams per tonne silver.

The North Hidden Creek showing, located 300 metres north of the mine, consists of two massive sulphide intersections obtained from 1982 drilling. The intersections occur above the basalt/argillite contact in hanging wall sedimentary rock units. A 6.1-metre intersection in Hole 82-9 assayed 2.5 per cent copper, 0.5 per cent zinc, 1.7 grams per tonne gold and 99.4 grams per tonne silver (Report by Taiga Consultants Ltd., 1992).

In 1983, Wright Engineers Limited estimated remaining ore reserves at Hidden Creek to be 77 million tonnes grading 0.55 per cent copper equivalent. In the same year Cominco computerized the data and calculated a potential mineralized ore reserve, to a depth of 60 metres, of 45,360,000 tonnes grading 0.60 per cent copper, with a cutoff of 0.2 per cent copper (Report by Taiga Consultants Ltd., 1992).

CAPSULE GEOLOGY

In 1988, Glanville Management Ltd. concluded that open pit reserves present were 10.9 to 13.6 million tonnes, grading 0.70 to 0.75 per cent copper, with gold and zinc grades (Report by Taiga Consultants Ltd., 1992). This report and Assessment Report 23528 have a good summary and history of exploration in the Anyox area.

In 1992, Beacon Hill Consultants Ltd. outlined an indicated open pit reserve of 24,221,840 tonnes grading 1.08 per cent copper, 0.17 gram per tonne gold and 10.3 grams per tonne silver (George Cross News Letter No. 21 (February 1), 1993 and Report by Taiga Consultants Ltd., 1992).

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EMPR ASS RPT 4247, 6137, 9474, 9890, 10636, 17119, 17396, 18135, 23582
EMPR BC METAL MM00751
EMPR BULL *63, pp. 129-132
EMPR ENG INSP (Mine Plans-Fiche No. 60028, 60029, Dec. 1935); 1990
EMPR EXPL 1976-E164
EMPR FIELDWORK 1985, pp. 211-216; 1988, pp. 233-240; 1990, pp. 235-243; 1993, pp. 351-356; 1994, pp. 513-520
EMPR INDEX 3-199
EMPR MAP 8; 65, 1989
EMPR OF 1992-1; 1992-3; 1999-2; 2000-28
EMPR P 1991-4, p. 105
EMPR PF (Bancroft, J.A. (1918): Report; Sargent, H. (1942): Report; Anyox Map, 1986; Cominco/Prospectors Airways Brief of Anyox Project, 1987; Prospectors Airways Ltd. Prospectus, 1988; Abdel-Rahman, A. et al (1988): Geological Prospecting Report, *Taiga Consultants Ltd. (1992): Geological, Geochemical and Geophysical Report on the Anyox Property)
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GSC SUM RPT 1922 Part A, pp. 18-23
GSC OF 3454
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EMR MP CORPFILE (Granby Consolidated Mining, Smelting & Power Co. Ltd.; Ventures Ltd.; Anyox Metals Ltd.; Consolidated Mining & Smelting Co. of Canada Ltd.)
EMR MP RESFILE (Hidden Creek)
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N MINER May 31, 1973
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Placer Dome File
EMPR OF 1998-10

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/31

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

CAPSULE GEOLOGY

Group) volcanics (Sharp, R.J., 1980).

The volcanics consist of variably chloritized pillow and massive andesite and basalt with minor mafic tuffs. The overlying sediments consist of argillite, siltstone and sandstone with minor chert and limestone.

There are two observable phases of folding in the area, an initial north-northeast trending phase followed by a later east-northeast trending phase.

The Granby Point and Reserve Quartz mines are developed in the same vein system. Quartz veins ranging from a few centimetres to 4 metres thick are developed along bedding planes in argillite. The argillite and quartz veins dip gently to the southeast with dips averaging 20 degrees and never exceeding 40 degrees. Numerous quartz stringers extend for up to 10 metres into the hangingwall of the veins.

Mineralization consists of pyrite, sphalerite and galena with traces of chalcopyrite and pyrrhotite. The mineralization occurs as disseminations and blebs scattered erratically through the quartz veins and more commonly along the margins. Gold is associated with pyrite and chalcopyrite and silver is associated with sphalerite.

The Granby Point mine contains a small unexploited mass of moderately sulphide-rich, potentially high grade, vein material in the southwestern part of the mine area. The mine area is mainly dry and stable. The probable extension of the vein is the Quarry vein system, 50 to 150 metres south of the mine portal.

The Reserve vein is hosted by black argillite and siltstone. It is estimated that 20 to 25 per cent of the vein system remains largely in the form of pillars. The ground at the mine is unstable and underground examination difficult. A sample taken across 0.75 metres assayed 699.3 grams per tonne silver and 4.97 grams per tonne gold (Property File - Fox, J.S., 1988). The probable extension of this vein, Jean's vein, was located 200 metres south of the mine portal. Surface grab samples assayed up to 1.16 grams per tonne gold and 6.4 grams per tonne silver (Property File - Fox, J.S., 1988).

The mines periodically supplied the copper smelter at Anyox with silica flux. Between 1915 and 1938, 121,245 tonnes (production records for 1918 include some production from the Macy mine - 103P 112), with an average grade of 2.33 grams per tonne gold and 85.7 grams per tonne silver, were mined (Property File - Burton, A., 1987). Mineral Policy records state that 79 kilograms of copper and 429 kilograms of lead were produced from 1936 to 1938. The adits of the Reserve Quartz mine can only be entered at low tide.

A drill hole intersection across 3.0 metres in the area of the Granby Point and Reserve veins assayed 2.7 grams per tonne gold and 200.2 grams per tonne silver ((Property File - Fox, J.S., 1988).

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EMPR OF 1998-10

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/31

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

CAPSULE GEOLOGY

Plutonic Complex. These rocks have been correlated with the Jurassic Hazelton Group (Grove, T. 1986), but have also been correlated with the Upper Triassic Kunga Group sediments and Karmutsen Formation (Vancouver Group) volcanics (Sharp, R.J. (1980), M.Sc. Thesis).

The volcanics consist of massive and pillow andesitic to basaltic flows with minor mafic tuff. These have been altered and chloritized to greenstone as a result of regional greenschist metamorphism. The overlying sediments consist of argillite, siltstone, sandstone, minor limestone and chert. These rocks have been subjected to an initial north-northeast trending phase of folding followed by a later east-northeast trending phase.

The deposit is situated on the western limb of a northeast trending broad anticlinal fold (the Bonanza/Hidden Creek Anticline). The deposit forms a flattened cylindrical body 805 metres long, 61 metres wide and 9 to 12 metres thick trending 010 degrees. It lies near horizontal to the south, but gradually steepens northward toward a normal fault, dipping up to 30 degrees north. The fault strikes northwest, dips 50 degrees northeast and truncates the north end of the deposit.

The ore body consists of massive to disseminated layers and lenses of sulphides hosted in a zone of altered basaltic tuff and minor pelitic sediments. The host rocks, up to 84 metres thick, occur within a sequence of tholeiitic pillow lavas. In the sulphide rich strata, the host rocks have been variably chloritized, sericitized and saussuritized. Due to the foliated nature of the host rocks, the deposit was previously described as being hosted in a shear zone (Geological Survey of Canada Memoir 175).

Mineralization occurs as massive to disseminated crudely bedded layers of chalcopyrite, pyrite, sphalerite and quartz (up to a metre thick) and as disseminated chalcopyrite and pyrrhotite, minor pyrite and magnetite in schists. Gangue minerals consist of quartz, sericite, muscovite, actinolite, tremolite, hornblende and calcite.

Between 1928 and 1935, 656,974 tonnes of ore with an average grade of 0.13 grams per tonne gold, 13.31 grams per tonne silver and 2.17 per cent copper were mined.

Remaining reserve estimates vary from 226,800 tonnes grading 1.0 per cent copper (National Mineral Inventory card 103P5 CU5) to 65,116 tonnes (Property File: Sargent, H. (1942) Report). The remaining reserves have more recently been classified as insignificant (Dr. W. J. Wolfe, Cominco Ltd., Personal Communication, 1989).

Reserve statistics compiled from original Granby and Cominco files by Taiga consultants of Calgary are 10,620 tonnes grading 1.76 per cent copper, 0.16 gram per tonne gold and 13.71 grams per tonne silver (Report by Taiga Consultants Ltd., 1992). This report and Assessment Report 23582 has a good summary and history of exploration of the Anyox area.

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EMPR INDEX 3-190
EMPR MAP 8; 65
EMPR OF 1998-10; 1999-2; 2000-28
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EMR MIN BULL MR 223 B.C. 296
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DATE CODED: 1985/07/24
DATE REVISED: 1989/01/31

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 024**

NATIONAL MINERAL INVENTORY: 103P5 Cu1

NAME(S): **REDWING**, RED, RED WING

STATUS: Developed Prospect

MINING DIVISION: Skeena

REGIONS: British Columbia

NTS MAP: 103P05W

UTM ZONE: 09 (NAD 83)

BC MAP:

LATITUDE: 55 22 52 N

NORTHING: 6137560

LONGITUDE: 129 53 13 W

EASTING: 443803

ELEVATION: 0518 Metres

LOCATION ACCURACY: Within 500M

COMMENTS: Location of two closely spaced adits (Property File - Alldrick, D. 1986 Anyox Map).

COMMODITIES: Copper Silver Zinc Gold

MINERALS

SIGNIFICANT: Chalcopyrite Sphalerite

COMMENTS: Sulphides are disseminated to crudely banded.

ASSOCIATED: Pyrite Pyrrhotite

ALTERATION TYPE: Chloritic

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Massive Disseminated

CLASSIFICATION: Volcanogenic Exhalative

TYPE: G05 Cyprus massive sulphide Cu (Zn)

DIMENSION: 15 Metres STRIKE/DIP: 173/60E TREND/PLUNGE:

COMMENTS: Attitude given for zone, up to 15 metres wide, exposed in Number 1 adit.

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Jurassic	Hazelton	Undefined Formation	
Upper Triassic	Vancouver	Karmutsen	

LITHOLOGY: Chlorite Schist
Biotite Schist
Pillow Andesite
Volcanic Breccia
Greenstone

HOSTROCK COMMENTS: Deposit hosted in chlorite to biotite schist, within andesitic pillow flows and volcanic breccia.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline

PHYSIOGRAPHIC AREA: Fjord Ranges (Northern)

TERRANE: Stikine

Wrangell

METAMORPHIC TYPE: Regional

RELATIONSHIP: Post-mineralization

GRADE: Greenschist

COMMENTS: In a roof pendant at the eastern margin of the Coast Plutonic Complex.

INVENTORY

ORE ZONE: REDWING REPORT ON: Y

CATEGORY:	Unclassified	YEAR:	1966
QUANTITY:	181440 Tonnes		
COMMODITY	GRADE		
Silver	85.7100	Grams per tonne	
Gold	1.2000	Grams per tonne	
Copper	2.0000	Per cent	
Zinc	2.7000	Per cent	

COMMENTS: Compiled from original Granby and Cominco files.

REFERENCE: Report by Taiga Consultants Ltd., 1992.

CAPSULE GEOLOGY

The Redwing deposit is located near the headwaters of Tauw Creek, 3.2 kilometres west of Granby Bay on Observatory Inlet. The entrance to the Number 1 adit is located at 594 metres elevation. The property was first staked in 1909 and has been periodically investigated for copper bearing massive sulphides.

The region is underlain by a sequence of volcanics and sediments, which form a 14.4 by 9.6 kilometre roof pendant in the Coast Plutonic Complex. These rocks have been correlated with the Jurassic Hazelton Group (Grove, T. 1986), but have also been correlated with the Upper Triassic Kunga Group (Sharp, 1980)

CAPSULE GEOLOGY

sediments and Karmutsen Formation (Vancouver Group) volcanics.

The volcanics consist of massive and pillow andesitic to basaltic flows with minor mafic tuff. These have been altered and chloritized to greenstone as a result of regional greenschist metamorphism. The overlying sediments consist of argillite, siltstone, sandstone, minor limestone and chert. These rocks have been subjected to an initial north-northeast trending phase of folding followed by a later east-northeast trending phase.

The deposit consists of two mineralized bands within a north trending, steeply east dipping, 18 to 30 metre wide zone. The zone, traced for 61 metres along strike, occurs in altered andesitic pillow flows and volcanic breccia located 120 metres west of the volcanic/argillite contact. The zone exposed in the Number 1 adit strikes 173 degrees, dips 60 degrees east and is up to 15 metres wide. The second zone strikes north and dips steeply east.

Mineralization consists of pyrite, pyrrhotite, chalcopyrite and minor sphalerite occurring as disseminations to crude massive bands in chlorite to biotite schist. The shear is cut by two east-west trending steeply dipping lamprophyre dykes up to 2.5 metres wide.

Reserves were initially reported as 181,440 tonnes grading 2.0 per cent copper (Northern Miner April 6, 1967). The grade was revised to 1.84 per cent copper and includes 29.5 grams per tonne silver (Bow River Resources Ltd. Statement of Material Facts, July 11, 1971).

Reserve statistics compiled from original Granby and Cominco files are 181,440 tonnes grading 2.0 per cent copper, 2.7 per cent zinc, 1.2 grams per tonne gold and 85.71 grams per tonne silver (Report by Taiga Consultants Ltd., 1992).

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EMPR OF 1999-2
EMPR PF (*White, L.G. (1963) Report; Alldrick, D. (1986) Anyox Map; Taiga Consultants Ltd. (1992): Geological, Geochemical and Geophysical Report on the Anyox Property in 103P 021)
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GCNL Mar. 27, 1967
N MINER Apr. 6, 1967
SMF Bow River Resources Ltd., July 11, 1971
Sharp, R.J. (1980): *The Geology, Geochemistry & Sulphur Isotopes of the Anyox Massive Sulphide Deposits, University of Alberta
M.Sc. Thesis
EMPR OF 1998-10

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/30

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 025**

NATIONAL MINERAL INVENTORY: 103P5 Cu6

NAME(S): **DOUBLE ED**, NUMBER 1, NUMBER 2

STATUS: Developed Prospect
REGIONS: British Columbia
NTS MAP: 103P05W
BC MAP:
LATITUDE: 55 24 42 N
LONGITUDE: 129 53 06 W
ELEVATION: 0506 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Location and elevation of centre of Number 2 zone outcrop (Sharp, R.J. (1980), Figure 5).

MINING DIVISION: Skeena
UTM ZONE: 09 (NAD 83)
NORTHING: 6140959
EASTING: 443970

COMMODITIES: Copper Zinc

MINERALS

SIGNIFICANT: Pyrite Pyrrhotite Chalcopyrite Sphalerite
COMMENTS: Sulphides massive to banded to disseminated.
ASSOCIATED: Quartz Biotite Chlorite Albite Magnetite
ALTERATION: Chlorite
ALTERATION TYPE: Chloritic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound Massive Disseminated
CLASSIFICATION: Volcanogenic Exhalative
TYPE: G05 Cyprus massive sulphide Cu (Zn)
SHAPE: Bladed
MODIFIER: Folded Faulted
DIMENSION: 0400 x 0210 x 0012 Metres STRIKE/DIP:
COMMENTS: Number 1 zone on east limb of anticline plunging 70 degrees south. TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Jurassic	Hazelton	Undefined Formation	
Upper Triassic	Vancouver	Karmutsen	

LITHOLOGY: Chlorite Schist
Biotite Schist
Quartzite
Basaltic Tuff
Chlorite Pillow Basalt

HOSTROCK COMMENTS: Deposit is hosted in chloritized pillow basalts and basaltic pyroclastics with minor pelitic to siliceous sediments.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Stikine Wrangell
METAMORPHIC TYPE: Regional RELATIONSHIP:
COMMENTS: Situated in a roof pendant within the Coast Plutonic Complex. PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)
GRADE: Greenschist

INVENTORY

ORE ZONE: DOUBLE ED REPORT ON: Y
CATEGORY: Combined YEAR: 1960
QUANTITY: 1977666 Tonnes
COMMODITY GRADE
Copper 1.3000 Per cent
Zinc 0.6000 Per cent
COMMENTS: Includes 1,229,236 tonnes indicated and 748,430 inferred. Compiled from original Granby and Cominco files.
REFERENCE: Report by Taiga Consultants Ltd., 1992.

CAPSULE GEOLOGY

The Double Ed deposit is located 3 kilometres west of Granby Bay on Observatory Inlet.
The region is underlain by a sequence of volcanics and sediments, which form a 14.4 by 9.6 kilometre roof pendant in the Coast Plutonic Complex. These rocks have been correlated with the Jurassic Hazelton Group, but have also been correlated with the Upper Triassic Kunga Group sediments and the Karmutsen Formation (Vancouver Group) volcanics (Sharp, R.J. (1980), M.Sc. Thesis).
The volcanics consist of massive and pillow andesitic to

CAPSULE GEOLOGY

basaltic flows with minor mafic tuff. These have been altered and chloritized to greenstone as a result of regional greenschist metamorphism. The overlying sediments consist of argillite, siltstone, sandstone, minor limestone and chert. These rocks have been subjected to an initial north-northeast trending phase of folding followed by a later east-northeast trending phase.

The deposit occurs in a sequence of chloritized pillow basalts, basaltic pyroclastics and minor pelitic to siliceous sediments near a major volcanic/sediment contact. The deposit comprises two distinct ore bodies, the Number 1 and 2 bodies. The Number 1 deposit forms a tabular sheet 400 by 150 to 210 by 12 metres and is situated on the east limb of an anticline that plunges 70 degrees to the south. The Number 2 deposit occurs on the west limb of this same anticline, is more irregular in form, and extends down dip for 175 metres. The north ends of both deposits terminate against a northeast trending steeply dipping fault.

The mineralized horizon consists of volcanogenic, stratabound massive to banded to disseminated pyrite, pyrrhotite, minor chalcopyrite and sphalerite. Mineralization is hosted in basaltic tuffs and siliceous to pelitic sediments that have been altered to chlorite schist and quartzite to biotite schist respectively. Gangue minerals consists of quartz and biotite, with subordinate chlorite, albite and magnetite.

The Double Ed deposits, discovered by prospecting in 1952, were tested by 6400 metres of surface drilling (25 holes) in 1953 and 1954; and by adit cross cut and 4335 metres of underground drilling (33 holes) in 1959 and 1960. The two zones combined show a drill-indicated resource of 1,229,236 tonnes of 1.3 per cent copper and 0.6 per cent zinc; and a drill-inferred resource of 748,430 tonnes of 1.3 per cent copper and 0.6 per cent zinc. The zones remain open to depth with scope for further limited tonnage of similar grade (Report by Taiga Consultants Ltd., 1992). This report and Assessment Report 23528 has a good summary and history of exploration in the Anyox area.

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- EMPR ENG INSP (Mine Plans: #60493, #60494, #60495, Mar. 1960)
- EMPR EXPL 1976-E164; 1982-372
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- EMPR OF 1999-2
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- EMR MIN BULL MR 223 B.C. 297
- GSC MAP 307A; 1385A
- Sharp, R.J. (1980): *The Geology, Geochemistry & Sulphur Isotopes of the Anyox Massive Sulphide Deposits, University of Alberta M.Sc. Thesis

DATE CODED: 1985/07/24
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FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 026**

NATIONAL MINERAL INVENTORY: 103P5 Cu9

NAME(S): **EDEN**, ED, SOUTH EDEN,
NORTH EDEN

STATUS: Developed Prospect
REGIONS: British Columbia
NTS MAP: 103P05W
BC MAP:

MINING DIVISION: Skeena

LATITUDE: 55 28 05 N
LONGITUDE: 129 53 06 W
ELEVATION: 0700 Metres

UTM ZONE: 09 (NAD 83)

LOCATION ACCURACY: Within 500M

NORTHING: 6147234
EASTING: 444050

COMMENTS: This location is for the larger better exposed, South Eden zone.
The North Eden zone is a few hundred metres to the north. Some
details found in this description are from unpublished data collected
by B.C. Geological Survey geologist D.J Alldrick in the mid 1990s.

COMMODITIES: Copper Zinc

MINERALS

SIGNIFICANT: Pyrite Pyrrhotite Chalcopyrite Sphalerite

ASSOCIATED: Quartz

MINERALIZATION AGE:

DEPOSIT

CHARACTER: Massive Vein Shear Disseminated

CLASSIFICATION: Hydrothermal Epigenetic

SHAPE: Tabular

COMMENTS: The Eden are parallel sulphide-bearing quartz veins.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Jurassic	Hazelton	Undefined Formation	
Middle Jurassic	Bowser Lake	Undefined Formation	
DATING METHOD:	Fossil		
MATERIAL DATED:	Ammonite		

LITHOLOGY: Pillow Basalt
Diorite Dike

HOSTROCK COMMENTS: Bowser Lake Group fossil date reported in Open File 3454 (1997).

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline

PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)

TERRANE: Stikine

Wrangell

METAMORPHIC TYPE: Regional

RELATIONSHIP: Post-mineralization

GRADE: Greenschist

COMMENTS: Situated in a roof pendant within the Coast Plutonic Complex.

INVENTORY

ORE ZONE: LOWER

REPORT ON: Y

CATEGORY:	Indicated	YEAR:	1954
QUANTITY:	122470 Tonnes		
COMMODITY		GRADE	
Copper		1.3000	Per cent
Zinc		1.3000	Per cent

COMMENTS: Compiled from original Granby and Cominco files.

REFERENCE: Report by Taiga Consultants Ltd., 1992.

ORE ZONE: UPPER

REPORT ON: Y

CATEGORY:	Indicated	YEAR:	1954
QUANTITY:	36287 Tonnes		
COMMODITY		GRADE	
Copper		1.9000	Per cent
Zinc		2.9000	Per cent

COMMENTS: Compiled from original Granby and Cominco files.

REFERENCE: Report by Taiga Consultants Ltd., 1992.

CAPSULE GEOLOGY

The Eden deposit is located 2 kilometres west of the centre of Upper Dam Lake (Anyox Creek), and 7 kilometres northeast of the Anyox smelter. The Eden area was explored for copper in the early 1950's.

The region is underlain by a roof pendant, consisting of volcanic and sedimentary rocks, within the Coast Plutonic Complex.

CAPSULE GEOLOGY

Recent geochronology and fossil research by the Geological Survey of Canada have helped define the age of the pendant. These pendant rocks have been correlated with Lower to lower Middle Jurassic Hazelton Group rocks and overlying upper Middle to Upper Jurassic Bowser Lake Group sedimentary rocks (GSC Open File 3454). The Hazelton rocks consist of variably chloritized pillowed and massive basalt with minor mafic tuffs. The overlying Bowser Lake sediments consist of siltstone and sandstone with minor chert and limestone.

There are two observable phases of folding in the area, an initial north-northeast trending phase followed by a later east-northeast trending phase.

The Eden deposit occurs as two parallel sulphide-bearing quartz veins which occur within two major parallel shear zones which cut pillowed basalt. On average, the shears strike 005 degrees and dip 45 degrees west. Many minor quartz veinlets are buckled and disrupted by the shear zones. Pyrite, pyrrhotite and chalcopyrite with minor sphalerite occur as massive sulphides in thick laminae within the sheared rock.

The floor of the nearby creek to the west exposes a 6-metre thick dike of massive unshredded fine-grained diorite. This dike is intruded along the mineralized shear. It could post-date mineralization or it may be the cause of the sulphide and silica mineralization.

The Eden deposit, discovered by prospecting in 1952, was tested by 1277 metres of drilling in 1954. The two distinct subparallel zones, 15 metres apart, contain a drill-indicated resource of 158,757 tonnes grading 1.3 per cent copper and 1.9 per cent zinc. The lower (southwestern) quartz vein (also known as the Lower Lens or South Eden zone) is 1.5-metres thick and contains 122,470 tonnes of 1.3 per cent copper and 1.3 per cent zinc; the upper (northeastern) quartz vein (also known as the Upper Lens or North Eden zone) is 0.5-metre thick and contains 36,287 tonnes of 1.9 per cent copper and 2.9 per cent zinc (Report by Taiga Consultants Ltd., 1992). This report and Assessment Report 23528 has a good summary and history of exploration in the Anyox area.

A sample collected from existing prospecting pits on the Eden showings yielded 2.95 per cent copper, 6.5 per cent zinc, 13 grams per tonne silver, 11 parts per million lead, 15 parts per billion gold and 132 parts per million cobalt (D.J. Alldrick, B.C. Geological Survey, unpublished data, 1998).

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MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 971
REPORT: RGEN0100

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1927-C67,C396; 1928-C77,C423; 1929-C431
EMPR ASS RPT 23582
EMPR BC METAL MM00747
EMPR BULL 63
EMPR ENG INSP (Mine Plans - 60648, Jan. 1928)
EMPR FIELDWORK 1985, p. 215; 1988, pp. 233-240; 1990, pp. 235-243
EMPR INDEX 3-198
EMPR MAP 8
EMPR OF 1987-15
EMPR PF (Pell, J. (1982) Silica Prospects in the Anyox Area, British
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(1986) Anyox Map; Fox, J.S. (1988): First Summary of Field Work;
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GSC MAP 307A; 315A; 1385A
GSC MEM 175, p. 93
GSC SUM RPT *1922, p. 29A
GCNL #168,#186,#196, 1982

DATE CODED: 1985/07/24
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CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

CAPSULE GEOLOGY

There are two observable phases of folding in the area, an initial north-northeast trending phase followed by a later east-northeast trending phase.

The occurrence consists of quartz veins, a few centimetres to a metre in width, that tend to conform to the bedding of the host argillite. The main showing, located along the shoreline, consists of a 0.05 to 0.6 metre wide vein, traced for 50 metres, that strikes 034 degrees and dips 53 to 60 degrees southeast. A lamprophyre dyke, adjacent to the hangingwall side of the vein, is 0.76 metre wide and has the same attitude. A network of quartz stringers extend from the vein into the footwall.

Mineralization consists of sparse disseminations and small patches of galena, sphalerite, chalcopyrite and pyrrhotite throughout the vein. In the hanging wall and footwall small blebs of gold occur intermixed with galena, sphalerite and pyrite.

Between 1938 and 1940 seven bulk samples ranging from 0.91 to 1,968 kilograms were shipped from the main showing to a government sampling plant in Prince Rupert. The 1968 kilogram sample of cobbled ore averaged 468.6 grams per tonne gold, 148.4 grams per tonne silver, 0.17 per cent lead and 0.63 per cent zinc (Minister of Mines Annual Report 1938, page B5).

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EMPR INDEX 3-197

EMPR MAP 8

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Thesis

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DATE REVISED: 1989/01/29

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 029**

NATIONAL MINERAL INVENTORY: 103P6,5 Pb5

NAME(S): **ARBERARDER**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P06W 103P05E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 28 50 N
LONGITUDE: 129 29 58 W
ELEVATION: 226 Metres

NORTHING: 6148383
EASTING: 468434

LOCATION ACCURACY: Within 500M

COMMENTS: Location of showing as described in Minister of Mines Annual Report 1916, page 64 and as shown on map.

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite

COMMENTS: Occur sparsely in quartz vein.

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein

CLASSIFICATION: Hydrothermal Epigenetic

TYPE: I06 Cu±Ag quartz veins

DIMENSION:

COMMENTS: Attitude of vein.

105 Polymetallic veins Ag-Pb-Zn±Au
STRIKE/DIP: 028/65W TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE GROUP
Jurassic Bowser Lake

FORMATION
Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Argillite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Stikine

METAMORPHIC TYPE: Regional

Bowser Lake
RELATIONSHIP:

PHYSIOGRAPHIC AREA: Boundary Ranges

GRADE: Greenschist

CAPSULE GEOLOGY

The Arberarder occurrence is situated 700 metres west-southwest of the approximate center of the Alice Arm townsite.

The area west and northwest of Alice Arm is underlain by Middle to Upper Jurassic Bowser Lake Group sediments. They dip moderately to steeply southwest and northeast as a result of being deformed into closely spaced northwest trending folds.

The Arberarder showing comprises a 0.76 metre wide quartz vein that strikes 028 degrees and dips 65 degrees west. The vein is hosted in argillite that contains pyritic bands up to 0.36 metres wide. The vein, mineralized with sparse pyrite and chalcopyrite, may be the south extension of the Independent vein (103P 013).

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- EMPR BULL 63
- EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp. 235-243
- EMPR MAP 8
- EMPR OF 1986-2
- GSC MAP 307A; 1385A

DATE CODED: 1989/03/23
DATE REVISED: / /

CODED BY: PSF
REVISED BY:

FIELD CHECK: N
FIELD CHECK:

MINFILE NUMBER: **103P 030**

NATIONAL MINERAL INVENTORY: 103P12 Pb5

NAME(S): **B AND C**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P12E
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 33 04 N
LONGITUDE: 129 31 19 W
ELEVATION: 305 Metres

NORTHING: 6156245
EASTING: 467071

LOCATION ACCURACY: Within 500M

COMMENTS: Location of claims as described in Minister of Mines Annual Report
1916, page 63 and as shown on Geological Survey of Canada Map 315A.

COMMODITIES: Zinc Lead

MINERALS

SIGNIFICANT: Arsenopyrite Pyrrhotite Pyrite Sphalerite Galena

ASSOCIATED: Quartz Calcite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein

CLASSIFICATION: Hydrothermal Epigenetic

TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Upper Triassic

GROUP

Stuhini

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Black Siltstone
Argillite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Stikine

METAMORPHIC TYPE: Regional

COMMENTS: At the southern end of the Stewart Complex (Island Arc Assemblage).

PHYSIOGRAPHIC AREA: Boundary Ranges

RELATIONSHIP:

GRADE: Greenschist

CAPSULE GEOLOGY

The B and C showing is situated on the north side of La Rose Creek (Granite Creek), 8.0 kilometres north-northwest of Alice Arm.

The area is underlain by a sequence of volcanic and sedimentary rocks belonging to the Upper Triassic Stuhini Group, the Lower Jurassic Hazelton Group and the Middle to Upper Jurassic Bowser Lake Group. The sequence is folded into a north-northwest trending anticline/syncline pair and has been regionally metamorphosed to green-schist facies.

This showing comprises a 0.15 metre wide quartz vein in black siltstone (argillite) of the Stuhini Group. The siltstone is cut by numerous dykes. Mineralization comprises sparse arsenopyrite, pyrrhotite, pyrite, sphalerite and galena in a gangue of quartz and minor calcite.

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EMPR MAP 8
EMPR OF 1986-2
GSC MAP 307A; 315A; 1385A
GSC MEM 175, p. 53

DATE CODED: 1989/03/28
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REVISED BY:

FIELD CHECK: N
FIELD CHECK:

MINFILE NUMBER: **103P 031**

NATIONAL MINERAL INVENTORY: 103P5 Cu10

NAME(S): **BLACK BEAR**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P05W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 22 57 N
LONGITUDE: 129 50 40 W
ELEVATION: 0300 Metres

NORTHING: 6137681
EASTING: 446498

LOCATION ACCURACY: Within 500M

COMMENTS: Location of centre of Lot 3338 - Black Bear claim (Minister of Mines Annual Report 1930, page A83).

COMMODITIES: Molybdenum Copper

MINERALS

SIGNIFICANT: Molybdenite Chalcopyrite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stockwork Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: L05 Porphyry Mo (Low F- type)

COMMENTS: Vein strikes 008 degrees, dips steeply west. Stockwork generally trends 038 degrees.

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Jurassic	Hazelton	Undefined Formation	
Upper Triassic	Vancouver	Karmutsen	

LITHOLOGY: Hornblende Porphyritic Basalt
Massive Basalt

HOSTROCK COMMENTS: The stockwork is hosted in hornblende porphyritic basalt and the molybdenite bearing quartz vein is hosted in massive basalt.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline

PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)

TERRANE: Stikine

Wrangell

METAMORPHIC TYPE: Regional

RELATIONSHIP: Syn-mineralization

GRADE: Greenschist

COMMENTS: Situated in a roof pendant within the Coast Plutonic Complex.

CAPSULE GEOLOGY

The Black Bear showing is located on the west side of Granby Bay on Observatory Inlet just southeast of the Bonanza mine (103P 023).

The showing is hosted in a 14.4 by 9.6 kilometre roof pendant within the Coast Plutonic Complex. These rocks belong to either the Jurassic Hazelton Group or the Upper Triassic Kunga Group sediments and Karmutsen Formation (Vancouver Group) volcanics (Sharp, R.J., (1980), M.Sc. Thesis). The pendant consists of variably chloritized, massive and pillow, andesitic to basaltic flows with minor mafic tuffs overlain by a sequence of thin-bedded argillite, dark siltstone, sandstone and minor limestone lenses and chert.

A north-northeast trending phase of folding and a later east-northeast trending phase of tighter folding deforms these rocks.

A 200 metre wide stockwork of irregular lenticular masses, veins and stringers of quartz in hornblende prophyritic basalt contains minor chalcopyrite. The stockwork has a general strike of 038 degrees.

Two hundred metres west of the stockwork, at an elevation of 400 metres, a quartz vein strikes 008 degrees and dips steeply to the west. The vein can be traced for 152 metres and is 3 to 4 metres wide. A 2.5-centimetre wide, 0.6-metre long stringer of molybdenite occurs on the hangingwall.

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- EMPR MAP 8
- EMPR PF (Alldrick, D. (1986) Anyox Map; Taiga Consultants Ltd.

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RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 977
REPORT: RGEN0100

BIBLIOGRAPHY

(1992): Geological, Geochemical and Geophysical Report on the
Anyox Area in 103P 021)
GSC MAP 307A; 315A
GSC MEM 175, p. 88

DATE CODED: 1989/01/30
DATE REVISED: 1997/04/07

CODED BY: PSF
REVISED BY: DA

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **103P 032**

NATIONAL MINERAL INVENTORY: 103P1 Cu

NAME(S): **BELLE VUE**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P01W
BC MAP:

MINING DIVISION: Omineca

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 01 56 N
LONGITUDE: 128 21 09 W
ELEVATION: 450 Metres

NORTHING: 6098569
EASTING: 541386

LOCATION ACCURACY: Within 1 KM

COMMENTS: Location approximate and inferred from description (Energy, Mines and Petroleum Resources Annual Report 1925 p.130).

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Malachite
COMMENTS: Malachite assumed.
ASSOCIATED: Quartz
ALTERATION: Malachite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal
TYPE: I06 Cu±Ag quartz veins 105 Polymetallic veins Ag-Pb-Zn±Au
DIMENSION: 0001 Metres STRIKE/DIP: 345/85W TREND/PLUNGE:
COMMENTS: Veins are up to 1.2 metres wide, strike 345 degrees and dip steeply west.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Jurassic	Bowser Lake	Undefined Formation	

LITHOLOGY: Quartzite

HOSTROCK COMMENTS: Bowser Lake Group is Middle to Upper Jurassic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Bowser Lake Stikine
PHYSIOGRAPHIC AREA: Nass Depression

CAPSULE GEOLOGY

The Belle Vue showing is located on the west side of the Skeena River, approximately 4.8 kilometres northwest of Cedarvale. The area is underlain by sediments of the Middle to Upper Jurassic Bowser Lake Group, which are intruded by Tertiary (and possibly younger) granitic Coast Plutonic Complex rocks. A number of quartz veins, 0.3 to 1.2 metres in width, occur in quartzite. The veins strike 345 degrees and dip steeply west. A quartz vein is reported to exhibit copper staining (malachite?) over 1.2 metres. Assay results from a sample of this vein were negative.

BIBLIOGRAPHY

EMPR AR *1925-130
EMPR BULL 63; 64
EMPR FIELDWORK 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
GSC MAP 36-17; 1385A

DATE CODED: 1985/07/24
DATE REVISED: 1989/12/21

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 033**

NATIONAL MINERAL INVENTORY: 103P1 Cu

NAME(S): **SUNSET**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P01W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 03 17 N
LONGITUDE: 128 19 06 W
ELEVATION: 366 Metres

NORTHING: 6101093
EASTING: 543545

LOCATION ACCURACY: Within 1 KM

COMMENTS: Location of showing inferred from description (Energy, Mines and Petroleum Resources Annual Report 1929 p.154).

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite
ASSOCIATED: Quartz Calcite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I06 Cu±Ag quartz veins

105 Polymetallic veins Ag-Pb-Zn±Au
STRIKE/DIP: 320/80W TREND/PLUNGE:

DIMENSION:
COMMENTS: Attitude of quartz-calcite vein.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Jurassic

GROUP

Bowser Lake

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Argillite
Sandstone

HOSTROCK COMMENTS: Bowser Lake Group is Middle to Upper Jurassic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Bowser Lake

PHYSIOGRAPHIC AREA: Nass Depression

CAPSULE GEOLOGY

The Sunset showing is located on the west bank of Wilson Creek approximately 4.8 kilometres west of Woodcock. The area was investigated in 1929.

The area is underlain by sediments of the Middle to Upper Jurassic Bowser Lake Group, which are intruded by Tertiary (and possibly younger) granitic Coast Plutonic Complex rocks.

A quartz-calcite vein, striking 320 degrees and dipping 80 degrees west, containing pyrite has been exposed by an open cut. A 15 centimetre stringer containing irregular patches of chalcopyrite occurs 30 metres to the southeast of the open cut.

BIBLIOGRAPHY

EMPR AR *1929-154
EMPR MAP 8
EMPR BULL 63; 64
EMPR FIELDWORK 1988, pp. 233-240; 1990, pp. 235-243
GSC MAP 1385A

DATE CODED: 1985/07/24
DATE REVISED: 1989/12/20

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 034**

NATIONAL MINERAL INVENTORY: 103P1 Ag

NAME(S): **MORNING STAR**, STAR 9, MORNINGSTAR

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P01E
BC MAP:

MINING DIVISION: Omineca

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 05 47 N
LONGITUDE: 128 12 18 W
ELEVATION: 450 Metres

NORTHING: 6105806
EASTING: 550732

LOCATION ACCURACY: Within 1 KM

COMMENTS: Location of claim uncertain, based on description (Minister of Mines Annual Report 1927 p.129).

COMMODITIES: Gold Silver Lead Zinc Molybdenum

MINERALS

SIGNIFICANT: Galena Sphalerite Pyrite Arsenopyrite Chalcopyrite

Molybdenite

COMMENTS: Tin also reported. Occur as fracture fillings and disseminations.

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stockwork Vein Disseminated

CLASSIFICATION: Hydrothermal Epigenetic

TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

DIMENSION: STRIKE/DIP: 325/70W TREND/PLUNGE:

COMMENTS: Attitude of quartz seams which occur over an area of approximately 120 metres.

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

Jurassic
Jurassic-Cretaceous

GROUP

Bowser Lake

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Coast Plutonic Complex

LITHOLOGY: Granodiorite
Argillite
Sandstone
Conglomerate

HOSTROCK COMMENTS: Bowser Lake Group is Middle to Upper Jurassic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Stikine

Bowser Lake

PHYSIOGRAPHIC AREA: Nass Depression

COMMENTS: Bowser Lake sedimentary overlap on the Stikinia Terrane.

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1927

SAMPLE TYPE: Grab

COMMODITY

GRADE

Silver

274.2340

Grams per tonne

Gold

0.6860

Grams per tonne

Lead

6.0000

Per cent

Zinc

13.0000

Per cent

COMMENTS: Selected sample containing galena, sphalerite, arsenopyrite and pyrite.

REFERENCE: Minister of Mines Annual Report 1927, page 129.

CAPSULE GEOLOGY

The Morning Star showing is located north of the Skeena River approximately 3.5 kilometres northeast of Woodcock. The area was explored between 1927 and 1931 for lead-zinc-silver mineralization.

The area is underlain by argillite, sandstone, and conglomerate of the Middle to Upper Jurassic Bowser Lake Group intruded by a granodiorite stock of the Juro-Cretaceous Coast Plutonic Complex.

Mineralization extends from just beyond the contact area into the stock itself over an area of about 120 metres. An open cut at the contact exposes a number of well mineralized small quartz seams extending over a considerable width. These seams strike 325 degrees and dip 70 degrees west. Mineralization consists of galena, sphalerite, pyrite, arsenopyrite, chalcopyrite and molybdenite occurring as

CAPSULE GEOLOGY

fracture fillings and disseminations.

A selected grab sample containing galena, sphalerite, arsenopyrite and pyrite assayed 0.686 grams per tonne gold, 274.234 grams per tonne silver, 6 per cent lead and 13 per cent zinc (Minister of Mines Annual Report 1927 p.129) tin has also been reported. Similar, mineralization occurs to the northwest at the Moose and Deer showings (103P 039). Due to the location uncertainty these are possibly the same showings.

BIBLIOGRAPHY

EMPR AR *1927-129, 1929-154, 1930-138, 1931-72
EMPR ASS RPT 8615, 19733, 21728
EMPR BULL 63
EMPR FIELDWORK 1979 p. 127; 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
EMPR OF 1994-14
GSC MAP 1385A
Placer Dome File

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/04

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 035**

NATIONAL MINERAL INVENTORY: 103P1 Pb

NAME(S): **ROSALEA**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P01E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 04 23 N
LONGITUDE: 128 13 27 W
ELEVATION: 200 Metres

NORTHING: 6103196
EASTING: 549538

LOCATION ACCURACY: Within 1 KM

COMMENTS: Location inferred from description (Energy, Mines and Petroleum Resources Annual Report 1929 p.155).

COMMODITIES: Lead

MINERALS

SIGNIFICANT: Pyrite Galena

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein

CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

DIMENSION:

STRIKE/DIP: 310/80S

TREND/PLUNGE:

COMMENTS: Attitude of zone hosting quartz vein which is 0.45 metres average width.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Jurassic	Bowser Lake	Undefined Formation	

LITHOLOGY: Sandstone

HOSTROCK COMMENTS: The Bowser Lake Group is Middle to Upper Jurassic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Stikine

Bowser Lake

PHYSIOGRAPHIC AREA: Nass Depression

COMMENTS: Bowser Lake sedimentary overlap on Stikinia Terrane.

CAPSULE GEOLOGY

The Rosalea showing is located east of Woodcock station, 270 metres north of the railway. The area was investigated in 1929.

The area is underlain by sediments of the Middle to Upper Jurassic Bowser Lake Group, which have been intruded by Tertiary (and possibly younger) granitic Coast Plutonic rocks.

A quartz vein, hosted in sandstone, is exposed by an open cut. The sandstone strikes 030 degrees and dips 40 degrees north. The lenticular quartz vein, 0.45 metres average width, occurs along a shear or fault zone which strikes 310 degrees and dips steeply southwest. The vein is locally conformably to the bedding and is mineralized with pyrite and minor galena. A sample of the mineralized quartz assayed no values for gold, silver or lead.

BIBLIOGRAPHY

EMPR AR *1929-155
EMPR ASS RPT 7888
EMPR BULL 63; 64
EMPR FIELDWORK 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
GSC MAP 1385A

DATE CODED: 1985/07/24
DATE REVISED: 1989/12/20

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 036**

NATIONAL MINERAL INVENTORY: 103P1 Ag

NAME(S): **LADDIE**, TWO LADDIE

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P01E
BC MAP:

MINING DIVISION: Omineca

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 05 55 N
LONGITUDE: 128 01 48 W
ELEVATION: 300 Metres

NORTHING: 6106195
EASTING: 561896

LOCATION ACCURACY: Within 500M

COMMENTS: Location from description in Energy, Mines and Petroleum Resources Annual Report 1925 p.131.

COMMODITIES: Silver Zinc Lead Copper

MINERALS

SIGNIFICANT: Pyrite Sphalerite Chalcopyrite Galena

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Unknown
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
DIMENSION:
COMMENTS: Attitude of shear zone and quartzite.

STRIKE/DIP: 340/60W

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Jurassic	Bowser Lake	Undefined Formation	

LITHOLOGY: Quartzite

HOSTROCK COMMENTS: Bowser Lake Group is Middle to Upper Jurassic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Bowser Lake

PHYSIOGRAPHIC AREA: Nass Depression

INVENTORY

ORE ZONE: SAMPLE	REPORT ON: N
CATEGORY: Assay/analysis	YEAR: 1929
SAMPLE TYPE: Grab	
COMMODITY	<u>GRADE</u>
Silver	17.1400 Grams per tonne
Zinc	48.8000 Per cent
COMMENTS: Sample type unknown.	
REFERENCE: Energy, Mines and Petroleum Resources Annual Report 1929 page 155.	

CAPSULE GEOLOGY

The Laddie showing is located approximately 1 kilometre east of Kitwanga, just north of the railroad tracks.

The area is underlain by Middle to Upper Jurassic Bowser Lake Group sediments. The showing consists of a sparsely mineralized shear zone hosted in quartzite. Mineralization, exposed across 0.30 to 0.46 metres, consists of sphalerite, pyrite, minor chalcopyrite and galena. The zone is conformable with the quartzite which strikes 340 degrees and dips 55 to 65 degrees west.

A sample from a 19 metre adit assayed trace gold, 17.14 grams per tonne silver and 48.8 per cent zinc (Energy, Mines and Petroleum Resources Annual Report 1929 p.155).

BIBLIOGRAPHY

EMPR AR *1925-131, 1928-152, 1929-155
EMPR BULL 63; 64
EMPR FIELDWORK 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
GSC MAP 1385A

DATE CODED: 1985/07/24
DATE REVISED: 1989/12/19

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 037**

NATIONAL MINERAL INVENTORY: 103P1 Ag

NAME(S): **DYNAMITER**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P01W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 02 01 N
LONGITUDE: 128 15 14 W
ELEVATION: 384 Metres

NORTHING: 6098786
EASTING: 547687

LOCATION ACCURACY: Within 1 KM

COMMENTS: Approximate location of workings (Energy, Mines and Petroleum Resources Annual Report 1931 p.72).

COMMODITIES: Silver Antimony

MINERALS

SIGNIFICANT: Pyrrhotite Pyrite Arsenopyrite Stibnite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratiform Concordant Breccia
CLASSIFICATION: Unknown
TYPE: I09 Stibnite veins and disseminations 105 Polymetallic veins Ag-Pb-Zn±Au
DIMENSION: STRIKE/DIP: 180/45N TREND/PLUNGE:
COMMENTS: Attitude of bedding and conformable mineralization.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Jurassic	Bowser Lake	Undefined Formation	
Tertiary			Coast Plutonic Complex

LITHOLOGY: Argillite
Alaskite Intrusive
Breccia

HOSTROCK COMMENTS: Bowser Lake Group is Middle to Upper Jurassic in age. Intrusives are Tertiary or possibly younger.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Nass Depression
TERRANE: Bowser Lake

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
YEAR: 1931
CATEGORY: Assay/analysis
SAMPLE TYPE: Grab
COMMODITY GRADE
Silver 12.3000 Grams per tonne
Antimony 0.5000 Per cent
COMMENTS: Sample (grab assumed) across 1.1 metres of best mineralization in brecciated zone.
REFERENCE: Energy, Mines and Petroleum Resources Annual Report 1931 page 72.

CAPSULE GEOLOGY

The Dynamiter showing is located approximately 4.8 kilometres south of Woodcock on the east side of the Skeena River. The area was investigated in 1931.

The area is underlain by sediments of the Middle to Upper Jurassic Bowser Lake Group, which are intruded by Tertiary (and possibly younger) granitic Coast Plutonic Complex rocks.

Mineralization occurs on the bedding planes of argillite near alaskite tongues. Bedding strikes approximately east-west and dips 45 degrees north. Mineralization consists of pyrrhotite, arsenopyrite, pyrite and a small amount of stibnite. The workings are located between 373 and 396 metres elevation. The shaft at 386 metres elevation exposes 2.3 metres of iron-stained argillite heavily mineralized with arsenopyrite. A brecciated zone, 1.1 metres wide, in the hangingwall exhibits the best mineralization. A sample from this zone across the width, assayed trace gold, 12.3 grams per tonne silver and 0.5 per cent antimony (Energy, Mines and Petroleum Resources Annual Report 1931 p. 72). Similar mineralization is exposed in an open cut 60 metres to the west.

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BIBLIOGRAPHY

EMPR AR *1931-72
EMPR BULL 63;64
EMPR FIELDWORK 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
GSC MAP 1385A

DATE CODED: 1985/07/24
DATE REVISED: 1989/12/20

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 038**

NATIONAL MINERAL INVENTORY: 103P1 Ag

NAME(S): **WHISKEY CREEK**, WHISKEY

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P01W
BC MAP:

MINING DIVISION: Omineca

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 02 18 N
LONGITUDE: 128 15 47 W
ELEVATION: 345 Metres

NORTHING: 6099305
EASTING: 547096

LOCATION ACCURACY: Within 500M

COMMENTS: Location of centre of Whiskey #2 claim (Assessment Report 12794).

COMMODITIES: Gold Silver Lead Copper Zinc

MINERALS

SIGNIFICANT: Pyrite Arsenopyrite Sphalerite Pyrrhotite Galena

Tetrahedrite Chalcopyrite

ASSOCIATED: Quartz

ALTERATION: Carbonate Sericite

ALTERATION TYPE: Carbonate Sericitic

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Stockwork Massive

CLASSIFICATION: Hydrothermal Epigenetic

TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

DIMENSION: STRIKE/DIP: L04 /20E Porphyry Cu ± Mo ± Au TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Jurassic	Bowser Lake	Undefined Formation	

LITHOLOGY: Calcareous Siltstone
Siliceous Siltstone
Rhyolite Dike

HOSTROCK COMMENTS: Bowser Lake Group is Middle to Upper Jurassic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Bowser Lake

PHYSIOGRAPHIC AREA: Nass Depression

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N

CATEGORY: Assay/analysis YEAR: 1984

SAMPLE TYPE: Channel

COMMODITY

COMMODITY	GRADE	
Silver	150.5000	Grams per tonne
Gold	7.8000	Grams per tonne
Copper	0.2000	Per cent
Lead	1.3800	Per cent
Zinc	0.6600	Per cent

COMMENTS: Sample WR-4 over 0.15 metres.

REFERENCE: Assessment Report 12794.

CAPSULE GEOLOGY

The Whiskey Creek showing is located on the south bank of the Skeena River, 4.5 kilometres northeast of Cedarvale.

The area is underlain by sediments of the Middle to Upper Jurassic Bowser Lake Group which are intruded by Tertiary (and possibly younger) granitic Coast Plutonic Complex rocks.

The showing is hosted in variably calcareous siltstone intruded by several northeast trending rhyolite dykes. Mineralization occurs in quartz veins, in stockworks and as massive, bedded sulphides in siltstone. The host rocks have been carbonatized and sericitized in an alteration envelope up to 1.0 metre in width. Pyrrhotite and minor chalcopyrite occur in seams up to 0.10 metres thick in siliceous siltstone. Quartz stockworks, consisting of 1 to 2 millimetre wide quartz filled fractures, host fine grained pyrite, plus or minus chalcopyrite and arsenopyrite. Quartz veins contain near massive lenses of mixed sulphides comprising pyrite, arsenopyrite, sphalerite, pyrrhotite, galena, tetrahedrite and chalcopyrite (in order of abundance). The lenses occur as partially segregated

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CAPSULE GEOLOGY

bands parallel to vein walls. Sulphide content can be up to 40 per cent in the veins. The veins are 0.15 metres wide, strike north and dip 20 degrees east.

A sample taken from a vein over 0.15 metres, assayed 7.8 grams per tonne gold, 150.5 grams per tonne silver, 0.20 per cent copper, 1.38 per cent lead and 0.66 per cent zinc (Assessment Report 12794 Fig. 4).

BIBLIOGRAPHY

EMPR ASS RPT *12794
EMPR BULL 63
EMPR FIELDWORK 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
GSC MAP 1385A
GSC MEM 212-52

DATE CODED: 1985/07/24
DATE REVISED: 1990/01/02

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 039**

NATIONAL MINERAL INVENTORY: 103P1 Ag

NAME(S): **MOOSE AND DEER 4, MOOSE, DEER,
BOW, KIX, WEBB-WOODCOCK,
SEDAN CREEK**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P01E
BC MAP:
LATITUDE: 55 05 52 N
LONGITUDE: 128 13 01 W
ELEVATION: 700 Metres
LOCATION ACCURACY: Within 1 KM
COMMENTS: Location of sample #1625 from trench on Deer 4 claim (Assessment Report 619).

MINING DIVISION: Omineca
UTM ZONE: 09 (NAD 83)
NORTHING: 6105952
EASTING: 549968

COMMODITIES: Molybdenum Copper Lead Zinc

MINERALS

SIGNIFICANT: Pyrite Galena Chalcopyrite Sphalerite Molybdenite
COMMENTS: Anomalous gold and silver values reported.
ASSOCIATED: Quartz
ALTERATION: Silica Sericite
ALTERATION TYPE: Silicific'n Sericitic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stockwork Vein Disseminated
CLASSIFICATION: Porphyry Hydrothermal Epigenetic
TYPE: L05 Porphyry Mo (Low F- type) I05 Polymetallic veins Ag-Pb-Zn±Au
SHAPE: Tabular
MODIFIER: Faulted Sheared
DIMENSION: 0450 x 0150 Metres STRIKE/DIP: TREND/PLUNGE: 045/
COMMENTS: Zone of veining occurs in area 450 by 150 metres. Individual veins are 1 millimetre (stockwork) to 61 centimetres wide. Attitude of stockwork veins which dip steeply north.

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Jurassic	Bowser Lake	Undefined Formation	
Jurassic-Cretaceous			Coast Plutonic Complex

LITHOLOGY: Granitic Quartz Feldspar Porphyry
Argillite
Siltstone
Greywacke
Conglomerate

HOSTROCK COMMENTS: Bowser Lake Group is Middle to Upper Jurassic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane	PHYSIOGRAPHIC AREA: Nass Depression	
TERRANE: Stikine	Bowser Lake	
METAMORPHIC TYPE: Contact	RELATIONSHIP:	GRADE: Hornfels
COMMENTS: Bowser Lake sedimentary overlap on the Stikinia Terrane.		

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1964
SAMPLE TYPE: Grab
COMMODITY GRADE
Molybdenum 0.2100 Per cent
COMMENTS: Average assay value of samples (assumed grab).
REFERENCE: Assessment Report 619.

INVENTORY

ORE ZONE: TRENCH

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1964

SAMPLE TYPE: Grab

COMMODITY

GRADE

Copper

0.0500

Per cent

Molybdenum

0.0030

Per cent

Lead

0.2600

Per cent

COMMENTS: Sample #1625 from trench.

REFERENCE: Assessment Report 619.

CAPSULE GEOLOGY

The Moose and Deer 4 showings are located approximately 5 kilometres north-northeast of Woodcock in the Sedan Creek area. The area has been investigated for molybdenite and, more recently, precious metal mineralization from 1964 to 1980.

The area is underlain by brown to black argillite, siltstone, greywacke and minor pebble conglomerate of the Middle to Upper Jurassic Bowser Lake Group. The sediments are intruded and hornfelsed by stocks and dykes of granitic quartz-feldspar+/-biotite porphyry of the Juro-Cretaceous Coast Plutonic Complex. Locally, these beds show tight recumbent folding with low angle thrust faults.

The granitic porphyry has been sericitized, silicified and contains a high concentration of primarily barren quartz veining. The occurrence consists of two showings, the upper or northern and the lower or southern, approximately 500 metres apart.

The upper showing occurs on the Deer 4 claim and consists of quartz stockworks in the porphyry and adjacent hornfelsed sediments. Mineralization is sparse and occurs in highly silicified, sheared and fractured zones where small grey quartz stringers cut milky quartz. Mineralization commonly occurs in northeast trending, steeply north dipping veins, shears or fractures from 1 millimetre to 3 centimetres wide. Intense veining is concentrated in an area of 450 by 150 metres in the central part of the intrusive complex and appears to be cut off to the east by a fault. Mineralization consists of pyrite and galena and rare chalcopyrite, sphalerite and molybdenite in grey quartz gangue. A grab sample (#1625) assayed 0.26 per cent lead, 0.05 per cent copper and 0.003 per cent molybdenum (Assessment Report 619).

Mineralization at the lower showing on the Moose claims appears to be concentrated in northwest trending, vertically dipping quartz and quartz carbonate veins and stringers in granitic porphyry. The veins and stringers occupy shears and are up to 0.61 metres wide. The mineralization does not extend into the hornfelsed sediments. Samples from the lower showing averaged 0.21 percent molybdenite (Assessment Report 619).

Anomalous gold and silver values have been obtained from the contact zone. The average molybdenite content for both showings is 0.014 percent. These showings could incorporate the Morning Star showing (103P 034).

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- EMPR BULL 63
- EMPR EXPL 1979-257
- EMPR FIELDWORK 1988, pp. 233-240; 1990, pp. 235-243
- EMPR MAP 8
- EMPR OF 1994-14
- GSC MAP 1385A

DATE CODED: 1985/07/24
DATE REVISED: 1990/01/04

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 040**

NATIONAL MINERAL INVENTORY: 103P5 Cu3

NAME(S): **COMSTOCK**, MAPLE BAY

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P05W 103O08E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 25 30 N
LONGITUDE: 129 59 44 W
ELEVATION: 0457 Metres

NORTHING: 6142537
EASTING: 436992

LOCATION ACCURACY: Within 500M

COMMENTS: Location of "Comstock Knob" (Open File 1987-15, Figure 34B).

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite Pyrite

ASSOCIATED: Quartz Chlorite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb)
DIMENSION: 0010 Metres
COMMENTS: The vein is over 10 metres wide.

STRIKE/DIP: G04 Besshi massive sulphide Cu-Zn
TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Lower Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Greenstone
Chlorite Hornblende Schist

HOSTROCK COMMENTS: Rocks belong to either the Hazelton Group or the Karmutsen Formation.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline

TERRANE: Stikine

Bowser Lake

PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

COMMENTS: Hosted in a roof pendant within the Coast Plutonic Complex.

CAPSULE GEOLOGY

The Comstock showing is located 730 metres northeast of Maple Bay on the east side of the Portland Canal, 55 kilometres south of Stewart. The area was explored in the early 1900's for copper.

The area of the showing is underlain by the western margin of a 14.4 by 9.6 kilometre roof pendant within the Tertiary Coast Plutonic Complex. The rocks within the pendant have been correlated with the Lower Jurassic Hazelton Group (Grove, T. 1986), but have also been correlated with the Upper Triassic Karmutsen Formation (Vancouver Group) volcanics and the Kunga Group sediments.

The roof pendant in this area comprises a sequence of mafic and intermediate (andesitic-dacitic) volcanics interbedded with felsic tuffs, siltstones, silty argillites and fine-grained sandstones. The sequence strikes 010 to 035 degrees and dips 40 to 85 degrees southeast. The mafic volcanics have been variably foliated and chloritized to greenstone and chlorite-hornblende schist as a result of regional greenschist metamorphism.

The occurrence consists of a vein, over 10 metres wide, containing granular textured milky white quartz with up to 10 per cent disseminated chalcopyrite and minor disseminated pyrite. Chlorite inclusions ("chlorite seams") occasionally occur in the vein. The vein is reported to host good gold and copper values (Energy, Mines and Petroleum Resources Annual Report 1911 p.72).

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1957-7
EMPR ASS RPT 5550
EMPR BULL 63
EMPR FIELDWORK 1988, pp. 233-240; 1990, pp. 235-243
EMPR GEM *1970-77-81
EMPR MAP 8

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 991
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR OF *1987-15, p. 36
EMPR PF (Pentland, A.G. (1969): Report; *Pell, J. (1982): Silica
Prospects in the Anyox Area, British Columbia)
EMR MIN RES FILE BR (Maple Bay Group)
EMR MP CORPFILE (Granby Mining Co. Ltd.; Maple Bay Copper Mines Ltd.)
GSC MAP 307A; 315A; 1385A
GSC MEM 175, pp. 100,101
GSC SUM RPT 1922 Part A, pp. 23-25

DATE CODED: 1989/02/22
DATE REVISED: 1989/12/08

CODED BY: PSF
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 041**

NATIONAL MINERAL INVENTORY: 103P12 Pb6

NAME(S): **COPPER CREST**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P12E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 31 40 N
LONGITUDE: 129 31 55 W
ELEVATION: 873 Metres

NORTHING: 6153653
EASTING: 466421

LOCATION ACCURACY: Within 500M

COMMENTS: Location of centre of showing (Minister of Mines Annual Report 1916, page 56).

COMMODITIES: Silver Copper Zinc Lead

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Sphalerite Galena
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Unknown
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Jurassic	Bowser Lake	Undefined Formation	
Lower Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Sediment/Sedimentary
Andesitic Pyroclastic Volcanic

HOSTROCK COMMENTS: Showing hosted in Bowser Lake Group sediments and/or Hazelton Group andesitic pyroclastic volcanics.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Boundary Ranges
TERRANE: Stikine Bowser Lake
METAMORPHIC TYPE: Regional RELATIONSHIP:
COMMENTS: Located at the south end of Stewart Complex (Island Arc Assemblage). GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1916
SAMPLE TYPE: Grab
COMMODITY GRADE
Silver 2198.0000 Grams per tonne
REFERENCE: Minister of Mines Annual Report 1916, page 63.

CAPSULE GEOLOGY

The Copper Crest showing occurs 1.5 kilometres north of Gwunya Creek, 6 kilometres north-northwest of Alice Arm. The area was explored in 1916 for precious and base metal mineralization. The area is underlain by a sequence of volcanic and sedimentary rocks belonging to the Upper Triassic Stuhini Group, the Lower Jurassic Hazelton Group and the Upper to Middle Jurassic Bowser Lake Group. The sequence is folded into a north-northwest trending anticline/syncline pair and has been regionally metamorphosed to greenschist facies. The showing appears to be hosted in Bowser Lake Group sediments and/or Hazelton Group andesitic pyroclastics. The showing is reported to consist of red stained (gossanous ?) rocks that contain pyrite, chalcopyrite, sphalerite and galena. An assay of 2198 grams per tonne silver is reported to have come from this occurrence (Minister of Mines Annual Report 1916, page 3).

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EMPR AR *1916-63; 1921-345
EMPR ASS RPT 10803, 10951, 21141
EMPR BULL 63
EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
EMPR OF 1986-2

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 993
REPORT: RGEN0100

BIBLIOGRAPHY

GSC MAP 307A; 315A; 1385A
GSC MEM 175, p. 80

DATE CODED: 1989/03/28
DATE REVISED: / /

CODED BY: PSF
REVISED BY:

FIELD CHECK: N
FIELD CHECK:

MINFILE NUMBER: **103P 042**

NATIONAL MINERAL INVENTORY: 103P11 Cu5

NAME(S): **DAK**, TOTAL

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P11W
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 32 13 N
LONGITUDE: 129 26 04 W
ELEVATION: 168 Metres

NORTHING: 6154630
EASTING: 472582

LOCATION ACCURACY: Within 500M

COMMENTS: Location centered on trench (Minister of Mines Annual Report 1967, page 43 and shown in Open File 1986-2).

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite
ALTERATION: Sericite Albite Chlorite Malachite Azurite
ALTERATION TYPE: Sericitic Albitic Chloritic Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb) L03 Alkalic porphyry Cu-Au

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Upper Triassic Stuhini Undefined Formation

LITHOLOGY: Feldspar Porphyritic Flow
Augite Porphyritic Flow
Siliceous Greywacke

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Boundary Ranges
TERRANE: Stikine
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist
COMMENTS: Situated at southern end of Stewart Complex (Island Arc Assemblage).

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1971
SAMPLE TYPE: Chip
COMMODITY GRADE
Copper 0.2100 Per cent

COMMENTS: A 3.0 metre chip sample on southwestern showing. Trace gold.
REFERENCE: Geology, Exploration and Mining in B.C. 1971, page 124.

CAPSULE GEOLOGY

The Dak occurrence is located on the south side of the Dak River 7.0 kilometres northeast of Alice Arm. The area was explored for copper during the late 1960's and early 1970's. The region is underlain by a sequence of volcanic and sedimentary rocks belonging to the Upper Triassic Stuhini Group, the Lower Jurassic Hazelton Group and the Middle to Upper Jurassic Bowser Lake Group. In the vicinity of Wilauks Mountain (Mt. McGrath), this sequence lies along the western flank of the north-northwest trending Mt. McGuire anticline. These rocks have undergone regional greenschist facies metamorphism. The showing is hosted in intensely fractured Stuhini Group feldspar porphyritic flows that contain sericitized and albitized plagioclase and minor chloritized hornblende. Disseminated pyrite and minor chalcopyrite occur in these flows and local occurrences of malachite and azurite were noted in a 38 metre trench. Southwest about 300 metres, at 300 metres elevation, several trenches expose siliceous greywacke containing abundant disseminated pyrite, minor chalcopyrite and widespread malachite staining. A 3.0 metre chip sample assayed trace gold and 0.21 per cent copper (Geology, Exploration and Mining in British Columbia 1971, page 124).

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 995
REPORT: RGEN0100

BIBLIOGRAPHY

EM ASS RPT 21892
EMPR AR 1966-47,48; *1967-43
EMPR BULL 63
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EMPR GEM *1971-123,124
EMPR MAP 8
EMPR OF 1986-2
EMPR PF (Mayfair Moly Mines - Map)
GSC MAP 1385A
WWW http://www.infomine.com/index/properties/FH_CLAIMS.html

DATE CODED: 1989/03/02
DATE REVISED: / /

CODED BY: PSF
REVISED BY:

FIELD CHECK: N
FIELD CHECK:

MINFILE NUMBER: **103P 043**

NATIONAL MINERAL INVENTORY: 103P5 Cu3

NAME(S): **EAGLE - MAY QUEEN**, EAGLE, MAPLE BAY,
UNITED

STATUS: Developed Prospect
REGIONS: British Columbia
NTS MAP: 103P05W 103O08E
BC MAP:
LATITUDE: 55 25 45 N
LONGITUDE: 129 59 26 W
ELEVATION: 0671 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Location of entrance to adit on Eagle vein (Minister of Mines Annual Report 1931, page 40).

MINING DIVISION: Skeena
UTM ZONE: 09 (NAD 83)
NORTHING: 6142997
EASTING: 437315

COMMODITIES: Copper Zinc

MINERALS

SIGNIFICANT: Chalcopyrite Pyrrhotite Pyrite Sphalerite
COMMENTS: Sulphides occur in quartz vein and as massive lenses in vein walls.
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Massive
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: G04 Besshi massive sulphide Cu-Zn L01 Subvolcanic Cu-Ag-Au (As-Sb)
 I06 Cu±Ag quartz veins
DIMENSION: 1000 x 0011 Metres STRIKE/DIP: 045/80E TREND/PLUNGE:
COMMENTS: Vein strikes northeast for 1000 metres, dips 80 degrees southeast and is 1.5 to 10.7 metres wide.

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic	Hazelton	Undefined Formation	
Upper Triassic	Vancouver	Karmutsen	

LITHOLOGY: Greenstone
 Mafic Volcanic

HOSTROCK COMMENTS: Volcanic rocks belong to either the Hazelton Group or the Karmutsen Formation.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)
TERRANE: Stikine Wrangell
METAMORPHIC TYPE: Regional RELATIONSHIP:
COMMENTS: Located at the west end of roof pendant within Coast Plutonic Complex. GRADE: Greenschist

INVENTORY

ORE ZONE: EAGLE REPORT ON: Y
CATEGORY: Inferred YEAR: 1931
QUANTITY: 535189 Tonnes
COMMODITY GRADE
Copper 1.4000 Per cent
COMMENTS: Reserves based on 1923 diamond drilling results.
REFERENCE: Geology, Exploration and Mining in British Columbia 1970, page 77.

ORE ZONE: EAGLE REPORT ON: Y
CATEGORY: Indicated YEAR: 1931
QUANTITY: 473506 Tonnes
COMMODITY GRADE
Copper 1.7100 Per cent
COMMENTS: Probable reserves based on 1923 diamond drilling results.
REFERENCE: Geology, Exploration and Mining in British Columbia 1970, page 77.

CAPSULE GEOLOGY

The Eagle-May Queen quartz vein is located about 1.3 kilometres northeast of Maple Bay on the east side of the Portland Canal, 55 kilometres south of Stewart. Drilling in the 1920's established a moderate tonnage of copper ore for this deposit.
The area is underlain by the western margin of a 14.4 by 9.6 kilometre roof pendant within the Tertiary Coast Plutonic Complex.

CAPSULE GEOLOGY

These rocks have been correlated with the Lower Jurassic Hazelton Group (Grove, T. 1986), but have also been correlated with the Upper Triassic Karmutsen Formation (Vancouver Group) volcanics and the Kunga Group sediments.

The roof pendant in this area comprises a sequence of mafic and intermediate (andesitic-dacitic) volcanics interbedded with felsic tuffs, siltstones, silty argillites and fine-grained sandstones. The sequence strikes 010 to 035 degrees and dips 40 to 85 degrees southeast. The mafic volcanics have been variably foliated and chloritized to greenstone and chlorite-hornblende schist as a result of regional greenschist metamorphism.

The Eagle-May Queen vein pinches and swells, varying in width from 1.5 to 10.7 metres, strikes northeast for about 1000 metres and dips 80 degrees southeast. The United vein, a small satellite vein about 195 metres to the northwest and adjacent to the Eagle-May Queen's vein south end, strikes northeast for 122 metres parallel to the vein. These quartz veins are hosted in greenstone that strikes northeast and dips 60 to 80 degrees southeast. These conformable relationships suggest the veins may be lenses of volcanogenic massive sulphides similar to the Anyox ore bodies.

The Eagle-May Queen vein locally contains bands of country rock and mineralization consists of chalcopyrite, minor pyrrhotite and pyrite and trace sphalerite. Rare lenses of cupriferous massive sulphides up to 1.8 metres thick occur in the walls of the vein.

Based on diamond drilling in 1923, indicated reserves are estimated at 473,506 tonnes grading 1.7 per cent copper; and inferred reserves are estimated at 535,189 tonnes grading 1.4 per cent copper (Geology, Exploration and Mining in British Columbia 1970, page 77).

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1924-58; *1931-40,41; 1952-76; 1955-18; 1957-7
EMPR ASS RPT *5550
EMPR BULL 63
EMPR FIELDWORK 1988, pp. 233-240; 1990, pp. 235-243
EMPR GEM *1970-77-81
EMPR MAP 8
EMPR OF 1987-15, p. 36
EMPR PF (*Granby Consolidated, map and section of drilling, 1923;
*Sargent, H. (1942): Report; Pentland, A.G. (1969): Report; Pell,
J. (1982): Silica Prospects in the Anyox Area, British Columbia)
EMR MIN BULL MR 223 B.C. 300
EMR MP CORPFILE (Granby Mining Co. Ltd.; Maple Bay Copper Mines Ltd.)
EMR RESFILE BR (Maple Bay Group)
GSC MAP 307A; 315A; 1385A
GSC MEM 175, pp. 100,101
GSC SUM RPT 1922 Part A, pp. 23-25

DATE CODED: 1989/02/22
DATE REVISED: 1989/12/08

CODED BY: PSF
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 044**

NATIONAL MINERAL INVENTORY:

NAME(S): **FALCON**, HOMEBUSH LAKEVIEW,
BALMORAL, TOP NOTCH

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P11W
BC MAP:

MINING DIVISION: Skeena

LATITUDE: 55 33 53 N
LONGITUDE: 129 16 21 W
ELEVATION: 1124 Metres

UTM ZONE: 09 (NAD 83)

NORTHING: 6157670
EASTING: 482814

LOCATION ACCURACY: Within 1 KM

COMMENTS: Location of approximate centre of surface trace of vein (Assessment Report 10115, Figure 4).

COMMODITIES: Silver Lead Zinc

MINERALS

SIGNIFICANT: Sphalerite Galena Tetrahedrite
ASSOCIATED: Quartz Carbonate Barite Siderite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
DIMENSION:
COMMENTS: Shear zones strike 012 degrees for up to 30 metres and dip steeply east. STRIKE/DIP: 012/80E TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic Hazelton Undefined Formation

LITHOLOGY: Tuff
Conglomerate
Siltstone
Argillaceous Sandstone

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Boundary Ranges
TERRANE: Stikine
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist
COMMENTS: Situated at eastern margin of Stewart Complex (Island Arc Assemblage).

INVENTORY

ORE ZONE: VEIN REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1918
SAMPLE TYPE: Grab
COMMODITY GRADE
Silver 226.0000 Grams per tonne
Lead 6.5000 Per cent
COMMENTS: From quartz vein along dyke.
REFERENCE: Minister of Mines Annual Report 1918, page 72.

CAPSULE GEOLOGY

The Falcon occurrence is located just west of the Illiance River headwaters, about 16.5 kilometres northeast of Alice Arm. The various showings which comprise this occurrence have been prospected since 1918 for lead, zinc and silver.

The region is underlain by Lower Jurassic Hazelton Group volcanics and sediments situated on the east limb of the north-northwest trending Mt. McGuire anticline. These rocks have been regionally metamorphosed up to greenschist facies.

The Falcon occurrence comprises various showings hosted in a sequence of interbedded conglomerates, argillaceous sandstones, siltstones and tuffs. Three parallel shear zones hosted in tuff have been traced for up to 30 metres between 1189 and 1219 metres elevation. The zones are 0.6 to 1.5 metres wide, strike 012 degrees and dip steeply east. These zones contain sphalerite, galena and tetrahedrite in a brecciated quartz-carbonate gangue.

South of the shear zones, at 1105 metres elevation, irregular quartz-barite-siderite veins are locally mineralized with blebs of

CAPSULE GEOLOGY

tetrahedrite. Nearby, at a similar elevation, a quartz vein is reported to assay 226 grams per tonne silver and 6.5 per cent lead (Energy, Mines and Petroleum Resources Annual Report 1918, page 72). The vein is developed adjacent to a 6 metre wide dyke and strikes 130 degrees.

These showings are probably situated along the continuation of a north trending regional shear structure that hosts the Illy occurrence (103P 141) to the south.

BIBLIOGRAPHY

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EMPR ASS RPT 10115, 19459
EMPR BULL 63
EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
EMPR OF 1986-2
GSC MAP 307A; 315A; 1385A
GSC MEM 175, pp. 65,66

DATE CODED: 1989/03/15
DATE REVISED: / /

CODED BY: PSF
REVISED BY:

FIELD CHECK: N
FIELD CHECK:

CAPSULE GEOLOGY

limestone.

The Goldkeish vein occurs within a turbidite sequence of medium to coarse-grained sandstone with subordinate siltstone and minor argillite. The vein is hosted entirely in a siltstone/ argillite unit that strikes between 20 and 30 degrees and dips 50 to 60 degrees east. The vein is parallel to bedding, which is common to veins in the Anyox area, striking 025 degrees and dipping 60 degrees east. The vein varies from 1.2 to 1.8 metres in width over a known strike length of 180 metres. A graphitic shear zone in the argillite forms the footwall of the quartz vein.

The vein exhibits marginal banding or ribbon texture, similar to other stratabound quartz veins in the area. Lenses and stringers of pyrite, sphalerite and less frequently galena, are developed in the margins, parallel to the vein.

Chip sampling of the underground workings resulted in low and generally erratic gold and silver values, assaying up to 6.61 grams per tonne gold and 16.6 grams per tonne silver over a 1.5 metre width (Assessment Report 18127). Gold is suspected to be carried in the galena.

The Goldkeish vein is reported to have produced approximately 45,000 tonnes of quartz between 1928 and 1935 (Assessment Report 18127) from 255 metres of underground workings. This tonnage is similar to that reported for the Golskeish Quartz mine, indicating that production figures for these two mines have been confused or combined.

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- EMPR BULL 63
- EMPR FIELDWORK 1985, pp. 211-216; 1988, pp. 233-240; 1990, pp. 235-243
- EMPR MAP 8
- EMPR PF (Alldrick, D. (1986) Anyox Map; In 103P 022 - Fox, J.S. (1988): First Summary of Field Work)
- GSC MAP 307A; 1385A

DATE CODED: 1989/01/31
DATE REVISED: 1997/04/07

CODED BY: PSF
REVISED BY: DA

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **103P 046**

NATIONAL MINERAL INVENTORY:

NAME(S): **GROUNDHOG**, GROUND HOG

MINING DIVISION: Skeena

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 103P05W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 21 57 N
LONGITUDE: 129 49 38 W

NORTHING: 6135814
EASTING: 447567

ELEVATION: 0107 Metres

LOCATION ACCURACY: Within 500M

COMMENTS: Location of trench (Property File: Alldrick, D.J. (1986) Anyox Map).

COMMODITIES: Gold Silver Lead

MINERALS

SIGNIFICANT: Galena Sphalerite Pyrite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein

CLASSIFICATION: Hydrothermal Epigenetic

TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au I02 Intrusion-related Au pyrrhotite veins

DIMENSION: 15 x 2 Metres STRIKE/DIP: 040/57S TREND/PLUNGE:

COMMENTS: The vein has been traced for 15 metres and is up to 2.4 metres wide.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Jurassic
Upper Triassic

GROUP

Hazelton
Kunga

FORMATION

Undefined Formation
Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Argillite
Siltstone
Lamprophyre Dike

HOSTROCK COMMENTS: Quartz vein hosted in argillite of either Hazelton or Kunga Groups.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline

PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)

TERRANE: Bowser Lake

Wrangell

METAMORPHIC TYPE: Regional

RELATIONSHIP: Syn-mineralization

GRADE: Greenschist

COMMENTS: Situated in a roof pendant within the Coast Plutonic Complex.

INVENTORY

ORE ZONE: VEIN

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1913

SAMPLE TYPE: Chip

COMMODITY

GRADE

Silver

82.3000

Grams per tonne

Gold

4.8000

Grams per tonne

COMMENTS: Sample taken across quartz vein over 2.4 metres.

REFERENCE: Minister of Mines Annual Report 1913, page K84.

CAPSULE GEOLOGY

The Groundhog vein is located on the west shore of Granby Peninsula on Observatory Inlet about 6 kilometres south of Anyox. The location is reported to be 107 metres above the high water mark on the south side near the head of Granby Bay.

The region is underlain by a roof pendant, consisting of volcanic and sedimentary rocks, within the Coast Plutonic Complex. These rocks are commonly correlated with the Jurassic Hazelton Group, but have also been correlated with the Upper Triassic Kunga Group sediments and Karmutsen Formation (Vancouver Group) volcanics (Sharp, R.J., 1980).

The volcanics consist of variably chloritized pillow and massive andesite and basalt with minor mafic tuffs. The overlying sediments consist of argillite, siltstone and sandstone with minor chert and limestone.

There are two observable phases of folding in the area, an initial north-northeast trending phase followed by a later east-northeast trending phase.

The Groundhog occurrence consists of a 2 to 2.4 metre wide

CAPSULE GEOLOGY

quartz vein hosted in argillite. The vein has been traced for 100 metres, strikes 040 degrees and dips 57 degrees southeast. A lamprophyre dyke of similar orientation occurs within a few metres of the hangingwall of the vein. A streak of galena, sphalerite and pyrite, 25 to 40 centimetres wide, occurs in the footwall. This mineralization is reported to assay 5.48 grams per tonne gold, 17.65 grams per tonne silver and 32.5 per cent lead, and a sample across the width of the vein over 2.4 metres contained 4.8 grams per tonne gold and 82.3 grams per tonne silver (Energy, Mines and Petroleum Resources Annual Report 1913, page 84).

Currently, a 100 metre long, 4 metre wide open cut is developed along the vein as a result of work that was unreported or included with the nearby Golskeish Quartz vein (103P 027) (Alldrick, D.- Personal Communication, Jan. 1989).

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EMPR PF (*Alldrick, D. (1986) Anyox Map; In 103P 022 - Fox, J.S. (1988): First Summary Report of Field Work)
GSC MAP 307A; 1385A
GSC MEM 175, p. 93

DATE CODED: 1989/01/29
DATE REVISED: 1989/12/30

CODED BY: PSF
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 047**

NATIONAL MINERAL INVENTORY: 103P11 Ag3

NAME(S): **LEFT OVER**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P11W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 35 22 N
LONGITUDE: 129 16 47 W
ELEVATION: 933 Metres

NORTHING: 6160423
EASTING: 482370

LOCATION ACCURACY: Within 500M

COMMENTS: Location of chip sample C-24 (Assessment Report 8904, Figures 3 and 4).

COMMODITIES: Silver Lead Copper Zinc Mercury
Gold

MINERALS

SIGNIFICANT: Pyrite Galena Chalcopyrite
COMMENTS: Bands and disseminations.
ASSOCIATED: Quartz
ALTERATION: Quartz Pyrite
ALTERATION TYPE: Silicific'n Pyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated Massive
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn
DIMENSION: 0150 x 0006 Metres STRIKE/DIP: 030/52S TREND/PLUNGE:
COMMENTS: Rhyolite bed strikes 020 to 040 degrees, dips 45 to 60 degrees south-east, extends 150 metres and varies from 4 to 6 metres wide.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic Hazelton Undefined Formation

LITHOLOGY: Rhyolite
Andesitic Breccia

HOSTROCK COMMENTS: Host rock consists of a brecciated to massive rhyolite bed in andesitic breccias.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Boundary Ranges
TERRANE: Stikine
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist
COMMENTS: Located at eastern margin of Stewart Complex (Island Arc Assemblage).

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N

CATEGORY: Assay/analysis	YEAR: 1981
SAMPLE TYPE: Channel	
<u>COMMODITY</u>	<u>GRADE</u>
Silver	119.0000 Grams per tonne
Gold	0.0300 Grams per tonne
Copper	0.2600 Per cent
Mercury	0.0030 Per cent
Lead	0.2000 Per cent
Zinc	0.2000 Per cent

COMMENTS: A 5.0 metre channel sample across a pyrite rich zone.
REFERENCE: Assessment Report 8904, page 4.

CAPSULE GEOLOGY

The Left Over occurrence is located at the headwaters of the south fork of the Tchitin River on its south bank, about 17.75 kilometres northeast of Alice Arm. This showing was initially prospected in 1916 and re-discovered in 1980.

The region is underlain by Lower Jurassic Hazelton Group volcanics and sediments situated on the east limb of the north-northwest trending Mt. McGuire anticline. These rocks have been regionally metamorphosed to greenschist facies.

The occurrence consists of a 4 to 6 metre wide rhyolite bed hosted in maroon and green andesitic breccias. The rhyolite bed has

CAPSULE GEOLOGY

been traced for 150 metres, strikes 020 to 040 degrees and dips 45 to 60 degrees southeast. The brecciated to massive rhyolite bed has been silicified and pyritized.

Mineralization consists of massive bands of pyrite and disseminations and blebs of pyrite, galena and minor chalcopyrite. The showing was previously described as a 1.5 metre wide quartz vein containing bands and lenses of galena, chalcopyrite, sphalerite and pyrite (Minister of Mines Annual Report 1916). A 5 metre channel sample across a pyrite rich zone assayed 119 grams per tonne silver, 0.20 per cent lead, 0.26 per cent copper, 0.20 per cent zinc, 0.003 per cent mercury and 0.03 grams per tonne gold (Assessment Report 8904, page 4).

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EMPR ASS RPT *8904, *9823
EMPR BULL 63
EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
EMPR OF 1986-2; 1999-2; 1999-14
GSC MAP 307A; 315A; 1385A
GSC MEM 175, p. 70

DATE CODED: 1989/03/15
DATE REVISED: / /

CODED BY: PSF
REVISED BY:

FIELD CHECK: N
FIELD CHECK:

MINFILE NUMBER: **103P 048**

NATIONAL MINERAL INVENTORY:

NAME(S): **PRINCESS, MAPLE BAY, LIZZIE,
ANACONDA, THISTLE, GERTIE**

STATUS: Developed Prospect
REGIONS: British Columbia
NTS MAP: 103P05W 103O08E
BC MAP:

MINING DIVISION: Skeena

LATITUDE: 55 25 16 N
LONGITUDE: 129 59 26 W
ELEVATION: 0695 Metres

UTM ZONE: 09 (NAD 83)

NORTHING: 6142100
EASTING: 437302

LOCATION ACCURACY: Within 500M
COMMENTS: Location of adit entrance on Princess vein (Assessment Report 5550, Map 4).

COMMODITIES: Copper Gold Silver

MINERALS

SIGNIFICANT: Chalcopyrite Pyrrhotite Pyrite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Breccia
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb) G04 Besshi massive sulphide Cu-Zn
DIMENSION: 0914 x 0002 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: Princess vein strikes northeast for 914 metres, dips steeply east and is over 2.4 metres wide.

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic	Hazelton	Undefined Formation	
Upper Triassic	Vancouver	Karmutsen	

LITHOLOGY: Felsic Tuff
Greenstone
Volcanic
Argillite
Siltstone

HOSTROCK COMMENTS: The Princess vein is hosted in felsic tuff and the Thistle vein is hosted in greenstone of either the Hazelton Group or Karmutsen Fm.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)
TERRANE: Stikine Wrangell
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist
COMMENTS: At the west end of a roof pendant within the Coast Plutonic Complex.

INVENTORY

ORE ZONE: ANACONDA REPORT ON: Y
CATEGORY: Inferred YEAR: 1942
QUANTITY: 29400 Tonnes
COMMODITY: Copper GRADE: 2.0400 Per cent
REFERENCE: Property File - Sargent, H. 1942, page 4.

CAPSULE GEOLOGY

The Maple Bay occurrence is located just east of Maple Bay on the east shore of the Portland Canal, 55 kilometres south of Stewart and 12.5 kilometres west of Anyox.

The area is underlain by the western margin of a 14.4 by 9.6 kilometre roof pendant within the Tertiary Coast Plutonic Complex. These rocks have been correlated with the Lower Jurassic Hazelton Group (Grove, T. 1986), but have also been correlated with the Upper Triassic Karmutsen Formation (Vancouver Group) volcanics and the Kunga Group sediments.

The roof pendant in this area comprises a sequence of mafic and intermediate (andesitic-dacitic) volcanics interbedded with felsic tuffs, siltstones, silty argillites and fine-grained sandstones. The sequence strikes 010 to 035 degrees and dips 40 to 85 degrees southeast. The mafic volcanics have been variably foliated and chloritized to greenstone and chlorite-hornblende schist as a result

CAPSULE GEOLOGY

of regional greenschist metamorphism.

The occurrence comprises five northeast trending quartz veins. The most important is the Princess vein, which strikes northeast and dips steeply to the southeast. The vein varies in width from less than 0.5 metres to over 2.4 metres and is hosted in a massive to slightly banded fine-grained felsic tuff. The vein comprises fine-grained milky white quartz and is mineralized with chalcopyrite, minor pyrrhotite and pyrite. Sulphides locally comprise up to 40 per cent of the vein (Pell, J. 1982). Locally, the vein becomes a quartz-chalcopyrite breccia. Assays of all samples from surface trenches average 2.06 per cent copper over an average width of 2.3 metres and a sample vein assayed 3.10 per cent copper over 2.4 metres in a drift (Assessment Report 5550 p.5).

Another quartz vein, varying from 1.2 to 3.7 metres in width, is located 400 metres to the northeast. This vein strikes northeast for 411 metres on the Princess Alice claim (L.498). It contains chalcopyrite mineralization and is likely an extension of the Princess vein.

The Gertie vein lies 207 metres along strike of the Princess vein to the southwest, and continues southwest for about 305 metres. This vein is also likely an extension of the Princess vein.

The Lizzie vein, which parallels the Gertie vein, occurs 340 metres to the southeast.

The Anaconda vein lies 120 metres northwest of, and is parallel to, the southern end of the Princess vein. It consists of quartz with chalcopyrite, pyrrhotite and pyrite. Inferred reserves are estimated at 29,400 tonnes grading 2.04 per cent copper with traces of gold and silver over an average width of 2.4 metres (Property File - Sargent, H. 1942 page 4).

The Thistle vein occurs about 256 metres to the northwest of the Anaconda vein. It strikes 017 degrees for 180 metres, dips steeply to the west and is up to 7.6 metres wide. The vein is hosted in greenstone and consists of fine-grained milky white quartz with minor disseminated chalcopyrite and a few chlorite stringers. The vein is estimated to average 3.3 per cent copper over a length of 183 metres and an average width of 4.0 metres (Assessment Report 5550).

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1924-58; 1931-40,41; 1952-76; 1955-18; 1956-18,19; 1957-7
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EMPR BULL 63
EMPR FIELDWORK 1988, pp. 233-240; 1990, pp. 235-243
EMPR GEM 1968-59; *1970-77-81
EMPR MAP 8
EMPR OF 87-15, p. 36
EMPR PF (*Sargent, H. (1942): Report; Pentland, A.G. (1969): Report;
Pell, J. (1982): Silica Prospects in the Anyox Area, British
Columbia)
EMR MIN RES BR FILE (Maple Bay Group)
EMR MP CORPFILE (Granby Mining Co. Ltd.; Maple Bay copper Mines Ltd.)
GSC MAP 307A; 315A; 1385A
GSC MEM 175, pp. 100,101
GSC SUM RPT 1922 Part A, pp. 23-25

DATE CODED: 1989/02/25
DATE REVISED: 1989/12/08

CODED BY: PSF
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 049**

NATIONAL MINERAL INVENTORY: 103P13 Cu1

NAME(S): **PRINCE JOHN**, PRINCE JOHN NO. 3 (L4389)

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 103P13W
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 59 43 N
LONGITUDE: 129 58 43 W
ELEVATION: 677 Metres

NORTHING: 6205986
EASTING: 438960

LOCATION ACCURACY: Within 500M

COMMENTS: Location of the portal to the western (upper) adit (Bulletin 58, Figure 3 - Sheet B).

COMMODITIES: Copper Gold Silver

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Pyrrhotite
ASSOCIATED: Quartz
ALTERATION: Chlorite
ALTERATION TYPE: Chloritic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb) 102 Intrusion-related Au pyrrhotite veins
DIMENSION: 0012 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: Main zone of mineralization, 12 metres wide, strikes northwest.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic	Hazelton	Unuk River	

LITHOLOGY: Schistose Greenstone
Schistose Argillite
Schistose Slate
Pyroclastic
Granodiorite Dike

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Boundary Ranges
TERRANE: Stikine
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist
COMMENTS: At the western margin of Stewart Complex (Island Arc Assemblage).

INVENTORY

ORE ZONE: ADIT REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1922
SAMPLE TYPE: Chip
COMMODITY GRADE
Gold 1.6600 Grams per tonne
Copper 2.0000 Per cent
COMMENTS: Across 12 metres width of zone. Gold assay equivalent for combined gold and silver.
REFERENCE: Minister of Mines Annual Report 1922, page 76.

CAPSULE GEOLOGY

The Prince John prospect is situated 1 kilometre west of the Bear River, 6 kilometres north-northeast of Stewart. This zone of low grade copper mineralization was explored between 1914 and 1923. The mineralization is developed in Lower Jurassic Unuk River Formation (Hazelton Group) schistose greenstone and argillite (slate). These rocks, including the overlying sandstone and siltstone to the southwest, strike northwest and dip approximately 60 degrees southwest. The mineralized zone, 12 metres wide, is adjacent to and parallels the footwall of a granodiorite dyke. The dyke is 14 metres wide, strikes northwest and dips steeply west. Mineralization consists of pyrite and chalcopyrite disseminations and lenticular stringers. These stringers parallel schistosity, which strikes north and dips steeply west. Chip sampling across this zone in the upper adit averaged 2 per

CAPSULE GEOLOGY

cent copper and 1.66 grams per tonne gold equivalent for combined gold and silver (Minister of Mines Annual Report 1918 page 76). The second adit, 45 metres below the upper adit, encountered a 1.2 metre wide vein. Samples from this vein assayed 13 grams per tonne gold equivalent for combined gold, silver and copper (Minister of Mines Annual Report 1922, page 76).

A thin-bedded pyroclastic bed, lying 50 metres south of the upper adit, is mineralized with chalcopyrite. The bed is cut by a northeast striking fault which displays dextral strike slip movement. A grab sample taken from this area assayed 0.45 grams per tonne gold, 5.14 grams per tonne silver and 2.18 per cent copper (Assessment Report 11175, page 12).

At lower elevations to the east, a 1.8 metre wide quartz vein is mineralized with pyrrhotite and chalcopyrite. The vein strikes northwest and is hosted in argillite (slate). A sample of heavily mineralized quartz assayed 9.54 grams per tonne gold (Minister of Mines Annual Report 1919, page 65).

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1919-64,65; 1922-70; *1923-76,77
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EMPR BULL *58; 63
EMPR FIELDWORK 1983, pp. 149-163; 1984, pp. 316-341; 1985, pp.
217,218; 1986, pp. 81-93; 1988, pp. 233-240; 1990, pp. 235-243
EMPR GEM 1970-75,76
EMPR MAP 8
EMR MP CORPFILE (The Prince John Mining Company Ltd.)
GSC MAP 215A; 307A; 315A; 1385A
GSC MEM *159, pp. 21,32; 175, pp. 137,138

DATE CODED: 1989/05/19
DATE REVISED: 1990/01/02

CODED BY: PSF
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

CAPSULE GEOLOGY

limestone.

Mineralization is contained in a 550 metre long shear zone known as the Trites zone (Lucille-Thompson vein). The zone trends approximately 140 degrees, with individual strikes varying from 128 to 173 degrees and dipping 45 to 85 degrees southwest. It extends downdip for a vertical distance of 240 metres and varies in width from less than 0.3 metres to 2.4 metres. The southeast end of the shear zone terminates within granodiorite just south of the contact with the Hyder Pluton.

Mineralization consists of pyrite, pyrrhotite, galena and sphalerite with minor arsenopyrite, tetrahedrite and pyrargyrite. Mineralization occurs as stringers, disseminations, blebs and massive lenses up to 0.76 metres wide. Mineralization infrequently occurs in a gangue of quartz with minor calcite and adjacent wall rock has been pyritized and variably silicified. The mineralization is better developed where shearing and fracturing is more intense.

A 2.4 metre chip sample assayed 3.4 grams per tonne gold, 2280 grams per tonne silver, 11.0 per cent lead and 9.0 per cent zinc (Property File: Guernsey, T.W., 1934, page 16).

Between 1925 and 1936, 163 tonnes of hand sorted ore was mined from the Trites zone. This tonnage averaged 2.10 grams per tonne gold, 1136.7 grams per tonne silver, 7.35 per cent lead and 5.78 per cent zinc.

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1928-98; 1929-95,505,506; 1930-105; *1933-53,54; *1934-B18,B19;
1935-B28; 1936-B59; 1963-1
EMPR ASS RPT 2386, *12620
EMPR BULL 10, p. 53; 58; 63
EMPR FIELDWORK 1983, pp. 149-163; 1984, pp. 316-341; 1985, pp. 217,218
1986, pp. 81-102; 1988, pp. 233-240; 1990, pp. 235-243
EMPR GEM 1970-76; 1971-126
EMPR MAP 8
EMPR PF (Starr, C.C. (1929): Report of an Examination of the Gold
Cliff Group, 10 p.; workings on and near property, 1929; *Guernsey,
T.W. (1934) Geology Report; Mandy, J.T. (1934) Maps and
cross-sections of surface and underground workings)
EMR MIN RES FILE MR-Ag 301.00 B.C., Silver Producing Mines in British
Columbia, June 1930, pp. 66,68
EMR MP CORPFILE (Pacific Mines; Petroleum & Development Co. Ltd.;
Bayview Mining Co. Ltd.; United Empire Gold & Silver Mining Co.
Ltd.; Athena Mines Ltd.)
GSC MAP 215A; 307A; 315A; 1385A
GSC MEM 159, pp. 38,39; 1975, pp. 149,150
GCNL #177, 1983; #119,#131,#142, 1984

DATE CODED: 1985/07/24
DATE REVISED: 1989/05/24

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 051**

NATIONAL MINERAL INVENTORY: 103P13 Ag1

NAME(S): **BAYVIEW**, FRANKLIN

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 103P13W
BC MAP:

Open Pit

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 58 18 N
LONGITUDE: 129 59 52 W
ELEVATION: 1250 Metres

NORTHING: 6203376
EASTING: 437726

LOCATION ACCURACY: Within 500M

COMMENTS: Location of sample 5008320 in lower Bayview showings (Assessment Report 12620, Figure 5).

COMMODITIES: Silver Zinc Lead Gold

MINERALS

SIGNIFICANT: Pyrrhotite Galena Sphalerite Pyrite Tetrahedrite

ASSOCIATED: Quartz

MINERALIZATION AGE: Eocene

ISOTOPIC AGE:

DATING METHOD: Lead/Lead

MATERIAL DATED: Galena

DEPOSIT

CHARACTER: Vein Massive Disseminated Stockwork
CLASSIFICATION: Hydrothermal Epigenetic

TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

DIMENSION: 0120

Metres

STRIKE/DIP: 030/65W

TREND/PLUNGE:

COMMENTS: Southern Bayview vein is up to 0.6 metres wide and has been traced along strike for 120 metres.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Lower Jurassic

GROUP

Hazelton

FORMATION

Unuk River

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Hornfels Argillite
Hornfels Siltstone
Schist
Granodiorite Dike

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Stikine

PHYSIOGRAPHIC AREA: Boundary Ranges

METAMORPHIC TYPE: Contact

RELATIONSHIP: Syn-mineralization

GRADE: Hornfels

COMMENTS: At the western margin of Stewart Complex (Island Arc Assemblage).

INVENTORY

ORE ZONE: VEIN

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1983

SAMPLE TYPE: Chip

COMMODITY

Silver

GRADE

8679.7000

Grams per tonne

Gold

2.0000

Grams per tonne

Lead

20.3000

Per cent

Zinc

20.2000

Per cent

COMMENTS: A 0.61 metre chip sample from No.4 Zone.

REFERENCE: Assessment Report 12620, page 7.

CAPSULE GEOLOGY

The Bayview occurrence is situated on the east slope of Mount Dolly, 3.5 kilometres north of Stewart. In 1983 and 1984, high grade ore was trenched from silver-lead-zinc veins, first explored in 1919.

Various mineralized zones occur in Lower Jurassic schist and hornfelsed argillite/siltstone of the Unuk River Formation (Hazelton Group) in the vicinity of Eocene granodiorite of the Hyder Pluton.

The Number 4 zone consists of a 1.2 metre wide vein which strikes northeast and dips 20 degrees southeast. The vein contains 0.6 metres of massive galena, sphalerite and tetrahedrite in the hangingwall and 0.6 metres of quartz with disseminated sulphides in the footwall. A 0.61 metre chip sample across the vein assayed 2 grams per tonne gold, 8679.7 grams per tonne silver, 20.3 per cent lead and 20.2 per cent zinc (Assessment Report 12620, page 7).

The Number 3 zone is located about 100 metres south of the Number 4 zone and 150 metres north of the granodiorite. This shear

CAPSULE GEOLOGY

zone contains long lenses of quartz mineralized with pyrite, pyrrhotite, galena and sphalerite. These lenses are up to 1.8 metres wide and the zone, hosted in schist, has a strike of 150 degrees. A stockwork of sulphide stringers also occurs in the vicinity.

The lower Bayview showings, 300 metres east of the number 4 zone, consist of two quartz-sulphide veins. The southernmost vein lies along the contact between a large granodiorite dyke on the east and hornfelsed argillite to the west. The vein strikes 030 degrees for 120 metres, dips 65 degrees west and is up to 0.6 metres wide. It contains lenses of pyrrhotite, sphalerite, galena and tetrahedrite in a gangue of quartz. A 0.91 chip sample across the vein assayed 42.30 grams per tonne gold and 1273 grams per tonne silver (Assessment Report 12620, page 8). A second vein 120 metres to the north assayed 15.96 grams per tonne gold and 2268 grams per tonne silver over a narrow width (Assessment Report 12620, page 8).

The removal of high grade ore by Bayview Mining in 1983 and by Norcon Exploration in 1984 produced 21 tonnes with an average grade of 1.27 grams per tonne gold, 5848.3 grams per tonne silver, 16.99 per cent lead and 16.53 per cent zinc from the Number 4 zone.

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1925-99,100; 1927-87; 1928-97,98; 1929-95; 1963-11
EMPR ASS RPT *12620
EMPR BULL 58; 63
EMPR FIELDWORK 1983, pp. 149-163; 1984, pp. 316-341; 1985, pp.
217,218; 1986, pp. 81-102; 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
EMPR PF (Quinstar Oil Corp., Prospectus 1978)
EMR MIN RES FILE MR-AG 301.00 B.C., Silver Producing Mines in British
Columbia, June 1930, pp. 66,68
EMR MP CORPFILE (Bayview Mining Co. Ltd.)
GSC MAP 215A; 307A; 315A; 1385A
GSC MEM 159, pp. 38,39; 175, p. 106
GCNL #177, 1983; #119,#131,#142,#175, 1984

DATE CODED: 1985/07/24
DATE REVISED: 1989/05/24

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 052**

NATIONAL MINERAL INVENTORY: 103P13 Ag4

NAME(S): **DUNWELL**, SUNBEAM, BEN HUR

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 103P13W 104A04W
BC MAP:

Underground

MINING DIVISION: Skeena

LATITUDE: 55 59 49 N
LONGITUDE: 129 55 16 W
ELEVATION: 435 Metres

UTM ZONE: 09 (NAD 83)

NORTHING: 6206122
EASTING: 442549

LOCATION ACCURACY: Within 500M

COMMENTS: Location of portal to the Number 3 (Assessment Report 16622, Map 2).

COMMODITIES: Zinc Gold Silver Lead

MINERALS

SIGNIFICANT: Pyrite Galena Sphalerite Tetrahedrite Chalcopyrite

Silver Argentite

COMMENTS: Lenses, disseminations and stringers.

ASSOCIATED: Quartz Calcite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Breccia Massive Disseminated

CLASSIFICATION: Hydrothermal Epigenetic

TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

SHAPE: Bladed

MODIFIER: Faulted

DIMENSION: 0150 x 0030 x 0001 Metres STRIKE/DIP: /46W TREND/PLUNGE:

COMMENTS: Dimensions given for ore shoot within Dunwell vein which strikes 0 degrees and dips 42 to 50 degrees.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE: Middle Jurassic GROUP: Hazelton FORMATION: Salmon River IGNEOUS/METAMORPHIC/OTHER:

LITHOLOGY: Argillite
Siltstone
Greywacke
Lamprophyre Dike

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Stikine

PHYSIOGRAPHIC AREA: Boundary Ranges

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

COMMENTS: At the western margin of Stewart Complex (Island Arc Assemblage).

INVENTORY

ORE ZONE: VEIN

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1933

SAMPLE TYPE: Chip

COMMODITY

COMMODITY	GRADE	
Silver	4456.0000	Grams per tonne
Gold	6.9000	Grams per tonne
Lead	6.6000	Per cent
Zinc	5.0000	Per cent

COMMENTS: A 1.14 metre chip sample across ore shoot in Dunwell vein.

REFERENCE: Minister of Mines Annual Report 1933, page 58.

CAPSULE GEOLOGY

The Dunwell mine is located 7.5 kilometres northeast of Stewart on the north side of Glacier Creek.

The deposit consists of a series of quartz and quartz-breccia veins hosted in thin bedded argillite, siltstone and greywacke of the Middle Jurassic Salmon River Formation (Hazelton Group). Andesitic tuffs of the underlying Lower Jurassic Unuk River Formation outcrop to the east of the veins.

The veins are developed in the Portland Canal Fissure Zone. This zone of faulting and shearing trends north, dips steeply west and hosts a vein system that extends southward for 6.5 kilometres from the Victoria/Dandy occurrence (104A 067) on the north, through the Dunwell mine across Glacier Creek to the Ben Bolt occurrence

CAPSULE GEOLOGY

(103P 080).

The deposit consists primarily of two veins, the Sunbeam (number 8) vein to the north and the Dunwell (number 23) vein to the south, with a number of other less important veins. The veins are developed en echelon adjacent to a major north striking, west dipping fault zone (West fault). The veins are commonly situated along one or both sides of parallel lamprophyre dykes which are up to 0.6 metres wide.

The Sunbeam vein strikes 000 to 010 degrees and dips 40 to 60 degrees west. It varies from 1 to 1.8 metres in width, with a definite strike length of 315 metres and possibly up to 588 metres. The Sunbeam vein likely continues northward through the Victoria/Danby occurrence (104A 067) as the Main Reef vein.

The Dunwell (north-south) vein strikes 000 degrees and dips 42 to 50 degrees west. The vein extends along strike for 240 metres and downdip for at least 240 metres, varying in width from 0.3 to 2.1 metres.

Mineralization consists of lenses, disseminations and stringers of pyrite, galena, sphalerite and tetrahedrite with minor chalcopyrite, native silver and argentite in a gangue of quartz and minor calcite. Locally, the Dunwell vein contains up to 75 per cent sulphides. The mineralization is more intense where the veins are intersected by fractures of the West fault zone. High grade mineralization is contained within one ore shoot in the Dunwell vein. This ore shoot strikes for 30 metres, extends downdip for 150 metres and averages at least 1.2 metres in width. A chip sample across 1.14 metres assayed 6.9 grams per tonne gold, 4456 grams per tonne silver, 6.6 per cent lead and 5 per cent zinc (Minister of Mines Annual Report 1933, page 58).

Between 1926 and 1937, 45657 tonnes were produced averaging 6.63 grams per tonne gold, 223.91 grams per tonne silver, 1.83 per cent lead, 4.01 per cent zinc and 0.056 per cent copper.

BIBLIOGRAPHY

- EMPR AR 1907-73; 1909-63; 1914-157,158; 1920-58; 1921-66; 1922-72;
1923-71,72; 1924-62-64,366; 1925-90,91,447; 1926-89-91,363;
1927-96,97,392; 1928-100,101,426; 1932-58; *1933-54-59,303;
*1934-B19-B22; 1935-B26,G48; 1936-B57; *1937-B6-B12; 1938-B25;
1940-52; 1951-75; 1964-22; 1965-51; 1966-41
EMPR ASS RPT 16622
EMPR BULL 58, pp. 129-131; 63
EMPR ENG INSP (Mine Plans #60499-500, Nov. 1925; #60501, Jul. 1924)
EMPR FIELDWORK 1983, pp. 149-163; 1984, pp. 316-341; 1985, pp.
217,218; 1986, pp. 81-102; 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
EMPR PF (Clippings, Maps of Underground Workings, 1925,1933)
EMR MP CORPFILE (Dunwell Mines Ltd.; Stewart Mining & Development
Ltd.; Silver Arrow Explorations Ltd.; Silver Princess Resources
Inc.)
GSC MAP 215A; 307A; 315A; 1385A
GSC MEM 32, p. 42; *159, pp. 49-53,54-56; 175, pp. 112,113,147
CANMET IR 241, pp. 3-6
GCNL #94, 1986; #41,#52, 1989
WWW <http://www.infomine.com/>
EMPR OF 1998-10

DATE CODED: 1985/07/24
DATE REVISED: 1989/05/29

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 053**

NATIONAL MINERAL INVENTORY: 103P13 Ag4

NAME(S): **BEN ALI (L.4283)**, DUNWELL, BEN ALI NO. 2 (L.4470)

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 103P13W 104A04W
BC MAP:

Underground

MINING DIVISION: Skeena

LATITUDE: 55 59 58 N
LONGITUDE: 129 56 09 W
ELEVATION: 183 Metres

UTM ZONE: 09 (NAD 83)

NORTHING: 6206413
EASTING: 441634

LOCATION ACCURACY: Within 500M

COMMENTS: Location centered on portal of lower tunnel-No.4 level (Assessment Report 7706, Figure 2).

COMMODITIES: Gold Silver Zinc Copper Lead

MINERALS

SIGNIFICANT: Pyrite Galena Sphalerite Chalcopyrite
ASSOCIATED: Quartz
ALTERATION: Chlorite Epidote Quartz
ALTERATION TYPE: Propylitic Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Breccia
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
SHAPE: Tabular
MODIFIER: Fractured
DIMENSION: 0107 x 0076 x 0001 Metres STRIKE/DIP: 140/75S TREND/PLUNGE:
COMMENTS: Vein dips 65 to 88 degrees southwest.

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic Eocene	Hazelton	Unuk River	Coast Plutonic Complex

ISOTOPIC AGE: 47-51 +/- 2-3 Ma
DATING METHOD: Potassium/Argon
MATERIAL DATED: Biotite/hornblende

LITHOLOGY: Porphyritic Quartz Monzonite
Epiclastic Volcanic
Tuff

HOSTROCK COMMENTS: Small stock of quartz monzonite related to the Hyder Pluton of the Coast Plutonic Complex intrudes Unuk River volcanics.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Boundary Ranges
TERRANE: Stikine
COMMENTS: At the western margin of the Stewart Complex (Island Arc Assemblage).

INVENTORY

ORE ZONE: VEIN REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1987
SAMPLE TYPE: Chip
COMMODITY GRADE
Silver 25.0000 Grams per tonne
Gold 7.8800 Grams per tonne
COMMENTS: Across 5.0 metres.
REFERENCE: Assessment Report 16633, page 20.

CAPSULE GEOLOGY

The Ben Ali mine is situated on the east side of the Bear River, 7.5 kilometres north-northeast of Stewart. A precious metal bearing quartz vein was periodically mined, on a small scale, between 1932 and 1941.

The deposit is hosted in a small stock of medium-grained porphyritic quartz monzonite, probably related to the Eocene Hyder Pluton to the southwest. The stock intrudes epiclastic volcanics and lithic tuffs of the Lower Jurassic Unuk River Formation (Hazelton Group). These are overlain, to the east, by argillaceous black siltstone of the Middle Jurassic Salmon River Formation.

The deposit consists of a lenticular quartz-breccia vein,

CAPSULE GEOLOGY

between 0.15 and 0.60 metres wide, developed in a shear zone which is up to 1.0 metre wide. The vein strikes 140 degrees for at least 107 metres, possibly up to 300 metres, dips 65 to 88 degrees southwest and extends downdip for at least 76 metres. A narrow vertical cross vein extends northwestward from the main vein, striking 050 degrees.

Mineralization consists of pyrite and minor galena, sphalerite and chalcopryrite. The mineralization is more intense where the vein is cut by northeast striking fractures. A 5 metre chip sample along the length of the vein assayed 7.88 grams per tonne gold and 25.0 grams per tonne silver (Assessment Report 16633, page 20). The gold and silver values are higher near the wall rocks, which show minor silicification and propylitic alteration.

Approximately 4500 tonnes averaging 21.6 grams per tonne gold were mined between 1932 and 1941 (Assessment Report 7706, page 1).

BIBLIOGRAPHY

EMPR AR 1924-366; 1927-96; 1928-100,101,426; 1932-58; 1933-54,56,58,59,303; 1934-B20-B22; 1935-B26,648; 1937-B12; 1940-41,52; 1941-41
EMPR ASS RPT *7706, *16633
EMPR BULL 58; 63
EMPR EXPL 1979-261
EMPR FIELDWORK 1983, pp. 149-163; 1984, pp. 316-341; 1985, pp. 217, 218; 1986, pp. 81-102; 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
EMPR PF (Mandy, J.T. (1933) Plan and Cross-sections of Underground Workings; *Rose Spit Resources Inc. Prospectus, 1989)
EMR MP CORPFILE (Dunwell Mines Ltd.; Stewart Mining and Development Ltd.)
GSC MAP 215A; 307A; 315A; 1385A

DATE CODED: 1989/05/29
DATE REVISED: 1989/11/15

CODED BY: PSF
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 054**

NATIONAL MINERAL INVENTORY: 103P12 Ag4,5

NAME(S): **GEORGE E.** GLACIER CREEK, STEWART,
LITTLE WONDER, LULU, O.K. FRACTION,
PORTER WONDER

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 103P13W
BC MAP:
LATITUDE: 55 59 26 N
LONGITUDE: 129 55 34 W
ELEVATION: 290 Metres
LOCATION ACCURACY: Within 500M

MINING DIVISION: Skeena
UTM ZONE: 09 (NAD 83)
NORTHING: 6205416
EASTING: 442227

COMMENTS: Location centered on the portal of the main adit on the Lulu claim,
Lot 926 (Minister of Mines Annual Report 1937, page B13).

COMMODITIES: Gold Silver Lead Zinc Copper

MINERALS

SIGNIFICANT: Pyrite Galena Sphalerite Argentite Silver
COMMENTS: Disseminated to massive.
ASSOCIATED: Quartz Calcite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated Massive
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
DIMENSION: 0700 x 0009 Metres STRIKE/DIP: 165/77W TREND/PLUNGE:
COMMENTS: Attitude and dimension of Number 3 vein.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Middle Jurassic Hazelton Salmon River

LITHOLOGY: Argillite
Siltstone
Greywacke

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Boundary Ranges
TERRANE: Stikine
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist
COMMENTS: At the western margin of the Stewart Complex (Island Arc Assemblage).

INVENTORY

ORE ZONE: VEIN REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1934
SAMPLE TYPE: Chip
COMMODITY GRADE
Silver 583.0000 Grams per tonne
Gold 17.0000 Grams per tonne
Lead 28.0000 Per cent
Zinc 5.0000 Per cent
COMMENTS: A 1.5 metre chip sample from the Number 4 vein.
REFERENCE: Minister of Mines Annual Report 1934, page 20.

CAPSULE GEOLOGY

The George E occurrence is located on the north bank of Glacier Creek, 7 kilometres northeast of Stewart. A number of veins have been explored in this area since 1908 for base and precious metal mineralization.

This occurrence is hosted in thinly bedded argillite, siltstone and greywacke of the Middle Jurassic Salmon River Formation (Hazelton Group). Andesitic tuffs of the underlying Lower Jurassic Unuk River Formation outcrop to the east. These units dip 30 to 60 degrees west on the west limb of a broad, open, north trending anticline.

The veins are developed in the Portland Canal Fissure Zone. This zone of faulting and shearing trends north, dips steeply west and hosts a vein system that extends southward for 6.5 kilometres from the Victoria/Dandy occurrence (104A 067) on the north, through the Dunwell mine across Glacier Creek to the Ben Bolt occurrence (103P 080).

CAPSULE GEOLOGY

The George E occurrence is comprised of 9 subparallel quartz-breccia veins developed en echelon. The veins occur adjacent to and between, two parallel north striking, steeply west dipping faults which are 300 metres apart. Significant mineralization is confined to four of these veins, designated from west to east; number 4, number 1 (First/West), number 2 (Centre/Main) and the number 3 (Green/East). The veins are spaced 15 to 40 metres apart, strike north to northwest and dip between 30 and 90 degrees west. They are sometimes associated with dykes that form the hangingwall or footwall of the vein. The number 1, 2 and 4 veins vary from 0.2 to 1.8 metres in width and have been traced along strike for between 165 metres (number 4) and 300 metres (number 1 and 2). The number 3 vein varies from 0.1 to 9 metres in width and has been traced for 700 metres.

Mineralization generally consists of disseminated to massive pyrite, galena and sphalerite with a trace of argentite and native silver in a gangue of quartz and minor calcite. A representative sample from a well mineralized lens, 4.6 metres long and 0.05 to 0.46 metres wide, in the number 3 vein assayed 63.1 grams per tonne gold, 137 grams per tonne silver, 5 per cent lead and 6 per cent zinc (Minister of Mines Annual Report 1935, page B23). A 1.5 metre chip sample from the number 4 vein assayed 17 grams per tonne gold, 583 grams per tonne silver, trace copper, 28 per cent lead and 5 per cent zinc (Minister of Mines Annual Report 1934, page 20). A 1.25 metre chip sample from the number 1 vein assayed 15.8 grams per tonne gold, 411 grams per tonne silver, trace copper, 7.4 per cent lead and 0.2 per cent zinc (Minister of Mines Annual Report 1937, page B12).

In 1937, 12 tons of high grade ore was mined from the number 1 vein with an average grade of 13 grams per tonne gold, 3250 grams per tonne silver and 23.3 per cent lead.

BIBLIOGRAPHY

- EMPR AR 1907-73; 1908-55; 1909-63-65; *1910-63,64,75-77; 1911-74;
1912-108; 1914-158,160; 1924-62; 1925-90; 1933-58; *1934-B20;
1935-B23; *1937-B11-B16
EMPR BULL 58, pp. 129,130; 63
EMPR FIELDWORK 1983, pp. 149-163; 1984, pp. 316-341; 1985, pp.
217,218; 1986, pp. 81-102; 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
EMR MP CORPFILE (Dunwell Mines Ltd.; Glacier Creek Mining Co.
Ltd.; Stewart Mining & Development Co. Ltd.)
GSC MAP 207A; 307A; 315A; 1385A
GSC MEM *32, pp. 39-42; *159, pp. 49-53,56,57; 175, pp. 117-119,127,
134
GSC SUM RPT 1910, pp. 76,77

DATE CODED: 1985/07/24
DATE REVISED: 1989/05/31

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 055**

NATIONAL MINERAL INVENTORY:

NAME(S): **HANSA**, ANGELO

MINING DIVISION: Skeena

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 103P13W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 59 06 N
LONGITUDE: 129 53 49 W
ELEVATION: 457 Metres

NORTHING: 6204773
EASTING: 444039

LOCATION ACCURACY: Within 1 KM

COMMENTS: Location centered on showing at the north fork of Glacier Creek
(Minister of Mines Annual Report 1948, page 71).

COMMODITIES: Silver Zinc Lead Gold

MINERALS

SIGNIFICANT: Sulphide
COMMENTS: Sulphides not specified.
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
DIMENSION: 0100 x 0001 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: The vein strikes northeast, dips vertically, has been traced for
100 metres and is 0.6 metres wide.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Middle Jurassic Hazelton Salmon River

LITHOLOGY: Argillite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Boundary Ranges
TERRANE: Stikine
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist
COMMENTS: At the western margin of the Stewart Complex (Island Arc Assemblage).

CAPSULE GEOLOGY

The Hansa occurrence is located on the north fork of Glacier Creek, 7.5 kilometres northeast of Stewart. One shipment of high grade ore was made from this occurrence in 1948. The occurrence consists of a 0.6 metre wide, northeast striking, vertically dipping, quartz vein. The vein lies within a fault zone hosted in argillite of the Middle Jurassic Salmon River Formation (Hazelton Group). The vein has been traced for 100 metres and contains sparse sulphides over most of its width. Along one wall the vein is heavily mineralized with sulphides over a width of between 0.05 and 0.10 metres. A 4.5 tonne shipment of sorted ore from the vein averaged 5.28 grams per tonne gold, 6883 grams per tonne silver, 10.5 per cent lead and 9.31 per cent zinc (Minister of Mines Annual Report 1948, page 71).

BIBLIOGRAPHY

EMPR AR *1948-71
EMPR BULL 58; 63
EMPR FIELDWORK 1983, pp. 149-163; 1984, pp. 316-341; 1985, pp. 217,218; 1986, pp. 81-102; 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
GSC MAP 215A; 307A; 1385A

DATE CODED: 1989/06/04
DATE REVISED: 1990/01/11

CODED BY: PSF
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 056**

NATIONAL MINERAL INVENTORY:

NAME(S): **NORTHERN BELLE**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P13W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 59 47 N
LONGITUDE: 129 53 11 W
ELEVATION: 968 Metres

NORTHING: 6206032
EASTING: 444714

LOCATION ACCURACY: Within 1 KM

COMMENTS: Location centered on showing (Geological Survey of Canada Memoir 32, page 43).

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Breccia Massive

CLASSIFICATION: Hydrothermal Epigenetic

TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb)

DIMENSION: 0015 x 0002 Metres

106 Cu±Ag quartz veins

STRIKE/DIP: 270/40S

TREND/PLUNGE:

COMMENTS: The vein strikes west, dips 40 degrees south, has been traced for 15 metres and is 1.5 to 1.8 metres wide.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Middle Jurassic

GROUP

Hazelton

FORMATION

Salmon River

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Argillite
Slate

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Stikine

METAMORPHIC TYPE: Regional

COMMENTS: At the western margin of the Stewart Complex (Island Arc Assemblage).

PHYSIOGRAPHIC AREA: Boundary Ranges

RELATIONSHIP:

GRADE: Greenschist

CAPSULE GEOLOGY

The Northern Belle occurrence is located west of the north fork of Glacier Creek, 9 kilometres northeast of Stewart.

The occurrence consists of a 1.5 to 1.8 metre wide gossanous quartz-breccia vein hosted in argillite (slate) of the Middle Jurassic Salmon River Formation (Hazelton Group). The vein, traced for 15 metres, strikes west and dips 40 degrees south. Mineralization consists of pyrite and massive lenses, up to 5 centimetres in diameter, of chalcopyrite.

BIBLIOGRAPHY

EMPR AR 1905-80

EMPR BULL 58; 63

EMPR FIELDWORK 1983, pp. 149-163; 1984, pp. 316-341; 1985, pp.

217,218; 1986, pp. 81-102; 1988, pp. 233-240; 1990, pp. 235-243

EMPR MAP 8

GSC MAP 215A; 307A; 1385A

GSC MEM 32, pp. 43,44

GSC SUM RPT 1910, p. 78

DATE CODED: 1989/06/05
DATE REVISED: / /

CODED BY: PSF
REVISED BY:

FIELD CHECK: N
FIELD CHECK:

MINFILE NUMBER: **103P 057**

NATIONAL MINERAL INVENTORY:

NAME(S): **OLGA**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P13W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 58 42 N
LONGITUDE: 129 55 48 W
ELEVATION: 533 Metres

NORTHING: 6204059
EASTING: 441966

LOCATION ACCURACY: Within 500M

COMMENTS: Location centered on outcrop of the number 1 vein (Property File: Gaul, A.J. (1925), page 1).

COMMODITIES: Zinc Silver Lead Copper Gold

MINERALS

SIGNIFICANT: Pyrite
COMMENTS: Host minerals not specified.
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
COMMENTS: Veins strike north, dip west.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Middle Jurassic Hazelton Salmon River

LITHOLOGY: Argillite
Slate

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Boundary Ranges
TERRANE: Stikine
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist
COMMENTS: At the western margin of the Stewart Complex (Island Arc Assemblage).

INVENTORY

ORE ZONE: VEIN REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1925
SAMPLE TYPE: Chip
COMMODITY GRADE
Silver 343.5000 Grams per tonne
Zinc 7.1460 Per cent

COMMENTS: A 1.2 metre chip sample across No.1 vein. Silver assay equivalent for gold, silver and lead.

REFERENCE: Minister of Mines Annual Report 1925, page 84.

CAPSULE GEOLOGY

The Olga showing is located on the south side of Glacier Creek, 6 kilometres northeast of Stewart. These veins were discovered in 1925 from prospecting in the Portland Canal Fissure Zone.

The occurrence is comprised of two veins in argillite (slate) of the Middle Jurassic Salmon River Formation (Hazelton Group). The veins are developed in the Portland Canal Fissure Zone. This zone of faulting and shearing trends north, dips steeply west and hosts a vein system that extends southward for 6.5 kilometres. As with other veins in the zone the number 1 and number 2 veins strike north and dip west.

The number 1 vein is reported to be well mineralized, a selected grab sample assayed trace gold and 510.87 grams per tonne silver (Property File: Gaul, A.J. (1925) Report). A 1.2 metre chip sample across the vein assayed 7.146 per cent zinc and 343.5 grams per tonne silver equivalent for combined gold, silver and lead (Minister of Mines Annual Report 1925, page 84). The number 2 vein contains only sparse pyrite in a gangue of quartz.

BIBLIOGRAPHY

EMPR AR 1906-80; 1924-60,61; *1925-84

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1023
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR BULL 58; 63
EMPR FIELDWORK 1983, pp. 149-163; 1984, pp. 316-341; 1985, pp.
217,218; 1986, pp. 81-102; 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
EMPR PF (*Gaul, A.J. (1925) Report)
EMR MP CORPFILE (Cassiar Consolidated Mines Ltd.)
GSC MAP 215A; 315A; 1385A

DATE CODED: 1989/05/30
DATE REVISED: / /

CODED BY: PSF
REVISED BY:

FIELD CHECK: N
FIELD CHECK:

MINFILE NUMBER: **103P 058**

NATIONAL MINERAL INVENTORY: 103P13 Ag6

NAME(S): **PORTLAND CANAL TUNNELS**, PHOENIX SILVER, LUCKY BOY,
MELBA, MOSQUITO, RICHARD

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P13W
BC MAP:

MINING DIVISION: Skeena
UTM ZONE: 09 (NAD 83)

LATITUDE: 55 59 07 N
LONGITUDE: 129 55 56 W
ELEVATION: 97 Metres

NORTHING: 6204833
EASTING: 441838

LOCATION ACCURACY: Within 500M

COMMENTS: Location centered on the intersection of the Melba (Number 12) vein
in the main tunnel (Geological Survey of Canada Memoir 159, Figure
12).

COMMODITIES: Gold Silver Copper Lead Zinc

MINERALS

SIGNIFICANT: Pyrite Galena Sphalerite Chalcopyrite
COMMENTS: Massive to disseminated.
ASSOCIATED: Quartz Calcite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Breccia Massive Disseminated
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
DIMENSION: 0130 x 0060 Metres STRIKE/DIP: 007/45W TREND/PLUNGE:
COMMENTS: Attitude and dimensions of Lucky Boy vein.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Middle Jurassic Hazelton Salmon River

LITHOLOGY: Argillite
Slate

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Boundary Ranges
TERRANE: Stikine
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist
COMMENTS: At the western margin of the Stewart Complex (Island Arc Assemblage).

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1914
SAMPLE TYPE: Chip
COMMODITY GRADE
Silver 200.0000 Grams per tonne
Gold 3.8000 Grams per tonne
COMMENTS: A 0.25 metre chip sample across massive sulphide stringer in
Mosquito vein.
REFERENCE: Minister of Mines Annual Report 1914, page 160.

CAPSULE GEOLOGY

The Portland Canal Tunnels occurrence is located along the south side of Glacier Creek, 6.5 kilometres northeast of Stewart. A 1.10 kilometre long tunnel was extended eastward into the Portland Canal Fissure Zone, between 1912 and 1914, in an attempt to discover veins at depth within the zone.

The tunnel intersected 9 veins in argillite (slate) of the Middle Jurassic Salmon River Formation (Hazelton Group). The Portland Canal Fissure Zone is a zone of faulting and shearing which trends north, dips steeply west and hosts a vein system that extends southward for 6.5 kilometres from the Victoria/Dandy occurrence (104A 067) on the north, through the Dunwell mine across Glacier Creek to the Ben Bolt occurrence (103P 080).

Four of the nine breccia-veins discovered in the tunnel are of significance, from west to east these are: the Lucky Boy, Melba, Richard and Mosquito (Green) veins. The veins are spaced between 76 and 210 metres apart and strike approximately north and dip west. The Lucky Boy vein strikes at 007 degrees and dips 45 degrees west.

CAPSULE GEOLOGY

The veins vary from 12 (Melba) to 30 metres (Lucky Boy) in width. The veins have been traced along strike for up to 160 metres (Lucky Boy and Melba) and are commonly associated with dykes.

Mineralization consists of pyrite, galena, and minor sphalerite and chalcopyrite. Mineralization occurs as disseminations, massive stringers and bands up to 0.6 metres wide in a gangue of quartz and minor calcite. A 0.25 metre chip sample across a massive stringer in the Mosquito vein assayed 3.8 grams per tonne gold and 200 grams per tonne silver (Minister of Mines Annual Report 1914, page 160), and locally, up to 2 per cent copper (Minister of Mines Annual Report 1914, page 155). Significant lead and zinc values were also reported.

BIBLIOGRAPHY

- EMPR AR 1912-103,104,109; *1913-90-92; *1914-155,158-160,512;
1924-60,61; 1925-84; 1954-82; 1955-17
EMPR BULL 58, pp. 147,148; 63
EMPR ENG INSP (Mine Plans - #61302, 1920)
EMPR FIELDWORK 1983, pp. 149-163; 1984, pp. 316-341; 1985, pp.
217,218; 1986, pp. 81-102; 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
EMPR PF (Elmendorf, J. (1915) Report; Gaul, A.J. (1925) Report)
EMR MP CORPFILE (Portland Canal Tunnels Ltd.; Cassiar Consolidated
Mines Ltd.; Portal Mining Company Ltd.; Silver Princess Resources
Inc.)
GSC MAP 215A; 307A; 315A; 1385A
GSC MEM *159, pp. 48-53,57,58; 175, pp. 135,136
GCNL #190, 1979; #170, 1980; #49, 1982; #63, 1984

DATE CODED: 1985/07/24
DATE REVISED: 1989/05/30

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 059**

NATIONAL MINERAL INVENTORY: 103P13 Ag12

NAME(S): **LAKEVIEW**, CABIN, CAMPBELL

STATUS: Past Producer
 REGIONS: British Columbia
 NTS MAP: 103P13W
 BC MAP:

Open Pit Underground

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 59 29 N
 LONGITUDE: 129 53 53 W
 ELEVATION: 686 Metres

NORTHING: 6205485
 EASTING: 443979

LOCATION ACCURACY: Within 500M

COMMENTS: Location centered on site of sample No. 4 (Assessment Report 16526, Figure 2).

COMMODITIES: Zinc Silver Lead Gold Copper

MINERALS

SIGNIFICANT: Galena Sphalerite Pyrite Tetrahedrite

COMMENTS: Massive to disseminated.

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Massive Disseminated
 CLASSIFICATION: Hydrothermal Epigenetic

TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

DIMENSION: 0093 x 0001 Metres

STRIKE/DIP: 108/68S

TREND/PLUNGE:

COMMENTS: Attitude and dimensions of Cabin vein.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Middle Jurassic	Hazelton	Salmon River	

LITHOLOGY: Argillite
 Siltstone
 Lamprophyre Dike

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

PHYSIOGRAPHIC AREA: Boundary Ranges

TERRANE: Stikine

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

COMMENTS: At the western margin of the Stewart Complex (Island Arc Assemblage).

INVENTORY

ORE ZONE: VEIN

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1937

SAMPLE TYPE: Chip

COMMODITY

COMMODITY	GRADE	
Silver	1289.0000	Grams per tonne
Gold	1.3700	Grams per tonne
Copper	0.8000	Per cent
Lead	8.5000	Per cent
Zinc	10.5000	Per cent

COMMENTS: Composite chip sample 13.7 metres long and 0.114 metres wide.

REFERENCE: Minister of Mines Annual Report 1937, page B20.

CAPSULE GEOLOGY

The Lakeview occurrence is located just east of Maude Gulch, 8 kilometres northeast of Stewart. Various veins have been explored for base and precious metals in this area since 1906.

This area is underlain by argillite and siltstone of the Middle Jurassic Salmon River Formation (Hazelton Group). These sediments lie on the west limb of an open anticline which trends north. A small augite diorite stock intrudes the sediments to the south.

The occurrence consists of a number of veins and shear zones of which two, the Cabin and the Campbell veins, are the most significant. The Cabin vein, 0.6 to 1.5 metres in width, strikes 108 degrees for 93 metres and dips 68 degrees southwest, within sheared wallrock. Mineralization consists of massive to disseminated pyrite, galena and sphalerite in a quartz gangue. An 18 metre long, 0.013 to 0.208 metre wide, band of massive galena and sphalerite is developed along the hangingwall. A composite chip sample from this band over a length of 13.7 metres and an average width of 0.114 metres assayed

CAPSULE GEOLOGY

1.37 grams per tonne gold, 1289 grams per tonne silver, 0.8 per cent copper, 8.5 per cent lead and 10.5 per cent zinc (Minister of Mines Annual Report 1937, page B20).

The Campbell vein, 55 metres southeast of the Cabin vein, strikes 123 to 137 degrees for 98 metres adjacent to a parallel lamprophyre dyke and dips 40 to 50 degrees southwest. The vein, 0.36 to 1.2 metres wide, is mineralized with sparse galena, sphalerite, pyrite and trace tetrahedrite in a quartz gangue. This may be the southeastern extension of the Cabin vein.

A 2.4 to 3.0 metre wide shear zone just east of the Campbell vein contains quartz lenses and stringers mineralized with galena, sphalerite, pyrite and tetrahedrite.

Between 1913 and 1936, 60 tonnes were mined from surface and underground workings with an average grade of 4.7 grams per tonne gold, 2734 grams per tonne silver and 11.5 per cent lead.

BIBLIOGRAPHY

EMPR AR 1906-66; 1907-73; 1908-56; 1909-63; 1912-109; 1913-90;
1914-156; 1915-73; 1916-86; 1917-67,85; 1918-78; 1919-69; 1920-58;
1921-66; 1922-72,73; 1923-74; *1924-64-66; 1925-88-90,447; 1928-
101; *1934-B22,B23; 1936-B59; *1937-B16-B20
EMPR ASS RPT 14657, *16526
EMPR BULL 58; 63
EMPR FIELDWORK 1983, pp. 149-163; 1984, pp. 316-341; 1985, pp.
217,218; 1986, pp. 81-102; 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
EMR MP CORPFILE (Copper Town Mines Ltd.)
GSC MAP 215A; 307A; 315A; 1385A
GSC MEM 32, p. 44; 159, pp. 42,43; 175, pp. 126,127

DATE CODED: 1985/07/24
DATE REVISED: 1989/05/30

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 060**

NATIONAL MINERAL INVENTORY: 103P13 Ag3

NAME(S): **NABOB**, GALENA, SILVER BOW

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P13W
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 59 32 N
LONGITUDE: 129 53 10 W
ELEVATION: 838 Metres

NORTHING: 6205568
EASTING: 444725

LOCATION ACCURACY: Within 500M

COMMENTS: Location centered on prospect adjacent to Maude Gulch (Geological Survey of Canada Map 215A).

COMMODITIES: Copper Lead Zinc

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Galena Sphalerite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Breccia
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

DIMENSION:

STRIKE/DIP: 010/75W

TREND/PLUNGE:

COMMENTS: Attitude of quartz-breccia vein.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Middle Jurassic	Hazelton	Salmon River	

LITHOLOGY: Argillite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

PHYSIOGRAPHIC AREA: Boundary Ranges

TERRANE: Stikine

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

COMMENTS: At western margin of the Stewart Complex (Island Arc Assemblage).

CAPSULE GEOLOGY

The Nabob showing is located on the north fork of Glacier Creek, 9 kilometres northeast of Stewart. Several showings were explored in this area between 1910 and 1923.

A 0.3 metre wide quartz-breccia vein, striking 010 degrees and dipping 75 degrees west, is hosted in argillite of the Middle Jurassic Salmon River Formation (Hazelton Group). It contains a small amount of pyrite and chalcopyrite.

Another vein in the vicinity, also hosted in argillite, is up to 0.15 metres wide and is mineralized with galena and sphalerite.

BIBLIOGRAPHY

EMPR AR 1919-70; 1923-75; *1929-506,507
EMPR BULL 58; 63
EMPR FIELDWORK 1983, pp. 149-163; 1984, pp. 316-341; 1985, pp. 217,218; 1986, pp. 81-102; 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
GSC MAP *215A; 307A; 315A; 1385A
GSC MEM 32, p. 43
GSC SUM RPT 1910, p. 78

DATE CODED: 1985/07/24
DATE REVISED: 1989/04/30

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 061**

NATIONAL MINERAL INVENTORY: 103P13 Ag3

NAME(S): **RAF COPPER**, RAF

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P13W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 59 31 N
LONGITUDE: 129 51 58 W
ELEVATION: 1274 Metres

NORTHING: 6205522
EASTING: 445972

LOCATION ACCURACY: Within 500M

COMMENTS: Location centered on trench (Assessment Report 343, Map 1).

COMMODITIES: Copper Silver Gold

MINERALS

SIGNIFICANT: Chalcopyrite
COMMENTS: Massive to disseminated.
ASSOCIATED: Quartz Calcite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Massive Vein Disseminated
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb)
COMMENTS: Shear zones strike northwest, dip east.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Middle Jurassic	Hazelton	Salmon River	

LITHOLOGY: Argillite
Porphyritic Dike

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Boundary Ranges
TERRANE: Stikine
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist
COMMENTS: At the western margin of the Stewart Complex (Island Arc Assemblage).

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
YEAR: 1960
CATEGORY: Assay/analysis
SAMPLE TYPE: Chip
COMMODITY GRADE
Silver 48.0000 Grams per tonne
Copper 3.7700 Per cent
COMMENTS: A 3.7 metre chip sample.
REFERENCE: Assessment Report 343, Map 1.

CAPSULE GEOLOGY

The Raf Copper showing is located on the north fork of Glacier Creek, 9.5 kilometres northeast of Stewart. The region is underlain by north striking, west dipping, argillite of the Middle Jurassic Salmon River Formation (Hazelton Group). The argillite is frequently cut by narrow felsic and augite porphyritic dykes.

The showing consists of a zone of massive chalcopyrite pods and various shear zones. The pods parallel the bedding of the enclosing argillite and the shear zones strike northwest and dip east. The shear zones contain quartz calcite veinlets with disseminated chalcopyrite. A 3.7 metre chip sample assayed trace gold, 48 grams per tonne silver and 3.77 per cent copper (Assessment Report 343, Map 1).

BIBLIOGRAPHY

EMPR AR 1965-51
EMPR ASS RPT *343, 344
EMPR BULL 58, p. 151; 63
EMPR FIELDWORK 1983, pp. 149-163; 1984, pp. 316-341; 1985, pp. 217,218; 1986, pp. 81-102; 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
EMR MP CORPFILE (Cassiar Consolidated Mines Ltd.)

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1030
REPORT: RGEN0100

BIBLIOGRAPHY

GSC MAP 215A; 307A; 315A; 1385A

DATE CODED: 1989/05/30
DATE REVISED: / /

CODED BY: PSF
REVISED BY:

FIELD CHECK: N
FIELD CHECK:

MINFILE NUMBER: **103P 062**

NATIONAL MINERAL INVENTORY: 103P13 Ag3

NAME(S): **RUTH & FRANCIS, RAF, COPPER KING,
SILVER BOW, MAIN, CROSS**

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 103P13W
BC MAP:
LATITUDE: 55 59 22 N
LONGITUDE: 129 52 28 W
ELEVATION: 1052 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Location centered on the portal of the upper tunnel (Assessment Report 343, Map 1).

MINING DIVISION: Skeena
UTM ZONE: 09 (NAD 83)
NORTHING: 6205250
EASTING: 445449

COMMODITIES: Zinc Lead Silver Antimony Gold

MINERALS

SIGNIFICANT: Pyrite Sphalerite Jamesonite Boulangerite Chalcopyrite
Tetrahedrite Galena
COMMENTS: Massive to disseminated.
ASSOCIATED: Quartz Calcite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Breccia Massive Disseminated
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au 109 Stibnite veins and disseminations
DIMENSION: 0046 x 0002 Metres STRIKE/DIP: 025/90 TREND/PLUNGE:
COMMENTS: Main vein strikes 10 to 40 degrees for 46 metres and is 0.6 to 2.1 metres wide.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Middle Jurassic	Hazelton	Salmon River	

LITHOLOGY: Argillite
Siltstone
Greywacke
Porphyritic Dike

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Boundary Ranges
TERRANE: Stikine
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist
COMMENTS: At the western margin of the Stewart Complex (Island Arc Assemblage).

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1918
SAMPLE TYPE: Chip
COMMODITY GRADE
Silver 1083.0000 Grams per tonne
Gold 0.6600 Grams per tonne
Lead 15.0000 Per cent
Antimony 8.3000 Per cent
Zinc 18.0000 Per cent
COMMENTS: Chip sample along 1.98 metre long massive sulphide zone.
REFERENCE: Minister of Mines Annual Report 1918, page 77.

CAPSULE GEOLOGY

The Ruth & Francis occurrence is located along the north fork of Glacier Creek, 9 kilometres northeast of Stewart. A vein containing antimony bearing massive sulphides has been explored in this area since 1906.

The occurrence is hosted in north striking, west dipping argillite, siltstone and greywacke of the Middle Jurassic Salmon River Formation (Hazelton Group). These sediments are intruded by numerous felsic and augite porphyritic dykes.

The mineralization is confined to several veins and a shear zone. The Main vein is a quartz-breccia vein hosted in argillite which occurs on the west side of a vertical fault that strikes 030 degrees. The vein strikes 010 to 040 degrees for at least 46 metres,

CAPSULE GEOLOGY

dips vertically and is 0.6 to 2.1 metres wide. Mineralization consists of massive to disseminated pyrite, sphalerite, jamesonite, boulangerite and minor chalcopyrite, tetrahedrite and galena. A chip sample along a 1.98 metre long, 0.6 metre wide zone of massive sulphides assayed 0.66 grams per tonne gold, 1083 grams per tonne silver, 15 per cent lead, 18 per cent zinc and 8.3 per cent antimony (Minister of Mines Annual Report 1918, page 77).

The Cross vein strikes 120 degrees, dips 72 degrees south and intersects the Main vein. This quartz breccia vein is 1.2 metres wide and is developed along the south side of an adjacent, parallel dyke. Anomalous copper and gold assays are reported from this vein (Minister of Mines Annual Report 1914, page 156).

A shear zone, 100 metres long and 1.2 to 3 metres wide, lies 300 metres east of the two veins. The zone contains chalcopyrite in a gangue of quartz and calcite.

BIBLIOGRAPHY

EMPR AR 1906-67; 1908-56; 1912-108; *1914-156; 1915-73,74; 1917-85;
*1918-77,78; 1919-70; 1921-66; 1922-72; 1923-74; 1924-68; 1926-92,
93; 1927-88,89; 1934-B24; 1935-B26; 1947-90,91; 1961-116; 1965-51
EMPR ASS RPT 343, 344
EMPR BULL 58, p. 151; 63
EMPR FIELDWORK 1983, pp. 149-163; 1984, pp. 316-341; 1985, pp. 217,
218; 1986, pp. 81-102; 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
EMR MP CORPFILE (Cassiar Consolidated Mines Ltd.)
GSC MAP 215A; 307A; 315A; 1385A
GSC MEM *159, pp. 43,44; 175, pp. 111,145
Placer Dome File

DATE CODED: 1985/07/24
DATE REVISED: 1989/05/30

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 063**

NATIONAL MINERAL INVENTORY: 103P13 Ag3

NAME(S): **SILVER BOW-STEWART**, SILVER BOW

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P13W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 59 12 N
LONGITUDE: 129 52 51 W
ELEVATION: 896 Metres

NORTHING: 6204946
EASTING: 445046

LOCATION ACCURACY: Within 500M

COMMENTS: Location centered on principal showing (Geological Survey of Canada Summary Report 1910, page 78).

COMMODITIES: Zinc Lead

MINERALS

SIGNIFICANT: Pyrite Sphalerite Galena Tetrahedrite

COMMENTS: Sulphides as lenses and disseminations.

ASSOCIATED: Quartz

ALTERATION: Quartz

ALTERATION TYPE: Silicific'n

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Massive Disseminated

CLASSIFICATION: Hydrothermal Epigenetic

TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

SHAPE: Irregular

MODIFIER: Fractured

DIMENSION: 0213 x 0005 Metres STRIKE/DIP:

TREND/PLUNGE:

COMMENTS: Mineralized dyke strikes northeast for 213 metres and is up to 4.6 metres.

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

Middle Jurassic

GROUP

Hazelton

FORMATION

Salmon River

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Mafic Dike
Greenstone
Argillite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Stikine

PHYSIOGRAPHIC AREA: Boundary Ranges

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

COMMENTS: At the western margin of the Stewart Complex (Island Arc Assemblage).

CAPSULE GEOLOGY

The Silver Bow-Stewart showing is located on the north fork of Glacier Creek, 8.5 kilometres northeast of Stewart. The area is underlain by argillite of the Middle Jurassic Salmon River Formation (Hazelton Group) which has been intruded by a number of mafic (greenstone) dykes.

Mineralization is contained in a fractured and silicified mafic dyke. The dyke is up to 4.6 metres wide and strikes northeast for 213 metres along the creek. Mineralization consists of small lenses and disseminations of pyrite and minor sphalerite, galena and tetrahedrite.

BIBLIOGRAPHY

EMPR AR 1904-100; 1905-80; 1906-67; 1927-88; 1965-51
EMPR ASS RPT 14657, 16526
EMPR BULL 58; 63
EMPR FIELDWORK 1983, pp. 149-163; 1984, pp. 316-341; 1985, pp. 217, 218; 1986, pp. 81-102; 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
EMR MP CORPFILE (Cassiar Consolidated Mines Ltd.)
GSC MAP 215A; 307A; 315A; 1385A
GSC MEM 32, p. 43; 175, p. 146
GSC SUM RPT *1910, p. 78

DATE CODED: 1985/07/24
DATE REVISED: 1989/05/30

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 063**

MINFILE NUMBER: **103P 064**

NATIONAL MINERAL INVENTORY: 103P13 Ag13

NAME(S): **MIMICO**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P13W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 58 51 N
LONGITUDE: 129 54 14 W
ELEVATION: 335 Metres

NORTHING: 6204315
EASTING: 443599

LOCATION ACCURACY: Within 500M

COMMENTS: Location centered on portal of eastern adit (Geological Survey of Canada Map 215A).

COMMODITIES: Lead Silver Zinc

MINERALS

SIGNIFICANT: Pyrite Galena Sphalerite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Massive
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

DIMENSION: Attitude of vein, 0.10 to 0.30 metres wide.

STRIKE/DIP: 020/60W

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Middle Jurassic

GROUP

Hazelton

FORMATION

Salmon River

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Argillite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

PHYSIOGRAPHIC AREA: Boundary Ranges

TERRANE: Stikine

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

COMMENTS: At the western margin of the Stewart Complex (Island Arc Assemblage).

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1922

SAMPLE TYPE: Grab

COMMODITY

GRADE

Silver

5345.0000

Grams per tonne

Lead

87.2000

Per cent

COMMENTS: From selected grab samples containing mainly galena.

REFERENCE: Minister of Mines Annual Report 1922, page 75.

CAPSULE GEOLOGY

The Mimico showing is located on the south fork of Glacier Creek, 7 kilometres northeast of Stewart. A vein was explored here by trenching and tunnelling in 1922 and 1923.

The showing is comprised of a 0.10 to 0.30 metre wide quartz vein striking 020 degrees and dipping 60 degrees west. The vein is hosted in argillite of the Middle Jurassic Salmon River Formation (Hazelton Group). Locally, the vein contains massive pyrite, galena and sphalerite up to 0.30 metres. Grab samples of the purest galena have assayed up to 5345 grams per tonne silver and 87.2 per cent lead (Minister of Mines Annual Report 1922, page 75).

BIBLIOGRAPHY

EMPR AR *1922-75; 1923-73,74; 1925-84
EMPR BULL 58; 63
EMPR FIELDWORK 1983, pp. 149-163; 1984, pp. 316-341; 1985, pp. 217, 218; 1986, pp. 81-102; 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
EMR MP CORPFILE (Mimico Mines Ltd.)
GSC MAP *215A; 307A; 315A; 1385A

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1035
REPORT: RGEN0100

BIBLIOGRAPHY

GSC MEM 175, p. 131

DATE CODED: 1985/07/24
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CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 065**

NATIONAL MINERAL INVENTORY: 103P13 Cu2

NAME(S): **SUNSHINE, IDA**

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 103P13W
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 58 50 N
LONGITUDE: 129 52 18 W
ELEVATION: 1050 Metres

NORTHING: 6204258
EASTING: 445610

LOCATION ACCURACY: Within 500M

COMMENTS: Location centered on portal of adit on Sunshine No.1 claim-Lot 4500
(Assessment Report 15305, Figure 3).

COMMODITIES: Gold Copper Silver Zinc Lead

MINERALS

SIGNIFICANT: Chalcopyrite Pyrite Sphalerite Galena Tetrahedrite

ASSOCIATED: Quartz Carbonate

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Massive
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

DIMENSION: 0213 x 0137 x 0002 Metres STRIKE/DIP: 027/55W

TREND/PLUNGE:

COMMENTS: Vein strikes 20 to 34 degrees and dips 50 to 60 degrees west.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Middle Jurassic Hazelton Salmon River

LITHOLOGY: Argillite
Feldspar Porphyritic Dike
Limestone

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

PHYSIOGRAPHIC AREA: Boundary Ranges

TERRANE: Stikine

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

COMMENTS: At the western margin of the Stewart Complex (Island Arc Assemblage).

INVENTORY

ORE ZONE: VEIN

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1986

SAMPLE TYPE: Chip

COMMODITY

GRADE

Silver	47.6000	Grams per tonne
Gold	5.1400	Grams per tonne
Copper	1.9300	Per cent

COMMENTS: A 0.95 metre chip sample across vein.

REFERENCE: Assessment Report 15305, page 14.

CAPSULE GEOLOGY

The Sunshine occurrence is located on the middle fork of Glacier Creek, 8.5 kilometres northeast of Stewart. A massive sulphide bearing vein has been explored in this area for copper and precious metals since 1918.

The occurrence is hosted in argillite with minor interbedded limestone of the Middle Jurassic Salmon River Formation (Hazelton Group). In the immediate vicinity, these sediments are cut by felsic feldspar porphyritic dykes and to the southwest are intruded by an augite diorite stock.

The prospect consists of a 0.9 to 2.4 metre wide quartz-carbonate vein which strikes 020 to 034 degrees and dips 50 to 60 degrees west. The vein occurs within a shear zone along the south-east side of a parallel feldspar porphyritic dyke. The vein has been traced along surface for up to 213 metres and downdip for a vertical distance of 137 metres. Mineralization consists of pods, up to 0.2 metres thick, of massive chalcopyrite and pyrite. A 0.95 metre chip sample across the vein assayed 5.14 grams per tonne gold, 47.6 grams per tonne silver and 1.93 per cent copper (Assessment Report 15305, page 14).

CAPSULE GEOLOGY

Two narrow quartz veins mineralized with sphalerite, galena and tetrahedrite occur just south of the first vein. From these, 2 tonnes of high grade ore were produced in 1922, averaging 13,181 grams per tonne silver.

BIBLIOGRAPHY

EMPR AR 1918-78; *1919-70,71; 1921-66; 1922-73,74; *1923-74; *1925-85,86; 1935-B28,B29
EMPR ASS RPT 10046, *15305
EMPR BULL 58; 63
EMPR FIELDWORK 1983, pp. 149-163; 1984, pp. 316-341; 1985, pp. 217, 218; 1986, pp. 81-102; 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
EMPR PF (Morocco Explorations Inc. Prospectus, 1988)
EMR MP CORPFILE (Granby Mining Co. Ltd.; Sunshine Morning Star Mining Co. Ltd.)
GSC MAP 215A; 307A; 315A; 1385A
GSC MEM 159, pp. 34,35; 175, pp. 147,148

DATE CODED: 1985/07/24
DATE REVISED: 1989/06/03

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1038
REPORT: RGEN0100

MINFILE NUMBER: **103P 066**

NATIONAL MINERAL INVENTORY: 103P13 Cu2

NAME(S): **MORNING STAR COPPER**, MORNING STAR, SUNSHINE

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P13W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 59 07 N
LONGITUDE: 129 51 32 W
ELEVATION: 1280 Metres

NORTHING: 6204774
EASTING: 446413

LOCATION ACCURACY: Within 500M

COMMENTS: Location determined from plot of claim on "Salmon & Bear River Sections" map (Minister of Mines Annual Report 1925, page 80).

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite

ASSOCIATED: Quartz Calcite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein

CLASSIFICATION: Hydrothermal Epigenetic

TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb)

DIMENSION: 0210 x 0002 Metres STRIKE/DIP: 040/40S

TREND/PLUNGE:

COMMENTS: The vein has been traced for 210 metres and is up to 1.8 metres wide.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Middle Jurassic

GROUP

Hazelton

FORMATION

Salmon River

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Argillite
Slate
Dioritic Dike

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Stikine

PHYSIOGRAPHIC AREA: Boundary Ranges

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

COMMENTS: At the western margin of the Stewart Complex (Island Arc Assemblage).

CAPSULE GEOLOGY

The Morning Star Copper showing is located near the headwaters of the north fork of Glacier Creek, 9.5 kilometres northeast of Stewart. A vein was periodically investigated in this area for copper between 1919 and 1923.

The showing consists of a 1.8 metre wide quartz-calcite vein, striking 040 degrees and dipping 40 degrees southeast, hosted in argillite (slate) of the Middle Jurassic Salmon River Formation (Hazelton Group). The vein has been traced along surface for approximately 210 metres and a parallel diorite dyke forms the hangingwall. The vein contains abundant pyrite and chalcopyrite on the hangingwall side for a width of 0.6 metres and the remaining 1.2 metres on the footwall side is only sparsely pyritized.

BIBLIOGRAPHY

EMPR AR 1919-70; 1923-75; *1925-80

EMPR BULL 58; 63

EMPR FIELDWORK 1983, pp. 149-163; 1984, pp. 316-341; 1985, pp. 217, 218; 1986, pp. 81-102; 1988, pp. 233-240; 1990, pp. 235-243

EMPR MAP 8

EMR MP CORPFILE (Granby Mining Co. Ltd.; Sunshine Morning Star Mining Co. Ltd.)

GSC MAP 215A; 307A; 315A; 1385A

GSC MEM 175, p. 132

DATE CODED: 1985/07/24
DATE REVISED: 1989/05/31

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 066**

MINFILE NUMBER: **103P 067**

NATIONAL MINERAL INVENTORY: 103P13 Ag7

NAME(S): **BLACK BEAR - STEWART**, BLACK BEAR

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P13W
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 58 52 N
LONGITUDE: 129 54 34 W
ELEVATION: Metres

NORTHING: 6204351
EASTING: 443253

LOCATION ACCURACY: Within 500M

COMMENTS: Location centered on showings (Minister of Mines Annual Report 1924, page 61).

COMMODITIES: Silver Lead Zinc

MINERALS

SIGNIFICANT: Pyrite Galena Sphalerite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Breccia
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
DIMENSION:

STRIKE/DIP: 130/50S

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Middle Jurassic

GROUP

Hazelton

FORMATION

Salmon River

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Argillite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Stikine

METAMORPHIC TYPE: Regional

COMMENTS: At the western margin of the Stewart Complex (Island Arc Assemblage).

PHYSIOGRAPHIC AREA: Boundary Ranges

RELATIONSHIP:

GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1924

SAMPLE TYPE: Grab

COMMODITY

Silver

GRADE

2060.0000 Grams per tonne

COMMENTS: Selected grab sample containing the best galena and sphalerite mineralization.

REFERENCE: Minister of Mines Annual Report 1924, page 61.

CAPSULE GEOLOGY

The Black Bear-Stewart showing is located on the southwest side of Glacier Creek, 7 kilometres northeast of Stewart. A 3 metre wide quartz-breccia vein was investigated in this area in 1924.

The vein, striking 130 degrees and dipping 50 degrees south, is hosted in argillite of the Middle Jurassic Salmon River Formation (Hazelton Group). The quartz matrix is mineralized with pyrite, galena and minor sphalerite. Selected grab samples containing the best galena and sphalerite mineralization, assayed up to 2060 grams per tonne silver (Minister of Mines Annual Report 1924, page 61).

BIBLIOGRAPHY

EMPR AR *1924-61

EMPR BULL 58; 63

EMPR FIELDWORK 1983, pp. 149-163; 1984, pp. 316-341; 1985, pp. 217, 218; 1986, pp. 81-102; 1988, pp. 233-240; 1990, pp. 235-243

EMPR MAP 8

GSC MAP 215A; 307A; 315A; 1385A

GSC MEM 175, p. 109

DATE CODED: 1985/07/24

DATE REVISED: 1989/05/30

CODED BY: GSB

REVISED BY: PSF

FIELD CHECK: N

FIELD CHECK: N

CAPSULE GEOLOGY

the Dunwell mine across Glacier Creek to the Ben Bolt occurrence (103P 080).

The deposit consists of a quartz-breccia vein striking 155 degrees and dipping 30 degrees west in argillite. The vein, up to 10 metres wide with an average width of 2.4 metres, has been traced along strike for 600 metres. The vein is cut by several vertical shear zones which strike 169 degrees. Several parallel hornblende diorite dykes closely follow the vein.

Mineralization consists of lenses of massive pyrite, tetrahedrite, galena, sphalerite and minor chalcopyrite, arsenopyrite and argentite. The mineralization is concentrated in two flat lying pod shaped ore shoots from 0.6 to 3.0 metres wide (average 1.5 metres in width). The shoots extend along strike for up to 49 metres and down dip for up to 73 metres.

Drilling in 1973 defined a reserve of 11,160 tonnes grading 2.23 grams per tonne gold, 208.8 grams per tonne silver, 1.58 per cent lead and 1.87 per cent zinc over a strike length of 58 metres, dip length of 37 metres and an average width of 1.6 metres (Assessment Report 4935, pages 1,8,9).

A branch vein (the Gipsy vein) on the north end of the main vein, strikes 050 to 074 degrees for 60 metres and dips 60 to 70 degrees southeast. The vein varies from a few centimetres to a metre in width and is adjacent to a parallel feldspar porphyritic dyke. Mineralization consists of pyrite, galena, sphalerite and minor arsenopyrite and chalcopyrite. A 0.91 metre chip sample across this vein assayed 41.1 grams per tonne gold, 185 grams per tonne silver and 5 per cent lead (Minister of Mines Annual Report 1909, page 61).

Production from the Portland Canal mine totalled 8164 tonnes of ore with an average grade of 2.33 grams per tonne gold, 98.55 grams per tonne silver and 1.56 per cent lead.

BIBLIOGRAPHY

- EMPR AR 1906-64,65; 1907-73; 1908-55; *1909-59-61; 1910-63,*71-75; 1911-74; 1912-104; 1924-61; 1925-84; 1935-B4; 1955-17; 1967-36; 1968-53,54
EMPR ASS RPT *2525, 3083, *4935
EMPR BULL 58, pp. 147,148; 63
EMPR FIELDWORK 1983, pp. 149-163; 1984, pp. 316-341; 1985, pp. 217, 218; 1986, pp. 81-102; 1988, pp. 233-240; 1990, pp. 235-243
EMPR GEM 1969-57,58; 1971-126; 1972-509,510; 1973-490,491
EMPR MAP 8
EMPR PF (Elmendorf, W.J. (1907,1908) Reports; Arscott, D. (1971) Report; Starbird Mines Ltd. Prospectus, 1971)
EMR MIN BULL MR 223 B.C. 314
EMR MP CORPFILE (Portland Canal Mining Co. Ltd.; Portal Mining Co. Ltd.; Cassiar Consolidated Mines Ltd.; Starbird Mines Ltd.; Silver Princess Resources Inc.)
GSC MAP 215A; 307A; 315A; 1385A
GSC MEM *32, pp. 31-36; 159, pp. 48-53; 175, p. 136
GSC SUM RPT *1910, pp. 71-76
GCNL #190, 1979; #170, 1980; #49, 1982; #63, 1984
EMPR OF 1998-10

DATE CODED: 1985/07/24
DATE REVISED: 1989/06/03

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 069**

NATIONAL MINERAL INVENTORY:

NAME(S): **MOBILE** ARGENTINE, KENNETH,
GIBSON

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 103P13W
BC MAP:
LATITUDE: 55 57 59 N
LONGITUDE: 129 53 59 W
ELEVATION: 1189 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Location centered on portal of Number 4 adit (Assessment Report 745, Map 2).

Underground
MINING DIVISION: Skeena
UTM ZONE: 09 (NAD 83)
NORTHING: 6202704
EASTING: 443838

COMMODITIES: Zinc Silver Lead Copper Gold
 Antimony

MINERALS

SIGNIFICANT: Galena Sphalerite Pyrite Argentite Tetrahedrite
 Stibnite Proustite Gold Silver
ASSOCIATED: Quartz Carbonate
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Breccia Disseminated
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
DIMENSION: 0580 x 0006 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: Shear zones and quartz-breccia veins strike north-northeast, dip steeply, extend for up to 580 metres and are up to 6.1 metres wide.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Middle Jurassic Hazelton Salmon River

LITHOLOGY: Argillite
 Siltstone

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Boundary Ranges
TERRANE: Stikine
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist
COMMENTS: At the western margin of the Stewart Complex (Island Arc Assemblage).

INVENTORY

ORE ZONE: SHEAR REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1929
SAMPLE TYPE: Chip
COMMODITY GRADE Grams per tonne
Silver 363.0000 Per cent
Zinc 4.2000
COMMENTS: A 0.91 metre chip sample. Trace gold and lead.
REFERENCE: Minister of Mines Annual Report 1929, page 95.

CAPSULE GEOLOGY

The Mobile occurrence is located just west of the south fork of Glacier Creek, 5.5 kilometres northeast of Stewart. Several shipments of high grade ore were made from this prospect between 1930 and 1949.

The occurrence is hosted in well bedded argillite and siltstone of the Middle Jurassic Salmon River Formation (Hazelton Group). These are intruded to the east by a Tertiary(?) augite diorite stock. The underlying greenstone of the Unuk River Formation outcrops to the west. These sediments strike 160 degrees and dip 50 degrees south-west.

The Mobile occurrence is comprised of a series of steeply dipping north-northeast striking shear zones and quartz-breccia veins. These are up to 6.1 metres wide, extend for up to 580 metres in length and contain quartz-carbonate lenses, up to 0.6 metres wide.

Mineralization consists of galena, sphalerite and pyrite with minor argentite, tetrahedrite, stibnite, proustite and rare native

CAPSULE GEOLOGY

gold and silver. The mineralization occurs within the quartz-carbonate lenses and is disseminated discontinuously throughout the shear zones and breccia veins. A 0.91 metre chip sample across a shear zone assayed trace gold, 363 grams per tonne silver, trace lead and 4.2 per cent zinc (Ministry of Mines Annual Report 1929, page 95). A selected grab sample assayed 1.37 grams per tonne gold, 3805 grams per tonne silver, 19 per cent lead and 12 per cent zinc (Ministry of Mines Annual Report 1931, page 42).

Production for 1930 and 1949 totalled 12 tonnes with an average grade of 2.7 grams per tonne gold, 8247 grams per tonne silver, 8.0 per cent lead, 9.6 per cent zinc and 0.3 per cent copper.

BIBLIOGRAPHY

EM EXPL 2001-1-9
EMPR AR 1919-65; 1920-54,44; *1921-64,65; 1922-69; 1923-71-73;
1927-90,91; 1929-95; 1930-105,106; 1931-42; 1932-58; 1933-53;
1934-B24; *1949-41; 1965-51; 1966-40
EMPR ASS RPT 745, 1010, 14331, 16157
EMPR BULL 58, p. 136; 63
EMPR FIELDWORK 1983, pp. 149-163; 1984, pp. 316-341; 1985, pp. 217,
218; 1986, pp. 81-102; 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
EMR MP CORPFILE (Mobile Mine, Kenneth Group, Anglo United Development
Corp. Ltd.)
GSC MAP 215A; 307A; 315A; 1385A
GSC MEM 175, p. 131

DATE CODED: 1985/07/24
DATE REVISED: 1989/06/06

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 070**

NATIONAL MINERAL INVENTORY: 103P13 Ag9

NAME(S): **AJAX - REX**, BEN BOLT

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P13W
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 58 00 N
LONGITUDE: 129 53 54 W
ELEVATION: 678 Metres

NORTHING: 6202734
EASTING: 443926

LOCATION ACCURACY: Within 500M

COMMENTS: Location centered on Ajax claim (Lot 770), as shown on Map 103P/13.

COMMODITIES: Zinc Lead

MINERALS

SIGNIFICANT: Pyrite Sphalerite Galena
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Discordant
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
DIMENSION: 0008 Metres
COMMENTS: Fracture zone strikes west, dips north.

STRIKE/DIP: L01 Subvolcanic Cu-Ag-Au (As-Sb)
TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Plutonic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Middle Jurassic Tertiary	Hazelton	Salmon River	Coast Plutonic Complex

LITHOLOGY: Augite Diorite
Argillite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine
COMMENTS: Situated at the western margin of the Stewart Complex.

PHYSIOGRAPHIC AREA: Boundary Ranges

CAPSULE GEOLOGY

The Ajax-Rex showing is located just east of the south fork of Glacier Creek, 6.5 kilometres northeast of Stewart.
The showing consists of a 7.6 metre wide gossanous fracture zone in the northwestern margin of a Tertiary(?) augite diorite stock. The stock intrudes argillite of the Middle Jurassic Salmon River Formation (Hazelton Group). The zone strikes west, dips north and contains abundant pyrite, sphalerite and minor galena in a 1.5 to 1.8 metre wide section near the hangingwall.

BIBLIOGRAPHY

EMPR AR 1907-73; 1910-64; 1911-74; 1912-324
EMPR BULL 58; 63
EMPR FIELDWORK 1983, pp. 149-163; 1984, pp. 316-341; 1985, pp. 217, 218; 1986, pp. 81-102; 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
EMR MP CORPFILE (Cassiar Consolidated Mines Ltd.; Silver Princess Resources Inc.)
GSC MAP 215A; 307A; 315A; 1385A
GSC MEM 32, p. 45; 175, p. 104
GSC SUM RPT 1910, p. 79
GCNL #190, 1979

DATE CODED: 1985/07/24
DATE REVISED: 1989/06/05

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 071**

NATIONAL MINERAL INVENTORY: 103P13 Ag8

NAME(S): **ALBANY, HALLIE**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P13W
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 58 26 N
LONGITUDE: 129 54 00 W
ELEVATION: 488 Metres

NORTHING: 6203539
EASTING: 443832

LOCATION ACCURACY: Within 500M

COMMENTS: Location centered on adit on east bank of Albany Creek (Geological Survey of Canada Memoir 175, pages 46,47).

COMMODITIES: Zinc Lead Silver Gold Copper

MINERALS

SIGNIFICANT: Pyrite Sphalerite Galena

COMMENTS: Locally massive.

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Breccia Massive

CLASSIFICATION: Hydrothermal Epigenetic

TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

DIMENSION: STRIKE/DIP: 144/50W TREND/PLUNGE:

COMMENTS: Approximate attitude of 0.15 to 0.30 metre wide quartz-breccia vein.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Middle Jurassic Hazelton Salmon River

LITHOLOGY: Argillite
Augite Diorite Intrusive

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

PHYSIOGRAPHIC AREA: Boundary Ranges

TERRANE: Stikine

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

COMMENTS: At the western margin of the Stewart Complex (Island Arc Assemblage).

INVENTORY

ORE ZONE: VEIN

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1926

SAMPLE TYPE: Grab

COMMODITY

COMMODITY	GRADE	
Silver	343.0000	Grams per tonne
Gold	6.6300	Grams per tonne
Lead	17.0000	Per cent
Zinc	4.0000	Per cent

COMMENTS: From 0.15 to 0.3 metre wide quartz-breccia vein.

REFERENCE: Minister of Mines Annual Report 1926, page 92.

CAPSULE GEOLOGY

The Albany showing is located on the south fork of Glacier Creek (Albany Creek), 7 kilometres northeast of Stewart. Several veins were investigated for polymetallic mineralization between 1909 and 1925.

The occurrence consists of two veins hosted in argillite of the Middle Jurassic Salmon River Formation (Hazelton Group) adjacent to the northwest margin of a Tertiary(?) augite diorite stock.

A 0.15 to 0.30 metre wide quartz-breccia vein striking 144 degrees and dipping 50 degrees southwest occurs just east of the creek. The vein contains massive pyrite and minor galena and sphalerite over a width of up to 0.30 metres. A selected grab sample from the vein assayed 6.63 grams per tonne gold, 343 grams per tonne silver, 17 per cent lead and 4 per cent zinc (Minister of Mines Annual Report 1926, page 92).

A 1.5 to 2.4 metre wide vuggy quartz-breccia vein, striking 159 degrees and dipping between 10 degrees east and 50 degrees west, outcrops along the east bank of the creek to the northwest. The vein is

CAPSULE GEOLOGY

mineralized with abundant, locally massive pyrite, sphalerite and galena. A few selected samples assayed up to trace gold, 247 grams per tonne silver, 24 per cent lead and 34 per cent zinc (Minister of Mines Annual Report 1926, page 92).

BIBLIOGRAPHY

EMPR AR 1909-62; 1925-84; *1926-92; 1927-89
EMPR BULL 58; 63
EMPR FIELDWORK 1983, pp. 149-163; 1984, pp. 316-341; 1985, pp. 217, 218; 1986, pp. 81-102; 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
EMR MP CORPFILE (Albany Mining Co. Ltd.)
GSC MAP 215A; 307A; 315A; 1385A
GSC MEM 159, pp. 40,47; *175, pp. 104,105,120

DATE CODED: 1985/07/24
DATE REVISED: 1989/06/03

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 072**

NATIONAL MINERAL INVENTORY:

NAME(S): **SWAN**, AJAX

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P13W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 57 39 N
LONGITUDE: 129 57 31 W
ELEVATION: 107 Metres

NORTHING: 6202135
EASTING: 440154

LOCATION ACCURACY: Within 500M

COMMENTS: Location centered on showing (Geology, Exploration and Mining in British Columbia 1969, page 58, Figure 9).

COMMODITIES: Zinc

MINERALS

SIGNIFICANT: Sphalerite Pyrrhotite
ASSOCIATED: Garnet Epidote Diopside
ALTERATION: Garnet Epidote Diopside
ALTERATION TYPE: Skarn
MINERALIZATION AGE: Eocene
ISOTOPIC AGE: 47-51 (+/- 2-3) Ma DATING METHOD: Potassium/Argon MATERIAL DATED: Biotite

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Skarn
TYPE: K02 Pb-Zn skarn

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic	Hazelton	Unuk River	

LITHOLOGY: Meta Sediment/Sedimentary
Biotite Quartz Monzonite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Boundary Ranges
TERRANE: Stikine
METAMORPHIC TYPE: Contact RELATIONSHIP: Syn-mineralization GRADE:
COMMENTS: At the western margin of the Stewart Complex (Island Arc Assemblage).

CAPSULE GEOLOGY

The Swan showing is located on the east side of the Bear River, 6 kilometres north-northeast of Stewart. The showing comprises a skarn zone developed in metasediments of the Lower Jurassic Unuk River Formation (Hazelton Group) just north-west of the contact with biotite quartz monzonite of the Hyder Pluton. The skarn zone contains sphalerite and pyrrhotite in a gangue of garnet, epidote and diopside.

BIBLIOGRAPHY

EMPR BULL 58; 63
EMPR FIELDWORK 1983, pp. 149-163; 1984, pp. 316-341; 1985, pp. 217, 218; 1986, pp. 81-102; 1988, pp. 233-240; 1990, pp. 235-243
EMPR GEM *1969-58
EMPR MAP 8
GSC MAP 215A; 307A; 1385A

DATE CODED: 1989/06/04
DATE REVISED: / /

CODED BY: PSF
REVISED BY:

FIELD CHECK: N
FIELD CHECK:

CAPSULE GEOLOGY

as veinlets and discrete bands, up to 5 millimetres thick, locally concentrated to form higher grade ore shoots within the vein. The vein contains inferred reserves of 118,000 tonnes grading 0.69 grams per tonne gold, 120 grams per tonne silver and 3 per cent lead over a strike length of 360 metres, a dip extent of 137 metres and an average width of 1 metre (Property File - Morocco Explorations, Prospectus 1988 p.18). Ore shoots within the vein average 2.4 grams per tonne gold, 1131 grams per tonne silver and 20 per cent lead (Property File - Prospectus, Morocco Explorations, 1988, page 18).

A parallel quartz vein, up to 0.15 metres wide, occurs 24 metres to the southeast and contains minor sphalerite and galena. A 0.15 metre chip sample assayed 3.4 grams per tonne gold, 24 grams per tonne silver and 0.004 per cent lead (Assessment Report 15305, page 11).

Two shipments of hand sorted ore totalling ten tonnes averaged 3.1 grams per tonne gold, 7847 grams per tonne silver, 18.06 per cent lead and 6.1 per cent copper.

BIBLIOGRAPHY

- EMPR AR 1905-80; 1906-66; 1907-73; 1908-56; 1909-62,63; *1910-63;
1912-108; 1913-89; 1919-71,72; 1920-59; 1921-65; 1922-74,75; 1923-
74; 1925-85; 1926-91; 1927-89; 1928-98; 1935-B28,B29
EMPR ASS RPT *10046, *15305
EMPR FIELDWORK 1983, pp. 149-163; 1984, pp. 316-341; 1985, pp. 217,
218; 1986, pp. 81-102; 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
EMPR PF (*Morocco Explorations Ltd. Prospectus, 1988)
EMR MP CORPFILE (Rush-Columbia Mines Ltd.; L & L Consolidated Mines
Ltd.)
GSC MAP 215A; 307A; 315A; 1385A
GSC MEM 32, pp. 44,45; 159, pp. 44-46; 175, pp. 110,146
GSC SUM RPT 1910, p. 79
EMPR OF 1998-10

DATE CODED: 1985/07/24
DATE REVISED: 1989/06/04

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 074**

NATIONAL MINERAL INVENTORY: 103P12 Cu3

NAME(S): **LUCKY STRIKE NORTH**, LUCKY STRIKE

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P12E
BC MAP:

MINING DIVISION: Skeena
UTM ZONE: 09 (NAD 83)

LATITUDE: 55 44 48 N
LONGITUDE: 129 36 09 W
ELEVATION: 1400 Metres

NORTHING: 6178049
EASTING: 462178

LOCATION ACCURACY: Within 500M

COMMENTS: Location centered on showing (Minister of Mines Annual Report 1965, page 66).

COMMODITIES: Copper Lead Zinc

MINERALS

SIGNIFICANT: Chalcopyrite Galena Sphalerite Pyrite

ASSOCIATED: Quartz Calcite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Breccia
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Upper Triassic	Stuhini	Undefined Formation	
Lower Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Argillite
Plagioclase Hornblende Porphyritic Andesite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

PHYSIOGRAPHIC AREA: Boundary Ranges

TERRANE: Stikine

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

COMMENTS: At the western margin of the Stewart Complex (Island Arc Assemblage).

CAPSULE GEOLOGY

The Lucky Strike North showing is located 1.25 kilometres north of the west fork of the Kitsault River, 30.5 kilometres north-northwest of Alice Arm.

A shear zone contains quartz-calcite stringers mineralized with chalcopyrite, galena, sphalerite and pyrite. This zone is developed in Upper Triassic Stuhini Group(?) argillites near the contact with overlying plagioclase-hornblende porphyritic andesite, informally known as the Copper Belt, of the Lower Jurassic Hazelton Group.

A 3.7 metre wide zone of brecciated Copper Belt andesite east of the shear zone contains at its center, a 0.3 metre wide calcite vein mineralized with chalcopyrite.

BIBLIOGRAPHY

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EMPR ASS RPT 8166, 9076, 16034, 18657
EMPR EXPL 1980-409,410; 1987-C364
EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
EMPR OF 1986-2
EMPR PF (Cambria Resources Ltd. Prospectus, 1987)
GSC MAP 307A; 1385A

DATE CODED: 1989/05/12
DATE REVISED: / /

CODED BY: PSF
REVISED BY:

FIELD CHECK: N
FIELD CHECK:

MINFILE NUMBER: **103P 075**

NATIONAL MINERAL INVENTORY: 103P13 Ag22

NAME(S): **MAGEE**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P13W
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 55 34 N
LONGITUDE: 129 56 03 W
ELEVATION: 1875 Metres

NORTHING: 6198250
EASTING: 441628

LOCATION ACCURACY: Within 500M

COMMENTS: Location centered on Trench #3 (Assessment Report 8650, Figure 3).

COMMODITIES: Copper Silver

MINERALS

SIGNIFICANT: Tetrahedrite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
DIMENSION:
COMMENTS: Attitude of vein.

STRIKE/DIP: 128/18N

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Lower Jurassic	Hazelton	Unuk River	

LITHOLOGY: Dacitic Tuff

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine
METAMORPHIC TYPE: Regional
COMMENTS: At the western margin of the Stewart Complex (Island Arc Assemblage).

PHYSIOGRAPHIC AREA: Boundary Ranges

RELATIONSHIP:
GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1980
SAMPLE TYPE: Grab
COMMODITY GRADE
Silver 2.5800 Grams per tonne
Copper 0.4600 Per cent
COMMENTS: Sample of stained quartz. Trace lead.
REFERENCE: Assessment Report 8650, page 9.

CAPSULE GEOLOGY

The Magee showing, located 4 kilometres east-southeast of Stewart, was discovered in 1980. It consists of a 0.3 metre wide tetrahedrite-quartz vein striking 128 degrees and dipping 18 degrees northeast. The vein is hosted in dacitic tuff of the Lower Jurassic Unuk River Formation (Hazelton Group). A sample assayed 2.58 grams per tonne silver, 0.46 per cent copper and trace lead (Assessment Report 8650, page 9).

BIBLIOGRAPHY

EMPR ASS RPT 8403, *8650
EMPR BULL 58; 63
EMPR FIELDWORK 1983, pp. 149-163; 1984, pp. 316-341; 1985, pp. 217, 218; 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
GSC MAP 215A; 307A; 315A; 1385A

DATE CODED: 1989/05/14
DATE REVISED: / /

CODED BY: PSF
REVISED BY:

FIELD CHECK: N
FIELD CHECK:

MINFILE NUMBER: **103P 076**

NATIONAL MINERAL INVENTORY: 103P13 Ag15

NAME(S): **L & L, KATHERINE**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 103P13W
BC MAP:

Open Pit Underground

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 58 30 N
LONGITUDE: 129 52 16 W
ELEVATION: 1100 Metres

NORTHING: 6203640
EASTING: 445636

LOCATION ACCURACY: Within 500M

COMMENTS: Location centered on portal of southern most adit on L & L Number 1 claim-Lot 4526 (Assessment Report 15305, Figure 3).

COMMODITIES: Zinc Silver Lead Gold Copper

MINERALS

SIGNIFICANT: Sphalerite Pyrite Arsenopyrite Galena Tetrahedrite

Pyrrhotite Chalcopyrite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Breccia
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

SHAPE: Bladed

MODIFIER: Faulted

DIMENSION: 0350 x 0120 x 0001 Metres

STRIKE/DIP: 156/73S

TREND/PLUNGE:

COMMENTS: Vein is 0.60 to 1.5 metres wide.

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

Middle Jurassic
Tertiary

GROUP

Hazelton

FORMATION

Salmon River

IGNEOUS/METAMORPHIC/OTHER

Coast Plutonic Complex

LITHOLOGY: Augite Diorite
Feldspar Porphyritic Dike
Argillite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Stikine

COMMENTS: Situated at the western margin of the Stewart Complex.

PHYSIOGRAPHIC AREA: Boundary Ranges

INVENTORY

ORE ZONE: L & L-MAIN VEIN

REPORT ON: Y

CATEGORY: Inferred
QUANTITY: 18000 Tonnes

YEAR: 1988

COMMODITY

GRADE

Silver	31.0000	Grams per tonne
Gold	0.2700	Grams per tonne
Lead	0.3600	Per cent
Zinc	2.1000	Per cent

COMMENTS: Reserves within a block with dimensions of 180 by 120 by 0.6 metres. Potential for 118,000 tonnes from southeastern extension.

REFERENCE: Property File - Prospectus, Morocco Explorations, 1988, page 18.

ORE ZONE: L & L-HIGHGRADE ORE

REPORT ON: Y

CATEGORY: Combined
QUANTITY: 327 Tonnes

YEAR: 1981

COMMODITY

GRADE

Silver	2057.0000	Grams per tonne
--------	-----------	-----------------

COMMENTS: Indicated and inferred reserves within a block with dimensions of 36 by 36 by 0.3 metres.

REFERENCE: Assessment Report 10046, page 12.

CAPSULE GEOLOGY

The L & L occurrence is located on the middle fork of Glacier Creek, south of the Black Hills Glacier and 8.5 kilometres northeast of Stewart. Several shipments of high grade ore were made, between 1913 and 1927, from this occurrence.

CAPSULE GEOLOGY

The occurrence consists of several veins hosted in a 3 kilometre long by 2 kilometre wide Tertiary(?) augite diorite stock that intrudes argillite of the Middle Jurassic Salmon River Formation (Hazelton Group).

The most extensive mineralization occurs in a 0.60 to 1.5 metre wide quartz-breccia vein. The vein strikes 156 degrees for 350 metres and dips 73 degrees southwest, extending downdip for at least 120 metres. The vein is developed adjacent to a subparallel feldspar porphyritic dyke. Faulting has caused 1.0 to 2.0 metre displacements of the vein.

Mineralization consists of sphalerite, pyrite, arsenopyrite and minor galena, tetrahedrite, pyrrhotite and chalcopyrite. The mineralization is confined largely to a 0.3 to 0.8 metre wide, 36 metre long and 36 metre deep ore shoot on the hangingwall of the vein. This ore shoot contains 63.5 tonnes of indicated (proven) reserves and an additional 172.4 tonnes of inferred (possible) reserves for a total of 326.6 tonnes over a 0.3 metre width, averaging 2057 grams per tonne silver (Assessment Report 10046, page 12). The entire vein contains inferred (possible) reserves of 18,000 tonnes within a 180 metre long, 120 metre deep, 0.6 metre wide block grading 0.27 grams per tonne gold, 31 grams per tonne silver, 2.1 per cent zinc and 0.36 per cent lead (Property File - Morocco Explorations Prospectus 1988, p. 18). A potential for 118,000 tonnes of similar grade is contained in the southeastern extension of the vein (Property File - Prospectus, Morocco Explorations, 1988, page 18).

A parallel 2 metre wide shear zone, sixty metres to the southwest, contains a quartz vein up to 0.3 metres wide mineralized with pyrite, sphalerite, and some arsenopyrite. A selected grab sample assayed 0.87 grams per tonne gold, 30.2 grams per tonne silver, 0.36 per cent lead and 2.18 per cent zinc (Assessment Report 15305, p. 13).

Between 1913 and 1925, 63 tonnes of sorted ore were mined, with an average grade of 3.1 grams per tonne gold, 6292 grams per tonne silver and 13.7 per cent lead, 15.6 per cent zinc and 0.01 per cent copper.

BIBLIOGRAPHY

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*1924-66-68; 1925-85,447; 1926-91; 1927-89; 1928-98; 1934-B24;
1935-B28,B29
EMPR ASS RPT *10046, *15305
EMPR BULL 58; 63
EMPR FIELDWORK 1983, pp. 149-163; 1984, pp. 316-341; 1985, pp. 217,
218; 1986, pp. 81-102; 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
EMPR PF (*Morocco Explorations Inc. Prospectus, 1988)
EMR MP CORPFILE (L & L Consolidated Mines Ltd.)
GSC MAP 215A; 307A; 315A; 1385A
GSC MEM 32, p. 45; 159, pp. 34,35; 175, pp. 124,125,144
EMPR OF 1998-10

DATE CODED: 1985/07/24
DATE REVISED: 1989/06/03

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 077**

NATIONAL MINERAL INVENTORY: 103P12 Cu3

NAME(S): **RAMBLER**, LUCKY STRIKE

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P12E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 43 55 N
LONGITUDE: 129 34 47 W
ELEVATION: 1021 Metres

NORTHING: 6176399
EASTING: 463594

LOCATION ACCURACY: Within 500M

COMMENTS: Location based on description of claim and showing (Minister of Mines Annual Report 1922, page 57).

COMMODITIES: Copper Gold

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite

ASSOCIATED: Quartz Calcite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Breccia Vein Disseminated

CLASSIFICATION: Hydrothermal Epigenetic

TYPE: I02 Intrusion-related Au pyrrhotite veins 105 Polymetallic veins Ag-Pb-Zn±Au

DIMENSION: 0180 x 0005 Metres STRIKE/DIP: TREND/PLUNGE:

COMMENTS: Breccia vein strikes 000 degrees (north), is 4.9 metres wide and extends for 180 metres.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Argillite
Siltstone
Plagioclase Hornblende Porphyritic Andesite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

PHYSIOGRAPHIC AREA: Boundary Ranges

TERRANE: Stikine

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

COMMENTS: At the western margin of the Stewart Complex (Island Arc Assemblage).

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1922

SAMPLE TYPE: Grab

COMMODITY

GRADE

Gold

8.3000

Grams per tonne

Copper

8.0000

Per cent

COMMENTS: Highest values for grab samples.

REFERENCE: Minister of Mines Annual Report 1922, page 57.

CAPSULE GEOLOGY

The Rambler showing is located 0.75 kilometres north of the west fork of the Kitsault River, 28.5 kilometres north-northwest of Alice Arm.

The showing occurs in a sequence of plagioclase-hornblende porphyritic andesite and minor interbedded black siltstone/argillite of the Lower Jurassic Hazelton Group.

The mineralization is hosted in a north striking, 4.9 metre wide quartz-calcite breccia vein in argillite. The vein, extending for 180 metres, consists of brecciated argillite fragments cemented with quartz and calcite which contains abundant disseminated pyrite and chalcopyrite. Grab samples assayed up to 8 per cent copper, and between 3.3 and 8.3 grams per tonne gold (Minister of Mines Annual Report 1922, page 57).

BIBLIOGRAPHY

EM EXPL 2001-1-9
EMPR AR *1922-57; 1926-82; 1929-87
EMPR ASS RPT 8166, 9076, 16034, 18657
EMPR EXPL 1980-409,410; 1987-C364

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1055
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp.
235-243
EMPR MAP 8
EMPR OF 1986-2
EMPR PF (*Cambria Resources Ltd. Prospectus, 1987)
GSC MAP 307A; 315A; 1385A
GSC MEM 175, p. 71

DATE CODED: 1989/05/12
DATE REVISED: / /

CODED BY: PSF
REVISED BY:

FIELD CHECK: N
FIELD CHECK:

MINFILE NUMBER: **103P 078**

NATIONAL MINERAL INVENTORY: 103P13 Ag

NAME(S): **WINDSOR, BLACK BEAR LAURA,
RAVEN, LAST CHANCE, GOLD BLUFF**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P13W
BC MAP:

MINING DIVISION: Skeena
UTM ZONE: 09 (NAD 83)

LATITUDE: 55 57 29 N
LONGITUDE: 129 45 46 W
ELEVATION: 1130 Metres

NORTHING: 6201674
EASTING: 452376

LOCATION ACCURACY: Within 1 KM

COMMENTS: Approximate location of main showing on Lot 5398 (NTS Map 103P13).

COMMODITIES: Gold Silver Lead Zinc

MINERALS

SIGNIFICANT: Pyrite Galena Sphalerite
ASSOCIATED: Quartz
ALTERATION: Silica
ALTERATION TYPE: Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Breccia Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
SHAPE: Irregular
MODIFIER: Fractured Sheared
DIMENSION: 0005 Metres STRIKE/DIP: 330/40W TREND/PLUNGE:
COMMENTS: Dimension and attitude of main showing.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Middle Jurassic Hazelton Salmon River

LITHOLOGY: Argillite
Diorite Dike

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline PHYSIOGRAPHIC AREA: Boundary Ranges
TERRANE: Bowser Lake Plutonic Rocks

INVENTORY

ORE ZONE: OPENCUT REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1924
SAMPLE TYPE: Grab
COMMODITY GRADE
Gold 18.2000 Grams per tonne
COMMENTS: Sample from open cut across 1.5 metres. Quoted as \$12 per ton gold.
REFERENCE: Energy, Mines and Petroleum Resources Annual Report 1924 page 68.

CAPSULE GEOLOGY

The Windsor showing is located west of Bromley glacier approximately 16 kilometres east of Stewart. The area was investigated initially in the early 1900's and has been sporadically explored up to 1974.

The area is underlain by argillite of the Middle Jurassic Salmon River Formation (Hazelton Group) intruded by a number of large diorite dykes. The argillite strikes approximately north-south and dips 40 degrees west.

The showing comprises crushed and silicified zones up to 6 metres wide which have approximately the same attitude as the host argillites. The main showing consists of 4.6 metres of quartz and silicified argillites mineralized with locally abundant pyrite, galena and sphalerite. Patches and lenses of galena and sphalerite contain high silver and low gold values. The main showing strikes 330 degrees and dips 40 degrees west. A number of smaller showings also occur in the vicinity.

The main zone has been investigated through several open cuts and a 23 metre crosscut tunnel. One cut gave gold values of 18.2 grams per tonne across 1.5 metres Energy, Mines and Petroleum Resources Annual Report 1924 p. 68)

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1057
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR AR 1905-81, 1916-520, 1911-74, *1924-68, 1930-107
EMPR BULL 63
EMPR FIELDWORK 1988, pp. 233-240; 1990, pp. 235-243
EMPR GEM 1974-326
EMPR MAP 8
EMPR PF (George Cross Newsletter, date unknown c.1974)
EMR CORPFILE (Tournigan Mining Explorations Limited)
GSC MAP 193A, 215A, 315A, 1385A
GSC MEM *32-55, 175-109
WWW <http://www.infomine.com/>

DATE CODED: 1985/07/24
DATE REVISED: 1989/12/14

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1058
REPORT: RGEN0100

MINFILE NUMBER: **103P 079**

NATIONAL MINERAL INVENTORY: 103P1 Mo1

NAME(S): **MOGUL**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P01W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 01 47 N
LONGITUDE: 128 16 36 W
ELEVATION: 305 Metres

NORTHING: 6098338
EASTING: 546236

LOCATION ACCURACY: Within 1 KM

COMMENTS: Location of approximate centre of claims (Assessment Report 4248).

COMMODITIES: Molybdenum

MINERALS

SIGNIFICANT: Molybdenite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Unknown
TYPE: L05 Porphyry Mo (Low F- type)

HOST ROCK

DOMINANT HOSTROCK: Plutonic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Tertiary			Coast Plutonic Complex

LITHOLOGY: Granite

HOSTROCK COMMENTS: Coast Plutonic Complex rocks are Tertiary and possibly younger in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

Bowser Lake

PHYSIOGRAPHIC AREA: Nass Depression

CAPSULE GEOLOGY

The Mogul showing is located on the south bank of the Skeena River approximately 3.2 kilometres northeast of Cedarvale.

The area is underlain by sediments of the Middle to Upper Jurassic Bowser Lake Group which has been intruded by Tertiary (and possibly younger) granitic rocks of the Coast Plutonic Complex.

Minor molybdenite is reported to occur in fractures of granitic rocks. No other information is available.

BIBLIOGRAPHY

EMPR ASS RPT 2873, 4248
EMPR BULL 63; 64
EMPR FIELDWORK 1988, pp. 233-240; 1990, pp. 235-243
EMPR GEM *1971-119, 1973-488
EMPR MAP 8
GSC MAP 1385A

DATE CODED: 1985/07/24
DATE REVISED: 1989/12/21

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 079**

MINFILE NUMBER: **103P 080**

NATIONAL MINERAL INVENTORY: 103P13 Ag9

NAME(S): **BEN BOLT**, JUMBO

MINING DIVISION: Skeena

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 103P13W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 57 17 N
LONGITUDE: 129 53 46 W
ELEVATION: 671 Metres

NORTHING: 6201403
EASTING: 444047

LOCATION ACCURACY: Within 500M

COMMENTS: Location centered on portal of easternmost adit (Geological Survey of Canada Map 215A).

COMMODITIES: Lead Zinc Silver Gold Copper

MINERALS

SIGNIFICANT: Pyrite Galena Sphalerite Chalcopyrite Pyrrhotite

 Arsenopyrite

ASSOCIATED: Quartz

ALTERATION: Quartz

ALTERATION TYPE: Silicific'n

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated Breccia

CLASSIFICATION: Hydrothermal Epigenetic

TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

DIMENSION: 0032 x 0015 x 0003 Metres STRIKE/DIP:

COMMENTS: Dimensions given for ore shoot within a northwest striking 22 to 30 degrees southwest dipping vein.

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Middle Jurassic	Hazelton	Salmon River	

LITHOLOGY: Argillite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

PHYSIOGRAPHIC AREA: Boundary Ranges

TERRANE: Stikine

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

COMMENTS: At the western margin of the Stewart Complex (Island Arc Assemblage).

INVENTORY

ORE ZONE: ORE SHOOT

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1913

SAMPLE TYPE: Chip

COMMODITY

GRADE

COMMODITY	GRADE	UNIT
Silver	193.0000	Grams per tonne
Gold	2.4000	Grams per tonne
Copper	0.9000	Per cent
Lead	15.0100	Per cent
Zinc	3.1600	Per cent

COMMENTS: A 4.3 metre chip sample across ore shoot.

REFERENCE: Geological Survey of Canada Memoir 32, page 38.

CAPSULE GEOLOGY

The Ben Bolt occurrence is located near the headwaters of the south fork of Glacier Creek, 6 kilometres east-northeast of Stewart. The vein, carrying polymetallic mineralization, was periodically investigated between 1906 and 1955.

The mineralized quartz breccia zone is hosted in argillite of the Middle Jurassic Salmon River Formation (Hazelton Group) near the southwest margin of a Tertiary(?) augite diorite stock. The argillite strikes northwest and dips gently southwest.

The occurrence is situated at the south end of the Portland Canal Fissure Zone. This zone of faulting and shearing trends north, dips steeply west and hosts a vein system that extends from the Victoria/Dandy occurrence (104A 067) on the north, through the Dunwell mine (103P 052) across Glacier Creek to this occurrence.

The occurrence consists of a 2.4 to 30 metre wide quartz-breccia zone. The zone contains distinct quartz veins and lenses up to 1.8

CAPSULE GEOLOGY

metres width and outcropping along a length of 600 metres. The vein strikes northwest and dips 22 to 30 degrees southwest. A few subparallel silicified porphyritic diorite dykes are associated with the vein.

Mineralization consists of disseminated pyrite, galena, sphalerite and minor chalcopyrite, pyrrhotite and arsenopyrite in a gangue of quartz and silicified argillite fragments. An intensely mineralized zone forms a 32 metre long ore shoot varying from a few centimetres to at least 3 metres in width and extending downdip for 15 metres. A 4.3 metre chip sample across the ore shoot assayed 2.4 grams per tonne gold, 193 grams per tonne silver, 15.01 per cent lead, 0.9 per cent copper and 3.16 per cent zinc (Geological Survey of Canada Memoir 32, page 38).

BIBLIOGRAPHY

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1913-90; 1914-157; 1929-96,97; 1930-106; 1932-59; 1955-17
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EMPR FIELDWORK 1983, pp. 149-163; 1984, pp. 316-341; 1985, pp. 217,
218; 1986, pp. 81-102; 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
EMR MIN BR FILE MR-AG-301.00, p. 90, Jun. 1930
EMR MP CORPFILE (Cassiar Consolidated Mines Ltd.; Silver Princess
Resources Inc.)
GSC MAP 215A; 307A; 315A; 1385A
GSC MEM *32, pp. 36-38; 159, pp. 47,48; 175, pp. 107,108
GSC SUM RPT 1910, p. 76
GCNL #190, 1979

DATE CODED: 1985/07/24
DATE REVISED: 1989/06/05

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 081**

NATIONAL MINERAL INVENTORY: 103P13 Ag8,9

NAME(S): **CHICAGO**, COOK & DOBSONS

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P13W
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 57 44 N
LONGITUDE: 129 54 25 W
ELEVATION: 732 Metres

NORTHING: 6202246
EASTING: 443382

LOCATION ACCURACY: Within 500M

COMMENTS: Location centered on showing on west side of Albany Creek
(Geological Survey of Canada Map 215A).

COMMODITIES: Lead

MINERALS

SIGNIFICANT: Pyrite Galena

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Breccia
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Middle Jurassic	Hazelton	Salmon River	

LITHOLOGY: Argillite
Slate

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Stikine

METAMORPHIC TYPE: Regional

COMMENTS: At the western margin of the Stewart Complex (Island Arc Assemblage).

PHYSIOGRAPHIC AREA: Boundary Ranges

RELATIONSHIP:

GRADE: Greenschist

CAPSULE GEOLOGY

The Chicago showing is located on the west bank of the south fork of Glacier Creek, 6 kilometres northeast of Stewart. The showing consists of a 2.4 to 7.6 metre wide quartz breccia vein hosted in Middle Jurassic Salmon River Formation (Hazelton Group) argillite/slate. The vein is situated west of a Tertiary(?) augite diorite stock, within the Portland Canal Fissure Zone. The vein is mineralized with abundant pyrite and minor galena.

BIBLIOGRAPHY

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EMPR MAP 8
GSC MAP *215A; 307A; 315A; 1385A
GSC MEM 32, pp. 37,38; 175, p. 110
GSC SUM PRT 1910, p. 76

DATE CODED: 1985/07/24
DATE REVISED: 1989/06/04

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 082**

NATIONAL MINERAL INVENTORY:

NAME(S): **SILVER CROWN**, LUCKY STRIKE

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P12E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 44 42 N
LONGITUDE: 129 35 51 W
ELEVATION: 1331 Metres

NORTHING: 6177861
EASTING: 462490

LOCATION ACCURACY: Within 500M

COMMENTS: Location centered on site of grab sample 8978D (Assessment Report 16034, Figure 5).

COMMODITIES: Silver

Gold

Lead

Zinc

Antimony

MINERALS

SIGNIFICANT: Tetrahedrite Stibnite Galena Sphalerite Arsenopyrite
Pyrite Chalcopyrite

COMMENTS: As stringers in vein and shear zone.

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein

CLASSIFICATION: Hydrothermal Epigenetic

TYPE: I02 Intrusion-related Au pyrrhotite veins

I05 Polymetallic veins Ag-Pb-Zn±Au

COMMENTS: Shear zones and veins strike 070 degrees, dip steeply north.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Lower Jurassic

Hazelton

Undefined Formation

LITHOLOGY: Plagioclase Hornblende Porphyritic Andesite
Black Siltstone
Black Argillite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

PHYSIOGRAPHIC AREA: Boundary Ranges

TERRANE: Stikine

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

COMMENTS: At the western margin of the Stewart Complex (Island Arc Assemblage).

INVENTORY

ORE ZONE: VEIN

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1930

SAMPLE TYPE: Grab

COMMODITY

GRADE

Silver

7241.1400

Grams per tonne

Gold

15.4000

Grams per tonne

COMMENTS: Sample from quartz vein.

REFERENCE: Assessment Report 16034, page 16.

CAPSULE GEOLOGY

The Silver Crown showing is located 1 kilometre northeast of the Kitsault River, 30.5 kilometres north-northwest of Alice Arm.

This showing is hosted in altered plagioclase-hornblende porphyritic andesite, with minor interbedded black siltstone/argillite, informally known as the Copper Belt, of the Lower Jurassic Hazelton Group. The showing consists of 0.3 to 0.6 metre wide shear zones and quartz veins striking 070 degrees and dipping steeply north. These contain stringers, 5 centimetres thick, of stibnite, arsenopyrite, tetrahedrite, galena, pyrite, sphalerite and chalcopyrite. A grab sample of a quartz vein assayed 15.4 grams per tonne gold and 7241.14 grams per tonne silver (Assessment Report 16034, page 16). A grab sample of selected galena ore from a shear zone assayed 19.9 grams per tonne gold, 1370 grams per tonne silver, 15.1 per cent lead and 3.0 per cent zinc (Minister of Mines Annual Report 1930, page 100).

BIBLIOGRAPHY

EMPR AR 1922-58; 1926-82; *1930-99,100; 1931-38; 1951-88; 1965-66
EMPR ASS RPT 8166, 9076, *16034, 18657

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1063
REPORT: RGEN0100

BIBLIOGRAPHY

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EMPR MAP 8
EMPR OF 1986-2
EMPR PF (Cambria Resources Ltd. Prospectus, 1987)
GSC MAP 307A; 315A; 1385A
GSC MEM 175, p. 71

DATE CODED: 1989/05/12
DATE REVISED: / /

CODED BY: PSF
REVISED BY:

FIELD CHECK: N
FIELD CHECK:

MINFILE NUMBER: **103P 083**

NATIONAL MINERAL INVENTORY: 103P12,13 Cu2

NAME(S): **SILVER TIP-GOLD REEF**, SILVER TIP, GOLD REEF

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P13E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 45 19 N
LONGITUDE: 129 35 46 W
ELEVATION: 1300 Metres

NORTHING: 6179004
EASTING: 462588

LOCATION ACCURACY: Within 500M

COMMENTS: Location centered on showing (Minister of Mines Annual Report 1927, page 78).

COMMODITIES: Zinc Silver Copper

MINERALS

SIGNIFICANT: Pyrite Sphalerite Galena

COMMENTS: Occur sparsely in silicified zone.

ASSOCIATED: Quartz

ALTERATION: Quartz

ALTERATION TYPE: Silicific'n

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated

CLASSIFICATION: Hydrothermal Epigenetic

TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

COMMENTS: Silicified zone strikes southeast, dips 65 degrees southwest.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Lower Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Volcanic Breccia

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Stikine

METAMORPHIC TYPE: Regional

RELATIONSHIP:

COMMENTS: At the western margin of the Stewart Complex (Island Arc Assemblage).

PHYSIOGRAPHIC AREA: Boundary Ranges

GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1934

SAMPLE TYPE: Chip

COMMODITY

GRADE

Silver

123.0000

Grams per tonne

Copper

0.5000

Per cent

Zinc

4.5000

Per cent

COMMENTS: Across unknown length of best mineralization, trace gold.

REFERENCE: Minister of Mines Annual Report 1934, page B15.

CAPSULE GEOLOGY

The Silver Tip-Gold Reef occurrence is located 2 kilometres east of Homestake Creek, 31.5 kilometres north-northwest of Alice Arm.

A silicified zone, explored by tunnelling in 1927, occurs in Lower Jurassic Hazelton Group volcanic breccia. The zone, striking southeast and dipping 65 degrees southwest, contains sparse pyrite, sphalerite and galena. A chip sample of unknown length across the best mineralization assayed trace gold, 123 grams per tonne silver, 0.5 per cent copper and 4.5 per cent zinc (Minister of Mines Annual Report 1934, page B15).

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EMPR AR *1927-78; *1934-B15

EMPR ASS RPT 16034, 18657

EMPR BULL 63

EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp.

235-243

EMPR MAP 8

EMPR OF 1986-2

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1065
REPORT: RGEN0100

BIBLIOGRAPHY

GSC MAP 307A; 1385A

DATE CODED: 1989/05/11
DATE REVISED: / /

CODED BY: PSF
REVISED BY:

FIELD CHECK: N
FIELD CHECK:

MINFILE NUMBER: **103P 084**

NATIONAL MINERAL INVENTORY: 103P13 Ag10

NAME(S): **BLACK HILL**, EXCELSIOR & EAGLE

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 103P13W
BC MAP:

Open Pit Underground

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 56 56 N
LONGITUDE: 129 52 17 W
ELEVATION: 1295 Metres

NORTHING: 6200734
EASTING: 445582

LOCATION ACCURACY: Within 500M

COMMENTS: Location centered on portal of adit on Nellie W No. 1 claim-Lot 5244
(Assessment Report 10006).

COMMODITIES: Silver Zinc Lead Gold Copper

MINERALS

SIGNIFICANT: Sphalerite Jamesonite Galena Tetrahedrite Stibnite

Chalcopyrite

ASSOCIATED: Quartz Calcite Siderite Barite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Massive
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

DIMENSION: 0012 Metres STRIKE/DIP: 020/57N

COMMENTS: Attitude of shear zone enclosing quartz vein 12.5 metres long and 0.80 metres wide. TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Middle Jurassic
Tertiary

GROUP

Hazelton

FORMATION

Salmon River

IGNEOUS/METAMORPHIC/OTHER

Coast Plutonic Complex

LITHOLOGY: Argillite
Augite Diorite

HOSTROCK COMMENTS: Veins hosted in Tertiary stock and adjacent sediments.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Stikine

METAMORPHIC TYPE: Regional

COMMENTS: At the western margin of the Stewart Complex (Island Arc Assemblage).

PHYSIOGRAPHIC AREA: Boundary Ranges

RELATIONSHIP:

GRADE: Greenschist

INVENTORY

ORE ZONE: VEIN

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1929

SAMPLE TYPE: Chip

COMMODITY

GRADE

Silver	2955.0000	Grams per tonne
Gold	1.3700	Grams per tonne
Lead	9.8000	Per cent
Zinc	6.8000	Per cent

COMMENTS: Composite chip sample over an average width of 0.20 metres for a length of 9 metres.

REFERENCE: Minister of Mines Annual Report 1929, page 96.

CAPSULE GEOLOGY

The Black Hill occurrence is located near the headwaters of the south fork of Glacier Creek, 7.5 kilometres east-northeast of Stewart. A few shipments of high grade ore were made from this occurrence in 1930, 1935 and 1983.

The occurrence consists of various veins hosted in augite diorite and argillite. These occur on the southeastern margin of a Tertiary(?) stock of the Coast Plutonic Complex that intrudes argillite, greywacke and limestone of the Middle Jurassic Salmon River Formation.

A set of steeply dipping, west striking, quartz veins, from 0.15 to 0.20 metres wide, contain sparse galena, sphalerite, tetrahedrite and rare chalcopyrite. A second set of north striking, steeply dipping veins, up 0.3 metres wide, are well mineralized with sphalerite, tetrahedrite, galena and jamesonite.

CAPSULE GEOLOGY

Significant mineralization is confined to several of the north striking veins. A 1.8 metre wide shear zone striking 020 degrees and dipping 50 to 85 degrees northwest contains a vein along its margin. This vein contains locally massive sphalerite, jamesonite, stibnite, galena and tetrahedrite in a gangue of quartz, calcite, siderite and barite. The vein forms an ore shoot which averages 0.3 metres in width over a length of 12.5 metres. Veinlets containing similar massive sulphides occur throughout the rest of the shear zone. A 0.40 metre chip sample across the ore shoot assayed 3.4 grams per tonne gold, 3839 grams per tonne silver, 11.5 per cent lead and 4 per cent zinc (Minister of Mines Annual Report 1929, page 96).

An adjacent shear zone, 30 metres to the west, strikes 030 degrees and dips 65 degrees west. It contains, along the footwall, a 0.10 to 0.40 metre wide vein of massive sphalerite, tetrahedrite, galena and jamesonite. A composite chip sample over a length of 9 metres and an average width of 0.20 metres assayed 1.37 grams per tonne gold, 2955 grams per tonne silver, 9.8 per cent lead and 6.8 per cent zinc (Minister of Mines Annual Report 1929, page 96).

Sorted ore totalling 53 tonnes were produced in 1930, 1935 and 1983 with an average grade of 1.17 grams per tonne gold, 5658 grams per tonne silver, 16.1 per cent lead, 2.92 per cent zinc and 0.41 per cent copper.

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1928-99,100; *1929-96; 1930-439; 1934-B24; 1935-A24
EMPR ASS RPT *10006, 12578
EMPR BULL 58; 63
EMPR ENG INSP (Mine Plans: #61421, Apr., 1973)
EMPR FIELDWORK 1983, pp. 149-163; 1984, pp. 316-341; 1985, pp. 217,
218; 1986, pp. 81-102; 1988, pp. 233-240; 1990, pp. 235-243
EMPR GEM 1972-510,580
EMPR MAP 8
EMPR PF (Lehto Resources Ltd. Prospectus, 1974; Chisholm, E.O.
(1973) Report)
EMR MIN FILE MR-AG-301.00, pp. 91-94, Jun. 1930
EMR MP CORPFILE (Black Hill Mining Co. Ltd.)
GSC MAP 215A; 307A; 315A; 1385A
GSC MEM 32, pp. 45,46; 175, pp. 109,114
GSC SUM RPT 1910, pp. 79,80

DATE CODED: 1985/07/24
DATE REVISED: 1989/06/03

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

CAPSULE GEOLOGY

in 1947 and 1948.

The occurrence consists of at least two skarn zones, developed in hornfelsed and variably schistose argillites, tuffs, quartzites and minor limestone of the Lower Jurassic Unuk River Formation. These beds, intruded to the south and north by Eocene granodiorite of the Hyder Pluton, generally strike 125 degrees and dip between 60 and 90 degrees southwest. A few granitic dykes crosscut the sequence.

A skarn-altered limy siltstone bed within thin-bedded siltstone, striking 120 degrees and dipping 65 to 75 degrees southwest, has been traced southeast from the east bank of the Bear River for 30 metres. The limy beds vary in thickness between a few centimetres and 3 metres, averaging between 1 and 1.8 metres. Mineralization consists of scheelite and disseminated molybdenite, pyrite, chalcocopyrite, pyrrotite and sphalerite in a gangue of diopside, garnet, epidote and minor calcite. A 163 kilogram sample of hand sorted ore averaged 4.2 per cent molybdenum, 1.5 per cent tungstic oxide (WO₃) (1.2 per cent tungsten) and 0.4 per cent zinc (Bulletin 10, page 55). A 1.68 metre channel sample across the skarn zone assayed 0.37 per cent tungstic oxide (0.29 per cent tungsten) and 0.17 per cent molybdenite (Bulletin 10, page 55).

South of the scheelite-molybdenite skarn, approximately 300 metres, a zone of silicification and skarn alteration occurs in argillite. This zone, containing bands of epidote and garnet, parallels bedding, has been traced for 195 metres and varies from 1 to 5.2 metres in width. It contains stringers, bands and lenses of quartz with disseminations, stringers, blebs and massive patches of pyrrotite, chalcocopyrite, pyrite and trace sphalerite. The mineralization becomes more intense where the zone is cut by narrow shears and cross fractures which strike 026 to 031 degrees and dip 45 to 90 degrees northwest. A composite chip sample over a length of 14.0 metres and an average width of 2.7 metres assayed 3.4 grams per tonne gold, 10.3 grams per tonne silver and 0.8 per cent copper (Minister of Mines Annual Report 1937, page B5).

Between 1940 and 1941, 290 tonnes were mined from the precious metal bearing zone with an average grade of 2.36 grams per tonne gold, 12.01 grams per tonne silver and 0.716 per cent copper.

L.E.H. Ventures Ltd. optioned the property in 1999.

BIBLIOGRAPHY

- EMPR AR 1910-61; 1915-73; 1917-85; 1918-76; 1930-104; 1936-B57;
*1937-B4-B7; 1938-B25; 1940-52; 1941-54; 1942-31; 1946-79;
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EMPR ASS RPT 14745, 19445
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EMPR FIELDWORK 1983, pp. 149-163; 1984, pp. 316-341; 1985, pp. 217,
218; 1986, pp. 81-102; 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
EMPR OF 1991-17
EMPR PF (*Mathews, W.H. (1942-43) Geology Reports; Maps of Adits
1942,1946; *White, W.H. (1946) Report)
EMR MP CORPFILE (Stewart Canal Gold Mines Ltd.; Premier Gold Mining
Co. Ltd.; Annual Reports 1936-1938)
GSC MAP 215A; 307A; 315A; 1385A
GSC MEM 175, pp. 111,132
CANMET RPT IR 592, p. 43, 1925; 961, 1941
GCNL #37(Feb.23), 1999

DATE CODED: 1985/07/24
DATE REVISED: 1989/05/23

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 086**

NATIONAL MINERAL INVENTORY:

NAME(S): **RED MOUNTAIN, MARC, BRAD,
HROTHGAR, WRATH, JACK,
MOS2, WOTAN, AV,
S.F., JW**

STATUS: Developed Prospect
REGIONS: British Columbia
NTS MAP: 103P13E
BC MAP:

Underground

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 58 04 N
LONGITUDE: 129 41 47 W
ELEVATION: 1950 Metres

NORTHING: 6202712
EASTING: 456532

LOCATION ACCURACY: Within 500M

COMMENTS: Marc zone, just south of the summit of Red Mountain approximately 18.5 kilometres east of Stewart (Assessment Report 20133).

COMMODITIES: Gold Silver Zinc Lead Copper

MINERALS

SIGNIFICANT: Pyrite Sphalerite Pyrrhotite Arsenopyrite Chalcopyrite
Galena Tetrahedrite Gold Electrum

COMMENTS: Mineralogy not known.

ASSOCIATED: Quartz

ALTERATION: Sericite Pyrite Chlorite Quartz Alunite

ALTERATION TYPE: Jarosite Sericitic

Pyrite

Chloritic

Silicific'n

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated Massive
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb)
DIMENSION: 350 x 100 x 12 Metres
COMMENTS: Marc zone.

Stockwork

Shear

STRIKE/DIP:

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

Jurassic
Middle Jurassic

GROUP

Hazelton

FORMATION

Unuk River

IGNEOUS/METAMORPHIC/OTHER

Unnamed/Unknown Informal

LITHOLOGY: Intrusive Breccia
Andesitic Pyroclastic
Hornblende Plagioclase Porphyry
Argillite
Tuffaceous Sediment/Sedimentary
Dacitic Ash Tuff
Dacitic Lapilli Tuff
Dacitic Crystal Tuff

HOSTROCK COMMENTS: Informally named Goldslide Intrusion.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Boundary Ranges

INVENTORY

ORE ZONE: RED MOUNTAIN

REPORT ON: Y

CATEGORY: Inferred
QUANTITY: 12009300 Tonnes

YEAR: 1998

COMMODITY: Gold GRADE: 2.5400 Grams per tonne

COMMENTS: A higher-grade core totals 700,000 tonnes grading 12 grams per tonne gold.

REFERENCE: Wheaton River Minerals Ltd., Press Release, December 21, 1999.

INVENTORY

ORE ZONE: RED MOUNTAIN

REPORT ON: Y

CATEGORY:	Indicated	YEAR:	1997
QUANTITY:	1921680 Tonnes		
COMMODITY		GRADE	
Silver		38.1000	Grams per tonne
Gold		9.8000	Grams per tonne

COMMENTS: Royal Oak Mines Inc. estimate in 1997. Silver grade is included based on previous figures.

REFERENCE: Information Circular 1998-1, pages 16, 19.

CAPSULE GEOLOGY

The Red Mountain property is situated at the western margin of a broad, north-northwest trending volcano-plutonic belt composed of the Upper Triassic Stuhini Group and the Lower-Middle Jurassic Hazelton Group. This belt has been termed the "Stewart Complex" by Grove (1986) and forms part of the Stikinia Terrane. To the west the Stewart Complex is bordered by the Tertiary-Jurassic Coast Plutonic Complex. Sedimentary rocks of the Jurassic-Lower Cretaceous Bowser Lake Group overlay the complex in the east.

Red Mountain, an extensive gossan located between Bromley Glacier and Cambria Icefield, is underlain by pyroclastic and sedimentary rocks of the Hazelton Group (Unuk River and Salmon River formations) which have been intruded by Middle Jurassic as well as Early Tertiary stocks and dyke swarms. The younger intrusive sequence forms part of the Coast Plutonic Complex.

The portion of the property located east of Bromley Glacier is underlain by Lower Jurassic Unuk Formation clastic sediments, volcanic breccias, crystal and lithic tuffs, limestones and cherts. Rocks of the Lower-Middle Jurassic Salmon River Formation, a sequence of fine to coarse-grained clastic sediments, limestones, rhyolites, and crystal and lithic tuffs, are exposed west of Bromley Glacier.

Stratified rocks occupy the ridges and the southern and northern slopes at Red Mountain and consist of intermediate pyroclastic rocks (finely banded, waterlain ash and dust tuffs, coarse ash tuff, lapilli tuff, volcanic agglomerate and crystal tuff), finely banded, partly carbonaceous argillites and tuffaceous sediments, and cherts. The strata generally strike northwest and dip steeply towards the southwest, but strike and dip can locally be highly variable, which appears to be the result of doming by the hornblende-feldspar porphyry (Goldslide Intrusion) and satellite intrusions.

A hypabyssal, hornblende-plagioclase porphyritic granodiorite to diorite intrusion (Goldslide Intrusion) occupies the cirque as well as the western and eastern slopes of Red Mountain. A wide contact zone occurs between the volcano-sedimentary package and the intrusion. This zone is strongly brecciated and contains argillite and/or pyroclastic rock fragments within an intrusive matrix. Quartz stockwork is locally developed within the border phase of this intrusion. Weak to intense silicification, sericitization and propylitization are associated with these quartz stockwork zones. An extensive zone of pyritization and sericitization surrounds the Goldslide Intrusion and is responsible for the gossanous appearance of Red Mountain. Grove (1986) assumes a Middle Jurassic age for this intrusion and correlates it with the Texas Creek Plutonic Suite (Assessment Report 20971).

A granodioritic to quartz monzonitic intrusion (Erin stock) is exposed at the southern tip of Red Mountain and appears to continue south under Bromley Glacier onto Lost Mountain. The stock and associated aplitic dykes intrude a sequence of thinly bedded argillites, calcareous sediments and intermediate pyroclastics. The sediments have been extensively skarnified and hornfelsed. The stock itself is cut by a number of fine-grained basaltic dykes. An Early Tertiary age has been indicated for this intrusion (Grove, 1986) which may be part of the Alice Arm or Hyder Intrusion stocks.

Several sets of dykes cut the sediments and pyroclastic rocks and comprise potassium feldspar porphyry, microdiorite and lamprophyre.

The rocks of the Unuk River Formation underlying Red Mountain occupy the eastern limb of the north-northwest trending Bromley Syncline, the axis of which passes immediately west of the property. Subsequent deformation is mainly characterized by simple displacement along strike-slip faults and reactivation of older faults. At Red Mountain, there are two main conjugate sets of fault and fracture zones, north-northeast and north-northwest, and east-northeast and east-southeast. All of these structural trends are associated with alteration and sulphide mineralization. Subhorizontal to shallow dipping structures occur in the eastern half of Red Mountain.

Red Mountain is characterized by an extensive gossan, covering

CAPSULE GEOLOGY

about 12 square kilometres, which has attracted exploration activities for porphyry molybdenum-type targets in the 1960's. The molybdenite mineralization is controlled by northerly trending fractures along the northern and southern contacts of the Erin stock (see McAdam Point, 103P 220 and Goldslide Creek, 103P 221).

Several gold showings were discovered in 1989 at Red Mountain, all of which are spatially related to the contact of the Goldslide Intrusion with the surrounding sedimentary and pyroclastic rocks. The mineralization is structurally controlled and occurs in the intrusion as well as in the surrounding pyroclastics and interbedded sediments (Assessment Report 20133).

The Marc zone represents the most significant gold occurrence encountered and is located south of Red Mountain summit. Drilling has defined a well-mineralized zone up to several tens of metres in thickness along a strike length of 350 metres and a downdip extension of 100 metres. The mineralization is exposed at the base of a vertical cliff and extends at surface for about 30 metres along strike with a width varying from 3 to 20 metres.

The Marc zone is a transitional-type gold deposit with some skarn-type affinities and is associated with the contact between the Goldslide Intrusion (hornblende-plagioclase porphyry) and adjacent interbedded sedimentary and andesitic pyroclastic rocks of the Unuk River Formation. The Marc zone mineralization consists of a number of discrete lenses which are closely associated with the brecciated contact (intrusive breccias) between a sequence of interbedded argillites, tuffaceous sediments and intermediate pyroclastic rocks (dacitic ash, lapilli and crystal tuffs) and the hornblende-plagioclase porphyritic intrusion. The morphologies of the mineralized lenses are controlled by these zones of (intrusive) brecciation, strong fracturing, and, to a minor extent, shearing along the intrusive contact.

Hydrothermal alteration consists of strong to pervasive sericitization, moderate to strong pyritization, moderate chloritization, and moderate silicification. Moderate to strong potassic alteration as well as albitization occur locally.

The Marc zone mineralization typically consists of densely disseminated to semimassive pyrite replacement (up to 30 per cent) within a dark grey to black matrix and/or pyrite stringers and veinlets. Varying amounts of pyrrhotite and minor chalcopyrite, arsenopyrite, galena and tetrahedrite are associated with the pyrite. High gold values are usually associated with the semimassive, coarse-grained pyrite aggregates but also occur within a stockwork of pyrite stringers and veinlets. Specks of visible gold were noted only in one instance within a small quartz vein (Assessment Report 20971). Native gold as observed in polished thin sections occurs as sporadically distributed threads, interstitial pockets and partial networks within pyrite as well as moulded on to the periphery of pyrite fragments within the gangue and altered wallrock. Lead, silver, gold, antimony and bismuth tellurides are associated with or contain native gold and electrum. Dark reddish brown sphalerite occurs peripheral to the gold mineralization, with zinc values being commonly inversely correlated with gold values. The most significant drill intersections in the Marc zone was a core interval of 55.5 metres grading 12.08 grams per tonne gold and 53.91 grams per tonne silver (Assessment Report 20971).

Small quartz veinlets carrying up to 5 per cent galena and light yellow, honey-coloured sphalerite crosscut the Marc zone mineralization and represent a younger phase of mineralization.

Numerous post-mineralization faults and fractures with variable orientations transect the Marc zone sequence with offsets less than 40 metres.

A silver-rich sphalerite zone with associated anomalous gold, copper and lead was intersected in holes drilled up to 200 metres vertically above the Marc zone style mineralization. Values obtained range up to 0.58 grams per tonne gold, 69.22 grams per tonne silver, 5.6 per cent zinc, 0.47 per cent lead and 0.06 per cent copper over 9 metres of core length. This sphalerite zone appears to be related to the Marc zone mineralization by zonation (Assessment Report 20971).

A recent drill program tested a new structural interpretation of the Marc zone and its northwest extension, the AV zone. The new preliminary reserve estimate is 2,539,880 tonnes grading 12.68 grams per tonne gold and 38.1 grams per tonne silver. The new resource was calculated using a 3.10 grams per tonne gold cutoff and a minimum thickness of 3 metres. Preliminary metallurgical test work indicates acceptable recoveries (Northern Miner - February 22, 1993).

In 1996, Royal Oak Mines Inc. conducted surface and underground drilling as well as driving a 300-metre underground extension. A new zone of mineralization, the S.F., located at depth to the northwest of the previously known zones is reported. The drilling showed that

CAPSULE GEOLOGY

the JW Zone was truncated to the north by faulting or folding. However, drilling intersected Red Mountain type mineralization closer to the valley floor within the SF Zone 300 feet below and 300 feet due north of the JW Zone. The existing reserve is 2.77 million tonnes assaying 8.98 grams per tonne gold and containing 25 million grams of gold (Royal Oak Mines Inc., Annual Report 1996). They also estimate a resource of 1,921,680 tonnes grading 9.8 grams per tonne gold (Information Circular 1998-1, pages 16, 19).

North American Metals, owned by Wheaton River Minerals Ltd. agreed to buy the property in December 1999. Mineralized material at Red Mountain as published in Royal Oak's 1998 annual report totals 12,009,300 tonnes grading 2.54 grams per tonne gold. A technical evaluation completed by Wheaton River indicates that a higher-grade core of the deposit could be economically extracted, mining about 700,000 tonnes grading 12 grams gold per tonne, and recovering about 7,776,000 grams. A geostatistical evaluation carried out by Wheaton River indicates that no further drilling may be necessary for ore reserve estimation of the higher-grade core. Diamond drilling on the property has totalled 127,000 metres and 2,000 metres of underground workings have been excavated, including a 1,000-metre production-sized decline.

Seabridge Resources acquired Red Mountain in the early part of 2002 (Northern Miner, June 9, 2002).

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- EMPR INF CIRC 1993-13; 1997-1, p. 19; 1998-1, pp. 16, 19
- EMPR MAP *8
- EMPR OF 1992-1; 1992-3; 1994-1; 1998-10
- EMPR P 1991-4, p. 189
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- GCNL *#190, 1989
- N MINER Oct.9, 1989; Feb.18, 1991; Feb.22, 1993; Dec.27, 1999; Feb.21, Mar.13, May 29 (Gold & Precious Metal Insert), July 24, 2000; Jun.9, 2002
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- Falconbridge File
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DATE CODED: 1989/11/28
DATE REVISED: 1991/12/30

CODED BY: DEJ
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 087**

NATIONAL MINERAL INVENTORY: 103P13 Ag17

NAME(S): **GOLD ORE**, EAGLE, BIG BELL

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P13W
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 55 38 N
LONGITUDE: 129 57 26 W
ELEVATION: 975 Metres

NORTHING: 6198394
EASTING: 440189

LOCATION ACCURACY: Within 500M

COMMENTS: Location centered on showing (Minister of Mines Annual Report 1925, page 80).

COMMODITIES: Silver Lead Gold

MINERALS

SIGNIFICANT: Pyrrhotite Galena

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein

CLASSIFICATION: Hydrothermal Epigenetic

TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

COMMENTS: Two parallel veins strike west.

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE

Lower Jurassic

GROUP

Hazelton

FORMATION

Unuk River

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Greenstone

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Stikine

METAMORPHIC TYPE: Regional

COMMENTS: At the western margin of the Stewart Complex (Island Arc Assemblage).

PHYSIOGRAPHIC AREA: Boundary Ranges

RELATIONSHIP:

GRADE: Greenschist

INVENTORY

ORE ZONE: VEIN

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1925

SAMPLE TYPE: Chip

COMMODITY

GRADE

Silver

168.0000

Grams per tonne

Gold

0.3300

Grams per tonne

Lead

1.6100

Per cent

COMMENTS: A 1.37 metre chip sample across south vein.

REFERENCE: Minister of Mines Annual Report 1925, page 83.

CAPSULE GEOLOGY

The Gold Ore showing is located on the west slope of Mount Rainey just north of the Silverado occurrence (103P 088), 2.5 kilometres southeast of Stewart.

The showing consists of two parallel west striking quartz veins, about 120 metres apart, hosted in greenstone of the Lower Jurassic Unuk River Formation. The south vein contains sparse patches and disseminations of pyrrhotite and traces of galena, and the 2.7 metre wide north vein contains sparse pyrrhotite. A sample of pyrrhotite with minor galena from the south vein assayed 0.66 grams per tonne gold and 1354 grams per tonne silver and a 1.37 metre chip sample across the south vein assayed 0.33 grams per tonne gold, 168 grams per tonne silver and 1.61 per cent lead (Minister of Mines Annual Report 1925, page 83).

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EMPR BULL 58; 63

EMPR FIELDWORK 1983, pp. 149-163; 1984, pp. 316-341; 1985, pp. 217,

218; 1986, pp. 81-102; 1988, pp. 233-240; 1990, pp. 235-243

EMPR MAP 8

EMPR PF (White, W.H. (1946) Report)

GSC MAP 215A; 307A; 315A; 1385A

RUN DATE: 26-Jun-2003
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GSC MEM 175, p. 119

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FIELD CHECK: N
FIELD CHECK: N

CAPSULE GEOLOGY

clastic sediments of the Middle Jurassic Salmon River Formation.

Four major subparallel shear zones are developed in northwest striking, gently east dipping andesitic tuff breccias. The tuff breccias are cut by a few northwest striking, steeply west dipping porphyritic granodiorite and lamprophyre dykes. The shear zones, generally striking 130 degrees and dipping between 63 and 76 degrees southwest, vary in width from a few centimetres to 4.6 metres. The zones have been traced vertically for up to 300 metres (number 3 zone), along surface for between 100 metres (number 4 zone) and 490 metres (number 3 zone) and southeastward up to the terminus of the Silverado Glacier. These zones may extend underneath the glacier through Mount Rainey for 2 kilometres southeastward, to the Prosperity and Porter Idaho mine (103P 089). The numbers 1, 2 and 3 shear zones may correlate with the Blind, Prosperity and D veins, respectively, of the mine.

Mineralization occurs as discontinuous quartz lenses, up to 1.8 metres wide and 60 metres long, hosted within shear zones. The lenses contain massive galena, sphalerite, and pyrite with minor chalcopyrite, tetrahedrite, pyrargyrite, argentite and native silver. The wall rocks are variably silicified and weakly pyritized and epidotized. A 0.381 metre chip sample from the number 1 shear zone assayed 0.69 grams per tonne gold, 2866 grams per tonne silver, 8.9 per cent lead, 6.3 per cent zinc, 0.20 per cent copper and 0.09 percent cadmium, a second 0.102 metre chip sample across the same shear zone assayed trace gold, 7870.7 grams per tonne silver, 29.8 per cent lead, 12.8 per cent zinc, 0.47 per cent copper and 0.14 per cent cadmium (Minister of Mines Annual Report 1946, page 78).

Various quartz veins occur in this vicinity. These are gently dipping, up to 2 metres wide and mineralized with abundant tetrahedrite and pyrite. The veins have averaged 4285 grams per tonne silver, samples of pure tetrahedrite have assayed up to 34,000 grams per tonne silver (Minister of Mines Annual Report 1927, page 86).

Tungsten is reported to occur in quartz veins to the west on the lower slopes of Mount Rainey. The veins, 1 to 1.8 metres wide, occur in a shear zone up to 1.8 metres wide. A chip sample across 0.189 metres, assayed 0.22 per cent tungstic oxide (W03) (0.17 per cent tungsten) (Bulletin 10, page 56).

Between 1921 and 1932, 167.8 tonnes of sorted high grade ore were produced. A 12.7 tonne shipment in 1927 averaged 3,400 grams per tonne silver equivalent for silver combined with minor gold and lead values (Minister of Mines Annual Report 1927, page 86).

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EMPR BULL 10, p. 56; *58, pp. 163-165; 63
EMPR ENG INSP (Mine Plans: 60100-60102, 1951; 61513,61514, 1930)
EMPR EXPL 1975-178; 1980-411
EMPR FIELDWORK 1983, pp. 149-163,165-172; 1984, pp. 316-341; 1985, pp. 217,218; 1986, pp. 81-102; 1988, pp. 233-240; 1990, pp. 235-243
EMPR GEM 1969-58; 1970-76
EMPR MAP 8
EMPR OF 1991-17
EMPR PF (Mathews, W.H. (1943) Geology Report; Maps of Surface and Underground Workings, 1946; McDougall, B.W. (1950) Report)
EMR MP CORPFILE (Silverado Mining Co. Ltd.; Silverado Mines Ltd.; Big Four Silver Mines Ltd.; Cassiar Consolidated Mines Ltd.)
GSC MAP 215A; 307A; 315A; 1385A
GSC MEM 159, pp. 58,59; 175, pp. 146,147
GCNL #170, 1980; #37, 1982; #14, 1983; #31, 1985
N MINER Jan.23, 1947; Aug.14, 1975; Jan.17,24, 1985

DATE CODED: 1985/07/24
DATE REVISED: 1989/05/23

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

CAPSULE GEOLOGY

overlain to the east by clastic sediments of the Salmon River Formation (Hazelton Group).

Mineralization is contained within dacitic crystal to welded tuffs with minor andesitic lapilli tuff and dacitic waterlain tuff within a thick sequence of epiclastic conglomerate, andesitic and dacitic ash tuff, lapilli tuff, crystal tuff, welded tuff and tuff breccia.

The Prosperity and Porter Idaho deposit comprises 6 major subparallel shear zones, spaced roughly 150 to 175 metres apart, striking 160 to 180 degrees and dipping 45 to 65 degrees west. These occur in volcanics that strike 020 to 040 degrees, and dip steeply west. The shear zones have been traced on surface for between 200 metres (Prosperity West vein) and 1000 metres (D vein) and down dip for a vertical distance of up to 425 metres (D vein). Widths vary from between 2 and 13 metres. The shear zones terminate to the south against the Big Rig fault which strikes approximately 084 degrees and dips 50 degrees north. In the vicinity of the fault, the shears are dragged westward with reduced dips of 40 degrees. The shear zones show some minor lateral displacement by other west striking faults and are cut by several lamprophyre dykes.

The shear zones contain discontinuous, well-mineralized lenses and shoots up to 13 metres wide, 250 metres long and at least 200 metres down dip. High-grade mineralization occurs as individual sinuous massive sulphide veins usually between 0.2 and 0.6 metres wide and sometimes coalescing into veins up to 2 metres wide. The veins typically follow the footwall and hanging wall of the shear zones within sheared, altered and mineralized wallrock. Mineralization consists of galena, sphalerite, pyrite, tetrahedrite and minor chalcopyrite, pyrrotite, argentite, pyrargyrite, polybasite, native silver, arsenopyrite and trace electrum. Adjacent to the veins, disseminations, blebs and veinlets of quartz, ankeritic carbonate, manganese oxide and similar sulphides occur in variably silicified country rock for up to 5 to 6 metres outward from the veins.

In 1989, underground geological reserves were 826,400 tonnes grading 668.5 grams per tonne silver, 5 per cent lead and 5 per cent zinc (D. Alldrick, PhD Thesis, UBC, 1991).

Between 1922 and 1950, 27,268 tonnes of ore were periodically mined from the underground workings of the Prosperity and Porter Idaho mines. The production came from the D, Prosperity and Blind veins, and averaged 0.986 grams per tonne gold, 2692.1 grams per tonne silver, 5.08 per cent lead, 3,853 per cent zinc and 0.101 per cent copper.

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- EMPR GEM 1969-58; 1970-76
- EMPR MAP 8; 65 (1989)
- EMPR OF 1992-1
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- GSC MAP 215A; 307A; 315A; 1385A
- GSC MEM *159, pp. 59-65; 175, pp. 138-140
- CMH 1988-1989, p. 355
- CMJ Dec. 1985
- GCNL #83,#187, 1975; #8,#65,#77, 1976; #170,#233,#250, 1980; #35, #170,#187,#221,#229, 1981; #37,#49,#131, 1982; #14,#123,#131, #236,#238, 1983; *#63,#245, 1984; #31,#55,*#150,#217, 1985; #153(Aug.10), 1989
- N MINER Aug.14, 1975; Mar.5, Apr.9, Jul.16, Oct.1, Nov.12, Dec.10, 1981; Apr.15, May 20, Dec.15, 1983; Feb.2, Jul.19, Dec.27, 1984; Jan.17,24, Feb.21, Jul.25, Aug.15,29, 1985; Apr.7, Aug.25, 1986
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EMPR OF 1998-10

DATE CODED: 1985/07/24
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REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 090**

NATIONAL MINERAL INVENTORY: 103P13 Ag22

NAME(S): **MELVIN, MAGEE**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 103P13W
BC MAP:

Underground

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 54 42 N
LONGITUDE: 129 55 34 W
ELEVATION: 1646 Metres

NORTHING: 6196636
EASTING: 442110

LOCATION ACCURACY: Within 500M

COMMENTS: Location centered on portal of adit (Assessment Report 8650, Figure 3).

COMMODITIES: Silver Zinc Lead Gold

MINERALS

SIGNIFICANT: Galena Sphalerite Pyrite Chalcopyrite Silver

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Breccia

CLASSIFICATION: Hydrothermal

TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

G07 Subaqueous hot spring Ag-Au

COMMENTS: Shear zone strikes 160 degrees, dips steeply west.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Lower Jurassic	Hazelton	Unuk River	

LITHOLOGY: Plagioclase Porphyritic Andesite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Stikine

PHYSIOGRAPHIC AREA: Boundary Ranges

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

COMMENTS: At the western margin of the Stewart Complex (Island Arc Assemblage).

INVENTORY

ORE ZONE: ADIT

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1928

SAMPLE TYPE: Chip

COMMODITY

GRADE

Silver	72.1500	Grams per tonne
Gold	0.0310	Grams per tonne
Lead	0.1500	Per cent
Zinc	0.4600	Per cent

COMMENTS: A 1.0 metre chip sample.

REFERENCE: Assessment Report 8650, page 10.

CAPSULE GEOLOGY

The Melvin occurrence is located just northeast of the Prosperity and Porter Idaho mines (103P 089), 5 kilometres southeast of Stewart. Prospecting adjacent to the mine in 1928 revealed several narrow shear zones carrying high silver values.

The occurrence consists of a shear zone striking 160 degrees and dipping steeply west, hosted in plagioclase porphyritic andesite of the Lower Jurassic Unuk River Formation. The zone contains blocks of andesite in a white quartz matrix. A 0.1 to 0.66 metre wide sulphide-rich zone along the footwall of the shear zone contains abundant coarsely crystalline galena and sphalerite, some pyrite, chalcopyrite and trace native silver. A 1.0 metre chip sample taken from the adit assayed 0.031 grams per tonne gold, 72.15 grams per tonne silver, 0.15 per cent lead and 0.46 per cent zinc (Assessment Report 8650, page 10).

A second 0.3 metre wide shear zone, in the same vicinity, contains a 0.15 metre wide sulphidic lens. A 0.10 metre chip sample across the lens assayed 24,000 grams per tonne silver (Minister of Mines Annual Report 1928, page 25).

In 1929, four tonnes of ore were mined from the main zone with an average grade of 6642 grams per tonne silver.

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RUN TIME: 12:06:33

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GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

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BIBLIOGRAPHY

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EMPR BULL 58; 63
EMPR FIELDWORK 1983, pp. 149-163; 1984, pp. 316-341; 1985, pp. 217,
218; 1986, pp. 81-102; 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
EMR MP CORPFILE (Melvin Mining Co. Ltd.)
GSC MAP 215A; 307A; 315A; 1385A
GSC MEM 175, p. 131

DATE CODED: 1985/07/24
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CODED BY: GSB
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FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 091**

NATIONAL MINERAL INVENTORY: 103P12 Cu4

NAME(S): **VANGUARD GOLD**, VANGUARD, CAUFIELD BLOCK

STATUS: Showing
 REGIONS: British Columbia
 NTS MAP: 103P12E
 BC MAP:
 LATITUDE: 55 44 26 N
 LONGITUDE: 129 34 23 W
 ELEVATION: 968 Metres
 LOCATION ACCURACY: Within 500M
 COMMENTS: Location centered on sample site D-002 (Assessment Report 16034, Figure 5).

MINING DIVISION: Skeena
 UTM ZONE: 09 (NAD 83)
 NORTHING: 6177353
 EASTING: 464021

COMMODITIES: Gold Silver Copper Zinc Lead

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Galena Sphalerite
 COMMENTS: Within silicified zones in andesite.
 ASSOCIATED: Quartz Carbonate
 ALTERATION: Quartz Pyrite Sericite
 ALTERATION TYPE: Silicific'n Pyrite Sericitic
 MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Breccia Disseminated Massive Vein
 CLASSIFICATION: Hydrothermal Epigenetic
 TYPE: I02 Intrusion-related Au pyrrhotite veins I05 Polymetallic veins Ag-Pb-Zn±Au
 COMMENTS: Silicified zones strike northwest.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Lower Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Plagioclase Hornblende Porphyritic Andesite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Boundary Ranges
 TERRANE: Stikine
 METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist
 COMMENTS: At the western margin of the Stewart Complex (Island Arc Assemblage).

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
 CATEGORY: Assay/analysis YEAR: 1951
 SAMPLE TYPE: Chip

<u>COMMODITY</u>	<u>GRADE</u>	
Silver	48.0000	Grams per tonne
Gold	95.6000	Grams per tonne

 COMMENTS: A 1.93 metre long chip sample.
 REFERENCE: Minister of Mines Annual Report 1951, page 90.

CAPSULE GEOLOGY

The Vanguard Gold showing is located 1 kilometre southwest of Homestake Creek in the upper Kitsault Valley, 29.5 kilometres north-northwest of Alice Arm. High grade gold mineralization was discovered here in about 1928 and has been explored, by trenching and tunnelling, up to 1951.

This showing, as with the Vanguard copper prospect (103P 210) 1.15 kilometres to the southeast, is located at the northern extent of a 10 kilometre long northwest trending body of gossanous plagioclase-hornblende porphyritic andesite of the Lower Jurassic Hazelton Group. The andesite, informally known as the Copper Belt, has been extensively pyritized and variably silicified and sericitized along its length.

A poorly defined west-northwest trending zone of silicification and fracturing in the andesite contains disseminated pyrite, chalcopyrite and traces of galena and sphalerite in a gangue of quartz and carbonate. A 1.93 metre chip sample assayed 95.6 grams per tonne gold and 48.0 grams per tonne silver (Minister of Mines Annual Report 1951, page 90).

A second exposure, 100 metres to the east, contains quartz, pyrite, chalcopyrite, and minor galena over a 1.8 metre width in

CAPSULE GEOLOGY

altered andesite dipping steeply southwest. A 1.93 metre chip sample assayed 2.06 grams per tonne gold, 10.3 grams per tonne silver and 2.1 per cent copper (Minister of Mines Annual Report 1951, page 90).

A third zone, at least 24 metres wide, is exposed a further 60 metres to the east. This zone contains lenses of sphalerite, galena and chalcopyrite. The lenses, up to 2 centimetres thick, occur in quartz veinlets within slightly sheared pyritic andesite.

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EMPR OF 1986-2
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Prospectus, 1987)
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GSC MAP 307A; 1385A
CGNL #166, 1980; #99, 1989

DATE CODED: 1989/05/10
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CODED BY: PSF
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 092**

NATIONAL MINERAL INVENTORY: 103P13 Ag18

NAME(S): **SILVER HILL**, SILVER SLIPPER, COAST SILVER

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P13W
BC MAP:
LATITUDE: 55 53 41 N
LONGITUDE: 129 58 03 W
ELEVATION: 1250 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Location centered on adit (Minister of Mines Annual Report 1925, page 80).

MINING DIVISION: Skeena
UTM ZONE: 09 (NAD 83)
NORTHING: 6194786
EASTING: 439496

COMMODITIES: Gold Silver Copper Zinc Lead

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Magnetite Sphalerite Galena
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I02 Intrusion-related Au pyrrhotite veins
DIMENSION:
COMMENTS: Attitude of quartz-sulphide vein.
STRIKE/DIP: 105 Polymetallic veins Ag-Pb-Zn±Au
087/85S TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic Eocene	Hazleton	Unuk River	Coast Plutonic Complex

ISOTOPIC AGE: 47-51 +/- 2-3 Ma
DATING METHOD: Potassium/Argon

LITHOLOGY: Greenstone
Granodiorite

HOSTROCK COMMENTS: Isotopic age from Alldrick, D., Open File 1986-2.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine
METAMORPHIC TYPE: Regional
COMMENTS: Situated at the contact between the Stewart Complex & the Hyder Pluton
PHYSIOGRAPHIC AREA: Boundary Ranges
RELATIONSHIP: Plutonic Rocks
GRADE: Greenschist

INVENTORY

ORE ZONE: VEIN REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1925
SAMPLE TYPE: Chip
COMMODITY GRADE
Silver 1080.0000 Grams per tonne
Gold 58.9000 Grams per tonne
COMMENTS: A 0.152 metre chip sample from quartz-sulphide vein.
REFERENCE: Property File (McDougall, B.W. 1925).

CAPSULE GEOLOGY

The Silver Hill occurrence is located on the west slope of Mount Rainey, 5 kilometres southeast of Stewart. Various showings were investigated in this area in the 1920's.

The occurrence consists of a number of quartz veins varying from a few centimetres to 6 metres in width hosted in granodiorite of the Hyder Pluton to the west and greenstone of the Lower Jurassic Unuk River Formation to the east.

One vein occurs in a 0.3 metre wide shear zone, along its foot-wall, and is mineralized with magnetite, chalcopyrite and pyrite. The vein varies from 1.5 to 6 metres in width, strikes 130 degrees and dips 79 degrees southeast. A 0.3 metre chip sample across the shear assayed 3.1 grams per tonne gold, 103 grams per tonne silver and 0.5 per cent copper (Property File - McDougall, 1925).

A 0.15 to 0.20 metre wide quartz sulphide vein occurs to the north. It strikes 087 degrees for at least 30 metres and dips 85 degrees south. A 0.152 metre chip sample assayed 58.9 grams per tonne gold and 1080 grams per tonne silver (Property File -

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

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GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1086
REPORT: RGEN0100

CAPSULE GEOLOGY

McDougall, 1925).

Various other quartz veins containing pyrite, sphalerite and galena assayed up to 14.60 grams per tonne gold and 240 grams per tonne silver (Minister of Mines Annual Report 1925, page 80).

BIBLIOGRAPHY

EMPR AR *1925-80; 1928-96
EMPR BULL 58; 63
EMPR FIELDWORK 1983, pp. 149-163; 1984, pp. 316-341; 1985, pp. 217, 218; 1986, pp. 81-102; 1988, pp. 233-240; 1990, pp. 235-243
EMPR PF (*McDougall, B.W. (1925) Report)
EMR MP CORPFILE (Silver Slipper Mining Co. Ltd.)
GSC MAP 215A; 307A; 315A; 1385A
GSC MEM 175, p. 110

DATE CODED: 1985/07/24
DATE REVISED: 1989/05/14

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 093**

NATIONAL MINERAL INVENTORY: 103P12,13 Cu2

NAME(S): **FOX - GOLD REEF**, FOX, GOLD REEF,
CAMBRIA

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P12E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 44 46 N
LONGITUDE: 129 35 06 W
ELEVATION: 1200 Metres

NORTHING: 6177978
EASTING: 463276

LOCATION ACCURACY: Within 500M

COMMENTS: Location centered on trench Number 1 (Assessment Report 16034,
Figure 5).

COMMODITIES: Gold Silver Copper Lead Zinc

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Galena Sphalerite Electrum

Tetrahedrite

ASSOCIATED: Quartz Calcite Barite

ALTERATION: Quartz Sericite

ALTERATION TYPE: Silicific'n Sericitic

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein

CLASSIFICATION: Hydrothermal Epigenetic

TYPE: I02 Intrusion-related Au pyrrhotite veins

105 Polymetallic veins Ag-Pb-Zn±Au

DIMENSION:

STRIKE/DIP: 080/68N

TREND/PLUNGE:

COMMENTS: Attitude of vein in Number 1 trench.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Plagioclase Hornblende Porphyritic Andesite
Argillite
Siltstone

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

PHYSIOGRAPHIC AREA: Boundary Ranges

TERRANE: Stikine

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

COMMENTS: At the western margin of the Stewart Complex (Island Arc Assemblage).

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1988

SAMPLE TYPE: Channel

COMMODITY

GRADE

Silver 10.0000 Grams per tonne

Gold 21.5000 Grams per tonne

COMMENTS: A 1.0 metre sample across vein and wallrock.

REFERENCE: Property File (Prospectus: Cambria Resources, 1988, page 14).

CAPSULE GEOLOGY

The Fox-Gold Reef occurrence is located 1.5 kilometres southwest of Homestake Creek, 30.5 kilometres north-northwest of Alice Arm.

The occurrence is hosted in a hydrothermally altered unit of plagioclase-hornblende porphyritic andesite and minor interbedded black siltstone/argillite, informally called the Copper Belt, of the Lower Jurassic Hazelton Group.

The occurrence is comprised of several veins exposed in two trenches. The number 1 trench exposes a 0.35 metre wide vein striking 080 degrees and dipping 68 degrees north. The vein contains pyrite, minor chalcopyrite and trace galena, sphalerite and electrum in a gangue of quartz and pods of calcite. The vein is hosted in a silicified and sericitized porphyritic andesite. A 1 metre channel sample from the trench taken across a section of vein and wallrock assayed 21.5 grams per tonne gold and 10 grams per tonne silver (Property File - Cambria Resources Prospectus, page 14).

The number 2 trench, 230 metres to the southeast, exposes a 0.30

CAPSULE GEOLOGY

metre wide vein striking 115 degrees and dipping 32 degrees south in relatively unaltered porphyritic andesite. The vein is mineralized with pyrite, chalcopyrite, galena and sphalerite in a gangue of quartz, calcite and minor barite. A 1.50 metre channel sample across the vein and wall rock assayed 2.33 grams per tonne gold and 1.8 grams per tonne silver (Property File - Cambria Resources Prospectus, page 14).

An adit 100 metres north of the number 1 trench has exposed a quartz vein containing minor galena, pyrite and trace tetrahedrite.

BIBLIOGRAPHY

EMPR AR 1918-65; 1920-50; 1922-58; 1923-57; 1925-75,76; 1927-78;
1934-B15
EMPR ASS RPT 16034, 18657
EMPR EXPL 1987-C364
EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp.
235-243
EMPR MAP 8
EMPR OF 1986-2
EMPR PF (*Cambria Resources Ltd. Prospectus, 1987; Cambria
Resources, V.S.E. Filing Statement, 1988)
EMR MP CORPFILE (Kitsault River Mining & Development Co. Ltd.)
GSC MAP 307A; 315A; 1385A
GSC MEM 175, p. 65

DATE CODED: 1989/05/11
DATE REVISED: 1989/05/11

CODED BY: PSF
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 094**

NATIONAL MINERAL INVENTORY: 103P13 Cu5

NAME(S): **RED REEF**, PRINCEMONT

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P13W
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 55 29 N
LONGITUDE: 129 58 17 W

NORTHING: 6198128
EASTING: 439300

ELEVATION: 381 Metres
LOCATION ACCURACY: Within 500M

COMMENTS: Location centered on portal of adit (Minister of Mines Bulletin 58, Figure 3, Sheet A).

COMMODITIES: Copper Gold Silver

MINERALS

SIGNIFICANT: Pyrrhotite Pyrite Chalcopyrite Galena Sphalerite

Bornite

COMMENTS: Sulphides as massive patches, lenses, stringers, blebs and disseminations.

ASSOCIATED: Quartz Garnet Epidote Diopside Biotite

ALTERATION: Quartz Garnet Epidote Diopside Biotite

ALTERATION TYPE: Skarn

MINERALIZATION AGE: Eocene

ISOTOPIC AGE: 47-51 (+/- 2-3) Ma DATING METHOD: Potassium/Argon MATERIAL DATED: Biotite

DEPOSIT

CHARACTER: Stratiform Massive Disseminated Vein

CLASSIFICATION: Skarn Hydrothermal Epigenetic

TYPE: K01 Cu skarn

DIMENSION: STRIKE/DIP: 123/74S

TREND/PLUNGE:

COMMENTS: Bedded rocks containing skarn zones strike between 116 and 130 degrees and dip 70 to 78 degrees south.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic	Hazelton	Unuk River	
Eocene			Hyder Pluton

LITHOLOGY: Argillite
Tuff
Limestone
Granodiorite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

PHYSIOGRAPHIC AREA: Boundary Ranges

TERRANE: Stikine

METAMORPHIC TYPE: Contact

RELATIONSHIP: Syn-mineralization

GRADE:

COMMENTS: At the western margin of the Stewart Complex (Island Arc Assemblage).

INVENTORY

ORE ZONE: ADIT

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1974

SAMPLE TYPE: Chip

COMMODITY

GRADE

Copper

3.0000

Per cent

COMMENTS: Highest assay from chip samples taken from adit.

REFERENCE: Property File (S.V. Ramani, 1974, page 5).

CAPSULE GEOLOGY

The Red Reef showing is located on the northwest slope of Mount Rainey, 2 kilometres southeast of Stewart. Various showings have been investigated in this area since 1910.

The occurrence is hosted in argillite and tuff with minor intercalated recrystallized limestone of the Lower Jurassic Unuk River Formation adjacent to Eocene granodiorite of the Hyder Pluton. The bedded units strike 116 to 130 degrees, dip 70 to 78 degrees southwest and are locally folded and cut by granitic pegmatite and lamprophyre dykes.

The showing consists of siliceous skarn zones up to 3 metres wide, developed parallel to the bedding of the enclosing rocks. The zones contain massive patches, blebs, disseminations and stringers of

CAPSULE GEOLOGY

pyrrhotite, pyrite, minor chalcopyrite and bornite in a gangue of quartz, garnet, epidote, diopside and biotite. These zones are often cut by northwest and northeast striking lenses, veins and stringers of quartz and massive pyrrhotite, pyrite, galena and sphalerite with disseminated chalcopyrite. Chip sampling in an adit resulted in copper assays of between 0.62 and 3 per cent (Property File - Ramani, S.V. 1974, page 5). Chip sampling along a skarn zone over a length of 15 metres and a width of 2.4 metres assayed trace gold and silver (Property File - Mandy, J.T. 1937, page 6).

BIBLIOGRAPHY

EMPR AR 1910-62; 1911-287; 1912-106,107; 1913-89; 1928-97; 1938-B25;
1966-41
EMPR ASS RPT 14341
EMPR BULL 58; 63
EMPR FIELDWORK 1983, pp. 149-163; 1984, pp. 316-341; 1985, pp. 217,
218; 1986, pp. 81-102; 1988, pp. 233-240; 1990, pp. 235-243
EMPR GEM 1973-490
EMPR MAP 8
EMPR PF (*Mandy, J.T. (1937) Reports; *Ramani, S.W., (1974) Report;
Secretariat Resources Incorporated, Prospectus 1975)
EMR MP CORPFILE (Princemont Explorations Ltd.)
GSC MAP 215A; 307A; 315A; 1385A
GSC MEM 175, p. 140
GCNL #73, 1975

DATE CODED: 1985/07/24
DATE REVISED: 1989/05/22

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 095**

NATIONAL MINERAL INVENTORY: 103P13 Ag19

NAME(S): **SILVER BELL-STEWART**, SILVER BELL

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P13W
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 54 36 N
LONGITUDE: 129 57 16 W
ELEVATION: 1372 Metres

NORTHING: 6196474
EASTING: 440336

LOCATION ACCURACY: Within 500M

COMMENTS: Location centered on claims (Minister of Mines Annual Report 1925, page 80).

COMMODITIES: Silver Lead Zinc

MINERALS

SIGNIFICANT: Galena Sphalerite Pyrite

COMMENTS: Stringers and lenses.

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Massive
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic	Hazelton	Unuk River	

LITHOLOGY: Greenstone

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

PHYSIOGRAPHIC AREA: Boundary Ranges

TERRANE: Stikine

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

COMMENTS: At the western margin of the Stewart Complex (Island Arc Assemblage).

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1925

SAMPLE TYPE: Grab

COMMODITY

GRADE

Silver

141.0000

Grams per tonne

REFERENCE: Minister of Mines Annual Report 1925, page 80.

CAPSULE GEOLOGY

The Silver Bell-Stewart occurrence is located on the west slope of Mount Rainey, 4 kilometres southeast of Stewart.

The showing consists of a series of shear zones, up to 1.2 metres wide, in greenstone of the Lower Jurassic Unuk River Formation. The shear zones contain stringers and lenses of galena, sphalerite and pyrite. A grab sample assayed 141 grams per tonne silver (Minister of Mines Annual Report 1925, page 80).

BIBLIOGRAPHY

EMPR AR *1925-80; 1928-96; 1929-94,95

EMPR BULL 58; 63

EMPR FIELDWORK 1983, pp. 149-163; 1984, pp. 316-341; 1985, pp. 217, 218; 1986, pp. 81-102; 1988, pp. 233-240; 1990, pp. 235-243

EMPR MAP 8

EMR MP CORPFILE (Silver Bell Mining Co. Ltd.)

GSC MAP 215A; 307A; 315A; 1385A

GSC MEM 175, p. 145

DATE CODED: 1985/07/24
DATE REVISED: 1989/05/14

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 096**

NATIONAL MINERAL INVENTORY: 103P13 Au2

NAME(S): **WIRE GOLD**, RAINBOW, GOLD KNIFE,
GOLD DROP-GOLD BOULDER, HEAT, LRJ

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P13W
BC MAP:
LATITUDE: 55 52 22 N
LONGITUDE: 129 58 18 W
ELEVATION: 305 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Location centered on the portal of the northernmost tunnel
(Assessment Report 28, Map 1).

MINING DIVISION: Skeena
UTM ZONE: 09 (NAD 83)
NORTHING: 6192347
EASTING: 439201

COMMODITIES: Gold Silver Lead

MINERALS

SIGNIFICANT: Pyrite Galena Arsenopyrite Gold
COMMENTS: Massive sulphides in vein.
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Massive
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I02 Intrusion-related Au pyrrhotite veins
DIMENSION: 1370 x 2 Metres STRIKE/DIP: 059/67N TREND/PLUNGE:
COMMENTS: Vein strikes 054 to 065 degrees, dips 65 to 70 degrees northwest.

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Eocene			Coast Plutonic Complex

ISOTOPIC AGE: 47-51 +/- 2-3 Ma
DATING METHOD: Potassium/Argon
MATERIAL DATED: Biotite, hornblende

LITHOLOGY: Granodiorite

HOSTROCK COMMENTS: Isotopic age from Alldrick, D., Open File 1986-2.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline PHYSIOGRAPHIC AREA: Boundary Ranges
TERRANE: Plutonic Rocks
COMMENTS: Situated in the Hyder Pluton, within the Coast Plutonic Complex.

INVENTORY

ORE ZONE:	SAMPLE	REPORT ON:	N
CATEGORY:	Assay/analysis	YEAR:	1988
SAMPLE TYPE:	Grab		
COMMODITY		GRADE	
Silver		9.9000	Grams per tonne
Gold		15.3000	Grams per tonne
COMMENTS:	Highest assay values.		
REFERENCE:	Assessment Report 13402, page 14.		

CAPSULE GEOLOGY

The Wire Gold showing is located 3 kilometres east of the Portland Canal, 7.5 kilometres south-southeast of Stewart. The Wire Gold showing is one of 3 showings comprising the Rainbow property, the other two are the Fraser (103P 097) and the North Fork (103P 098) showings.

The showing consists of a 0.3 to 2.0 metre wide quartz vein, striking 054 to 065 degrees and dipping 65 to 70 degrees northwest. The vein is hosted in granodiorite of the Eocene Hyder Pluton of the Coast Plutonic Complex and extends along surface for approximately 1370 metres. Mineralization consists of massive pyrite with minor galena, arsenopyrite and visible gold.

Grab samples of the vein have assayed up to 15.3 grams per tonne gold and 9.9 grams per tonne silver (Assessment Report 13402, page 14).

BIBLIOGRAPHY

EMPR AR *1912-105; *1924-59; 1925-81; 1926-87; 1928-93

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1093
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR ASS RPT 1028, *13402, 17627, 20042, 22270
EMPR BULL 58; 63
EMPR FIELDWORK 1983, pp. 149-163; 1984, pp. 316-341; 1985, pp. 217,
218; 1986, pp. 81-102; 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
EMR MP CORPFILE (Sterling Silver-Lead Mines Ltd.; Marmot Consolidated
Mines Ltd.)
GSC MAP 215A; 307A; 315A; 1385A
GSC MEM 175, pp. 128,151
GSC OF 2996
GCNL #150, 1985; #168, 1991

DATE CODED: 1985/07/24
DATE REVISED: 1999/06/17

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 097**

NATIONAL MINERAL INVENTORY: 103P13 Ag24

NAME(S): **FRASER, HEAT, CRAWFORD,
DWYRE, RAINBOW**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P13W
BC MAP:

MINING DIVISION: Skeena
UTM ZONE: 09 (NAD 83)

LATITUDE: 55 53 00 N
LONGITUDE: 129 55 50 W
ELEVATION: 1160 Metres

NORTHING: 6193486
EASTING: 441790

LOCATION ACCURACY: Within 500M

COMMENTS: Location centered on portal of upper tunnel (Assessment Report 8969, Figure 3).

COMMODITIES: Gold Silver Zinc Copper Lead

MINERALS

SIGNIFICANT: Pyrite Pyrrhotite Galena Sphalerite Tetrahedrite
COMMENTS: Sulphides as massive veins.
ASSOCIATED: Quartz
ALTERATION: Quartz Pyrite
ALTERATION TYPE: Silicific'n Pyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Massive
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
SHAPE: Tabular
COMMENTS: Shear zones strike 90 to 120 degrees, dip steeply.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic Hazelton Unuk River

LITHOLOGY: Sandstone
Slate
Argillite
Volcanic Conglomerate
Tuff
Limestone
Andesitic Flow

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Boundary Ranges
TERRANE: Stikine
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist
COMMENTS: At the western margin of the Stewart Complex (Island Arc Assemblage).

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1919
SAMPLE TYPE: Chip
COMMODITY GRADE
Silver 41.0000 Grams per tonne
Gold 1.4000 Grams per tonne
Copper 0.1300 Per cent
Lead 0.4400 Per cent
Zinc 3.3600 Per cent
COMMENTS: A 2.0 metre chip sample below portal of lower adit.
REFERENCE: Assessment Report 8969, Figure 4.

CAPSULE GEOLOGY

The Fraser showing is located on the south side of Kate Ryan Creek, 7 kilometres southeast of Stewart. Various gossanous zones have been explored in the area for base and precious metals since 1919. The Fraser showing is one of 3 showings on the Rainbow property, the other 2 are the Wire Gold (103P 096) and the North Fork (103P 098) showings.
The showing is comprised of a number of tabular, pyritic and siliceous zones up to 20 metres long and a few metres wide. These are developed along shear zones that parallel a steeply dipping

CAPSULE GEOLOGY

cleavage trending 090 to 120 degrees. The shear zones occur in a folded sequence of tuffs, sandstone, slate, and argillite with minor volcanic conglomerate, limestone and andesitic flows of the Lower Jurassic Unuk River Formation. These are intruded by northwest trending dykes 1 to 2 metres wide. Some of the pyritic zones are cored by 1 to 10 centimetre wide veins of massive pyrite and pyrrhotite and minor galena, sphalerite and trace tetrahedrite. A 2-metre chip sample 6 metres below the portal of the lower adit assayed 0.13 per cent copper, 0.44 per cent lead, 3.36 per cent zinc, 41 grams per tonne silver and 1.4 grams per tonne gold (Assessment Report 8969, Figure 4).

BIBLIOGRAPHY

EMPR AR 1919-63; 1921-62; 1923-70; 1925-81; 1926-87; 1928-93
EMPR ASS RPT *8969, 17627, 20042
EMPR BULL 58; 63
EMPR FIELDWORK 1983, pp. 149-163; 1984, pp. 316-341; 1985, pp. 217, 218; 1986, pp. 81-102; 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
EMR MP CORPFILE (Sterling Silver-Lead Mines Ltd.; Marmot Consolidated Mines Ltd.; Marmot Lead & Zinc Mines Ltd.)
GSC MAP 215A; 307A; 315A; 1385A
GSC MEM 175, pp. 115,128,129
GCNL #168, 1991
WWW <http://www.infomine.com/>

DATE CODED: 1985/07/24
DATE REVISED: 1989/05/14

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 098**

NATIONAL MINERAL INVENTORY: 103P13 Ag24

NAME(S): **NORTH FORK**, NORTH FORK BASIN, FRASER,
HEAT, RAINBOW, STERLING SILVER

STATUS: Developed Prospect

Underground

MINING DIVISION: Skeena

REGIONS: British Columbia

NTS MAP: 103P13W

UTM ZONE: 09 (NAD 83)

BC MAP:

LATITUDE: 55 52 53 N

LONGITUDE: 129 55 09 W

ELEVATION: 1311 Metres

NORTHING: 6193260

EASTING: 442499

LOCATION ACCURACY: Within 500M

COMMENTS: Location centered on portal of the upper Sterling Silver adit
(Geological Survey of Canada Map 215A).

COMMODITIES: Silver

Lead

Zinc

MINERALS

SIGNIFICANT: Pyrite Galena Sphalerite Tetrahedrite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein

CLASSIFICATION: Hydrothermal

Epigenetic

TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

DIMENSION:

STRIKE/DIP: 360/45W

TREND/PLUNGE:

COMMENTS: Attitude of 1.0 metre wide vein in shear zone.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Lower Jurassic

Hazelton

Unuk River

LITHOLOGY: Argillite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

PHYSIOGRAPHIC AREA: Boundary Ranges

TERRANE: Stikine

COMMENTS: At the western margin of the Stewart Complex (Island Arc Assemblage).

CAPSULE GEOLOGY

The North Fork occurrence is located on the south side of Kate Ryan Creek, 8 kilometres southeast of Stewart. Several small shipments of high grade ore were made from this location between 1919 and 1924.

The occurrence is comprised of two veins which are developed in north to northwest striking, steeply west dipping argillite of the Lower Jurassic Unuk River Formation.

The first vein, situated in a shear zone, is 1 metre wide, strikes north and dips 45 degrees west. The second vein is 0.3 metres wide, strikes west, dips 60 degrees north and is offset by a fault. Mineralization consists of pyrite, galena, sphalerite and tetrahedrite in a gangue of quartz.

Two shipments of sorted ore from the first vein totalling 9 tonnes averaged 3872 grams per tonne silver, 14.4 per cent lead and 4.4 per cent zinc (Minister of Mines Annual Report 1919, pages 63, 64 and 1924, page 59).

BIBLIOGRAPHY

EMPR AR 1916-85; *1919-63,64; 1921-62; 1922-68; 1923-70; *1924-59

EMPR ASS RPT 8969, 17627, 20042

EMPR BULL 58; 63

EMPR FIELDWORK 1983, pp. 149-163; 1984, pp. 316-341; 1985, pp. 217, 218; 1986, pp. 81-102; 1988, pp. 233-240; 1990, pp. 235-243

EMPR MAP 8

EMR MP CORPFILE (Sterling Silver-Lead Mines Ltd.; Marmot Consolidated Mines Ltd.)

GSC MAP 215A; 307A; 315A; 1385A

GSC MEM *159, p. 66; 175, p. 133

GCNL #168, 1991

DATE CODED: 1985/07/24
DATE REVISED: 1989/05/14

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 099**

NATIONAL MINERAL INVENTORY: 103P13 Cu6

NAME(S): **DOMINION, STAR**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P13W
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 53 35 N
LONGITUDE: 129 54 03 W
ELEVATION: 1143 Metres

NORTHING: 6194544
EASTING: 443663

LOCATION ACCURACY: Within 500M

COMMENTS: Location centered on portal of adit (Geological Survey of Canada Map 215A).

COMMODITIES: Copper Lead Zinc

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Sphalerite Galena

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein

CLASSIFICATION: Hydrothermal Epigenetic

TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic	Hazelton	Unuk River	

LITHOLOGY: Schistose Tuff
Schistose Flow

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Stikine

PHYSIOGRAPHIC AREA: Boundary Ranges

COMMENTS: At the western margin of the Stewart Complex (Island Arc Assemblage).

CAPSULE GEOLOGY

The Dominion showing is located 7.5 kilometres southeast of Stewart, above the Kate Ryan Glacier. An adit, driven between 1927 and 1929, attempted to intersect veins that outcrop in the cliffs above it.

The showing consists of a few lenticular quartz veinlets containing pyrite, chalcopyrite, sphalerite and galena. These are hosted in north west striking, moderately northeast dipping, schistose tuffs and flows of the Lower Jurassic Unuk River Formation.

BIBLIOGRAPHY

EMPR AR 1925-82; 1927-84; 1934-B24
EMPR ASS RPT 17627
EMPR BULL 58; 63
EMPR FIELDWORK 1983, pp. 149-163; 1984, pp. 316-341; 1985, pp. 217, 218; 1986, pp. 81-102; 1988, pp. 233-240; 1990, pp. 235-243
EMPR GEM 1972-509
EMPR MAP 8
GSC MAP 215A; 307A; 315A; 1385A
GSC MEM *159, p. 65; 175, p. 112

DATE CODED: 1985/07/24
DATE REVISED: 1989/05/14

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 100**

NATIONAL MINERAL INVENTORY: 103P13 Au1

NAME(S): **GOLD DROP, BI-METALLIC, STIMULATOR,
GOLD BOULDER, MYSTERY, PAN HANDLE,
MIDAS, GOLD PAN, GOLD WEDGE,
LRJ**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 103P13W
BC MAP:

Underground

MINING DIVISION: Skeena

LATITUDE: 55 51 56 N
LONGITUDE: 129 58 31 W
ELEVATION: 411 Metres

UTM ZONE: 09 (NAD 83)

NORTHING: 6191546
EASTING: 438964

LOCATION ACCURACY: Within 500M

COMMENTS: Location centered on the vein exposure in the Gold Drop tunnel
(Assessment Report 28, Map 1).

COMMODITIES: Gold Silver Lead Copper Zinc

MINERALS

SIGNIFICANT: Pyrite Pyrrhotite Galena Sphalerite Chalcopyrite

ASSOCIATED: Gold Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Breccia
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

DIMENSION: STRIKE/DIP: 090/55W

COMMENTS: Mystery vein strikes 010 to 170 degrees and dips 35 to 75 degrees
west. TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Eocene Coast Plutonic Complex

ISOTOPIC AGE: 47-51 +/- 2-3 Ma

DATING METHOD: Potassium/Argon

MATERIAL DATED: Biotite, hornblende

LITHOLOGY: Orthoclase Porphyritic Granodiorite

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline

TERRANE: Plutonic Rocks

PHYSIOGRAPHIC AREA: Boundary Ranges

COMMENTS: Situated in the Hyder Pluton within the Coast Plutonic Complex.

INVENTORY

ORE ZONE: STOCKPILE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1946

SAMPLE TYPE: Bulk Sample

COMMODITY

GRADE

Silver	147.0000	Grams per tonne
Gold	80.2000	Grams per tonne
Copper	0.2000	Per cent
Lead	2.0000	Per cent
Zinc	0.2000	Per cent

COMMENTS: A 4.414 tonne bulk sample of sorted ore from Midas vein.

REFERENCE: Minister of Mines Annual Report 1946, page 84.

CAPSULE GEOLOGY

The Gold Drop occurrence is located on the south side of the Marmot River, 3.5 kilometres east of the Portland Canal and 8 kilometres south-southeast of Stewart.

A number of quartz veins and lenses, hosted in shear zones occur in orthoclase porphyritic granodiorite of the Eocene Hyder Pluton in the Coast Plutonic Complex. The shear zones and granodiorite are intruded by a few northeast and northwest striking, steeply dipping lamprophyre dykes. Two sets of veins generally strike 000 to 023 degrees and 050 to 070 degrees. Individual, well-defined veins vary up to 1.2 metres in width, and shear zones with poorly defined silicified walls containing numerous quartz veins and lenses are up to 6 metres in width. Mineralization generally consists of pyrite,

CAPSULE GEOLOGY

pyrrhotite, galena, sphalerite, chalcopyrite and free gold in a gangue of brecciated quartz.

Several of the more important veins contain significant precious metal values. The Midas (Gold Pan) vein is up to 0.76 metres wide, strikes 008 to 050 degrees for at least 100 metres and dips 30 degrees west to 76 degrees east. A 4.414 tonne sample of sorted ore assayed 80.2 grams per tonne gold, 147 grams per tonne silver, 0.2 per cent copper, 2.0 per cent lead and 0.2 per cent zinc (Minister of Mines Annual Report 1946, page 84).

The Mystery (Pan Handle) vein strikes northward 010 to 170 degrees for 137 metres and dips 35 to 75 degrees west. The vein varies from a single solid quartz vein to a shear zone, up to 1.5 metres wide, of crushed quartz lenses and brecciated granodiorite. A 0.15 metre channel sample assayed 8.26 grams per tonne gold and 276 grams per tonne silver (Minister of Mines Annual Report 1929, page 93).

Production in 1936 totalled 1 tonne of ore with an average grade of 187 grams per tonne gold, 218 grams per tonne silver, 0.3 per cent copper and 0.5 per cent lead.

BIBLIOGRAPHY

EMPR AR 1928-96; *1929-93,94; 1930-104; 1933-53; 1938-B25;
1939-56-58,66; 1940-41,43,52; 1945-62; *1946-82-85; 1950-78,79
EMPR ASS RPT *28, 9311, 13402, 16905
EMPR BC METAL MM00716
EMPR BULL 58; 63
EMPR FIELDWORK 1983, pp. 149-163; 1984, pp. 316-341; 1985, pp. 217,
218; 1986, pp. 81-102; 1988, pp. 233-240; 1990, pp. 235-243
EMPR INDEX 3-197
EMPR MAP 8
EMPR PF (Doyle, M.L. (1946) Letter)
EMR MP CORPFILE (Gold Drop Mines Ltd.)
GSC MAP 215A; 307A; 315A; 1385A
GSC MEM 175, p. 108
GSC OF 2996
GCNL #150, 1985
W MINER Nov., 1948
WWW <http://www.infomine.com/>

DATE CODED: 1985/07/24
DATE REVISED: 1989/05/13

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 101**

NATIONAL MINERAL INVENTORY: 103P13 Au3

NAME(S): **PATRICIA, PAT**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P13W
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 51 39 N
LONGITUDE: 129 55 42 W
ELEVATION: 823 Metres

NORTHING: 6190981
EASTING: 441895

LOCATION ACCURACY: Within 500M

COMMENTS: Location centered on the lowest of two trenches on Patricia Creek (Assessment Report 13177, Figure 4).

COMMODITIES: Gold Zinc Lead Copper

MINERALS

SIGNIFICANT: Sphalerite Galena Pyrite Chalcopyrite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein

CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

102 Intrusion-related Au pyrrhotite veins
STRIKE/DIP: 013/90 TREND/PLUNGE:

DIMENSION:
COMMENTS: Attitude of quartz vein in granodiorite.

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic	Hazelton	Unuk River	
Middle Jurassic	Hazelton	Salmon River	
Eocene			Coast Plutonic Complex

ISOTOPIC AGE: 47-51 +/- 2-3 Ma

DATING METHOD: Potassium/Argon

MATERIAL DATED: Biotite/hornblende

LITHOLOGY: Granodiorite
Argillite
Andesitic Tuff
Greenstone

HOSTROCK COMMENTS: Granodiorite of the Hyder Pluton. Isotopic age from Alldrick, D., Open File 1986-2.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline

PHYSIOGRAPHIC AREA: Boundary Ranges

TERRANE: Plutonic Rocks

Stikine

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

COMMENTS: Along contact between the Stewart Complex & the Coast Plutonic Complex

INVENTORY

ORE ZONE: VEIN

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1921

SAMPLE TYPE: Grab

COMMODITY

GRADE

Gold

133.0000

Grams per tonne

COMMENTS: Highest assay from sample of quartz vein containing galena and pyrite in granodiorite.

REFERENCE: Minister of Mines Annual Report 1921, page 61.

CAPSULE GEOLOGY

The Patricia occurrence is located just north of the Marmot River, 6.5 kilometres east of the Portland Canal and 9.5 kilometres southeast of Stewart. The occurrence consists of several showings developed in granodiorite of the Eocene Hyder Pluton (Coast Plutonic Complex) and argillite and tuff of the Salmon River and Unuk River formations (Hazelton Group).

A quartz vein, up to 0.3 metres wide in the granodiorite, has been followed by a tunnel for 34 metres. The vein, which pinches out 23 metres from the portal, strikes 013 degrees and dips vertically. It is mineralized with sphalerite, galena and pyrite for up to 9.0 metres from the portal. Samples of quartz containing galena and pyrite assayed up to 133 grams per tonne gold (Minister of Mines

CAPSULE GEOLOGY

Annual Report 1921, page 61).

A 9.0 metre wide granodiorite dyke intrudes argillite of the Salmon River Formation and andesitic tuff (greenstone) of the Unuk River Formation to the north. The dyke, locally parallel to the main granodiorite contact, strikes 093 degrees and dips 61 degrees north. Quartz veinlets containing pyrite with minor chalcopyrite and galena are developed in the argillite and tuff along the flanks of the dyke. Samples from these veinlets have assayed up to 6.63 grams per tonne gold equivalent (Minister of Mines Annual Report 1922, page 67).

BIBLIOGRAPHY

EMPR AR *1921-60,61; *1922-66,67; 1923-69; 1925-82; 1928-92,93,434
EMPR ASS RPT 13177, 23105
EMPR BULL 58; 63
EMPR EXPL 1984-381
EMPR FIELDWORK 1983, pp. 149-163; 1984, pp. 316-341; 1985, pp. 217, 218; 1986, pp. 81-102; 1988, pp. 233-240
EMPR MAP 8
EMR MP CORPFILE (Marmot Consolidated Mines Ltd.)
GSC MAP 215A; 307A; 315A; 1385A
GSC MEM 159, p. 66; 175, pp. 128,129,135
GSC OF 2996

DATE CODED: 1985/07/24
DATE REVISED: 1989/05/13

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 102**

NATIONAL MINERAL INVENTORY: 103P13 Ag25

NAME(S): **MARMOT METALS**, HORSESHOE, MONTANA (L.4974)

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P13W
BC MAP:

MINING DIVISION: Skeena
UTM ZONE: 09 (NAD 83)

LATITUDE: 55 50 55 N
LONGITUDE: 129 53 32 W
ELEVATION: 1151 Metres

NORTHING: 6189591
EASTING: 444138

LOCATION ACCURACY: Within 500M

COMMENTS: Location centered on portal of adit-sample site 13864 (Assessment Report 11943, Map 2).

COMMODITIES: Zinc Silver Gold Lead

MINERALS

SIGNIFICANT: Pyrite Sphalerite Galena Pyrrhotite
COMMENTS: Sulphides as stringers and disseminations in silicified zones.
ASSOCIATED: Quartz
ALTERATION: Quartz
ALTERATION TYPE: Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated Stockwork
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
SHAPE: Irregular
MODIFIER: Faulted
DIMENSION: 0125 x 0005 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: Silicified zone strikes northwest, for 125 metres and is 2 to 8 metres wide.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic Hazelton Unuk River

LITHOLOGY: Limestone

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Boundary Ranges
TERRANE: Stikine
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist
COMMENTS: At the western margin of the Stewart Complex (Island Arc Assemblage).

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1983
SAMPLE TYPE: Chip
COMMODITY GRADE
Silver 23.9100 Grams per tonne
Gold 0.0600 Grams per tonne
Zinc 2.6000 Per cent
COMMENTS: Average assay from 18 chip samples across silicified zone.
REFERENCE: Assessment Report 11943, page 16, Map 2.

CAPSULE GEOLOGY

The Marmot Metals showing is located just west of the Marmot Glacier, 12.0 kilometres southeast of Stewart. The showing consists of silicified zones containing stringers and disseminations of pyrite, sphalerite and minor galena and pyrrhotite. The zones occur in a limestone bed of the Lower Jurassic Unuk River Formation (Hazelton Group). The limestone unit has been segmented into four blocks, each roughly 100 metres wide, by three north trending steeply dipping faults. The zones are confined largely to the westernmost block. A 2 to 8 metre wide zone strikes northwest for 125 metres and occurs within 30 metres of the eastern edge of this limestone block. The average assay from eighteen chip samples across the zone was 0.06 grams per tonne gold, 23.91 grams per tonne silver and 2.60 per cent zinc (Assessment Report 11943, page 16, Map 2). Various other silicified zones, not as extensive, up to 4.0 metres wide also occur

CAPSULE GEOLOGY

in the westernmost limestone block.

BIBLIOGRAPHY

EMPR AR 1919-63; 1920-53; 1921-61; 1922-67; 1923-70; 1925-81,82;
*1926-88; *1927-82,394; 1928-93
EMPR ASS RPT 8538, *11943, 23105
EMPR BULL 58; 63
EMPR EXPL 1983-510
EMPR FIELDWORK 1983, pp. 149-163; 1984, pp. 316-341; 1985, pp. 217,
218; 1986, pp. 81-102; 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
EMPR PF (Bruggy, G.W., Geology Map, Marmot Metals Ltd.; Mondana
Ventures Inc. Prospectus Oct. 1989)
EMR MP CORPFILE (Marmot Metals Mining Co. Ltd.)
GSC MAP 215A; 307A; 315A; 1385A
GSC MEM *159, pp. 66,67; 175, pp. 129,130

DATE CODED: 1985/07/24
DATE REVISED: 1989/05/13

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 103**

NATIONAL MINERAL INVENTORY: 103P13 Pb1

NAME(S): **MARMOT ENGINEER**, ENGINEER

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P13W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 50 21 N
LONGITUDE: 129 53 17 W
ELEVATION: 759 Metres

NORTHING: 6188536
EASTING: 444385

LOCATION ACCURACY: Within 500M

COMMENTS: Location centered on adit (Geological Survey of Canada Map 215A).

COMMODITIES: Zinc Lead Copper

MINERALS

SIGNIFICANT: Pyrite Sphalerite Galena Chalcopyrite Stibnite

ASSOCIATED: Quartz Calcite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Breccia
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
DIMENSION: 0002 Metres

STRIKE/DIP: 147/72N

TREND/PLUNGE:

COMMENTS: Quartz-breccia vein, 1.8 to 2.4 metres wide, strikes 144 to 150 degrees and dips 65 to 80 degrees north.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Middle Jurassic
Eocene

GROUP

Hazelton

FORMATION

Salmon River

IGNEOUS/METAMORPHIC/OTHER

Hyder Pluton

LITHOLOGY: Hornfels Argillite
Granodiorite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Stikine

PHYSIOGRAPHIC AREA: Boundary Ranges

METAMORPHIC TYPE: Contact

RELATIONSHIP:

GRADE: Hornfels

COMMENTS: At the western margin of the Stewart Complex (Island Arc Assemblage).

CAPSULE GEOLOGY

The Marmot Engineer showing is located near the headwaters of the south fork of the Marmot River, 12.5 kilometres southeast of Stewart. The area is underlain by argillite, siltstone and sandstone of the Middle Jurassic Salmon River Formation (Hazelton Group) and the northeast flank of the Hyder Pluton.

The occurrence consists of two main showings which occur in hornfelsed argillite just northeast of the granodiorite contact. At approximately 759 metres elevation, a 1.8 to 2.4 metre wide quartz-breccia vein strikes 144 to 150 degrees and dips 65 to 80 degrees northeast. The vein is mineralized with pyrite, sparse chalcopyrite and trace stibnite.

South of the vein, at 945 metres elevation, various shear zones contain sparse lenses of quartz and calcite mineralized with sphalerite, galena and pyrite. One lense strikes 120 degrees and dips shallowly to the south.

BIBLIOGRAPHY

EM ASS RPT 23105
EMPR AR *1921-61; 1922-67; 1923-69; 1925-82; *1927-82,83; 1928-94;
*1930-104; 1931-42; 1932-57; 1933-53; 1934-B24
EMPR BULL 58; 63
EMPR FIELDWORK 1983, pp. 149-163; 1984, pp. 316-341; 1985, pp. 217,
218; 1986, pp. 81-102; 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
EMR MP CORPFILE (Marmot River Mines Ltd.)
GSC MAP 215A; 307A; 315A; 1385A
GSC MEM 175, p. 129

DATE CODED: 1985/07/24
DATE REVISED: 1989/05/14

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 103**

MINFILE NUMBER: **103P 104**

NATIONAL MINERAL INVENTORY: 103P13 Pb2

NAME(S): **WASHINGTON**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P13W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 50 00 N
LONGITUDE: 129 52 50 W

NORTHING: 6187881
EASTING: 444846

ELEVATION: 1158 Metres

LOCATION ACCURACY: Within 500M

COMMENTS: Location centered on portal of adit (Geological Survey of Canada Map 215A).

COMMODITIES: Silver Lead Zinc

MINERALS

SIGNIFICANT: Pyrite Galena Sphalerite

COMMENTS: Possibly tetrahedrite present.

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Breccia
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

SHAPE: Irregular

MODIFIER: Faulted

DIMENSION:

STRIKE/DIP: 360/90

TREND/PLUNGE:

COMMENTS: General attitude of four subparallel shear zones.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Lower Jurassic	Hazelton	Unuk River	

LITHOLOGY: Volcanic Breccia
Lithic Tuff

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

PHYSIOGRAPHIC AREA: Boundary Ranges

TERRANE: Stikine

METAMORPHIC TYPE: Contact

RELATIONSHIP:

GRADE: Hornfels

COMMENTS: At the western margin of the Stewart Complex (Island Arc Assemblage).

CAPSULE GEOLOGY

The Washington showing is located near the headwaters of the south fork of the Marmot River, 14 kilometres southeast of Stewart. The region is underlain by hornfelsed sediments and volcanics of the Middle Jurassic Salmon River and Lower Jurassic Unuk River formations. These are intruded to the southwest by granodiorite of the Eocene Hyder Pluton.

The showing comprises four north striking, vertically dipping, subparallel, shear zones 15 to 30 metres apart. These zones, up to 1.8 metres wide, occur in volcanic breccia and lithic tuff of the Unuk River Formation. The zones terminate against a northeast striking fault to the south. An adit, 120 metres long, driven 30 metres below the lowest exposed shear zone failed to intersect any of the shear zones, indicating that they may be cut off by faulting at shallow depths. The zones are mineralized with pyrite, galena, sphalerite and possibly tetrahedrite. Samples of high grade silver ore have been obtained from here (Minister of Mines Annual Report 1926, page 88).

BIBLIOGRAPHY

EMPR AR 1921-62; 1922-67; 1923-69; 1925-82; 1926-88; *1927-83,394
EMPR ASS RPT 16652, 23105
EMPR BULL 58; 63
EMPR FIELDWORK 1983, pp. 149-163; 1984, pp. 316-341; 1985, pp. 217, 218; 1986, pp. 81-102; 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
EMPR PF (Corning Resources Ltd. Prospectus, 1988)
GSC MAP 215A; 307A; 315A; 1385A
GSC MEM *159, pp. 67,68; 175, p. 151

DATE CODED: 1985/07/24
DATE REVISED: 1989/05/13

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 104**

MINFILE NUMBER: **103P 105**

NATIONAL MINERAL INVENTORY: 103P13 Au4

NAME(S): **HIGH GRADE**, FICKLIN - HARNER, HARNER

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P13W
BC MAP:
LATITUDE: 55 49 17 N
LONGITUDE: 129 52 16 W
ELEVATION: 1524 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Location centered on portal of adit on Lot 5068 (Assessment Report 16652, Figure 4).

MINING DIVISION: Skeena
UTM ZONE: 09 (NAD 83)
NORTHING: 6186544
EASTING: 445421

COMMODITIES: Gold Silver Copper Lead Zinc

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Galena Sphalerite Arsenopyrite
COMMENTS: Sulphides as massive lenses, stringers and disseminations.
ASSOCIATED: Quartz Carbonate
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Breccia Massive Disseminated
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
DIMENSION: 1000 x 0001 Metres STRIKE/DIP: 087/47N TREND/PLUNGE:
COMMENTS: The lower vein, up to 1.0 metre wide, strikes 085 to 089 degrees for 1000 metres and dips 45 to 50 degrees north.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic Hazelton Unuk River

LITHOLOGY: Volcanic Breccia
Lithic Tuff

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Boundary Ranges
TERRANE: Stikine
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist
COMMENTS: At the western margin of the Stewart Complex (Island Arc Assemblage).

INVENTORY

ORE ZONE: VEIN REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1926
SAMPLE TYPE: Grab
COMMODITY GRADE
Silver 123.0000 Grams per tonne
Gold 86.2000 Grams per tonne

COMMENTS: Sample of quartz with disseminated pyrite from lower vein.
REFERENCE: Minister of Mines Annual Report 1926, page 89.

CAPSULE GEOLOGY

The High Grade occurrence is located near the headwaters of the south fork of the Marmot River, 15 kilometres southeast of Stewart. Various gold bearing quartz veins were extensively explored by trenching and tunnelling in this area during the late 1920's.

The occurrence consists of three veins developed in volcanic breccia and lithic tuff of the Lower Jurassic Unuk River Formation (Hazelton Group) just east of the Eocene Hyder Pluton.

The upper vein strikes 119 to 134 degrees for at least 150 metres, dips 45 to 55 degrees northeast and is 0.6 to 2.7 metres wide. Mineralization consists of stringers and massive lenses of pyrite, galena and arsenopyrite in a quartz-carbonate gangue. A grab sample assayed 7.56 grams per tonne gold (Assessment Report 16652, page 11).

The middle vein, 150 metres southwest of the upper vein, strikes 125 degrees for 100 metres, dips 45 degrees northeast and is up to 2.1 metres wide. The quartz vein is mineralized with pyrite, minor chalcopyrite, sphalerite and trace galena.

The lower vein, 300 metres south of the upper vein, strikes 085 to 089 degrees for 1000 metres, dips 45 to 50 degrees north and is up

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1107
REPORT: RGEN0100

CAPSULE GEOLOGY

to 1.0 metre wide. It contains brecciated and silicified wallrock with numerous lenses and veinlets of quartz with pyrite and minor chalcopyrite. A sample of quartz with disseminated pyrite assayed 86.2 grams per tonne gold and 123.0 grams per tonne silver (Minister of Mines Annual Report 1926, page 89).

BIBLIOGRAPHY

EMPR AR *1926-88,89; *1927-83,84,394; 1928-94; 1929-434,506
EMPR ASS RPT *16652, 24128, 23105
EMPR BULL 58; 63
EMPR FIELDWORK 1983, pp. 149-163; 1984, pp. 316-341; 1985, pp. 217, 218; 1986, pp. 81-102; 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
EMPR PF (Corning Resources Ltd. Prospectus, 1988)
EMR MP CORPFILE (Marmot River Gold Mines Ltd.)
GSC MAP 215A; 307A; 315A; 1385A
GSC MEM 159, p. 68; 175, p. 120
Placer Dome File

DATE CODED: 1985/07/24
DATE REVISED: 1989/05/14

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 106**

NATIONAL MINERAL INVENTORY: 103P12,13 Cu2

NAME(S): **MATILDA**, GOLD REEF

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P13E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 45 05 N
LONGITUDE: 129 35 36 W
ELEVATION: 1302 Metres

NORTHING: 6178570
EASTING: 462758

LOCATION ACCURACY: Within 500M

COMMENTS: Location of grab sample number 38 (Assessment Report 16034, Fig. 5).

COMMODITIES: Zinc Lead Silver

MINERALS

SIGNIFICANT: Sphalerite Pyrite Galena
ASSOCIATED: Quartz Carbonate
ALTERATION: Pyrite Quartz Sericite
ALTERATION TYPE: Pyrite Silicific'n Sericitic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Podiform Vein Disseminated
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au I02 Intrusion-related Au pyrrhotite veins
DIMENSION: 0002 Metres STRIKE/DIP: 315/65 TREND/PLUNGE:
COMMENTS: Quartz lens, 2.4 metres thick, strikes west-northwest, dips 65 degrees north.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic Hazelton Undefined Formation

LITHOLOGY: Plagioclase Porphyritic Andesite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Boundary Ranges
TERRANE: Stikine
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist
COMMENTS: At the western margin of the Stewart Complex (Island Arc Assemblage).

INVENTORY

ORE ZONE: LENS REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1951
SAMPLE TYPE: Chip
COMMODITY GRADE
Silver 34.0000 Grams per tonne
Lead 3.9000 Per cent
Zinc 12.8000 Per cent

COMMENTS: A 0.76 metre chip sample from centre of quartz lens, trace gold.
REFERENCE: Minister of Mines Annual Report 1951, page 87.

CAPSULE GEOLOGY

The Matilda showing is located about 1.5 kilometres southwest of Homestake Creek, 31 kilometres north-northwest of Alice Arm. The showing was explored by trenching and tunnelling between 1918 and 1934.

The showing is situated at the western margin of a 10 kilometre long northwest trending body of plagioclase-hornblende porphyritic andesite. The Lower Jurassic Hazelton Group andesite, informally called the Copper Belt, is extensively pyritized with variable silicification and sericitization.

The showing comprises a 6 metre wide west-northwest trending zone containing numerous carbonate stringers, disseminated pyrite, blebs of sphalerite and minor galena. A 2.4 metre thick quartz lens of similar strike and dipping 65 degrees north occurs 30 metres east of this zone. The centre of the lens is well mineralized with sphalerite and galena, which becomes sparse at the margins of the lens. A 0.76 metre chip sample of the centre of the lens assayed trace gold, 34 grams per tonne silver, 3.9 per cent lead and 12.8 per cent zinc (Minister of Mines Annual Report 1951, page 87).

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1109
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR AR 1918-65; 1920-50; 1921-50; 1922-58; 1923-57; 1925-75;
1926-83; 1927-78; 1930-99; 1934-B15; *1951-86,87
EMPR ASS RPT *16034, 18657, 23105
EMPR BULL 63
EMPR EXPL 1987-C364
EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp.
235-243
EMPR MAP 8
EMPR OF 1986-2
EMR MP CORPFILE (Kitsault River Mining & Development Co. Ltd.)
GSC MAP 307A; 315A; 1385A
GSC MEM 175, pp. 71,72

DATE CODED: 1985/07/24
DATE REVISED: 1989/05/10

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 107**

NATIONAL MINERAL INVENTORY: 103P13 Au4

NAME(S): **PRINCE GEORGE** NEW STRIKE

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P13W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 50 05 N
LONGITUDE: 129 53 21 W
ELEVATION: 1097 Metres

NORTHING: 6188042
EASTING: 444309

LOCATION ACCURACY: Within 500M

COMMENTS: Location centered on New Strike claim-Lot 4751 (National Topographic System Map 103P/13).

COMMODITIES: Gold Silver Copper Lead Zinc

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Galena Sphalerite

COMMENTS: Sulphides massive to disseminated in vein.

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Massive Disseminated

CLASSIFICATION: Hydrothermal Epigenetic

TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au I02 Intrusion-related Au pyrrhotite veins

DIMENSION: STRIKE/DIP: 059/65N TREND/PLUNGE:

COMMENTS: Attitude of vein up to 1.2 metres wide.

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Eocene			Coast Plutonic Complex

ISOTOPIC AGE: 47-51 +/- 2-3 Ma

DATING METHOD: Potassium/Argon

MATERIAL DATED: Biotite/hornblende

LITHOLOGY: Granodiorite

HOSTROCK COMMENTS: Isotopic age from Alldrick, D., Open File 1986-2.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline

TERRANE: Plutonic Rocks

PHYSIOGRAPHIC AREA: Boundary Ranges

COMMENTS: Situated in the Hyder Pluton within the Coast Plutonic Complex.

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1921

SAMPLE TYPE: Grab

COMMODITY

GRADE

Silver 411.0000 Grams per tonne

Gold 66.3000 Grams per tonne

COMMENTS: Highest assay from samples of heavily mineralized quartz.

REFERENCE: Minister of Mines Annual Report 1921, page 62.

CAPSULE GEOLOGY

The Prince George showing is located near the headwaters of the south fork of the Marmot River, 13.5 kilometres southeast of Stewart.

The showing consists of a quartz vein, up to 1.2 metres wide, striking 059 degrees and dipping 65 degrees northwest. The vein is hosted in granodiorite of the Eocene Hyder Pluton, just southwest of the contact with argillite, siltstone and sandstone of the Middle Jurassic Salmon River Formation. The vein contains massive to disseminated pyrite and minor chalcopyrite, galena and sphalerite. Samples of heavily mineralized quartz have assayed up to 66.3 grams per tonne gold and 411 grams per tonne silver (Minister of Mines Annual Report 1921, page 62).

BIBLIOGRAPHY

EMPR AR *1921-61,62; 1922-67; 1928-519

EMPR ASS RPT 16652, 23105

EMPR BULL 58; 63

EMPR FIELDWORK 1983, pp. 149-163; 1984, pp. 316-341; 1985, pp. 217, 218; 1986, pp. 81-102; 1988, pp. 233-240; 1990, pp. 235-243

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1111
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR MAP 8
EMPR PF (Corning Resources Ltd. Prospectus 1988)
GSC MAP 215A; 307A; 315A; 1385A
GSC MEM 175, p. 137

DATE CODED: 1985/07/24
DATE REVISED: 1989/05/13

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 108**

NATIONAL MINERAL INVENTORY: 103P12 Pb2

NAME(S): **VIMY RIDGE**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P12E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 40 58 N
LONGITUDE: 129 41 48 W
ELEVATION: 579 Metres

NORTHING: 6170994
EASTING: 456196

LOCATION ACCURACY: Within 1 KM

COMMENTS: Location centered on showings (Geological Survey of Canada Map 315A).

COMMODITIES: Lead Zinc Copper

MINERALS

SIGNIFICANT: Galena Sphalerite Pyrite Chalcopyrite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Breccia
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

DIMENSION: 0030 x 0002 Metres

STRIKE/DIP:

TREND/PLUNGE:

COMMENTS: The vein is 0.6 to 1.8 metres wide and has been traced for 30 metres.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Lower Jurassic

GROUP

Hazelton

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Andesite
Quartz Diorite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

PHYSIOGRAPHIC AREA: Boundary Ranges

TERRANE: Stikine

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

COMMENTS: At the western margin of the Stewart Complex (Island Arc Assemblage).

CAPSULE GEOLOGY

The Vimy Ridge showing is located about 9.0 kilometres northeast of Hastings Arm on the north side of O'Neil Creek (Kshwan River). The showing was investigated in 1922 for its polymetallic mineralization.

The region is underlain by a sequence of volcanics and sediments of the Upper Triassic Stuhini Group and the Lower Jurassic Hazelton Group that is intruded by the Coast Plutonic Complex to the west. These rocks have been regionally metamorphosed to greenschist facies.

The showing consists of a quartz breccia vein hosted in Hazelton Group andesite(?). It is 0.6 to 1.8 metres wide and has been traced for at least 30 metres. The vein is heavily mineralized with galena, sphalerite, pyrite and chalcopyrite in a gangue of quartz containing andesite and quartz diorite breccia fragments.

BIBLIOGRAPHY

EMPR AR *1922-53
EMPR BULL 63
EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
EMPR OF 1986-2
GSC MAP 307A; 315A; 1385A
GSC MEM 175, p. 103

DATE CODED: 1985/07/24
DATE REVISED: 1989/03/31

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 109**

NATIONAL MINERAL INVENTORY:

NAME(S): **CARPENTERS**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P12E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 41 10 N
LONGITUDE: 129 39 20 W
ELEVATION: 762 Metres

NORTHING: 6171340
EASTING: 458784

LOCATION ACCURACY: Within 5 KM

COMMENTS: Based on location of claims (Geological Survey of Canada Map 315A).
Exact location uncertain.

COMMODITIES: Copper Gold

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein

CLASSIFICATION: Hydrothermal Epigenetic

TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb) 102 Intrusion-related Au pyrrhotite veins

COMMENTS: Three parallel veins strike 148 degrees.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Upper Triassic

GROUP

Stuhini

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Black Argillite
Black Siltstone

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

PHYSIOGRAPHIC AREA: Boundary Ranges

TERRANE: Stikine

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

COMMENTS: At the western margin of the Stewart Complex (Island Arc Assemblage).

CAPSULE GEOLOGY

The Carpenters showing is located on the southeast side of O'Neil Creek (Kshwan River), 12 kilometres northeast of Hastings Arm. The area was initially prospected in 1922 and an unsuccessful attempt was made to relocate this showing in 1982 and 1983.

The region is underlain by volcanics and sediments of the Upper Triassic Stuhini Group and the Lower Jurassic Hazelton Group which are intruded by the Coast Plutonic Complex rocks to the west. These rocks have been regionally metamorphosed to greenschist facies.

The showing consists of 3 parallel quartz veins, striking 148 degrees hosted in Stuhini Group black argillite and siltstone. The veins are mineralized with pyrite and minor chalcopyrite. A cross vein striking diagonally to the other veins is reported to contain free gold.

BIBLIOGRAPHY

EMPR AR 1922-52,53
EMPR ASS RPT 10296, 11081, *12122
EMPR BULL 63
EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
EMPR OF 1986-2
GSC MAP 307A; 315A; 1385A
GSC MEM 175, p. 91

DATE CODED: 1985/07/24
DATE REVISED: 1989/03/31

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

CAPSULE GEOLOGY

(Grove, T. 1986), but have also been correlated with the Upper Triassic Kunga Group sediments and the Karmutsen Formation (Vancouver Group) volcanics (Sharp, R.J., 1980, M.Sc. Thesis).

The pendant consists of mafic massive and pillowed flows with minor mafic tuffs and overlying argillite, siltstone, sandstone and minor limestone and chert. The sequence has undergone regional greenschist grade metamorphism and has been deformed by two northeast trending phases of folding.

The country rock consists of a folded sequence of thin-bedded argillite, graphitic argillite, siltstone and argillaceous sandstone, locally altered to mica schists. South of the showing, approximately 45 metres, an outcrop of argillite and greywacke strikes 140 degrees and has a vertical dip.

Trenching has exposed a 0.3 metre wide lens of massive pyrrhotite with blebs and stringers of chalcopyrite, minor pyrite and pentlandite. The lens is overlain by a 2.0 metre thick gossan zone of limonite containing nodules of massive pyrrhotite, chalcopyrite, pentlandite and associated cobalt minerals. The sulphide lens and gossan zone are underlain by a medium to coarse-grained olivine gabbro sill. The sill contains disseminated blebs of pyrrhotite rimmed with chalcopyrite 6.0 centimetres in diameter. The massive sulphide lens strikes west-northwest and dips 50 degrees to the north and the sill has a similar orientation.

A sample across the massive sulphide lens assayed trace gold, 10.3 grams per tonne silver, trace platinum, 1.66 per cent copper, trace lead and zinc, 1.11 per cent nickel and 0.18 per cent cobalt (Minister of Mines Annual Report 1965, page 61). A composite chip sample along a 9.0 metre trench assayed trace gold, 10.3 grams per tonne silver, 0.13 per cent nickel, 0.27 per cent copper and 0.01 per cent cobalt (Geology, Exploration and Mining in British Columbia 1969, page 68).

BIBLIOGRAPHY

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EMPR AR 1916-K65; *1965-61
EMPR ASS RPT *8377, *13059, 25838
EMPR BULL 63
EMPR FIELDWORK 1988, pp. 233-240; 1990, pp. 235-243
EMPR GEM *1969-67,68; 1971-120
EMPR MAP 8
EMPR PF (Seraphim, R.H. (1971) Report; Alldrick, D. (1986) Anyox Map)
GSC MAP 307A; 315A; 1385A
GSC MEM 175, p. 88
W MINER Sept., 1965
Placer Dome File

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/31

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 111**

NATIONAL MINERAL INVENTORY: 103P5 Mo1

NAME(S): **TIDEWATER**, MAYFLOWER, ROSS

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 103P05E
BC MAP:

Underground

MINING DIVISION: Skeena

LATITUDE: 55 28 05 N
LONGITUDE: 129 32 50 W
ELEVATION: 0330 Metres

UTM ZONE: 09 (NAD 83)

NORTHING: 6147014
EASTING: 465404

LOCATION ACCURACY: Within 500M

COMMENTS: Determined from location of the Number 2 adit (Assessment Report 8589, Figure 3).

COMMODITIES: Molybdenum Silver Gold Lead Zinc
Copper Tungsten

MINERALS

SIGNIFICANT: Molybdenite Pyrite Pyrrhotite Galena Sphalerite
Tetrahedrite Chalcopyrite Ruby Silver Scheelite

ASSOCIATED: Quartz

ALTERATION: Quartz

ALTERATION TYPE: Silicific'n

MINERALIZATION AGE: Unknown

Sericite

Clay

Sericitic

Hematite

Argillic

DEPOSIT

CHARACTER: Vein Stockwork Disseminated
CLASSIFICATION: Porphyry Hydrothermal Epigenetic
TYPE: L05 Porphyry Mo (Low F- type) I05 Polymetallic veins Ag-Pb-Zn±Au
DIMENSION: 0280 x 0020 Metres STRIKE/DIP:
COMMENTS: System of quartz veins and lenses, up to 20 metres wide, strikes for 280 metres northeast and dips steeply to the northwest. TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Jurassic Bowser Lake Undefined Formation Alice Arm Intrusion
Tertiary

LITHOLOGY: Quartz Porphyritic Quartz Monzonite
Argillite
Siltstone
Fine Grained Sandstone
Greywacke
Tuff

HOSTROCK COMMENTS: The Bowser Lake Group is Middle to Upper Jurassic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Stikine

METAMORPHIC TYPE: Contact

COMMENTS: Within Bowser Lake foredeep clastic wedge on Stikinia Terrane.

PHYSIOGRAPHIC AREA: Boundary Ranges

Bowser Lake

RELATIONSHIP: Syn-mineralization

GRADE: Hornfels

INVENTORY

ORE ZONE: TIDEWATER REPORT ON: Y
CATEGORY: Indicated YEAR: 1987
QUANTITY: 9071000 Tonnes
COMMODITY GRADE
Molybdenum 0.0600 Per cent
COMMENTS: Grade given was 0.1 per cent MoS₂; conversion to Mo using a factor of 1.6681.
REFERENCE: Property File - Prospectus, Richmark Resources Ltd., December 21, 1987.

CAPSULE GEOLOGY

The Tidewater deposit is located on the north side of Alice Arm Inlet, about 3.0 kilometres east of Alice Arm. The deposit produced a limited amount of ore in 1916 and 1931 containing high grade molybdenite from quartz veins.

The mineralization in this deposit resulted from the intrusion of a small quartz monzonite stock into a sequence of argillite, siltstone, fine-grained sandstone, minor greywacke and tuff of the Middle to Upper Jurassic Bowser Lake Group. These rocks, striking west to northwest and dipping steeply to the north and south, have been metamorphosed to biotite hornfels from a few metres to 450

CAPSULE GEOLOGY

metres outward from the stock.

The stock is an irregularly shaped 400 by 250 metre northeast trending quartz feldspar porphyritic quartz monzonite intrusive, typical of other Tertiary Alice Arm intrusions. The stock and veins are cut by northeast trending felsic and granodioritic dykes. Silicification, sericitization and argillic alteration occurs in the stock and along quartz vein margins.

High grade molybdenite mineralization is hosted in a system of quartz stringers, veins and lenses individually a few centimetres to 4.6 metres wide. The system, up to 20 metres wide, occurs on the southern contact of the stock and extends southwestward for a strike length of 280 metres, where it deteriorates into quartz stringers. The quartz veins and lenses strike northeast and dip steeply to the northwest. Molybdenite is irregularly distributed as 1 to 2 millimetre thick concordant bands or sheets and as disseminations, to a lesser extent, in the quartz, with minor pyrite. The pyrite content increases northward towards the stock.

Low grade mineralization occurs, more widespread, as thin bands and disseminations of molybdenite within a quartz vein stockwork in the stock, in adjacent hornfelsed sediments, in the stock itself and as coatings along fractures. Molybdenite occurs with pyrite and minor scheelite, galena and sphalerite. A sample assayed of 0.0605 per cent molybdenum (0.101 per cent molybdenite) over 34 metres in hornfelsed sediments (Assessment Report 8589, page 6).

The deposit contains indicated reserves of 9,071,000 tonnes grading 0.06 per cent molybdenum (0.1 per cent molybdenite using a factor of 1.6681) based on drilling results (Property File - Richmark Resources Ltd., December 21, 1987).

The Tidewater deposit has recently been re-evaluated for gold and silver mineralization in polymetallic quartz veins and quartz breccias, not related to the quartz-molybdenite veins. These occur in the quartz monzonite stock and adjacent hornfelsed sediments associated with hematitic, argillic and sericitic alteration. Quartz veins, up to 4 centimetres wide, contain selvages and disseminations of molybdenite, pyrite, pyrrhotite and minor galena, sphalerite, tetrahedrite, chalcopyrite and ruby silver. Samples assayed between 0.31 to 0.96 grams per tonne gold and 269.4 to 884.1 grams per tonne silver over 0.61 to 0.91 metres (Assessment Report 17842, pp. 9,10). Re-sampling of pulps and core from drilling in 1979 and 1980 resulted in gold assays of 3.55 grams per tonne over 2 metres from a fault zone and 7.90 grams per tonne over 2 metres in a sequence of carbonate veins in hornfelsed sediments adjacent to the stock (Richmark Resources Prospectus, 1987, page 6).

The Tidewater deposit produced a limited quantity of ore in 1916 and 1931 from underground workings in the high grade quartz-molybdenite vein system. In 1916, 347.5 tonnes of ore was shipped with a reported grade of 0.959 per cent molybdenum (1.60 per cent molybdenite) (Bulletin 9, page 65). In addition, 40.8 tonnes of tailings were shipped that averaged 0.911 per cent molybdenum (1.52 per cent molybdenite) (Bulletin 9, page 65). In 1931, 1.22 tonnes of ore were shipped (Bulletin 9, page 66).

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EMPR ASS RPT 427, 6961, 7444, 7966, *8589, *17285, *17842
EMPR BULL *9, pp. 61-67; 63
EMPR EXPL 1978-238; 1979-258; 1980-404
EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
EMPR OF 1986-2; 1991-17
EMPR PF (Mandy, J.T. (1939) Geological Map of Underground Workings; Carter, N.C. (1964) Map; Woodcock, J.R., Carter, N.C. (1976) Paper 46; Richmark Resources Ltd. Prospectus, 1987)
EMR MIN BULL MR 223 B.C. 303
EMR MINES 592, 1925; 728, 1931
EMR MP CORPFILE (Molybdenum Mining and Reduction Company Ltd.; Dalhousie Mining Co. Ltd.)
EMR MR FILE 1917-1919, p. 26
GSC MAP 307A; 315A; 1385A
GSC MEM 32, p. 93; 175, pp. 37,38
GSC SUM RPT 1911, p. 49; 1922A, p. 30
CIM SPEC VOL. 15, p. 465
GCNL #115, 1988

MINFILE NUMBER: **103P 112**

NATIONAL MINERAL INVENTORY: 103P5 Sia4

NAME(S): **MACY, MACEY, QUARTZ**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 103P05E
BC MAP:

Open Pit Underground

MINING DIVISION: Skeena

LATITUDE: 55 26 18 N
LONGITUDE: 129 30 13 W
ELEVATION: 0122 Metres

UTM ZONE: 09 (NAD 83)

NORTHING: 6143686
EASTING: 468137

LOCATION ACCURACY: Within 500M

COMMENTS: Location centered on mine workings (Open File 1986-2).

COMMODITIES: Silica

MINERALS

SIGNIFICANT: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic Industrial Min.
TYPE: 107 Silica veins

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Jurassic	Bowser Lake	Undefined Formation	

LITHOLOGY: Sediment/Sedimentary
Shale
Siltstone
Greywacke

HOSTROCK COMMENTS: The Bowser Lake Group is Middle to Upper Jurassic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane	PHYSIOGRAPHIC AREA: Boundary Ranges	
TERRANE: Stikine	Bowser Lake	
METAMORPHIC TYPE: Contact	RELATIONSHIP:	GRADE: Hornfels
COMMENTS: Situated in Bowser Lake foredeep clastic sediments on Stikinia Terrane		

CAPSULE GEOLOGY

The Macy mine is located on the south side of the Alice Arm of Observatory Inlet, about 5.0 kilometres south of the Alice Arm townsite. The mine, in the past, produced silica flux for the copper smelter at Anyox.

The deposit is hosted in a sequence of Middle to Upper Jurassic Bowser Lake Group sediments. These rocks have been regionally metamorphosed to greenschist facies and contact metamorphosed to biotite hornfels to the west along the contact with the Tertiary Coast Plutonic Complex.

The Macy mine is developed in biotite hornfelsed shale, siltstone and wacke. Large bodies of barren quartz were mined here from open cuts in 1916 and 1917 and from underground workings in 1918 and 1920 for silica flux. Silica production for 1918 is included with Granby Point (103P 022).

BIBLIOGRAPHY

EMPR AR 1917-F370; 1918-K55,K394; 1964-24,25
EMPR BULL 63
EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
EMPR OF 1986-2; 1987-15, p. 35
GSC MAP 307A; 315A; 1385A
GSC MEM 175, p. 71
CIM SPEC VOL 15, p. 462

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/01

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 113**

NATIONAL MINERAL INVENTORY: 103P6 Mo2

NAME(S): **ROUNDY CREEK**, SUNSHINE CREEK

STATUS: Developed Prospect

MINING DIVISION: Skeena

REGIONS: British Columbia

NTS MAP: 103P06W

BC MAP:

LATITUDE: 55 24 49 N

LONGITUDE: 129 29 32 W

ELEVATION: 320 Metres

UTM ZONE: 09 (NAD 83)

NORTHING: 6140929

EASTING: 468838

LOCATION ACCURACY: Within 500M

COMMENTS: Portal of the 1050 adit, approximately 6 kilometres south of Alice Arm (Geology, Exploration and Mining in British Columbia 1971).

COMMODITIES: Molybdenum

MINERALS

SIGNIFICANT: Molybdenite

ASSOCIATED: Quartz Chlorite

ALTERATION: Sericite Biotite

ALTERATION TYPE: Potassic

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated Stockwork Vein
CLASSIFICATION: Porphyry Hydrothermal Epigenetic

TYPE: L05 Porphyry Mo (Low F- type)

SHAPE: Irregular

MODIFIER: Faulted Fractured

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

Jurassic
Eocene

GROUP

Hazelton

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Alice Arm Intrusion

ISOTOPIC AGE: 53.5 Ma

DATING METHOD: Potassium/Argon

MATERIAL DATED: Biotite

LITHOLOGY: Porphyritic Quartz Monzonite
Biotite Quartz Monzonite
Alaskite
Lamprophyre Dike
Argillite
Greywacke

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Stikine

METAMORPHIC TYPE: Contact

COMMENTS: Intrusion within Bowser Lake foredeep clastic wedge.

Bowser Lake

RELATIONSHIP:

PHYSIOGRAPHIC AREA: Boundary Ranges

GRADE: Hornfels

INVENTORY

ORE ZONE: ROUNDY CREEK

REPORT ON: Y

CATEGORY: Indicated YEAR: 1971

QUANTITY: 7000000 Tonnes

COMMODITY Molybdenum GRADE 0.0600 Per cent

COMMENTS: Grade given was 0.11 per cent MoS₂; conversion to Mo using a factor of 1.6681.

REFERENCE: CIM Special Volume 15 (1976), page 467.

ORE ZONE: HIGH-GRADE

REPORT ON: Y

CATEGORY: Indicated YEAR: 1970

QUANTITY: 35000 Tonnes

COMMODITY Molybdenum GRADE 0.4000 Per cent

COMMENTS: of 1.6681.
REFERENCE: CIM Special Volume 15 (1976), page 467.

MINFILE NUMBER: **103P 114**

NATIONAL MINERAL INVENTORY: 103P6 Mo3

NAME(S): **MOHAWK**, GUS, LIME

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P06W
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 25 45 N
LONGITUDE: 129 28 08 W
ELEVATION: 655 Metres

NORTHING: 6142650
EASTING: 470327

LOCATION ACCURACY: Within 500M

COMMENTS: Location of main shaft (Minister of Mines Annual Report 1916, page 68).

COMMODITIES: Silver Gold Zinc Lead Molybdenum

MINERALS

SIGNIFICANT: Sphalerite Pyrite Ruby Silver Galena Arsenopyrite

ASSOCIATED: Molybdenite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Concordant
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

SHAPE: Irregular

MODIFIER: Faulted

DIMENSION: 0240 Metres

STRIKE/DIP: 108/80N

TREND/PLUNGE:

COMMENTS: Vein dips from 75 to 80 degrees north, strikes 108 degrees for 240 metres and is 0.30 to 0.61 metres wide.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Jurassic	Bowser Lake	Undefined Formation	

LITHOLOGY: Argillite

HOSTROCK COMMENTS: The Bowser Lake Group is Middle to Upper Jurassic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Stikine

Bowser Lake

PHYSIOGRAPHIC AREA: Boundary Ranges

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

COMMENTS: Situated in Bowser Lake foredeep clastic wedge on Stikinia Terrane.

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N

CATEGORY: Assay/analysis YEAR: 1916

SAMPLE TYPE: Grab

COMMODITY

GRADE

Silver 9999.0000 Grams per tonne

COMMENTS: Ore material graded 10,300 grams per tonne silver. Sample of ore reportedly mined before 1911.

REFERENCE: Minister of Mines Annual Report 1916, page 69.

CAPSULE GEOLOGY

The Mohawk occurrence is located 6.0 kilometres south-southeast of Alice Arm on the northwest flank of Mohawk Mountain.

The region is underlain by Middle to Lower Jurassic Bowser Lake Group argillite, shale, siltstone, greywacke and conglomerate. These have been intruded by Lower Tertiary granodiorite and diorite of the Coast Plutonic Complex. The sediments have been folded and contact metamorphosed to biotite hornfels.

The occurrence consists of a quartz vein, 0.30 to 0.61 metres wide, which strikes 108 degrees for 240 metres and dips 75 to 80 degrees north. The vein, faulted and displaced 6.1 metres where it crosses Mohawk Creek (Orange Creek), is developed concordantly in argillite.

The vein contains milky white quartz mineralized with black sphalerite, minor pyrite and traces of ruby silver, galena and arsenopyrite. The vein is reported to carry good gold and silver values (Minister of Mines Annual Report 1911, page 65). A small high grade ore shoot is reported to have been mined from a 1.8 metre long

CAPSULE GEOLOGY

tunnel and a 1.8 metre shaft just east of the fault on the creek. The ore material had an average grade of 10,300 grams per tonne silver (Minister of Mines Annual Report 1916, page 69).

Previous to 1911, small scale underground mining of high grade ore is reported and the vein was periodically explored for gold and silver between 1911 and 1930. During the mid 1960's and early 1970's the area was examined for molybdenum.

A vein carrying molybdenite is reported to occur at a lower elevation.

BIBLIOGRAPHY

EMPR AR 1911-65; *1916-69; 1929-82; *1930-86,87; 1964-24-30; 1965-62
EMPR ASS RPT 3448, 5447, 5814
EMPR BULL 63
EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
EMPR OF 1986-2
EMPR PF (Quinn, H.A. (1966) Report)
EMR CORPFILE (The Winnie Mine Development Company Ltd.; Mid-West Mines Limited; Apollo Minerals Ltd.)
GSC MAP 307A; 315A; 1385A
GSC MEM 175, pp. 72,73
CIM SPEC VOL 15, p. 462

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/26

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 115**

NATIONAL MINERAL INVENTORY: 103P6 Pb7

NAME(S): **KEYSTONE, SUNSET, MORLEY'S,
SILVER BOW-MCC**

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 103P06W
BC MAP:

MINING DIVISION: Skeena

LATITUDE: 55 24 40 N
LONGITUDE: 129 28 45 W
ELEVATION: 783 Metres

UTM ZONE: 09 (NAD 83)

NORTHING: 6140645
EASTING: 469663

LOCATION ACCURACY: Within 500M

COMMENTS: Location of entrance to upper adit (Property File - Marshall Creek
Copper Co., Plate 1).

COMMODITIES: Gold Silver Zinc Lead Copper
Cadmium

MINERALS

SIGNIFICANT: Galena Sphalerite Pyrite Pyrrhotite

ASSOCIATED: Quartz Carbonate

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Concordant
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
DIMENSION: 200 x 15 Metres

STRIKE/DIP: 032/50W

TREND/PLUNGE:

COMMENTS: Attitude of shear zone which has been traced for 200 metres and is
15 metres wide.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Middle Jurassic
Eocene

GROUP

Spatsizi

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Coast Plutonic Complex

ISOTOPIC AGE: 51.5 Ma

DATING METHOD: Potassium/Argon

MATERIAL DATED: Biotite

LITHOLOGY: Argillite
Granite
Granodiorite
Quartz Diorite

HOSTROCK COMMENTS: Shear zone occurs along contact between granite and argillite.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline

TERRANE: Bowser Lake

METAMORPHIC TYPE: Regional

COMMENTS: Along contact of Coast Plutonic Complex and Spatsizi Group sediments.

Plutonic Rocks

RELATIONSHIP: Syn-mineralization

PHYSIOGRAPHIC AREA: Boundary Ranges

GRADE: Hornfels

INVENTORY

ORE ZONE: ADIT

REPORT ON: N

CATEGORY: Assay/analysis

SAMPLE TYPE: Grab

YEAR: 1965

COMMODITY

COMMODITY	GRADE	
Silver	116.0000	Grams per tonne
Gold	13.0000	Grams per tonne
Cadmium	0.0600	Per cent
Lead	6.8000	Per cent
Zinc	4.9000	Per cent

COMMENTS: Grab sample from upper adit.

REFERENCE: Property File (Marshall Creek Copper Co. 1965 Annual Rpt. page 5).

CAPSULE GEOLOGY

The Keystone occurrence is located about 8.0 kilometres south of Alice Arm in the valley of Roundy Creek. The area has been explored numerous times between 1916 and 1968 for base and precious metals.

The region is underlain by Middle Jurassic Spatsizi Group argillite, shale, siltstone, greywacke and conglomerate. These are intruded by Lower Tertiary granodiorite and diorite of the Coast Plutonic Complex. These sediments have been folded and contact metamorphosed to biotite hornfels.

CAPSULE GEOLOGY

Quartz veins are found along or near the contact of a 30 to 90 metre wide granitic spur that extends northeastward into the argillite. The veins are localized along a shear zone developed along the eastern edge of the spur, with the intrusive forming the footwall. The shear zone extends into and parallels the argillite, dipping 45 to 60 degrees west, which lies on the western flank of a gentle north-northwest trending anticline. The shear zone strikes 032 degrees, dips 50 degrees west, is up to 15 metres wide and locally extends into the intrusive body. The zone can be traced for 200 metres along Snow Creek, a tributary of Roundy Creek, where it contains sporadic variably sulphidic quartz veins.

The veins are lenticular in nature and from 5 to 46 centimetres in diameter. A quartz vein, exposed in a 14.6 metre long adit along the shear zone, strikes 178 degrees and dips 50 degrees west. This vein is 25 to 30 centimetres wide and is enclosed in sheared granite. A 36 centimetre quartz vein developed in sheared argillite and granite is exposed in a trench just above the adit. In a 213 metre long north trending adit (the Bowyer Tunnel), 69 metres below the upper adit, the shear zone is encountered at about 122 metres from the entrance, where quartz diorite contacts the argillite.

Mineralization in the veins generally consists of galena, sphalerite, pyrite and pyrrhotite in a gangue of quartz with minor carbonate. The vein exposed in the upper adit contains fine-grained galena, sphalerite, pyrrhotite and pyrite. A grab sample from the adit assayed 13.0 grams per tonne gold, 116.0 grams per tonne silver, 4.9 per cent zinc, 6.8 per cent lead and 0.06 per cent cadmium (Property File - Marshall Creek Copper Company Ltd. 1965 Annual Report, page 5).

BIBLIOGRAPHY

- EMPR AR 1916-68,69; 1921-48; 1922-53; 1923-54; 1924-51; 1925-73;
1926-77,78; 1927-69,70; *1930-87-89; 1964-24-30; *1966-49,50;
1968-65
EMPR ASS RPT 18075, 20570
EMPR BULL 63
EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp.
235-243
EMPR MAP 8
EMPR OF 1986-2
EMPR PF (Marshall Creek Copper Co. Annual Report and Maps, 1965)
EMR MP CORPFILE (Keystone Mining Co. Ltd.; Marshall Creek Copper Co.)
GSC MAP 307A; 315A; 1385A
GSC MEM 175, p. 81

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/26

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 116**

NATIONAL MINERAL INVENTORY: 103P6 Pb6

NAME(S): **BASIN (L.3190)**, SILVER BOW

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P06W
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 23 31 N
LONGITUDE: 129 28 25 W
ELEVATION: 1143 Metres

NORTHING: 6138510
EASTING: 470000

LOCATION ACCURACY: Within 500M

COMMENTS: Location based on approximate centre of surface trace of vein
(Property File - Marshall Creek Copper Co. Plate 2, 1967).

COMMODITIES: Silver Gold Lead Zinc Copper
 Cadmium

MINERALS

SIGNIFICANT: Pyrrhotite Galena Sphalerite
COMMENTS: As masses, blebs and disseminations.
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
 TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
DIMENSION: STRIKE/DIP: 040/75E TREND/PLUNGE:
COMMENTS: Vein strikes for 53 metres and varies in width from 0.20 to 0.76 metres.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Middle Jurassic Spatsizi Undefined Formation

LITHOLOGY: Argillite
Shale
Siltstone
Greywacke
Conglomerate

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Boundary Ranges
TERRANE: Stikine Bowser Lake
METAMORPHIC TYPE: Contact RELATIONSHIP: GRADE: Hornfels
COMMENTS: Situated in Bowser Lake foredeep clastic wedge on Stikinia Terrane.

INVENTORY

ORE ZONE: VEIN REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1966
SAMPLE TYPE: Chip
COMMODITY GRADE
Silver 620.0000 Grams per tonne
Gold 6.1700 Grams per tonne
Copper 0.8000 Per cent
Lead 19.7600 Per cent
Zinc 6.0000 Per cent

COMMENTS: A 0.61 metre chip sample taken across south end of vein.
REFERENCE: Minister of Mines Annual Report 1966, page 50.

CAPSULE GEOLOGY

The Basin showing is located about 10 kilometres due south of Alice Arm near the headwaters of the southwestern tributary of Lime Creek. It should be noted that the Basin claim (Lot 3190), on which the showing occurs, is not correctly located on claim sheet maps and National Topographic System maps. The area underwent limited exploration in 1916 and the mid 1960's for base and precious metals. The region is underlain by Middle Jurassic Spatsizi Group argillite, shale, siltstone, greywacke and conglomerate. These are intruded by Lower Tertiary granodiorite and diorite of the Coast Plutonic Complex. The sediments have been folded and contact metamorphosed to biotite hornfels. The showing consists of a 0.20 to 0.76 metre wide quartz vein

CAPSULE GEOLOGY

that strikes 040 degrees for 53 metres and dips 75 degrees east. The vein follows a shear zone, developed in sediments, near the granodiorite. Mineralization consists of masses and blebs of pyrrhotite which contain smaller blebs and disseminations of galena and sphalerite, all in a quartz gangue. A 0.61 metre chip sample taken across the south end of the vein assayed 6.17 grams per tonne gold, 620 grams per tonne silver, 0.8 per cent copper, 19.76 per cent lead and 6.0 per cent zinc (Minister of Mines Annual Report 1966, page 50).

BIBLIOGRAPHY

EM ASS RPT 20570
EMPR AR 1916-68; 1964-24-30; *1966-50; 1968-65
EMPR BULL 63
EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
EMPR OF 1986-2
EMPR PF (Marshall Creek Copper Co. Ltd. Annual Report, 1965; *Geology Map by Marshall Creek, 1967)
EMR MP CORPFILE (Marshall Creek Copper Co. Ltd.)
GSC MAP 307A; 315A; 1385A
GSC MEM 175, p. 82

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/26

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 117**

NATIONAL MINERAL INVENTORY: 103P6 Pb6

NAME(S): **VERONA**, SILVER BOW,MCC

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P06W
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 23 47 N
LONGITUDE: 129 28 27 W
ELEVATION: 966 Metres

NORTHING: 6139005
EASTING: 469968

LOCATION ACCURACY: Within 500M

COMMENTS: Location based on approximate centre of the surface trace of the vein system (Property File - Marshall Creek Copper Co., Plate 2).

COMMODITIES: Gold Silver Zinc Lead Cadmium
Copper

MINERALS

SIGNIFICANT: Pyrite Pyrrhotite Sphalerite Galena

COMMENTS: Occur as near massive sulphides in quartz vein.

ASSOCIATED: Quartz Carbonate

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Massive
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

DIMENSION: STRIKE/DIP: 020/53W

TREND/PLUNGE:

COMMENTS: Vein system strikes 020 degrees for 50 metres, dips 53 degrees west.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE: Middle Jurassic
GROUP: Spatsizi
FORMATION: Undefined Formation
IGNEOUS/METAMORPHIC/OTHER:

LITHOLOGY: Augite Plagioclase Porphyritic Andesite
Argillite

HOSTROCK COMMENTS: Veins occur as inclusions in andesitic sill.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

PHYSIOGRAPHIC AREA: Boundary Ranges

TERRANE: Stikine

Bowser Lake

METAMORPHIC TYPE: Contact

RELATIONSHIP:

GRADE: Hornfels

COMMENTS: Situated in Bowser Lake foredeep clastic wedge on Stikinia Terrane.

INVENTORY

ORE ZONE: VEIN

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1965

SAMPLE TYPE: Chip

COMMODITY

GRADE

Silver	283.0000	Grams per tonne
Gold	5.8000	Grams per tonne
Cadmium	0.3000	Per cent
Lead	8.1000	Per cent
Zinc	10.3000	Per cent

COMMENTS: A 0.61 metre chip sample at north end of vein system.

REFERENCE: Marshall Creek Copper Co. 1965 Annual Report, page 6.

CAPSULE GEOLOGY

The Verona occurrence is located about 9.5 kilometres due south of Alice Arm. The area was prospected for base and precious metals in the early 1920's and mid 1960's.

The region is underlain by Middle Jurassic Spatsizi Group argillite, shale, siltstone, greywacke and conglomerate. The sediments are intruded by Lower Tertiary granodiorite and diorite of the Coast Plutonic Complex and have been folded and contact metamorphosed up to biotite hornfels.

The showing comprises a system of quartz-carbonate-barite-sulphide veins which follow shear zones that are developed parallel to bedding in north-northeast striking, west dipping argillite. The veins are cut by porphyritic mafic sills that also follow the shear zones and all are displaced by northwest trending faults. The vein system strikes 020 degrees for 50 metres and dips 53 degrees west. Primarily, the veins occur as inclusions of variable width and length

CAPSULE GEOLOGY

in a 1.8 to 4.6 metre wide augite,-plagioclase-olivine porphyritic andesitic sill. On the north end of the sill, a 0.23 to 0.71 metre wide quartz vein, containing near massive pyrite, pyrrhotite, sphalerite and galena, is exposed for 6.1 metres. A 0.61 metre chip sample taken across the north end of the vein system, likely across the vein with near massive sulphides, assayed 5.8 grams per tonne gold, 283 grams per tonne silver, 10.3 per cent zinc, 8.1 per cent lead and 0.3 per cent cadmium (Property File - Marshall Creek Copper Co. Ltd. Annual Report 1965, page 6).

West of this location, variably sulphidic quartz veins are reported to occur in the hangingwall and footwall of a 0.3 metre wide lamprophyre sill. Mineralization is also reported adjacent to a west striking shear zone, over a width of 0.76 metres, near the south end of this sill.

BIBLIOGRAPHY

EMPR AR 1921-48; 1922-54; 1923-54; 1964-24-30; *1966-50; 1968-65
EMPR BULL 63
EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
EMPR OF 1986-2
EMPR PF (*Marshall Creek Copper Annual Report 1965; Geological Maps by Marshall Creek, 1967)
EMR MP CORPFILE (Marshall Creek Copper Co. Ltd.)
GSC MAP 307A; 315A; 1385A
GSC MEM 175, p. 85

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/26

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 118**

NATIONAL MINERAL INVENTORY: 103P6 Pb6

NAME(S): **SILVER BOW**, SILVER BOW,MCC

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P06W
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 23 42 N
LONGITUDE: 129 27 37 W
ELEVATION: 1059 Metres

NORTHING: 6138844
EASTING: 470847

LOCATION ACCURACY: Within 500M

COMMENTS: Location based on approximate centre of Silver Bow claim (Lot 3189)-
(Property File - Marshall Creek Copper Co., Plate 2, 1967).

COMMODITIES: Silver

MINERALS

SIGNIFICANT: Unknown
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stockwork Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Middle Jurassic	Spatsizi	Undefined Formation	

LITHOLOGY: Argillite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine
METAMORPHIC TYPE: Contact
COMMENTS: Situated in Bowser Lake foredeep clastic wedge on Stikinia Terrane.

PHYSIOGRAPHIC AREA: Boundary Ranges
RELATIONSHIP: Bowser Lake
GRADE: Hornfels

CAPSULE GEOLOGY

The Silver Bow occurrence is located approximately 11.0 kilometres south of Alice Arm on a tributary of Lime Creek. It should be noted that the Silver Bow claim (Lot 3189) is not accurately located on claim sheet maps and National Topographic System maps.

The region is underlain by Coast Plutonic rocks intruding Middle Jurassic Spatsizi Group argillite, shale, siltstone, greywacke and conglomerate. These sediments have been folded and contact metamorphosed to biotite hornfels.

The showing consists of quartz stringers developed in folded schistose argillite. A stringer of high grade material containing silver has been reported from this locality (Minister of Mines Annual Report 1916, page 68).

BIBLIOGRAPHY

EM ASS RPT 20570
EMPR AR *1916-68; 1964-24-30; 1966-49,50; 1968-65
EMPR BULL 63
EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
EMPR OF 1986-2
EMPR PF (*Marshall Creek Copper, Geology Map 1967)
GSC MAP 307A; 315A; 1385A
GSC MEM 175, p. 77

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/26

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 119**

NATIONAL MINERAL INVENTORY: 103P6 Au1

NAME(S): **LAST CHANCE** TMS

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P06W
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 24 27 N
LONGITUDE: 129 25 58 W
ELEVATION: 860 Metres

NORTHING: 6140224
EASTING: 472597

LOCATION ACCURACY: Within 500M

COMMENTS: Location centered on tunnel (Minister of Mines Annual Report 1916, page 68).

COMMODITIES: Gold Silver Lead

MINERALS

SIGNIFICANT: Galena Sphalerite Pyrite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein

CLASSIFICATION: Hydrothermal Epigenetic

TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

COMMENTS: Vein 1.2 to 1.5 metres wide, trends northeast.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Middle Jurassic

GROUP

Spatsizi

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Argillite
Slate

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Stikine

METAMORPHIC TYPE: Contact

COMMENTS: Situated in Bowser Lake foredeep clastic wedge on Stikinia Terrane.

PHYSIOGRAPHIC AREA: Boundary Ranges

Bowser Lake

RELATIONSHIP:

GRADE: Hornfels

INVENTORY

ORE ZONE: TUNNEL

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1916

SAMPLE TYPE: Grab

COMMODITY

	GRADE	
Silver	480.0000	Grams per tonne
Gold	48.0000	Grams per tonne
Lead	20.0000	Per cent

COMMENTS: Selected grab sample from 6.1 metre tunnel.

REFERENCE: Minister of Mines Annual Report 1916, page 68.

CAPSULE GEOLOGY

The Last Chance showing is located approximately 9.0 kilometres southwest of Alice Arm on a tributary of the southwest branch of Lime Creek.

The region is underlain by Coast Plutonic rocks intruding Middle Jurassic Spatsizi Group argillite, shale, siltstone, greywacke and conglomerate. These sediments have been folded and contact metamorphosed to biotite hornfels.

The showing consists of a northeast trending 1.2 to 1.5 metre wide quartz vein developed in sheared argillite. The vein is mineralized with galena, sphalerite and pyrite. A selected grab sample from a 6.1 metre long tunnel assayed 48 grams per tonne gold, 480 grams per tonne silver and 20 per cent lead (Minister of Mines Annual Report 1916, page 68).

BIBLIOGRAPHY

EMPR AR *1916-68; 1964-24-30
EMPR BULL 63
EMPR FIELDWORK 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
EMPR OF 1986-2
GSC MAP 307A; 315A; 1385A

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1131
REPORT: RGEN0100

BIBLIOGRAPHY

GSC MEM 175, p. 69

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/27

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 120**

NATIONAL MINERAL INVENTORY: 103P6 Mo1

NAME(S): **KITSAULT**, CLARY CREEK, B.C. MOLYBDENUM,
ALICE, LIME CREEK, LYNX,
CARIBOO

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 103P06W
BC MAP:
LATITUDE: 55 25 19 N
LONGITUDE: 129 25 10 W
ELEVATION: 542 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Open pit, approximately 6 kilometres southeast of the head of Alice Arm of Observatory Inlet (Assessment Report 10443).

Open Pit

MINING DIVISION: Skeena
UTM ZONE: 09 (NAD 83)
NORTHING: 6141827
EASTING: 473451

COMMODITIES: Molybdenum Silver Lead Zinc Copper

MINERALS

SIGNIFICANT: Molybdenite Pyrite Galena Sphalerite Scheelite
Chalcopyrite Tetrahedrite Pyrrhotite Fluorite Neyite
ASSOCIATED: Quartz K-Feldspar Sericite Clay Gypsum
ALTERATION: K-Feldspar Sericite Clay
ALTERATION TYPE: Potassic Sericitic Argillic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stockwork Disseminated
CLASSIFICATION: Porphyry Hydrothermal Epigenetic
TYPE: L05 Porphyry Mo (Low F- type) I05 Polymetallic veins Ag-Pb-Zn±Au
SHAPE: Regular
MODIFIER: Faulted Fractured
DIMENSION: 700 x 560 x 180 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: Mineralization is in a 700 by 560 metre annular zone, 30 to 180 metres wide.

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Jurassic Bowser Lake Undefined Formation Alice Arm Intrusion
Eocene

ISOTOPIC AGE: 52.6 Ma
DATING METHOD: Potassium/Argon
MATERIAL DATED: Biotite

LITHOLOGY: Porphyritic Quartz Monzonite
Granodiorite
Quartz Diorite
Alaskite
Siltstone
Greywacke

HOSTROCK COMMENTS: Isotopic age from Open File 1986-2.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Boundary Ranges
TERRANE: Stikine Bowser Lake
METAMORPHIC TYPE: Contact RELATIONSHIP: GRADE: Hornfels
COMMENTS: Stock intrudes Bowser Lake foredeep clastic wedge.

INVENTORY

ORE ZONE: KITSAULT REPORT ON: Y
CATEGORY: Combined YEAR: 1985
QUANTITY: 104316500 Tonnes
COMMODITY GRADE
Molybdenum 0.1100 Per cent
COMMENTS: Proven, probable reserves taking into account 1981-82 production.
Grade given was 0.186% MoS₂; conversion to Mo using a factor of 1.6681.
REFERENCE: Amax Inc., 10-K Report, December 31, 1985.

CAPSULE GEOLOGY

The Kitsault mine is located approximately 8.0 kilometres south of Alice Arm on the southeast fork of Lime Creek. The mine was a major producer of molybdenum between 1967 and 1972 and considerable reserves of molybdenum remained in place when mining operations

CAPSULE GEOLOGY

ceased. Stockpiled ore was processed in 1981-82.

The deposit is developed in the Eocene Lime Creek stock of the Alice Arm Intrusion. The stock consists of an ellipsoidal, north trending 1000 by 600 metre body of quartz monzonite to quartz diorite, with a 500 by 300 metre eastern appendage of quartz diorite. The stock intrudes Middle-Upper Jurassic Bowser Lake Group siltstones and greywackes, which are contact metamorphosed to biotite hornfels, 500 to 1000 metres outward from the stock. These rocks are all intruded by 1 to 10-metre wide lamprophyre dykes

The main body is differentiated into a core of porphyritic quartz monzonite that grades outward through granodiorite to quartz diorite on the east and west sides of the stock. It is cut by dykes and irregular masses of fine-grained alaskite.

Potassic alteration, consisting of secondary potassium feldspar, rims mineralized quartz veinlets and replaces plagioclase in the rock matrix. Plagioclase has also been subjected to sericitic and argillic alteration, especially near northeast striking faults and shears.

Molybdenite mineralization is contained in a 700 metre (east-west) by 560 metre (north-south) ellipsoidal annular zone in the north half of the main body of the stock. It varies in width from 30 to 180 metres and the zone roughly follows the north, east and west margins of the stock. The zone is developed around a 300 by 350 metre core of largely barren quartz monzonite.

Mineralization consists of molybdenite along fractures and along margins of closely-spaced, randomly oriented, 0.3 to 0.6-centimetre wide quartz veinlets that form a stockwork. They are cut by later quartz veins, up to 1 metre wide, containing pyrite, galena, sphalerite, neyite, scheelite, chalcopyrite, tetrahedrite, pyrrhotite, fluorite and gypsum. Disseminated molybdenite occurs only in the alaskite. Higher grade mineralization is found in zones of more intense fracturing and faulting, especially in the northwest contact area.

Between 1967 and 1972, a total of 9,329,669 tonnes grading 0.112 per cent molybdenum were mined. During 1981 and 1982, 4,069,548 tonnes of stockpiled ore grading 0.076 per cent molybdenum were milled.

Combined (proven, probable) reserves are 104,316,500 tonnes grading 0.11 per cent molybdenum; grade given was 0.186 per cent MoS₂; conversion to Mo using a factor of 1.6681 (Amax Inc., 10-K Report, December 31, 1985).

BIBLIOGRAPHY

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EMPR ASS RPT 7034, 7170, 8797, *10443, 11239
EMPR BULL 63; *64, pp. 93-96
EMPR ENG INSP (Mine Plans: #61413-61418, 1972)
EMPR EXPL 1978-E238
EMPR FIELDWORK 1985, pp. 219-224; 1988, 233-240; 1990, pp. 235-243
EMPR GEM 1969-69; 1970-94,95; 1971-121,122; 1972-504-506; 1973-489; 1974-326
EMPR MAP 8; 65, 1989
EMPR MINING 1981-1985
EMPR OF 1986-2; 1991-15 pp. 37-39; 1992-1; 1992-3; 1998-8-F, pp. 1-60
EMPR PF (*Woodcock, J.R., Carter, N.C. (1976) Paper 46; Various Press Clippings; Monthly Reports - District Geologist, Jul. 1974)
EMR MIN BULL MR 223 B.C. 305
EMR MP CORPFILE 1976, pp. 48,63-80,64-50
EMR MP RESFILE (Lime Creek)
GSC MAP 307A; 315A; 1385A
GSC MEM 175, p. 71
GSC SUM RPT 1922 Part A, p. 32
CIM Spec. Vol. *15, pp. 468-475
GCNL #69, 1970; #67, 1976; #1, 1979; #88, 1980; #88, 1981; #239, 1981
N MINER Mar. 6, *May 8, 1980; Mar. 6, 1995
W MINER Feb. 1979, pp. 14-19; Mar. 1980, pp. 13-16
WWW <http://www.infomine.com/index/properties/KITSAULT.html>

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/02

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 121**

NATIONAL MINERAL INVENTORY: 103P6 Cu1

NAME(S): **BEVERLEY**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P06W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 27 53 N
LONGITUDE: 129 27 07 W
ELEVATION: 229 Metres

NORTHING: 6146600
EASTING: 471425

LOCATION ACCURACY: Within 1 KM

COMMENTS: Location of open cut (Minister of Mines Annual Report 1923, page 54).

COMMODITIES: Copper Zinc

MINERALS

SIGNIFICANT: Chalcopyrite Pyrite Sphalerite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein

CLASSIFICATION: Hydrothermal Epigenetic

TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

107 Silica veins

DIMENSION:

STRIKE/DIP: 115/50S

TREND/PLUNGE:

COMMENTS: Bull quartz veins strike 115 degrees, dip 30 to 50 degrees south.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Middle Jurassic

GROUP

Spatsizi

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Sandstone
Argillite
Dioritic Dike

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Stikine

METAMORPHIC TYPE: Regional

COMMENTS: Within the Bowser Lake foredeep clastic wedge on Stikinia Terrane.

Bowser Lake

RELATIONSHIP:

PHYSIOGRAPHIC AREA: Boundary Ranges

GRADE: Greenschist

CAPSULE GEOLOGY

The Beverley occurrence is located approximately 3.0 kilometres southeast of Alice Arm.

The area is underlain by Middle Jurassic Spatsizi Group shale, siltstone, argillite, sandstone and conglomerate. These rocks have been variably folded and metamorphosed to greenschist facies.

The showing consists of a shear zone, which cuts sandstone and argillite, that contains quartz veinlets mineralized with chalcopyrite, pyrite and sphalerite.

In addition, a number of bull quartz veins crosscut a dioritic dyke reported to occur in this vicinity on the same claim group. These veins strike 115 degrees and dip 30 to 50 degrees south and one vein, exposed in a tunnel, is 0.30 to 0.46 metres wide. The veins lack sulphide mineralization and are referred to as being barren, however, free gold was reported to have come from them (Minister of Mines Annual Report 1923, p. 54).

BIBLIOGRAPHY

EMPR AR *1923-54; 1931-40; 1964-25
EMPR BULL 63
EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
EMPR OF 1986-2
GSC MAP 307A; 315A; 1385A
GSC MEM 175, p. 54

DATE CODED: 1985/07/24
DATE REVISED: 1989/03/07

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 122**

NATIONAL MINERAL INVENTORY: 103P5 Ag1

NAME(S): **UTOPIA**, LYON

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P05E
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 29 09 N
LONGITUDE: 129 31 01 W

NORTHING: 6148978
EASTING: 467333

ELEVATION: 0457 Metres

LOCATION ACCURACY: Within 500M

COMMENTS: Location centered on lower adit (Minister of Mines Annual Report 1924, page 53).

COMMODITIES: Silver Gold Zinc Lead

MINERALS

SIGNIFICANT: Pyrite Galena Sphalerite Tetrahedrite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein

CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

DIMENSION: STRIKE/DIP: 148/45S

TREND/PLUNGE:

COMMENTS: Attitude of 2.4 metre wide aplite dyke hosting quartz veinlets.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Middle Jurassic

GROUP

Spatsizi

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Argillite
Aplite Dike

HOSTROCK COMMENTS: Mineralized quartz veinlets hosted in an aplite dyke that intrudes argillite.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

PHYSIOGRAPHIC AREA: Boundary Ranges

TERRANE: Stikine

Bowser Lake

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

COMMENTS: Situated in Bowser Lake sedimentary overlap on Stikinia Terrane.

INVENTORY

ORE ZONE: DUMP

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1929

SAMPLE TYPE: Grab

COMMODITY

GRADE

Silver

2074.0000

Grams per tonne

Gold

2.1000

Grams per tonne

COMMENTS: Selected grab sample from adit dump.

REFERENCE: Minister of Mines Annual Report 1929, page 84.

CAPSULE GEOLOGY

The Utopia occurrence is located on Falls Creek 2.0 kilometres west-northwest of Alice Arm.

The area is underlain by Middle Jurassic Spatsizi Group sediments. The sediments dip moderately to steeply southwest and northeast as a result of being deformed into closely spaced northwest trending folds.

The showing consists of a 2.4 metre wide aplite dyke, striking 148 degrees and dipping 45 degrees southwest, that intrudes argillite. The dyke contains quartz veinlets mineralized with pyrite, galena, sphalerite and tetrahedrite. A selected grab sample from an adit dump assayed 2.1 grams per tonne gold and 2074 grams per tonne silver (Minister of Mines Annual Report 1929, p. 84).

BIBLIOGRAPHY

EMPR AR 1922-56; *1924-53; *1929-84
EMPR BULL 63
EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
EMPR OF 1986-2

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

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BIBLIOGRAPHY

GSC MAP 307A; 315A; 1385A
GSC MEM 175, p. 84
Chevron File

DATE CODED: 1985/07/24
DATE REVISED: 1989/03/22

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 123**

NATIONAL MINERAL INVENTORY: 103P5 Pb1

NAME(S): **BILLY BARTON**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P06W 103P05E 103P11W 103P12E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 29 56 N
LONGITUDE: 129 30 00 W
ELEVATION: 488 Metres

NORTHING: 6150423
EASTING: 468414

LOCATION ACCURACY: Within 1 KM

COMMENTS: Based on location of claim group (Minister of Mines Annual Report 1929, page 84).

COMMODITIES: Zinc Lead Silver Gold

MINERALS

SIGNIFICANT: Galena Sphalerite Pyrite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein

CLASSIFICATION: Hydrothermal Epigenetic

TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

SHAPE: Tabular

MODIFIER: Folded

COMMENTS: Quartz veins follow bedding and jointing of argillite.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Middle Jurassic	Spatsizi	Undefined Formation	

LITHOLOGY: Argillite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Stikine

METAMORPHIC TYPE: Regional

COMMENTS: Situated in Bowser Lake sedimentary overlap on Stikinia Terrane.

PHYSIOGRAPHIC AREA: Boundary Ranges

Bowser Lake

RELATIONSHIP:

GRADE: Greenschist

INVENTORY

ORE ZONE: DUMP

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1929

SAMPLE TYPE: Grab

COMMODITY

GRADE

COMMODITY	GRADE	UNIT
Silver	48.0000	Grams per tonne
Lead	1.0000	Per cent
Zinc	3.0000	Per cent

COMMENTS: Selected grab sample of sorted ore from adit dump, trace gold.

REFERENCE: Minister of Mines Annual Report 1929, page 84.

CAPSULE GEOLOGY

The Billy Barton showing is located on the east slope of Esperanza Mountain about 1.75 kilometres north-northwest of Alice Arm.

The area is underlain by Middle Jurassic Spatsizi Group sediments. The sediments dip moderately to steeply southwest and northeast as a result of being deformed into closely spaced northwest trending folds.

The showing consists of a series of irregular lenticular quartz veins, 0.025 to 0.30 metres wide, which are exposed in a tunnel 27 metres long. The veins, hosted in argillite, parallel bedding and jointing. The veins contain sparse galena, sphalerite and pyrite. A selected grab sample from an adit dump containing sorted ore assayed trace gold, 48 grams per tonne silver, 1.0 per cent lead and 3.0 per cent zinc (Minister of Mines Annual Report 1929, p. 84).

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EMPR AR *1929-84
EMPR BULL 63
EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

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BIBLIOGRAPHY

EMPR OF 1986-2
GSC MAP 307A; 315A; 1385A
GSC MEM 175, p. 54

DATE CODED: 1985/07/24
DATE REVISED: 1989/03/22

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 124**

NATIONAL MINERAL INVENTORY: 103P6 Ag5

NAME(S): **CARIBOU FRACTION**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P06W
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 28 36 N
LONGITUDE: 129 29 33 W
ELEVATION: Metres

NORTHING: 6147947
EASTING: 468870

LOCATION ACCURACY: Within 500M

COMMENTS: Based on location of claims (Minister of Mines Annual Report 1916, page 64).

COMMODITIES: Silver

MINERALS

SIGNIFICANT: Unknown
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
COMMENTS: Quartz vein up to 0.30 metre wide, dips 60 degrees southeast.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Middle Jurassic

GROUP

Spatsizi

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Argillite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine
METAMORPHIC TYPE: Regional
COMMENTS: Situated in Bowser Lake sedimentary overlap on Stikinia Terrane.

Bowser Lake

RELATIONSHIP:

PHYSIOGRAPHIC AREA: Boundary Ranges

GRADE: Greenschist

CAPSULE GEOLOGY

The Caribou Fraction showing is located on the shore of the Alice Arm of Observatory Inlet, 600 metres southwest of Alice Arm. The area is underlain by Middle Jurassic Spatsizi Group sediments. They dip moderately to steeply southwest and northeast as a result of being deformed into closely spaced northwest trending folds. The showing consists of a quartz vein, up to 0.30 metres wide, which dips 60 degrees southeast and is hosted in argillite. It appears barren of mineralization, however, it has been reported to contain very small shoots of silver ore (Geological Survey of Canada Memoir 175, p. 57).

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EMPR AR *1916-64
EMPR ASS RPT 8689
EMPR BULL 63
EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
EMPR OF 1986-2
GSC MAP 207A; 315A; 1385A
GSC MEM *175, p. 57

DATE CODED: 1985/07/24
DATE REVISED: 1989/03/22

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 125**

NATIONAL MINERAL INVENTORY: 103P6 Ag4

NAME(S): **WOLF**, ARCADIA

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 103P06W
BC MAP:

Underground

MINING DIVISION: Skeena

LATITUDE: 55 29 09 N
LONGITUDE: 129 29 28 W
ELEVATION: 34 Metres

UTM ZONE: 09 (NAD 83)

NORTHING: 6148966
EASTING: 468965

LOCATION ACCURACY: Within 500M

COMMENTS: Based on location of mine workings (Geological Survey of Canada Summary Report 1928, page 31A).

COMMODITIES: Silver Gold Zinc Lead Copper

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Sphalerite Galena Tetrahedrite

Ruby Silver Silver

COMMENTS: As disseminations, lenses and bands in veins.

ASSOCIATED: Quartz Ankerite Calcite Barite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Breccia Concordant
CLASSIFICATION: Hydrothermal Epigenetic

TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

DIMENSION: 0067 x 0021 x 0001 Metres

COMMENTS: Central vein strikes 018 to 160 degrees.

STRIKE/DIP: 018/20W

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Middle Jurassic

GROUP

Spatsizi

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Argillite

Argillaceous Quartzite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Stikine

METAMORPHIC TYPE: Regional

COMMENTS: Situated in Bowser Lake sedimentary overlap on Stikinia Terrane.

Bowser Lake

RELATIONSHIP:

PHYSIOGRAPHIC AREA: Boundary Ranges

GRADE: Greenschist

CAPSULE GEOLOGY

The Wolf mine is located 400 metres north-northwest of the centre of Alice Arm on Lot 3821. Three small shipments of high grade ore were made from this property in 1925, 1927 and 1953.

The area is underlain by Middle Jurassic Spatsizi Group sediments. The sediments dip moderately to steeply southwest and northeast as a result of being deformed into closely spaced northwest trending folds.

The Wolf deposit consists of three quartz veins, up to a metre wide but commonly about 0.3 metres wide, in argillite and argillaceous quartzites. The sediments, striking north and dipping 20 degrees west, are cut by numerous steeply dipping lamprophyre and diorite dykes which trend 030 to 040 degrees. The veins follow the bedding along which shearing and fracturing has taken place, as indicated by gouged or schistose argillite along the margins of the veins and by the incorporation of brecciated argillite fragments in the wider portions of the veins. The Central (main) vein, 0.05 to 0.6 metres wide, strikes north at 018 to 160 degrees and dips 20 degrees west. This vein has been traced along strike underground for 67 metres and down dip for 21 metres. Two other veins have been traced along surface for at least 30 metres. Mineralization consists of disseminations, lenses and bands of pyrite, chalcopyrite, sphalerite, galena, tetrahedrite, ruby silver and native silver. The lenses and bands are up to 0.36 metres thick in a gangue of white quartz, minor ankerite, calcite and barite. In the Central vein these sulphide bands are usually found along the footwall of the vein.

A total of 45 tonnes of hand sorted ore was shipped with an average grade of 5.5 grams per tonne gold, 3419.9 grams per tonne silver, 0.24 per cent copper, 1.74 per cent lead and 2.19 per cent zinc.

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RUN TIME: 12:06:33

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BIBLIOGRAPHY

EMPR AR 1916-64; 1925-74; 1926-79; *1927-70; *1928-79,80; 1929-84,85;
1930-93; 1938-B26; 1953-90; 1965-63
EMPR BULL 63
EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
EMPR OF 1986-2
EMR MP CORPFILE (Sileurian Chieftain Mining Co. Ltd.)
GSC MAP 307A; 315A; 1385A
GSC MEM 175, p. 86
GSC SUM RPT *1928, pp. 31A,32A

DATE CODED: 1985/07/24
DATE REVISED: 1989/03/22

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

CAPSULE GEOLOGY

Mineralization consists of sphalerite, galena, ruby silver, pyrite, pyrrhotite, chalcopyrite, arsenopyrite, freibergite, argentite and native silver in a gangue of quartz, calcite and siderite. These minerals commonly occur as disseminations throughout the vein and locally form bands of massive sulphides along the hangingwall of the vein. Scheelite is found in erratic patches.

Various other, more irregular, bedding parallel veins of similar mineralogy occur in the vicinity.

The Esperanza mine produced high grade hand sorted silver ore sporadically between 1911 and 1948. In total, 4662 tonnes of ore with an average grade of 1.77 grams per tonne gold, 983.9 grams per tonne silver, 0.028 per cent copper and 0.14 per cent lead were mined.

BIBLIOGRAPHY

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1918-56; 1919-50; 1920-47; 1921-48; 1922-55,56; 1923-55,56; 1924-
53; 1925-74; 1926-79; 1927-78; *1928-80-84; *1929-83; 1930-93;
1931-37,38; 1933-47,48; 1934-B14; 1935-B29; 1936-B59; 1937-B42;
1941-41; 1945-62; *1947-92-94; 1948-76; 1965-63; 1968-59
EMPR ASS RPT 5794, 6219, *9045, *10154
EMPR BC METAL MM00731, MM00811
EMPR BULL 10, p. 57; 63
EMPR EXPL 1976-166
EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 223-240; 1990, pp. 235-243
EMPR GEM *1969-64-67
EMPR INDEX 3-195
EMPR MAP 8
EMPR OF 1986-2
EMPR PF (Various Letters, Reports by Resident Engineer, 1925;
*Mathews, W.H. (1942) Report; *Brown, R.A. (1981) Drill Hole
Sections, Various Maps of underground workings, Field notes)
EMR MP CORPFILE (Esperanza Mines Ltd.; Silurian Chieftain Mining Co.
Ltd.; Lori Explorations Ltd.)
GSC MAP 307A; 315A; 1385A
GSC MEM 32, pp. 92,93; 175, pp. 62-65
GSC SUM RPT 1922, pp. 31A,32A,46A,47A; *1928, pp. 32A-37A
EMPR OF 1998-10

DATE CODED: 1985/07/24
DATE REVISED: 1989/03/23

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REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

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BIBLIOGRAPHY

EMPR BULL 63
EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
EMPR OF 1986-2
EMR MP CORPFILE (Esperanza Mines Ltd.)
GSC MAP 307A; 315A; 1385A
GSC MEM 175, p. 52

DATE CODED: 1985/07/24
DATE REVISED: 1989/03/23

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 128**

NATIONAL MINERAL INVENTORY: 103P6,5,11,12 Ag2

NAME(S): **LONE MAID**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P11W 103P06W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 30 01 N
LONGITUDE: 129 29 34 W
ELEVATION: 320 Metres

NORTHING: 6150574
EASTING: 468871

LOCATION ACCURACY: Within 500M

COMMENTS: Location centered on adit on north end of Lone Maid claim-Lot 3191
(Minister of Mines Annual Report 1916, page 62).

COMMODITIES: Copper Zinc Lead

MINERALS

SIGNIFICANT: Pyrite Pyrrhotite Chalcopyrite Sphalerite Galena

COMMENTS: Occur sparsely.

ASSOCIATED: Quartz Calcite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein

CLASSIFICATION: Hydrothermal Epigenetic

TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

COMMENTS: Zones of veins strikes northeast and dips 45 degrees northwest.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Middle Jurassic

GROUP

Spatsizi

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Argillite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Stikine

METAMORPHIC TYPE: Regional

COMMENTS: Situated in Bowser Lake sedimentary overlap on Stikinia Terrane.

PHYSIOGRAPHIC AREA: Boundary Ranges

Bowser Lake

RELATIONSHIP:

GRADE: Greenschist

CAPSULE GEOLOGY

The Lone Maid showing is located 2.0 kilometres north-northwest of Alice Arm, 750 metres north of the Esperanza Mine (103P 126). The property (Lot 3191) was explored for the northward extension of the Esperanza vein during the early 1920's.

The area is underlain by Middle Jurassic Spatsizi Group sediments. The sediments dip moderately to steeply southwest and northeast as a result of being deformed into closely spaced northwest trending folds.

The showing comprises a zone, 0.30 to 1.52 metres in diameter, of quartz and calcite veining that strikes northeast and dips about 45 degrees northwest. The veins, up to 0.46 metres wide, crosscut southwest dipping (about 45 degrees) argillite. The zone has been traced, by tunnel, for 23 metres. Mineralization in the quartz and calcite veins consists of sparse pyrite, pyrrhotite, chalcopyrite, sphalerite and galena.

BIBLIOGRAPHY

EMPR AR 1916-62; 1922-56; 1923-56
EMPR BULL 63
EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
EMPR OF 1986-2
GSC MAP 307A; 315A; 1385A
GSC MEM 175, p. 70
GSC SUM RPT *1928, p. 37A

DATE CODED: 1985/07/24
DATE REVISED: 1989/03/23

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 129**

NATIONAL MINERAL INVENTORY: 103P13 Ag25

NAME(S): **MONTANA (L.4974)**, MARMOT METALS, LOW TIDE

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 103P13W
BC MAP:

Underground

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 51 08 N
LONGITUDE: 129 54 41 W

NORTHING: 6190008
EASTING: 442943

ELEVATION: 975 Metres

LOCATION ACCURACY: Within 500M

COMMENTS: Location of the portal of the western adit (Assessment Report 11943, Map 1).

COMMODITIES: Silver Zinc Lead Gold Copper

MINERALS

SIGNIFICANT: Sphalerite Pyrite Chalcopyrite Galena Tetrahedrite

COMMENTS: Massive to disseminated.

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Massive Disseminated
CLASSIFICATION: Hydrothermal Epigenetic

TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

DIMENSION: 0300 x 0002 Metres

STRIKE/DIP: 040/25N

TREND/PLUNGE:

COMMENTS: Montana vein, up to 1.8 metres wide.

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Eocene			Coast Plutonic Complex

ISOTOPIC AGE: 47-51 +/- 2-3 Ma

DATING METHOD: Potassium/Argon

MATERIAL DATED: Biotite/hornblende

LITHOLOGY: Granodiorite
Andesitic Dike

HOSTROCK COMMENTS: Hyder Pluton. Isotopic age is from Alldrick, D., Open File 1986-2.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline

PHYSIOGRAPHIC AREA: Boundary Ranges

TERRANE: Plutonic Rocks

COMMENTS: At the eastern margin of the Coast Plutonic Complex.

INVENTORY

ORE ZONE: VEIN

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1985

SAMPLE TYPE: Grab

COMMODITY

GRADE

COMMODITY	GRADE	UNIT
Silver	9145.1000	Grams per tonne
Gold	2.4300	Grams per tonne
Copper	0.7850	Per cent
Lead	11.5000	Per cent
Zinc	24.9000	Per cent

COMMENTS: Grab sample of unnamed massive galena-sphalerite vein.

REFERENCE: Assessment Report 11943, page 15.

CAPSULE GEOLOGY

The Montana showing is located on the north side of the Marmot River, 9 kilometres east of the Portland Canal and 11 kilometres southeast of Stewart.

The area is underlain by volcanics and sediments of the Middle Jurassic Salmon River Formation and the Lower Jurassic Unuk River Formation of the Hazelton Group intruded by granodiorite of the Eocene Hyder Pluton.

The showing is comprised of at least two well mineralized structures in granodiorite, the Montana vein and a second unnamed vein 350 metres northwest of the Montana vein. The Montana vein strikes 040 degrees for at least 300 metres, dips 25 degrees northwest and varies up to 1.8 metres wide. Mineralization consists of massive lenses and disseminations of sphalerite with lesser pyrite, chalcopyrite, galena and tetrahedrite in a gangue of quartz.

CAPSULE GEOLOGY

A grab sample assayed 0.684 grams per tonne gold, 225.8 grams per tonne silver, 0.585 per cent copper, 4.99 per cent zinc and 0.90 per cent lead (Assessment Report 11943, page 15).

The second unnamed structure consists of a 0.10 to 0.30 metre wide discontinuous lenticular vein of massive galena and sphalerite that initially extends for 7.6 metres along the eastern contact of a vertically dipping andesitic dyke striking 050 degrees. The vein continues for another 3.6 metres 7.6 metres further to the northeast. A grab sample assayed 2.43 grams per tonne gold, 9145.1 grams per tonne silver, 0.785 per cent copper, 11.50 per cent lead and 24.90 per cent zinc (Assessment Report 11943, p. 15).

Past production from these veins totals 24 tonnes with an average grade of 7.75 grams per tonne gold, 6075.4 grams per tonne silver, 0.25 per cent copper, 14.14 per cent lead and 19.76 per cent zinc. At least 19 tonnes of this production came from the Montana vein.

BIBLIOGRAPHY

- EMPR AR 1913-88; 1914-154; 1915-71; 1919-62,63; 1920-6=53; 1921-61; 1922-67; 1923-70; *1925-81,82; 1926-88; 1927-82,394; 1928-93; 1930-53
EMPR ASS RPT 8538, *11943
EMPR BC METAL MM00771
EMPR BULL 58; 63
EMPR EXPL 1983-510
EMPR FIELDWORK 1983, pp. 149-163; 1984, pp. 316-341; 1985, pp. 217, 218; 1986, pp. 81-102; 1988, pp. 233-240; 1990, pp. 235-243
EMPR INDEX 3-206
EMPR MAP 8
EMPR PF (Mondana Ventures Inc. Prospectus Oct. 1989)
EMR MP CORPFILE (Marmot Metals Mining Co. Ltd.)
GSC MAP 215A; 307A; 315A; 1385A
GSC MEM *159, pp. 66,67; *175, pp. 129,130
GSC OF 2996

DATE CODED: 1985/07/24
DATE REVISED: 1989/05/13

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 130**

NATIONAL MINERAL INVENTORY: 103P6,5,11,12 Ag2

NAME(S): **ALICE**, ANNA MACK

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 103P11W 103P12E
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 30 09 N
LONGITUDE: 129 29 54 W
ELEVATION: 527 Metres

NORTHING: 6150824
EASTING: 468522

LOCATION ACCURACY: Within 500M

COMMENTS: Location centered on portal of Number 2 adit (Geology, Exploration and Mining in British Columbia 1969, page 67).

COMMODITIES: Silver Gold Lead Zinc Copper

MINERALS

SIGNIFICANT: Pyrite Galena Sphalerite Tetrahedrite Arsenopyrite

Ruby Silver Argentite

COMMENTS: Erratically distributed in quartz vein. Massive in places.

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein

CLASSIFICATION: Hydrothermal Epigenetic

TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

DIMENSION: 0213 x 0002 Metres

STRIKE/DIP: 140/80S

TREND/PLUNGE:

COMMENTS: Vein strikes 140 degrees for at least 213 metres, dips 50 to 80 degrees southwest and varies from 0.05 to 1.8 metres wide.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Middle Jurassic

GROUP

Spatsizi

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Argillite
Argillaceous Siltstone

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Stikine

METAMORPHIC TYPE: Regional

Bowser Lake

RELATIONSHIP:

COMMENTS: In the Bowser Lake sedimentary overlap on Stikinia Terrane.

PHYSIOGRAPHIC AREA: Boundary Ranges

GRADE: Greenschist

INVENTORY

ORE ZONE: VEIN

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1934

SAMPLE TYPE: Bulk Sample

COMMODITY

GRADE

Silver

771.0000

Grams per tonne

Gold

1.3700

Grams per tonne

Lead

0.5000

Per cent

COMMENTS: Composite sample taken along 17 metre strike length of vein.

REFERENCE: Minister of Mines Annual Report 1934, page B14.

CAPSULE GEOLOGY

The Alice occurrence is located 1.75 kilometres north-northwest of Alice Arm. The area was explored extensively during the 1920's and 1930's for the northward extension of the Esperanza vein (103P 126).

The area is underlain by Middle Jurassic Spatsizi Group sediments. The sediments dip moderately to steeply southwest and northeast as a result of being deformed into closely spaced northwest trending folds.

The occurrence consists of a quartz-breccia vein, 0.05 to 1.8 metres wide, which strikes 140 degrees and dips 50 to 80 degrees southwest. The vein, traced for 213 metres along strike, follows a bedding plane shear in sediments. These sediments, consisting of thin-bedded black argillite and argillaceous siltstone, strike north to northwest and dip west. Numerous lamprophyre and andesitic sills and northeast trending steeply dipping dykes cut the vein and sediments. The vein is thought to be the northward extension of the Esperanza vein (103P 126) about 1.2 kilometres to the southeast.

CAPSULE GEOLOGY

Mineralization consists of erratically distributed pyrite, galena, sphalerite, tetrahedrite, arsenopyrite, ruby silver and argentite in quartz gangue. In the number 2 adit, 0.3 metre wide banded zones of near massive pyrite, galena, sphalerite and ruby silver are exposed in the margins of the vein. A composite sample of the vein taken along a strike length of 17 metres on the surface, assayed 1.37 grams per tonne gold, 771 grams per tonne silver, 0.5 per cent lead and trace zinc (Minister of Mines Annual Report 1934, page B14).

This vein is reported to extend northwest onto the Anna Mack claim, where a 0.15 metre wide sparsely mineralized quartz vein in argillite is exposed in a trench.

BIBLIOGRAPHY

EMPR AR 1916-62,63; 1922-56; 1923-56; 1925-74; 1929-84; 1932-56;
*1934-B14; 1935-B29; *1947-94
EMPR BULL 63
EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp. 235-243
EMPR GEM *1969-64-67
EMPR MAP 8
EMPR OF 1986-2
EMR MP CORPFILE (Esperanza Mines Ltd.)
GSC MAP 307A; 315A; 1385A
GSC MEM 175, pp. 52,53
GSC SUM RPT *1928, pp. 37A,38A

DATE CODED: 1985/07/24
DATE REVISED: 1989/03/23

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 131**

NATIONAL MINERAL INVENTORY: 103P6,5 Pb5

NAME(S): **INDEPENDENT**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P06W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 29 02 N
LONGITUDE: 129 29 48 W
ELEVATION: 198 Metres

NORTHING: 6148752
EASTING: 468613

LOCATION ACCURACY: Within 500M

COMMENTS: Location centered on tunnel (Minister of Mines Annual Report 1918, page 56).

COMMODITIES: Zinc Silver Lead Gold

MINERALS

SIGNIFICANT: Pyrite Galena Chalcopyrite Sphalerite

ASSOCIATED: Quartz Calcite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Breccia Stockwork

CLASSIFICATION: Hydrothermal Epigenetic

TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

DIMENSION: STRIKE/DIP: /65W

TREND/PLUNGE:

COMMENTS: Attitude of vein, 0.30 to 1.8 metres wide.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Middle Jurassic

GROUP

Spatsizi

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Argillite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Stikine

Bowser Lake

PHYSIOGRAPHIC AREA: Boundary Ranges

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

COMMENTS: Situated in the Bowser Lake sedimentary overlap on Stikinia Terrane.

INVENTORY

ORE ZONE: FOOTWALL

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1918

SAMPLE TYPE: Grab

COMMODITY

GRADE

Silver 703.0000 Grams per tonne

Lead 1.0000 Per cent

Zinc 7.2000 Per cent

COMMENTS: Selected grab sample from footwall of vein.

REFERENCE: Minister of Mines Annual Report 1918, page 56.

CAPSULE GEOLOGY

The Independent occurrence is located 500 metres west-northwest of the approximate centre of Alice Arm. The area was explored for base and precious metals between 1918 and 1921.

The area is underlain by Middle Jurassic Spatsizi Group sediments. The sediments dip moderately to steeply southwest and northeast as a result of being deformed into closely spaced northwest trending folds.

The showing consists of a quartz vein, 0.30 to 1.8 metres wide, hosted in argillite that strikes north-south and dips 65 degrees west. Locally, the quartz breccia vein contains numerous fragments of argillite. The vein contains pyrite, galena, chalcopyrite and sphalerite in a gangue of quartz and minor calcite. A selected grab sample from a narrow mineralized zone in the footwall of the vein assayed trace gold, 703 grams per tonne silver, 1.0 per cent lead and 7.2 per cent zinc (Minister of Mines Annual Report 1918, p. 56).

BIBLIOGRAPHY

EMPR AR *1918-56; 1919-50; 1921-48

EMPR BULL 63

EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp. 235-243

EMPR MAP 8

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1152
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR OF 1986-2
GSC MAP 307A; 315A; 1385A
GSC MEM 175, p. 68

DATE CODED: 1985/07/24
DATE REVISED: 1989/03/23

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 132**

NATIONAL MINERAL INVENTORY: 103P6 Pb4

NAME(S): **BROWN BEAR**, CASEY'S, BEL

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P06W
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 28 41 N
LONGITUDE: 129 26 15 W
ELEVATION: 152 Metres

NORTHING: 6148078
EASTING: 472348

LOCATION ACCURACY: Within 500M

COMMENTS: Location of incline shaft (Minister of Mines Annual Report 1916, page 65).

COMMODITIES: Silver Lead Zinc

MINERALS

SIGNIFICANT: Galena Pyrite Arsenopyrite Sphalerite

COMMENTS: Trace gold.

ASSOCIATED: Quartz Barite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

110 Vein barite

DIMENSION: STRIKE/DIP: 138/25N

TREND/PLUNGE:

COMMENTS: Dip of quartz-barite vein, 1.2 metres wide, varies from 10 degrees southwest to 25 degrees northeast.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic Hazelton Undefined Formation

LITHOLOGY: Argillite
Tuff

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

PHYSIOGRAPHIC AREA: Boundary Ranges

TERRANE: Stikine

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

COMMENTS: At the south end of the Stewart Complex (Island Arc Assemblage).

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1933

SAMPLE TYPE: Grab

COMMODITY

GRADE

Silver

21.0000

Grams per tonne

COMMENTS: Selected grab sample, trace gold.

REFERENCE: Minister of Mines Annual Report 1933, page 47.

CAPSULE GEOLOGY

The Brown Bear showing is located just north of the Illiance River, about 3.5 kilometres east of Alice Arm. The area was investigated in 1916 and 1933 for base metals and uranium.

The region is underlain by an assemblage of volcanics and sediments comprising Upper Triassic Stuhini Group, Lower Jurassic Hazelton Group and Middle Jurassic Spatsizi Group. This assemblage has been folded into a north-northwest trending anticline (Mt. McGuire anticline) and regionally metamorphosed to greenschist facies.

The showing consists of a 1.2 metre wide quartz-barite vein exposed in a trench and a 6.0 metre long incline shaft at 152 metres elevation. The vein strikes 138 degrees and from dips 25 degrees northeast to 10 degrees southwest. It is hosted in Hazelton Group argillite and tuff on the western flank of the Mt. McGuire anticline. Mineralization consists of galena, pyrite, arsenopyrite and minor sphalerite. A selected grab sample assayed trace gold and 21 grams per tonne silver (Minister of Mines Annual Report 1933, page 47).

About 150 metres to the east, at 166 metres elevation, a similar 1 metre wide vein, mineralized with pyrite, galena and sphalerite, is exposed in a trench and shallow shaft.

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1154
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR AR 1916-64; *1933-46,47; 1966-47,48
EMPR BULL 63
EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
EMPR OF 1986-2
GSC MAP 307A; 315A; 1385A
GSC MEM 175, p. 57

DATE CODED: 1985/07/24
DATE REVISED: 1989/03/07

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 133**

NATIONAL MINERAL INVENTORY: 103P6 Pb3

NAME(S): **THREE MILE BEL**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P06W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 28 44 N
LONGITUDE: 129 24 15 W
ELEVATION: 122 Metres

NORTHING: 6148158
EASTING: 474455

LOCATION ACCURACY: Within 500M

COMMENTS: Location of entrance of 60 metre long adit (Minister of Mines Annual Report 1930, page 89).

COMMODITIES: Zinc Lead Silver Gold

MINERALS

SIGNIFICANT: Pyrite Marcasite Galena Sphalerite

ASSOCIATED: Quartz

ALTERATION: Quartz

COMMENTS: Quartz occurs as silicification in breccias and shear zones.

ALTERATION TYPE: Silicific'n

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Breccia

CLASSIFICATION: Hydrothermal Epigenetic

TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au I02 Intrusion-related Au pyrrhotite veins

L01 Subvolcanic Cu-Ag-Au (As-Sb)

COMMENTS: Silicified shear zone strikes north-south. Breccia zones vary from 4.6 to 6.1 metres wide.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Upper Triassic	Stuhini	Undefined Formation	

LITHOLOGY: Tuff
Graphitic Calcareous Argillite
Sandstone
Agglomerate

HOSTROCK COMMENTS: Occurrence hosted in interbedded sequence.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Stikine

PHYSIOGRAPHIC AREA: Boundary Ranges

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

COMMENTS: At the south end of the Stewart Complex (Island Arc Assemblage).

INVENTORY

ORE ZONE: BRECCIA

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1931

SAMPLE TYPE: Grab

COMMODITY

COMMODITY	GRADE	
Silver	21.0000	Grams per tonne
Lead	1.6000	Per cent
Zinc	2.8000	Per cent

COMMENTS: Grab sample from breccia zone, trace gold.

REFERENCE: Minister of Mines Annual Report 1931, page 39.

CAPSULE GEOLOGY

The Three Mile showing is located on the Illiance River about 5.3 kilometres east of Alice Arm. The area was explored, by stripping and tunnelling, during the early 1930's for base and precious metals.

The region is underlain by an assemblage of volcanics and sediments comprising the Upper Triassic Stuhini Group, the Lower Jurassic Hazelton Group and the Middle Jurassic Spatsizi Group. This assemblage has been folded into a north-northwest trending anticline (Mt. McGuire anticline) and regionally metamorphosed to greenschist facies.

The showing consists of various occurrences hosted in Stuhini Group interbedded argillite, sandstone, tuff and agglomerate which strike approximately north-south and dip 60 degrees east. The main

CAPSULE GEOLOGY

occurrences are two quartzose brecciated zones, 4.6 to 6.1 metres wide, mineralized with pyrite, marcasite and minor galena and sphalerite. A grab sample assayed trace gold, and 21 grams per tonne silver, 1.6 per cent lead, 2.8 per cent zinc (Minister of Mines Annual Report 1931, page 39).

At 122 metres elevation, on the east bank of the river, a north striking shear zone is developed in waterlain tuffs. The zone is pyritic, silicified and has been explored by a 61 metre tunnel. On the west bank, a 6.0 metre tunnel follows a slightly pyritic shear zone hosted in graphitic and calcareous argillite.

BIBLIOGRAPHY

EM ASS RPT 20698
EMPR AR 1930-89; *1931-39; 1966-47,48
EMPR BULL 63
EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
EMPR OF 1986-2
GSC MAP 307A; 315A; 1385A
GSC MEM 175, p. 82

DATE CODED: 1985/07/24
DATE REVISED: 1989/03/08

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 134**

NATIONAL MINERAL INVENTORY: 103P6 Pb1

NAME(S): **INGRAHAM'S, SUPREME**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P06W
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 29 11 N
LONGITUDE: 129 20 59 W
ELEVATION: 305 Metres

NORTHING: 6148974
EASTING: 477900

LOCATION ACCURACY: Within 500M

COMMENTS: Location based on description of showings in Minister of Mines
Annual Report 1922, page 62.

COMMODITIES: Lead Silver Gold

MINERALS

SIGNIFICANT: Galena Pyrite
COMMENTS: Galena occurs in a dyke and pyrite is hosted in a limestone bed.

ASSOCIATED: Quartz Calcite
COMMENTS: As veins and stringers in a dyke and limestone bed.

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Hydrothermal Epigenetic

TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au 102 Intrusion-related Au pyrrhotite veins

COMMENTS: Dyke containing galena strikes 060 degrees.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Upper Triassic	Stuhini	Undefined Formation	

LITHOLOGY: Limestone
Porphyritic Dike
Argillite
Siltstone
Sandstone

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Boundary Ranges

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

COMMENTS: At the south end of the Stewart Complex (Island Arc Assemblage).

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Grab

YEAR: 1922

COMMODITY	GRADE	
Silver	377.0000	Grams per tonne
Lead	28.0000	Per cent

COMMENTS: Selected grab sample from galena bearing dyke.

REFERENCE: Minister of Mines Annual Report 1922, page 63.

CAPSULE GEOLOGY

The Ingraham's showing is located along the Illiance River, 8.75 kilometres due east of Alice Arm. The area was prospected for gold, silver and lead in 1918 and 1921.

The region is underlain by an assemblage of volcanics and sediments comprising the Upper Triassic Stuhini Group, the Lower Jurassic Hazelton Group and the Middle Jurassic Spatsizi Group. This assemblage has been folded into a north-northwest trending anticline (Mt. McGuire anticline) and regionally metamorphosed to greenschist facies.

The showing is hosted in variably schistose argillite, siltstone, sandstone and limestone of the Stuhini Group. The main showing is situated 200 metres to the west of Theophilus Creek (Copper Creek) on the north bank of the Illiance River. This showing consists of quartz and calcite veins in a porphyritic dyke that strikes 060 degrees. The veins are mineralized with galena; minor disseminated galena is also found in the dyke. A selected grab sample assayed trace gold, 377 grams per tonne silver and 28 per cent

CAPSULE GEOLOGY

lead (Minister of Mines Annual Report 1922, page 63).
A second showing, consisting of stringers and bands of pyrite and quartz, is located on the same claim group. It occurs in a 3.7 metre wide bed of altered limestone. A grab sample from a 1.2 metre wide band of massive pyrite assayed 0.69 grams per tonne gold and 6.9 grams per tonne silver (Minister of Mines Annual Report 1918, page 70).

BIBLIOGRAPHY

EM ASS RPT 20698
EMPR AR *1918-70; *1922-62,63
EMPR BULL 63
EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
EMPR OF 1986-2
GSC MAP 307A; 315A; 1385A
GSC MEM 175, p. 68

DATE CODED: 1985/07/24
DATE REVISED: 1989/03/08

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 135**

NATIONAL MINERAL INVENTORY: 103P6 Ag1

NAME(S): **SILVER LEAF**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P06W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 28 59 N
LONGITUDE: 129 20 40 W
ELEVATION: 366 Metres

NORTHING: 6148601
EASTING: 478232

LOCATION ACCURACY: Within 500M

COMMENTS: Location of entrance of tunnel (Minister of Mines Annual Report 1924, page 52).

COMMODITIES: Silver

MINERALS

SIGNIFICANT: Pyrite Tetrahedrite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Breccia
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
DIMENSION: 0003 Metres

I02 Intrusion-related Au pyrrhotite veins

STRIKE/DIP: 165/55W TREND/PLUNGE:

COMMENTS: Attitude of breccia zone, 3 metres wide, that contains mineralized vein.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Middle Jurassic	Spatsizi	Undefined Formation	

LITHOLOGY: Brecciated Banded Argillite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

PHYSIOGRAPHIC AREA: Boundary Ranges

TERRANE: Stikine

Bowser Lake

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

COMMENTS: Within the Bowser Lake foredeep clastic wedge on Stikinia Terrane.

INVENTORY

ORE ZONE: VEIN

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1924

SAMPLE TYPE: Grab

COMMODITY

GRADE

Silver

120.0000

Grams per tonne

COMMENTS: From quartz vein in middle of breccia zone, trace gold.

REFERENCE: Minister of Mines Annual Report 1924, page 52.

CAPSULE GEOLOGY

The Silver Leaf showing is located on the south bank of the Illiance River, about 9.0 kilometres due east of Alice Arm. The area was explored for precious metals in 1924.

The region is underlain by an assemblage of volcanics and sediments comprising the Upper Triassic Stuhini Group, the Lower Jurassic Hazelton Group and the Middle Jurassic Spatsizi Group. This assemblage has been folded into a north-northwest trending anticline (Mt. McGuire anticline) and regionally metamorphosed to greenschist facies.

The showing is hosted in Spatsizi Group banded argillite, striking 050 degrees and dipping 55 degrees east, crosscut by several dykes. The showing consists of a zone of brecciated argillite and quartz, up to 3.0 metres wide, which strikes 165 degrees and dips 55 degrees west. A later, 15.0 centimetre wide, quartz vein, located midway between the walls of the breccia zone, is mineralized with pyrite and tetrahedrite. A grab sample from this vein assayed trace gold and 120 grams per tonne silver (Minister of Mines Annual Report 1924, page 52).

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EMPR AR *1924-52

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EMPR MAP 8
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GSC MAP 307A; 315A; 1385A
GSC MEM 175, p. 79

DATE CODED: 1985/07/24
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CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 136**

NATIONAL MINERAL INVENTORY: 103P13 W1

NAME(S): **LOUISE**, DOT

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P13W 104A04W
BC MAP:

MINING DIVISION: Skeena
UTM ZONE: 09 (NAD 83)

LATITUDE: 55 58 47 N
LONGITUDE: 129 58 10 W
ELEVATION: 122 Metres

NORTHING: 6204247
EASTING: 439507

LOCATION ACCURACY: Within 500M

COMMENTS: Location of showing (Property File - Mathews W.H. 1943).

COMMODITIES: Tungsten

MINERALS

SIGNIFICANT: Scheelite
ASSOCIATED: Calcite
COMMENTS: Minor calcite, calcium silicates.

ALTERATION TYPE: Skarn
MINERALIZATION AGE: Eocene

ISOTOPIC AGE: 47-51 +/- 2-3 Ma

DATING METHOD: Potassium/Argon

MATERIAL DATED: Biotite

DEPOSIT

CHARACTER: Stratiform
CLASSIFICATION: Skarn

TYPE: K05 W skarn

DIMENSION: 0046 x 0002 Metres

STRIKE/DIP: 360/25W

TREND/PLUNGE:

COMMENTS: Calc-silicate bed, 0.6 to 1.8 metres wide and traced for 46 metres, contains mineralization in lenses up to 0.6 metres wide.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Lower Jurassic
Eocene

GROUP

Hazelton

FORMATION

Unuk River

IGNEOUS/METAMORPHIC/OTHER

Coast Plutonic Complex

ISOTOPIC AGE: 47-51 +/- 2-3 Ma

DATING METHOD: Potassium/Argon

MATERIAL DATED: Biotite

LITHOLOGY: Calc-silicate
Mica Schist
Clastic
Tuff

HOSTROCK COMMENTS: Isotopic age is from Alldrick, D., Open File 1986-2.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Stikine

METAMORPHIC TYPE: Contact

COMMENTS: At the western margin of the Stewart Complex (Island Arc Assemblage).

PHYSIOGRAPHIC AREA: Boundary Ranges

RELATIONSHIP: Syn-mineralization

GRADE:

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1942

SAMPLE TYPE: Grab

COMMODITY

GRADE

Tungsten

0.2100

Per cent

COMMENTS: Equivalent to 0.27 per cent tungstic oxide (WO₃). Highest assay from grab samples.

REFERENCE: Bulletin 10, page 54.

CAPSULE GEOLOGY

The Louise showing is located on the west side of the Bear River 5.0 kilometres north-northeast of Stewart.

The showing comprises tungsten mineralization hosted in calc-silicate beds in a sequence of tuffs and clastics of the Lower Jurassic Unuk River Formation. These have been contact metamorphosed to mica schists. These beds lie about 150 metres north of a large body of granite of the Eocene Hyder Pluton, strike north and dip 25 to 40 degrees west.

Tungsten mineralization is contained in a 0.6 to 1.8 metre wide calc-silicate bed, traced for 46 metres, and in a series of calc-silicate lenses up to 0.6 metres wide and 1.0 metre in length. These

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CAPSULE GEOLOGY

contain scheelite in a gangue of calcium silicates and minor calcite. Grab samples of higher grade material from the lenses have assayed 0.04 per cent and 0.27 per cent tungstic oxide (WO₃) (Bulletin 10, p. 54).

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EMPR BULL *10(Rev), pp. 53,54; 58; 63
EMPR FIELDWORK 1983, pp. 149-163; 1984, pp. 316-341; 1985, pp. 217, 218; 1986, pp. 93-102; 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
EMPR OF 1991-17
EMPR PF (*Mathews, W.H. (1943) Reports)
GSC MAP 215A; 307A; 315A; 1385A

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CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 137**

NATIONAL MINERAL INVENTORY: 103P6 Pb2

NAME(S): **COPPER CREEK**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P06W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 28 55 N
LONGITUDE: 129 22 13 W
ELEVATION: 427 Metres

NORTHING: 6148486
EASTING: 476599

LOCATION ACCURACY: Within 500M

COMMENTS: Location of claim group (Minister of Mines Annual Report 1921, page 54).

COMMODITIES: Lead Silver Gold

MINERALS

SIGNIFICANT: Galena Pyrite

COMMENTS: Stringers.

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
DIMENSION: 0001 Metres
COMMENTS: Veins are up to 1.5 metres wide.

STRIKE/DIP: TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Upper Triassic	Stuhini	Undefined Formation	

LITHOLOGY: Argillite
Dioritic Dike

HOSTROCK COMMENTS: Mineralization developed in argillite adjacent to a dioritic dyke.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

PHYSIOGRAPHIC AREA: Boundary Ranges

TERRANE: Stikine

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

COMMENTS: At the south end of the Stewart Complex (Island Arc Assemblage).

INVENTORY

ORE ZONE: DUMP

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1921

SAMPLE TYPE: Grab

COMMODITY

GRADE

Silver

21.0000

Grams per tonne

Lead

6.5000

Per cent

COMMENTS: Selected grab sample from dump of trench.

REFERENCE: Minister of Mines Annual Report 1921, page 54.

CAPSULE GEOLOGY

The Copper Creek showing is located 7.5 kilometres east of the town of Alice Arm on the Illiance River. The showing was explored by trenching in 1921.

The region is underlain by an assemblage of volcanic and sedimentary rocks of the Upper Triassic Stuhini Group, the Lower Jurassic Hazelton Group and the Middle Jurassic Spatsizi Group. The sequence has been folded into a north-northwest trending anticline (Mt. McGuire anticline) and has been regionally metamorphosed to green-schist facies.

The showing comprises a zone of black cherty quartz veins, up to 1.5 metres wide, developed adjacent to a dioritic dyke in Stuhini Group argillite. The quartz veins contain stringers of galena and pyrite. A selected grab sample from the dump of a trench assayed trace gold, 21 grams per tonne silver and 6.5 per cent lead (Minister of Mines Annual Report 1921, p. 54).

BIBLIOGRAPHY

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EMPR AR 1921-54,55

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EMPR MAP 8
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GSC MAP 307A; 315A; 1385A
GSC MEM 175, p. 60

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CODED BY: PSF
REVISED BY:

FIELD CHECK: N
FIELD CHECK:

MINFILE NUMBER: **103P 138**

NATIONAL MINERAL INVENTORY: 103P11 Pyr2

NAME(S): **GOLDEN CREST**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P11W
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 30 58 N
LONGITUDE: 129 16 05 W
ELEVATION: 610 Metres

NORTHING: 6152259
EASTING: 483074

LOCATION ACCURACY: Within 500M

COMMENTS: Location of trench (Minister of Mines Annual Report 1916, page 71).

COMMODITIES: Gold Copper Silver

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite
ASSOCIATED: Quartz Barite Rhodochrosite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I02 Intrusion-related Au pyrrhotite veins L01 Subvolcanic Cu-Ag-Au (As-Sb)
COMMENTS: Largest vein extends northeast for 1.8 to 2.4 metres and is up to 0.3 metres wide.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Lower Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Sandstone
Tuff

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Boundary Ranges
TERRANE: Stikine
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist
COMMENTS: At the southeast margin of the Stewart Complex (Island Arc Assemblage)

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N

CATEGORY: Assay/analysis	YEAR: 1916
SAMPLE TYPE: Grab	
COMMODITY	GRADE
Silver	22.0000 Grams per tonne
Gold	5.3100 Grams per tonne
Copper	2.0000 Per cent

REFERENCE: Minister of Mines Annual Report 1916, page 71.

CAPSULE GEOLOGY

The Golden Crest showing is located on the east side of the Illiance River about 14.5 kilometres east-northeast of Alice Arm. The area was explored for copper and precious metals in 1916. The region is underlain by Lower Jurassic Hazelton Group volcanics and sediments situated on the east limb of the north-northwest trending Mt. McGuire anticline. These rocks have been regionally metamorphosed to greenschist facies. The area of the showing is underlain by sandstone and tuff outcrops to the north. The sandstone is cut by quartz veins and stringers mineralized with pyrite and minor chalcopyrite. The largest vein is 0.3 metres wide and extends for 1.8 to 2.4 metres in a northeast direction. Minor amounts of barite and rhodochrosite are reported to occur in the gangue. A sample assayed 5.31 grams per tonne gold, 22 grams per tonne silver and 2.0 per cent copper (Minister of Mines Annual Report 1916, p. 71).

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EMPR AR *1916-71
EMPR BULL 63
EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8

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GSC MAP 307A; 315A; 1385A
GSC MEM 175, p. 65

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REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 139**

NATIONAL MINERAL INVENTORY: 103P11 Ag7

NAME(S): **BELLEVUE**, BLENHEIM (L.3509), BELLEVUE NO. 1 (L.3508)

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P11W
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 32 29 N
LONGITUDE: 129 15 54 W
ELEVATION: 922 Metres

NORTHING: 6155071
EASTING: 483277

LOCATION ACCURACY: Within 500M

COMMENTS: Location of tunnel in main showing (Minister of Mines Annual Report 1920, page 51).

COMMODITIES: Silver Gold Zinc Lead

MINERALS

SIGNIFICANT: Pyrite Galena Sphalerite Tetrahedrite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein

CLASSIFICATION: Hydrothermal Epigenetic

TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au J01 Polymetallic manto Ag-Pb-Zn

DIMENSION: 1000 x 0015 Metres STRIKE/DIP: 158/45 TREND/PLUNGE:

COMMENTS: Mineralized shear zones strike 158 degrees for up to 1000 metres, dip moderately to the west and vary up to 15.2 metres wide.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Porphyritic Andesitic Tuff
Porphyritic Andesitic Breccia

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Stikine

PHYSIOGRAPHIC AREA: Boundary Ranges

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

COMMENTS: At the southeast margin of the Stewart Complex (Island Arc Assemblage)

INVENTORY

ORE ZONE: SHEAR

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1920

SAMPLE TYPE: Chip

COMMODITY

GRADE

COMMODITY	GRADE	UNIT
Silver	790.0000	Grams per tonne
Gold	2.3200	Grams per tonne
Lead	3.4000	Per cent
Zinc	5.4000	Per cent

COMMENTS: A 4.6 metre chip sample taken across the shear zone.

REFERENCE: Minister of Mines Annual Report 1920, page 51.

CAPSULE GEOLOGY

The Bellevue showing is located just east of the Illiance River, about 15.5 kilometres northeast of Alice Arm. The area was explored for lead and silver in the early 1920's.

The region is underlain by Lower Jurassic Hazelton Group volcanics and sediments situated on the east limb of the north-northwest trending Mt. McGuire anticline. These rocks have been regionally metamorphosed to greenschist facies.

The showing comprises a number of shear zones, generally striking 158 degrees and dipping moderately west, hosted in pyritic porphyritic andesitic tuffs and breccias. The zones locally contain lenses, veins and stringers of quartz mineralized with pyrite, galena, sphalerite and tetrahedrite. These are generally parallel to the enclosing shear zones. The main showing is located at the southeast corner of the Blenheim claim (Lot 3509). It consists of a quartz vein, mineralized with galena and tetrahedrite, up to 1.2 metres wide. The vein occurs in the hangingwall of a shear zone, 6.1 to 15.2 metres wide, that has been traced for 1000 metres. This shear zone also contains stringers of quartz, pyrite and galena which

CAPSULE GEOLOGY

occur over a width of 4.9 metres adjacent to the quartz vein of the main showing.

A 4.6 metre chip sample taken from the hangingwall across the shear zone assayed 2.32 grams per tonne gold, 790 grams per tonne silver, 3.4 per cent lead and 5.4 per cent zinc (Minister of Mines Annual Report 1920, page 51). An adit, 97.5 metres long, driven eastward 30 metres below the main showing, failed to encounter any significant mineralization.

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EMPR ASS RPT 10115
EMPR BULL 63
EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
EMPR PF (Great Northwest Resources Corp. Prospectus, 1989)
EMR MP CORPFILE (Alice Arm Consolidated Holdings Ltd.)
GSC MAP 307A; 315A; 1385A
GSC MEM 175, p. 54
GSC SUM RPT 1922, p. 47A

DATE CODED: 1985/07/24
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FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 140**

NATIONAL MINERAL INVENTORY: 103P11 Ag6

NAME(S): **GREY GOOSE**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P11W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 32 45 N
LONGITUDE: 129 16 10 W
ELEVATION: 927 Metres

NORTHING: 6155567
EASTING: 482999

LOCATION ACCURACY: Within 500M

COMMENTS: Approximate centre of trench (Assessment Report 10115, Figures 4 and 10).

COMMODITIES: Silver Zinc Lead Copper

MINERALS

SIGNIFICANT: Galena Sphalerite Pyrite

ASSOCIATED: Quartz Carbonate

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein

CLASSIFICATION: Hydrothermal Epigenetic

TYPE: J01 Polymetallic manto Ag-Pb-Zn I05 Polymetallic veins Ag-Pb-Zn±Au

COMMENTS: Shear zones strike northwest, dip southwest.

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Lower Jurassic

Hazelton

Undefined Formation

LITHOLOGY: Rhyolitic Schist
Andesitic Schist

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

PHYSIOGRAPHIC AREA: Boundary Ranges

TERRANE: Stikine

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

COMMENTS: At the southeast margin of the Stewart Complex (Island Arc Assemblage)

INVENTORY

ORE ZONE: SHEAR

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1981

SAMPLE TYPE: Chip

COMMODITY

GRADE

COMMODITY	GRADE	Units
Silver	1337.0000	Grams per tonne
Copper	0.3600	Per cent
Lead	19.9000	Per cent
Zinc	30.0000	Per cent

COMMENTS: A 0.6 metre chip sample across shear zone.

REFERENCE: Assessment Report 10115, page 12.

CAPSULE GEOLOGY

The Grey Goose occurrence is located on the west bank of the Illiance River, about 15.5 kilometres northeast of Alice Arm. The area was explored periodically since 1916 for lead and zinc mineralization.

The region is underlain by Lower Jurassic Hazelton Group volcanics and sediments situated on the east limb of the north-northwest trending Mt. McGuire anticline. These rocks have been regionally metamorphosed to greenschist facies.

The showing consists of a northwest striking shear zone, in light grey rhyolitic schist, exposed in a 6.0 metre long trench. The zone is mineralized with small lenses of massive galena and sphalerite over an approximate width of 0.6 metres. A 0.6 metre chip sample across the zone assayed 1337 grams per tonne silver, 30.0 per cent zinc, 19.9 per cent lead and 0.36 per cent copper (Assessment Report 10115, p. 12).

A 0.46 metre wide quartz-carbonate vein is reported to occur in this vicinity. The vein, mineralized with galena and pyrite, strikes northwest for 10 metres and is hosted in a northwest striking, west dipping shear zone developed in andesitic schist.

These showings are likely part of the same shear structure that

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CAPSULE GEOLOGY

contains the Illy showings (103P 141) to the north and the Bellevue showings (103P 139) to the south.

BIBLIOGRAPHY

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EMPR ASS RPT *10115, 19459
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EMPR MAP 8
EMPR OF 1986-2
EMPR PF (Great Northwest Resources Corp. Prospectus, 1989)
GSC MAP 307A; 315A; 1385A
GSC MEM 175, p. 66

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REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

CAPSULE GEOLOGY

and the Grey Goose occurrence (103P 140) to the south are likely situated on extensions of this zone. The shear structure is developed in a sequence of volcanically derived red conglomerates, sandstones and siltstones with local interbeds of red and green volcanic breccias. The sediments and breccias are composed of fragments of andesitic crystal tuff and porphyritic andesite. Thin beds of argillite are locally interbedded with these rocks. They are all cut by the andesitic and lamprophyric dykes commonly found in this vicinity. A north trending vertical to steeply dipping schistosity is developed in the sediments and volcanics. The rocks are bleached and altered to a light grey rhyolitic schist as a result of intense quartz-carbonate-sericite-pyrite alteration.

Mineralization, consisting of pyrite, galena and sphalerite, is found in a number of veins and zones scattered along the length of the shear structure. The Ily occurrence primarily comprises three zones, the United Metals, Horsecut and Silver Bar showings. Various other showings occur along the shear structure.

The United Metals showing, located on the south end of the shear structure, consists of stringers and near massive bands of sphalerite and galena. The bands are up to 1.5 metres wide and occur along shear planes in the light grey rhyolitic schist. A 1.5 metre chip sample contained trace gold, 764 grams per tonne silver, 11.60 per cent lead, 7.00 per cent zinc and 0.32 per cent copper (Minister of Mines Annual Report 1968, page 68). Results from 880 metres of diamond drilling in 15 holes encountered only narrow erratic sulphide zones at depth.

Drilling on the Silver Bar showing encountered only narrow quartz-carbonate stringers and veins mineralized with pyrite, galena sphalerite, tetrahedrite and chalcopyrite. The highest assay was 625.9 grams per tonne silver, 1.3 per cent lead and 1.64 per cent zinc over 1.0 metre (Assessment Report 10115, p.11).

The Horsecut zone is exposed for approximately 20 metres in old trenches. This zone is similar to and is possibly the extension of the Silver Bar showing. A sample from across 0.5 metres assayed 1172.4 grams per tonne silver, 4.27 per cent lead and 5.35 per cent zinc (Assessment Report 10115, p.12).

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- EMPR AR 1916-72,73; 1918-70-72; 1919-57-59; 1920-51,52; 1921-55;
1923-383; 1930-91,92; 1951-107; 1965-67,68; 1967-49; *1968-65-68
- EMPR ASS RPT *10115, 19459
- EMPR BULL 63
- EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp. 235-243
- EMPR MAP 8
- EMPR OF 1986-2
- EMPR PF (Map of Trenches, Silver Flint Mines, 1951; Ponder Oils -
Field notes and various maps of drill sites and showings, 1967;
Great Northwest Resources Corp. Prospectus, 1989)
- EMR MP CORPFILE (Ponder Oils Ltd.)
- GSC MAP 307A; 315A; 1385A
- GSC MEM 175, pp. 77,84

DATE CODED: 1985/07/24
DATE REVISED: 1989/03/15

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 142**

NATIONAL MINERAL INVENTORY: 103P5 Mo4

NAME(S): **NIMBLE** PENNY CREEK, MT. HUNDINDON

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P04E 103P05E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 13 58 N
LONGITUDE: 129 32 37 W
ELEVATION: 701 Metres

NORTHING: 6120830
EASTING: 465428

LOCATION ACCURACY: Within 1 KM

COMMENTS: Location of grab sample IMFH2 (Assessment Report 9930, Plate 2).

COMMODITIES: Molybdenum

MINERALS

SIGNIFICANT: Molybdenite Pyrite
ASSOCIATED: Quartz
ALTERATION: Orthoclase
ALTERATION TYPE: Potassic
MINERALIZATION AGE: Oligocene
ISOTOPIC AGE: 36 Ma

DATING METHOD: Potassium/Argon

MATERIAL DATED:

DEPOSIT

CHARACTER: Vein Stockwork
CLASSIFICATION: Porphyry Hydrothermal Epigenetic
TYPE: L05 Porphyry Mo (Low F-type)
DIMENSION: 0700 Metres STRIKE/DIP:
COMMENTS: 700 metre wide zone of shallow dipping, north trending quartz veins and steep dipping fractures striking 065 to 080 degrees, and 140 to 160 degrees.

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Oligocene			Alice Arm Intrusion

ISOTOPIC AGE: 36 Ma
DATING METHOD: Potassium/Argon

LITHOLOGY: Biotite Trondhjemite
Biotite Granodiorite
Lamprophyre Dike

HOSTROCK COMMENTS: Isotopic age from Carter, N.C., 1978.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Plutonic Rocks

PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)

INVENTORY

ORE ZONE: VEIN

REPORT ON: N

CATEGORY: Assay/analysis	YEAR: 1967
SAMPLE TYPE: Grab	
COMMODITY	GRADE
Molybdenum	0.2600 Per cent

COMMENTS: Highest assay from seven grab samples of vein.
REFERENCE: Assessment Report 9930.

CAPSULE GEOLOGY

The Nimble showing is located at the headwaters of Penny Creek, about 12 kilometres east of Observatory Inlet. The area has been intermittently explored in the past for molybdenum.

The showing is situated in the Coast Plutonic Complex near the eastern margin where it contacts Hazelton Group sediments.

Molybdenum mineralization is hosted in a 2.0 by 1.0 kilometre body of fine to medium-grained biotite trondhjemite granite of the Oligocene Alice Arm Intrusions. The trondhjemite intrudes Eocene coarse-grained equigranular biotite granodiorite of the Coast Plutonic Complex and has been dated at 36 million years (Carter, N.C. 1978). It is crosscut by lamprophyre dykes.

Mineralization consists of clots and smears of molybdenite and minor pyrite in quartz veins, fractures and quartz-healed fractures. These occur in the trondhjemite over a 700 metre distance along an east-west trending cliff on the north side of Penny Creek. Fractures are near vertical and strike 140 to 160 degrees and 065 to 080

CAPSULE GEOLOGY

degrees. Mineralized quartz veins, 5 to 10 millimetres wide, strike north and dip near horizontal. The veins are most intensely developed within 50 metres of the glacier west of Penny Creek. Molybdenite-bearing quartz veins are also frequently developed in a zone of potassic alteration, 160 to 260 metres west of the glacier, within the 700 metre wide zone. Seven grab samples taken from quartz veins assayed between 0.016 to 0.26 per cent molybdenum (Assessment Report 9930).

BIBLIOGRAPHY

EMPR AR 1967-48
EMPR ASS RPT 8080, 9139, *9930
EMPR BULL 63
EMPR EXPL 1979-258
EMPR FIELDWORK 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
GSC MAP 1385A

DATE CODED: 1989/01/26
DATE REVISED: 1990/01/11

CODED BY: PSF
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 143**

NATIONAL MINERAL INVENTORY: 103P11 Ag8

NAME(S): **SILVER**, BEL, SILVER STAR

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P11W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 32 44 N
LONGITUDE: 129 15 45 W
ELEVATION: 977 Metres

NORTHING: 6155534
EASTING: 483437

LOCATION ACCURACY: Within 500M

COMMENTS: Adit entrance on Silver showing (Assessment Report 10115, Figures 4 and 11).

COMMODITIES: Silver Lead Zinc Copper Gold

MINERALS

SIGNIFICANT: Galena Sphalerite Pyrrhotite Tetrahedrite Pyrite

COMMENTS: As disseminations, lenses and stringers in shear zones.

ASSOCIATED: Sericite Carbonate

ALTERATION: Sericite Carbonate

ALTERATION TYPE: Sericitic Carbonate

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated Massive Vein

CLASSIFICATION: Hydrothermal Epigenetic

TYPE: J01 Polymetallic manto Ag-Pb-Zn 105 Polymetallic veins Ag-Pb-Zn±Au

DIMENSION: 0475 x 0002 Metres STRIKE/DIP: 003/85W TREND/PLUNGE:

COMMENTS: Shear zone strikes 003 degrees for 475 metres, varies from 1 to 2.4 metres wide, dips 85 degrees west.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic Hazelton Undefined Formation

LITHOLOGY: Sericite Carbonate Schist
Andesitic Breccia

HOSTROCK COMMENTS: Host rock consists of red and green andesitic breccias that have been altered to grey sericite-carbonate schist.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

PHYSIOGRAPHIC AREA: Boundary Ranges

TERRANE: Stikine

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

COMMENTS: At the southeast margin of the Stewart Complex (Island Arc Assemblage)

INVENTORY

ORE ZONE: SHEAR

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1967

SAMPLE TYPE: Chip

COMMODITY

GRADE

COMMODITY	GRADE	UNIT
Silver	956.0000	Grams per tonne
Lead	3.3500	Per cent
Zinc	4.2900	Per cent

COMMENTS: A 1.7 metre chip sample across shear zone.

REFERENCE: Assessment Report 10115, Figure 11.

CAPSULE GEOLOGY

The Silver showing is located on the east bank of the Illiance River, just east of the United Metals zone of the Illy occurrence (103P 141), about 16 kilometres northeast of Alice Arm. The area has been explored periodically since 1918 for lead, silver and zinc mineralization.

The region is underlain by Lower Jurassic Hazelton Group volcanics and sediments situated on the east limb of the north-northwest trending Mt. McGuire anticline. These rocks have been regionally metamorphosed up to greenschist facies.

The showing consists of a shear zone, 1 to 2.4 metres wide, in green to red andesitic breccias. The zone strikes 003 degrees, dips 85 degrees west and has been traced for 475 metres. High grade mineralization is exposed for 55 metres in the south end of the zone. The country rock has been altered to grey sericite-carbonate schist.

CAPSULE GEOLOGY

Mineralization is similar to that exposed in the United Metals zone (103P 141) across the Illiance River. It consists of disseminations, massive lenses and stringers of galena, sphalerite, pyrrhotite and tetrahedrite. A 1.7 metre chip sample taken across the mineralized shear zone assayed 956 grams per tonne silver, 3.35 per cent lead and 4.29 per cent zinc (Assessment Report 10115, Fig. 11).

Southwest of the adit, about 20 metres, are several north trending shear zones which contain stringers of pyrite, galena and sphalerite.

BIBLIOGRAPHY

- EMPR AR 1918-72,73; *1919-58; 1920-51; 1921-56; *1930-92; 1951-107;
*1967-50; *1968-65-68
EMPR ASS RPT *10115, 19459
EMPR BULL 63
EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp.
235-243
EMPR MAP 8
EMPR OF 1986-2
EMPR PF (Silver Flint Mines, Map of showing, 1951; Ponder Oils, Map
of Drill Holes, 1968; Great Northwest Resources Corp. Prospectus,
1989)
EMR MP CORPFILE (Ponder Oils Ltd.)
GSC MAP 307A; 315A; 1385A
GSC MEM 175, p. 79

DATE CODED: 1985/07/24
DATE REVISED: 1989/03/15

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 144**

NATIONAL MINERAL INVENTORY: 103P11 Ag4

NAME(S): **YANKEE BOY**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P11W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 35 29 N
LONGITUDE: 129 15 51 W
ELEVATION: 762 Metres

NORTHING: 6160635
EASTING: 483351

LOCATION ACCURACY: Within 500M

COMMENTS: Location of showing based on description in (Minister of Mines Annual Reports 1916, page 75 and 1918, page 72).

COMMODITIES: Lead Copper

MINERALS

SIGNIFICANT: Galena

COMMENTS: As disseminations adjacent to dyke.

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Lower Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Andesitic Sandstone
Andesitic Breccia
Andesitic Tuff

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

PHYSIOGRAPHIC AREA: Boundary Ranges

TERRANE: Stikine

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

COMMENTS: At the eastern boundary of the Stewart Complex (Island Arc Assemblage)

CAPSULE GEOLOGY

The Yankee Boy showing is located on the south bank of the Tchitin River, just east of the Glacier showing (103P 145), about 19.0 kilometres northeast of Alice Arm.

The region is underlain by Lower Jurassic Hazelton Group volcanics and sediments situated on the east limb of the north-northwest trending Mt. McGuire anticline. These rocks have been regionally metamorphosed to greenschist facies.

Exploration in 1916 revealed traces of galena and a unidentified copper mineral in a slightly mineralized zone. The zone, 4.6 to 6.0 metres wide, is developed adjacent to a dyke in country rock that appears to be red and green andesitic sandstone, breccia and tuff.

BIBLIOGRAPHY

EMPR AR *1916-75; *1918-72
EMPR ASS RPT 8904, 9823
EMPR BULL 63
EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
EMPR OF 1986-2
GSC MAP 307A; 1385A

DATE CODED: 1985/07/24
DATE REVISED: 1989/03/15

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 145**

NATIONAL MINERAL INVENTORY: 103P11 Ag4

NAME(S): **GLACIER**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P11W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 35 31 N
LONGITUDE: 129 16 03 W
ELEVATION: 732 Metres

NORTHING: 6160698
EASTING: 483141

LOCATION ACCURACY: Within 500M

COMMENTS: Location based on description of showing in Minister of Mines Annual Report 1918, page 72.

COMMODITIES: Silver Lead Zinc

MINERALS

SIGNIFICANT: Galena Sphalerite Pyrite

COMMENTS: Galena and sphalerite assumed.

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic Hazelton Undefined Formation

LITHOLOGY: Chlorite Schist

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Stikine

METAMORPHIC TYPE: Regional

RELATIONSHIP:

COMMENTS: At the eastern edge of the Stewart Complex (Island Arc Assemblage).

PHYSIOGRAPHIC AREA: Boundary Ranges

GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N

CATEGORY: Assay/analysis YEAR: 1916

SAMPLE TYPE: Grab

COMMODITY GRADE
Silver 5964.7000 Grams per tonne

REFERENCE: Minister of Mines Annual Report 1916, page 74.

CAPSULE GEOLOGY

The Glacier showing is located on the south side of the Tchitin River, just west of the Yankee Boy showing (103P 144), about 19.0 kilometres northeast of Alice Arm.

The region is underlain by Lower Jurassic Hazelton Group volcanics and sediments situated on the east limb of the north-northwest trending Mt. McGuire anticline. These rocks have been regionally metamorphosed to greenschist facies.

The showing consists of a slightly pyritic quartz vein hosted in chloritic schist. In the hangingwall, a 0.10 to 0.30 metre wide zone contains high grade lead-zinc-silver ore (galena?, sphalerite?), typical of other occurrences in this region. A grab sample assayed 5964.7 grams per tonne silver (Minister of Mines Annual Report 1916, page 74).

BIBLIOGRAPHY

EMPR AR *1916-74; *1918-72
EMPR ASS RPT 8904, 9823
EMPR BULL 63
EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
EMPR OF 1986-2
GSC MAP 307A; 315A; 1385A

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

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GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1179
REPORT: RGEN0100

BIBLIOGRAPHY

GSC MEM 175, p. 65

DATE CODED: 1985/07/24
DATE REVISED: 1989/03/15

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 146**

NATIONAL MINERAL INVENTORY: 103P11 Cu3

NAME(S): **HORSESHOE** LANCE 4

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P11W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 30 20 N
LONGITUDE: 129 21 01 W

NORTHING: 6151107
EASTING: 477876

ELEVATION: 1219 Metres

LOCATION ACCURACY: Within 500M

COMMENTS: Location of claims (Geological Survey of Canada Memoir 175, page 68).

COMMODITIES: Copper Silver Barite

MINERALS

SIGNIFICANT: Chalcocite Barite
ASSOCIATED: Quartz Sericite Ankerite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic Industrial Min. 110 Vein barite
TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb)

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Upper Triassic	Stuhini	Undefined Formation	

LITHOLOGY: Augite Porphyritic Basaltic Flow
Basalt
Basaltic Breccia
Andesitic Tuff

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Boundary Ranges
TERRANE: Stikine
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist
COMMENTS: Situated in the Stewart Complex (Island Arc Assemblage).

INVENTORY

ORE ZONE: VEIN REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1922
SAMPLE TYPE: Chip
COMMODITY GRADE
Silver 137.0000 Grams per tonne
Copper 29.0000 Per cent
COMMENTS: Sample taken across 0.46 metre wide vein.
REFERENCE: Minister of Mines Annual Report 1922, page 62.

CAPSULE GEOLOGY

The Horseshoe showing is located 3.0 kilometres south of Mt. Theophilus, about 9.0 kilometres east-northeast of Alice Arm. The region is underlain by an assemblage of volcanics and sediments comprising the Upper Triassic Stuhini Group, the Lower Jurassic Hazelton Group and the Middle Jurassic Spatsizi Group. The sequence is situated on the eastern flank of the north-northwest trending Mt. McGuire anticline. The showing is hosted in Stuhini Group augite porphyritic basaltic flows and breccias, underlain, to the west, by argillite. The showing consists of quartz veins containing chalcocite. A sample taken across a 0.46 metre wide vein assayed 29.0 per cent copper and 137 grams per tonne silver (Minister of Mines Annual Report 1922, page 62). Quartz and quartz-barite veins up to 4 metres wide and 500 metres long striking approximately north-south are reported to be hosted in andesitic tuff. The veins carry up to 30 per cent disseminated pyrite associated with sericite however assay results have not produced significant values (Assessment Report 21060).

BIBLIOGRAPHY

EM ASS RPT *21060, 21075

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1181
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR AR *1922-62; 1923-61
EMPR BULL 63
EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
EMPR OF 1986-2
EMPR PF (Mondana Ventures Inc. Prospectus, Oct. 1989)
GSC MAP 307A; 315A; 1385A
GSC MEM *175, p. 68

DATE CODED: 1985/07/24
DATE REVISED: 1989/03/02

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 147**

NATIONAL MINERAL INVENTORY: 103P11 Zn1

NAME(S): **SUNRISE** SILVER BAND, BLACK BEAR,
BANDED, KEELY

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P11W
BC MAP:

MINING DIVISION: Skeena

LATITUDE: 55 30 34 N
LONGITUDE: 129 24 35 W
ELEVATION: 1113 Metres

UTM ZONE: 09 (NAD 83)

NORTHING: 6151561
EASTING: 474124

LOCATION ACCURACY: Within 500M

COMMENTS: Location based on main outcrop of the "banded vein" (Sample site AA-R5), (Assessment Report 11070, Map 3).

COMMODITIES: Zinc Silver Lead Gold

MINERALS

SIGNIFICANT: Sphalerite Galena Pyrite
ASSOCIATED: Quartz Calcite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Breccia
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
DIMENSION: 0366 x 0005 Metres STRIKE/DIP: 120/60E TREND/PLUNGE:
COMMENTS: The banded vein strikes 120 degrees for 366 metres, dips 50 to 60 degrees northeast and varies from 1.0 to 4.6 metres wide.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Upper Triassic Stuhini Undefined Formation

LITHOLOGY: Brecciated Argillite
Greywacke
Basaltic Conglomerate

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Boundary Ranges
TERRANE: Stikine
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist
COMMENTS: At the south end of the Stewart Complex (Island Arc Assemblage).

INVENTORY

ORE ZONE: VEIN REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1927
SAMPLE TYPE: Chip
COMMODITY GRADE
Silver 13.7000 Grams per tonne
Zinc 8.8000 Per cent
COMMENTS: A 3.0 metre chip sample across main showing of Banded vein.
REFERENCE: Minister of Mines Annual Report 1927, page 72.

CAPSULE GEOLOGY

The Sunrise showing is located on the south side of Wilauks Mountain, about 6.0 kilometres east-northeast of Alice Arm. The area has been extensively explored for zinc mineralization.

The region is underlain by an assemblage of volcanics and sediments comprising the Upper Triassic Stuhini Group, the Lower Jurassic Hazelton Group and the Middle Jurassic Spatsizi Group. This assemblage has been folded into a north-northwest trending anticline (Mt. McGuire anticline) and regionally metamorphosed to greenschist facies.

The showing is hosted in Stuhini Group argillite, greywacke and basaltic conglomerate which have been intruded by numerous hornblende and feldspar porphyritic dykes.

The main mineralized zone, the Banded vein, is developed along a fault that follows Sunshine Creek. The Banded vein, 1.0 to 4.6 metres wide, has been traced for about 366 metres, strikes 120 degrees and dips 50 to 60 degrees east. The zone consists of quartz and calcite veins and stringers, up to a metre in width, infilling fractures and shears in brecciated argillite. The wider veins

CAPSULE GEOLOGY

contain irregular, discontinuous pods, lenses and streaks of sphalerite and minor galena and pyrite. A 3.0 metre chip sample taken across the main showing assayed trace gold, 13.7 grams per tonne silver, nil lead and 8.8 per cent zinc (Minister of Mines Annual Report 1927, p. 72). A 354 metre long adit was driven in an attempt to intersect the downward projection of the zone but failed to encounter any significant zinc mineralization.

A second vein or zone, extends southeastward for 100 metres along Sunshine Creek from the widest point on the Banded vein. This vein, 0.6 to 1.2 metres wide at its south end and wider at the north end, trends west-northwest at an angle to the Banded vein. It is reported to be well mineralized with sphalerite.

A third vein, the Keely vein, occurs 244 to 274 metres to the west of, and parallel to, the Banded vein. It varies from 0.3 to 1.2 metres wide and is reported to contain moderate quantities of zinc (Minister of Mines Annual Report 1927, p. 72).

BIBLIOGRAPHY

EMPR AR 1916-65; 1918-68,69; 1923-61; 1926-78; *1927-71,72; 1928-89;
1929-89-91; *1949-76-80; 1966-47,48; 1967-43
EMPR ASS RPT *11070
EMPR BULL 63
EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp. 235-243
EMPR OF 1986-2
EMPR PF (King, R. (1926) Report; Quinn, H.A. (1966) Report)
EMR MP CORPFILE (Kitsault Mines Ltd.)
GSC MAP 307A; 315A; 1385A
GSC MEM 175, pp. 52,55,81
GSC SUM RPT 1928A, p. 41
GCNL #196, 1982

DATE CODED: 1985/07/24
DATE REVISED: 1989/03/02

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 148**

NATIONAL MINERAL INVENTORY: 103P11 Zn5

NAME(S): **STANDARD**, ALAMOSA

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P11W
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 30 44 N
LONGITUDE: 129 25 09 W
ELEVATION: 884 Metres

NORTHING: 6151873
EASTING: 473529

LOCATION ACCURACY: Within 500M

COMMENTS: Showing labelled "Standard" (Assessment Report 11070).

COMMODITIES: Zinc Silver Lead

MINERALS

SIGNIFICANT: Sphalerite Galena
COMMENTS: Occur as disseminations, blebs, veinlets and bands.
ASSOCIATED: Quartz Calcite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Breccia
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
DIMENSION: 0018 Metres
COMMENTS: Near horizontal vein traced for 18 metres.

J01 Polymetallic manto Ag-Pb-Zn
STRIKE/DIP: TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Upper Triassic Stuhini Undefined Formation

LITHOLOGY: Argillite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Boundary Ranges
TERRANE: Stikine
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist
COMMENTS: At the south end of Stewart Complex (Island Arc Assemblage).

INVENTORY

ORE ZONE: VEIN REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1918
SAMPLE TYPE: Grab
COMMODITY GRADE
Silver 21.0000 Grams per tonne
Zinc 48.0000 Per cent

COMMENTS: Selected grab sample of vein.
REFERENCE: Minister of Mines Annual Report 1918, page 69.

CAPSULE GEOLOGY

The Standard showing is located on the south slope of Wilauks Mountain, about 5.5 kilometres east-northeast of Alice Arm. The area has been explored for zinc mineralization since 1916.

The region is underlain by an assemblage of volcanics and sediments comprising the Upper Triassic Stuhini Group, the Lower Jurassic Hazelton Group and the Middle Jurassic Spatsizi Group. This assemblage has been folded into a north-northwest trending anticline (Mt. McGuire anticline) and regionally metamorphosed to greenschist facies.

The showing consists of a flat lying quartz-carbonate vein, hosted in Stuhini Group argillite, that has been traced along strike for 18 metres. Locally, breccia fragments of the argillite have been incorporated in the vein. Mineralization consists of disseminations, blebs, veinlets and bands of sphalerite up to 0.6 metres thick, and minor galena. Sphalerite comprises 10 to 20 per cent of the vein, with estimated grades from 5.0 to 10.0 per cent zinc (Minister of Mines Annual Report 1949, p. 80). A selected grab sample of the vein assayed 48 per cent zinc and 21 grams per tonne silver (Minister of Mines Annual Report 1918, p. 69).

Two other showings, to the south, 3 to 4.6 metres wide, host disseminated galena in quartz. All three showings are aligned in a northwest direction extending for a distance of 122 metres.

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

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PAGE: 1185
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BIBLIOGRAPHY

EMPR AR 1916-65; *1918-69; 1922-62; 1923-61; 1925-73,74; 1926-78,
1927-72; *1949-76-80; 1966-47,48; 1967-43
EMPR ASS RPT *11070, 20398
EMPR BULL 63
EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
EMPR OF 1986-2
EMPR PF (Quinn, H.A. (1966) Report)
EMR MP CORPFILE (Mayfair Moly Mines Ltd.)
GSC MAP 307A; 315A; 1385A
GSC MEM 175, pp. 52,80
GCNL #196, 1982
W MINER March 1967

DATE CODED: 1985/07/24
DATE REVISED: 1989/03/02

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 149**

NATIONAL MINERAL INVENTORY: 103P11 Zn5

NAME(S): **BILLY MACK**, KENT/MAPLE LEAF, BEL

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P06W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 29 45 N
LONGITUDE: 129 24 48 W
ELEVATION: 655 Metres

NORTHING: 6150047
EASTING: 473887

LOCATION ACCURACY: Within 500M

COMMENTS: Location of tunnel in creek bed (Minister of Mines Annual Report 1931, page 39).

COMMODITIES: Zinc

MINERALS

SIGNIFICANT: Sphalerite Pyrite
ASSOCIATED: Quartz Calcite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Breccia
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au J01 Polymetallic manto Ag-Pb-Zn
DIMENSION: 0076 x 0006 Metres STRIKE/DIP: 045/30S TREND/PLUNGE:
COMMENTS: Principle vein strikes northeast for 76 metres, dips 30 degrees southeast and varies from 4.6 to 6.1 metres wide.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Upper Triassic	Stuhini	Undefined Formation	

LITHOLOGY: Calcareous Argillite
Slate

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Boundary Ranges
TERRANE: Stikine
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist
COMMENTS: At the south end of the Stewart Complex (Island Arc Assemblage).

INVENTORY

ORE ZONE: VEIN REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1931
SAMPLE TYPE: Grab
COMMODITY: Zinc GRADE: 4.0000 Per cent
COMMENTS: Sample from southernmost vein.
REFERENCE: Minister of Mines Annual Report 1931, page 39.

CAPSULE GEOLOGY

The Billy Mack showing is located on Morley Creek on the south slope of Wilauks Mountain, 5.0 kilometres east-northeast of Alice Arm. The area has been extensively explored for zinc and silver in the past.

The region is underlain by an assemblage of volcanics and sediments comprising the Upper Triassic Stuhini Group, the Lower Jurassic Hazelton Group and the Middle Jurassic Spatsizi Group. This assemblage has been folded into a north-northwest trending anticline (Mt. McGuire anticline) and regionally metamorphosed to greenschist facies.

The Billy Mack showing comprises various occurrences hosted in Stuhini Group calcareous argillite on the west limb of the Mt. McGuire anticline. The main showing consists of a banded vein, 4.6 to 6.1 metres wide, with inclusions of brecciated argillite. The vein strikes northeast for 76 metres along a bluff on the south side of a tributary of Morley Creek and dips 30 degrees southeast. Mineralization, best developed within 1.2 to 1.5 metres of the footwall, consists of sparse streaks of sphalerite and minor pyrite in a gangue of quartz and calcite.

To the northeast, 100 metres, a nearly horizontal 3.7 metre wide body of quartz and calcite outcrops on either side of the tributary.

CAPSULE GEOLOGY

The vein, also containing brecciated fragments of argillite, dips 20 to 25 degrees east and strikes north-south. Mineralization consists of sphalerite and it is likely that this vein was on the Maple Leaf and Kent claims in 1918.

North of the main showing and about 37 metres below it in the creek bottom, a 2.4 metre wide banded and brecciated vein is exposed in a trench. The vein, striking 068 degrees and dipping 55 degrees north, is mineralized with sphalerite and pyrite. A grab sample assayed nil gold, nil silver and 4.0 per cent zinc (Minister of Mines Annual Report 1931, p. 39).

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EMPR OF 1986-2
EMPR PF (Quinn, H.A. (1966) Report)
EMR MP CORPFILE (Mayfair Moly Mines Ltd.)
GSC MAP 307A; 315A; 1385A
GSC MEM 175, pp. 55,68
GSC SUM RPT *1928A, p. 40A
W MINER March 1967

DATE CODED: 1985/07/24
DATE REVISED: 1989/03/08

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 150**

NATIONAL MINERAL INVENTORY: 103P11 Zn5

NAME(S): **HIGHLAND**, BLACK BEAR

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P11W 103P06W
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 30 00 N
LONGITUDE: 129 25 11 W
ELEVATION: 610 Metres

NORTHING: 6150513
EASTING: 473486

LOCATION ACCURACY: Within 500M

COMMENTS: Location of showings in Wilauks Creek (Jones Creek), (Minister of Mines Annual Report 1927, page 72).

COMMODITIES: Zinc Silver Gold Lead

MINERALS

SIGNIFICANT: Sphalerite Pyrite Galena

ASSOCIATED: Quartz Calcite Barite

COMMENTS: Occurs as irregular bodies.

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Breccia Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

J01 Polymetallic manto Ag-Pb-Zn

SHAPE: Irregular

MODIFIER: Sheared

DIMENSION: 0120 x 0003

Metres

STRIKE/DIP:

TREND/PLUNGE:

COMMENTS: Two principle zones strike northeast. One zone is 1.0 to 6.0 metres wide and has been traced partially for 120 metres.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Upper Triassic	Stuhini	Undefined Formation	

LITHOLOGY: Graphitic Argillite
Brecciated Conglomerate
Feldspar Porphyry

HOSTROCK COMMENTS: Host rock consists of graphitic argillite and interbedded conglomerate.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Stikine

PHYSIOGRAPHIC AREA: Boundary Ranges

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

COMMENTS: At the south end of the Stewart Complex (Island Arc Assemblage).

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1927

SAMPLE TYPE: Chip

COMMODITY

GRADE

Silver

13.7000

Grams per tonne

Zinc

2.5000

Per cent

COMMENTS: A 3.0 metre chip sample from zone on west side of creek, trace gold and lead.

REFERENCE: Minister of Mines Annual Report 1927, page 73.

CAPSULE GEOLOGY

The Highland showings are located on Wilauks Creek on the southwestern slope of Wilauks Mountain, about 4.75 kilometres north-east of Alice Arm. Various showings were investigated sporadically in this area from 1916 to 1966.

The region is underlain by an assemblage of volcanics and sediments comprising the Upper Triassic Stuhini Group, the Lower Jurassic Hazelton Group and the Middle Jurassic Spatsizi Group. This assemblage has been folded into a north-northwest trending anticline (Mt. McGuire anticline) and regionally metamorphosed to greenschist facies.

The showings are contained in a sequence of graphitic argillites and interbedded conglomerates of the Stuhini Group. These are underlain, to the east, by augite porphyritic basaltic flows which are

CAPSULE GEOLOGY

situated on the west limb of the Mt. McGuire anticline.

A breccia zone, on the east side of Wilauks Creek, in conglomerate contains irregular masses of quartz, calcite, barite and sphalerite. The zone strikes northeast, varies from 1 to 6 metres wide and has been partially traced for 120 metres by 5 trenches.

A fault zone of similar strike, 100 metres to the northwest on the west side of the creek, is developed in argillite. The zone contains lenticular and irregular bodies of quartz, calcite, sphalerite and minor pyrite and galena. A 3.0 metre chip sample taken across the zone assayed trace gold, 13.7 grams per tonne silver, trace lead and 2.5 per cent zinc (Minister of Mines Annual Report 1927, p. 73).

Farther upstream, a 1.5 to 6.1 metre wide zone in argillite is mineralized with pyrite and sphalerite.

Another mineralized zone is developed in a highly metamorphosed feldspar porphyritic rock, upstream from this showing. A selected grab sample assayed trace gold, 21 grams per tonne silver, nil lead and 8.6 per cent zinc (Minister of Mines Annual Report 1927, p. 73).

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- EMPR MAP 8
- EMPR OF 1986-2
- EMPR PF (Quinn, H.A. (1966) Report)
- EMR MP CORPFILE (Mayfair Moly Mines Ltd.)
- GSC MAP 307A; 315A; 1385A
- GSC MEM 175, pp. 55,66
- GSC SUM RPT 1928A, p. 41A
- W MINER March 1967

DATE CODED: 1985/07/24
DATE REVISED: 1989/03/08

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1191
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR PF (Geological Map)
GSC MAP 307A; 1385A

DATE CODED: 1989/02/27
DATE REVISED: 1997/04/07

CODED BY: PSF
REVISED BY: DA

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **103P 152**

NATIONAL MINERAL INVENTORY: 103P6 Cu7

NAME(S): **QUARTZ-HANNA**, HANNA, QUARTZ

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 103P05W
BC MAP:
LATITUDE: 55 27 14 N
LONGITUDE: 129 49 33 W
ELEVATION: 0366 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: As shown on 1986 Anyox map (Property File - Alldrick, D.).

MINING DIVISION: Skeena
UTM ZONE: 09 (NAD 83)
NORTHING: 6145612
EASTING: 447771

COMMODITIES: Copper Silver Gold Lead Zinc

MINERALS

SIGNIFICANT: Pyrite Pyrrhotite Chalcopyrite Galena Sphalerite
COMMENTS: Disseminated.
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Concordant
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I02 Intrusion-related Au pyrrhotite veins L01 Subvolcanic Cu-Ag-Au (As-Sb)
DIMENSION: 0600 x 0005 Metres STRIKE/DIP: 170/62E TREND/PLUNGE:
COMMENTS: The vein, 1.8 to 5.5 metres wide, has been traced for 600 metres, strikes 170 degrees and dips between 55 and 70 degrees east.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Jurassic	Hazelton	Undefined Formation	
Upper Triassic	Kunga	Undefined Formation	

LITHOLOGY: Argillite
Greenstone

HOSTROCK COMMENTS: Host rocks are correlative with either the Hazelton or Kunga Groups.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Bowser Lake
METAMORPHIC TYPE: Regional
COMMENTS: Situated in a roof pendant within the Coast Plutonic Complex.

PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)
RELATIONSHIP: Wrangell
GRADE: Greenschist

INVENTORY

ORE ZONE: VEIN REPORT ON: N

CATEGORY:	Assay/analysis	YEAR:	1918
SAMPLE TYPE:	Grab		
COMMODITY		GRADE	
Silver		61.7000	Grams per tonne
Gold		0.3400	Grams per tonne
Copper		0.1000	Per cent

COMMENTS: Well mineralized sample of the quartz vein.
REFERENCE: Property File - Bancroft, J.A. (1918), page 57.

CAPSULE GEOLOGY

The Quartz-Hanna showing is located about 3.0 kilometres west of the Hastings Arm of Observatory Inlet, between Carney and Upper Dam Lakes. The showing is located about 580 metres east of the Deadwood occurrence (103P 243).

The area of the showing is underlain by the western margin of a 14.4 by 9.6 kilometre roof pendant within the Coast Plutonic Complex. These rocks have been correlated with the Jurassic Hazelton Group, (Grove, T., 1986), but have also been correlated with the Upper Triassic Kunga Group sediments and Karmutsen Formation (Vancouver Group) volcanics (Sharp, R.J. (1980) M.Sc. Thesis).

The volcanics comprise mafic flows and tuffs that have been variably chloritized to greenstone. The overlying sediments comprise argillite, siltstone, sandstone, minor chert and limestone. These rocks are deformed by two phases of folding which trend northeast.

The showing consists of a well defined quartz vein in argillite, about 90 to 120 metres east of the greenstone/argillite contact. The vein, 1.8 to 5.5 metres wide, parallels bedding with a strike of 170

CAPSULE GEOLOGY

degrees, dipping 55 to 70 degrees east. The vein has been exposed for 600 metres along strike by stripping and trenching.

The vein consists of barren to sparsely mineralized milky white quartz, with traces of disseminated pyrite, pyrrhotite, chalcopyrite, galena and sphalerite. A well mineralized sample from the vein assayed 0.10 per cent copper, 61.7 grams per tonne silver and 0.34 grams per tonne gold (Property File - Bancroft, J.A. (1918) Report, p. 57).

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Anyox Map; *Taiga Consultants Ltd. (1992): Geological,
Geochemical, and Geophysical Report on the Anyox area in
102P 021)
GSC MAP 307A; 315A; 1385A
GSC MEM 175, p. 91

DATE CODED: 1989/01/31
DATE REVISED: 1997/04/07

CODED BY: PSF
REVISED BY: DA

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **103P 153**

NATIONAL MINERAL INVENTORY: 103P6 Zn1

NAME(S): **LONE STAR, BEL**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P06W
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 28 56 N
LONGITUDE: 129 25 21 W
ELEVATION: 274 Metres

NORTHING: 6148536
EASTING: 473298

LOCATION ACCURACY: Within 1 KM

COMMENTS: Location of tunnel (Minister of Mines Annual Report 1918, page 68). Location somewhat uncertain.

COMMODITIES: Gold Silver Zinc Lead

MINERALS

SIGNIFICANT: Pyrite Arsenopyrite Sphalerite Galena

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein

CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

DIMENSION: 0460 x 0007 Metres STRIKE/DIP:

TREND/PLUNGE:

COMMENTS: Vein strikes north-northeast for 460 metres and is up to 7.6 metres wide.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Upper Triassic	Stuhini	Undefined Formation	

LITHOLOGY: Argillite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

PHYSIOGRAPHIC AREA: Boundary Ranges

TERRANE: Stikine

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

COMMENTS: At the south end of the Stewart Complex (Island Arc Assemblage).

CAPSULE GEOLOGY

The Lonestar showing is located on the south slope of Wilauks Mountain, 4.25 kilometres due east of Alice Arm. The area was explored for gold, by tunnelling and trenching, in 1918.

The region is underlain by an assemblage of volcanics and sediments comprising the Upper Triassic Stuhini Group, the Lower Jurassic Hazelton Group and the Middle Jurassic Spatsizi Group. This assemblage has been folded into a north-northwest trending anticline (Mt. McGuire anticline) and regionally metamorphosed to greenschist facies.

The showing is hosted in Stuhini Group argillite near the contact with augite porphyritic basaltic flows which are situated on the western limb of the Mt. McGuire anticline. A quartz vein, up to 7.6 metres wide, contains bands of white quartz and strikes north-northeast for 460 metres. Mineralization consists of pyrite, minor arsenopyrite and sphalerite. A grab sample from the dump of an adit assayed low values in gold and silver (Minister of Mines Annual Report 1918, p. 68).

Across a small creek from the adit, quartz stringers mineralized with galena and sphalerite are found cutting schistose argillite. The argillite strikes 030 degrees and dips 75 degrees northwest.

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EMPR MAP 8
EMPR OF 1986-2
GSC MAP 307A; 315A; 1385A
GSC MEM 175, p. 70

DATE CODED: 1985/07/24
DATE REVISED: 1989/03/08

CODED BY: GSB
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FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 153**

MINFILE NUMBER: **103P 154**

NATIONAL MINERAL INVENTORY: 103P6 Zn1

NAME(S): **SILVER BELL**, BEL

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P06W
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 28 49 N
LONGITUDE: 129 25 27 W
ELEVATION: 244 Metres

NORTHING: 6148320
EASTING: 473192

LOCATION ACCURACY: Within 1 KM

COMMENTS: Based on location of showing as described in Minister of Mines Annual Report 1918, page 68. Location somewhat uncertain.

COMMODITIES: Zinc Silver Lead

MINERALS

SIGNIFICANT: Pyrite Sphalerite Galena

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein

CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

DIMENSION: 0005 Metres STRIKE/DIP: 015/60E

TREND/PLUNGE:

COMMENTS: Attitude of dyke, 4.6 metres wide, containing mineralized quartz stringers.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Upper Triassic	Stuhini	Undefined Formation	

LITHOLOGY: Argillite
Dioritic Dike

HOSTROCK COMMENTS: Mineralization contained in a dioritic dyke within argillite.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

PHYSIOGRAPHIC AREA: Boundary Ranges

TERRANE: Stikine

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

COMMENTS: At the south end of the Stewart Complex (Island Arc Assemblage).

INVENTORY

ORE ZONE: DUMP

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1918

SAMPLE TYPE: Grab

COMMODITY

GRADE

Silver

21.0000

Grams per tonne

Zinc

2.8000

Per cent

COMMENTS: Grab sample from adit dump, trace lead.

REFERENCE: Minister of Mines Annual Report 1918, page 68.

CAPSULE GEOLOGY

The Silver Bell showing is located on the south slope of Wilauks Mountain, 4.25 kilometres due east of Alice Arm. The showing lies immediately southwest of the Lonestar occurrence (103P 153). The area was explored by trenching and tunnelling for lead, zinc and silver mineralization in 1918.

The region is underlain by an assemblage of volcanics and sediments comprising the Upper Triassic Stuhini Group, the Lower Jurassic Hazelton Group and the Middle Jurassic Spatsizi Group. This assemblage has been folded into a north-northwest trending anticline (Mt. McGuire anticline) and regionally metamorphosed to greenschist facies.

The showing is hosted in Stuhini Group argillite situated on the western limb of the Mt. McGuire anticline. A 4.6 metre wide dyke in the argillite strikes 015 degrees and dips 55 to 60 degrees east. The dyke contains stringers, bands and blebs of quartz mineralized with pyrite, sphalerite and galena. A sample from an adit dump assayed 21 grams per tonne silver, trace lead and 2.8 per cent zinc (Minister of Mines Annual Report 1918, p. 68).

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1196
REPORT: RGEN0100

BIBLIOGRAPHY

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EMPR BULL 63
EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
EMPR OF 1986-2
GSC MAP 307A; 315A; 1385A
GSC MEM 175, pp. 77

DATE CODED: 1985/07/24
DATE REVISED: 1989/03/08

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 155**

NATIONAL MINERAL INVENTORY: 103P11 Cu5

NAME(S): **SAN DIEGO**, DAK, TOTAL

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P11W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 31 44 N
LONGITUDE: 129 26 17 W
ELEVATION: 274 Metres

NORTHING: 6153735
EASTING: 472348

LOCATION ACCURACY: Within 500M

COMMENTS: Location based on description of showing in Minister of Mines
Annual Report 1916, page 69.

COMMODITIES: Copper Gold

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Epigenetic
TYPE: I02 Intrusion-related Au pyrrhotite veins

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Lower Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Tuffaceous Sandstone
Argillite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine
METAMORPHIC TYPE: Regional
COMMENTS: At the south end of the Stewart Complex (Island Arc Assemblage).

PHYSIOGRAPHIC AREA: Boundary Ranges
RELATIONSHIP:
GRADE: Greenschist

INVENTORY

ORE ZONE: DRILLHOLE REPORT ON: N

CATEGORY: Assay/analysis YEAR: 1916
SAMPLE TYPE: Drill Core
COMMODITY

Gold	2.4000	Grams per tonne
Copper	1.9000	Per cent

COMMENTS: From Hole 2 between 3.66 and 7.32 metres.
REFERENCE: Minister of Mines Annual Report 1916, page 69.

CAPSULE GEOLOGY

The San Diego showing is located on the northwest slope of Wilauks Mountain, about 6.0 kilometres northeast of Alice Arm. The area was originally explored for copper in 1916, and more recently during the mid 1960's.

The region is underlain by an assemblage of volcanics and sediments comprising the Upper Triassic Stuhini Group, the Lower Jurassic Hazelton Group and the Middle Jurassic Spatsizi Group. This assemblage has been folded into a north-northwest trending anticline (Mt. McGuire anticline) and regionally metamorphosed to greenschist facies.

The showing is hosted in tuffaceous sandstones and argillites of the Hazelton Group crosscut by narrow dykes. The showing consists of pyritic sandstone, with irregularly distributed chalcopyrite, interbedded with barren argillite. A sample from drill hole Number 2 assayed 2.40 grams per tonne gold and 1.9 per cent copper between 3.66 and 7.32 metres (Minister of Mines Annual Report 1916, p. 69). A 12 metre chip sample taken 7.6 metres below where the drill holes were collared assayed 1.99 grams per tonne gold and 0.7 per cent copper (Minister of Mines Annual Report 1916, p. 70). The showing is now largely covered by slide material.

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EMPR AR *1916-69,70; 1966-47,48; 1967-43

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1198
REPORT: RGEN0100

BIBLIOGRAPHY

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235-243
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EMPR MAP 8
EMPR OF 1986-2
EMPR PF (Mayfair Moly Mines, Map)
GSC MAP 307A; 315A; 1385A
GSC MEM 175, p. 77
WWW http://www.infomine.com/index/properties/FH_CLAIMS.html

DATE CODED: 1985/07/24
DATE REVISED: 1989/03/02

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 156**

NATIONAL MINERAL INVENTORY:

NAME(S): **SUSANNE**, HANNA

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P12E 103P12W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 41 03 N
LONGITUDE: 129 38 46 W
ELEVATION: 1029 Metres

NORTHING: 6171118
EASTING: 459376

LOCATION ACCURACY: Within 500M

COMMENTS: Location of rock sample 66073 (Assessment Report 12122, Figure 5).

COMMODITIES: Gold Silver

MINERALS

SIGNIFICANT: Pyrite
COMMENTS: Also unidentified steel blue mineral present.
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I02 Intrusion-related Au pyrrhotite veins
DIMENSION: 0050 x 0002 Metres STRIKE/DIP: 020/80
COMMENTS: Attitude of veins in 2 metre wide, 50 metre long shear zone.

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Upper Triassic	Stuhini	Undefined Formation	

LITHOLOGY: Black Argillite
Black Siltstone

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Boundary Ranges
TERRANE: Stikine
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist
COMMENTS: At the western margin of the Stewart Complex (Island Arc Assemblage).

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1983
SAMPLE TYPE: Grab
COMMODITY GRADE
Silver 3159.0000 Grams per tonne
Gold 45.6600 Grams per tonne
COMMENTS: Grab sample of boulder from shear zone.
REFERENCE: Assessment Report 12122, page 5.

CAPSULE GEOLOGY

The Susanne showing is located on the west side of Long Creek, just southeast of O'Neil Creek, 24.5 kilometres north-northwest of Alice Arm. The showing was discovered in 1983, by Canadian-United Minerals Inc.

The area is underlain by volcanics and sediments of the Upper Triassic Stuhini Group and the Lower Jurassic Hazelton Group intruded by Coast Plutonic Complex rocks.

The showing consists of a 2.0 metre wide shear zone exposed for 50 metres in black argillite and siltstone of the Stuhini Group. The zone contains a series of quartz veins, up to 30 centimetres in diameter, that strike 020 degrees and dip 80 degrees east. The veins are mineralized with pyrite and an unidentified steel blue mineral. A grab sample from a boulder in the shear zone assayed 45.66 grams per tonne gold and 3159 grams per tonne silver (Assessment Report 12122, p. 5). Three short diamond-drill holes failed to intersect the continuation of this shear zone.

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RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1200
REPORT: RGEN0100

BIBLIOGRAPHY

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EMPR OF 1986-2
GSC MAP 307A; 1385A
GCNL #55,#132, 1985
N MINER Jul.18, 1985
NAGMIN Jun.7,Jul.19, 1985
IPDM May/June 1985, p. 15

DATE CODED: 1989/03/31
DATE REVISED: 1989/11/15

CODED BY: PSF
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

CAPSULE GEOLOGY

Marshall Creek Copper Annual Report 1965, p. 7). The shear zone is likely the southward extension of the shear zone hosting the Keystone showing (103P 115), 1700 metres to the north.

A 1.2 to 1.5 metre wide quartz vein, 240 metres to the south of the adits, lies along a dioritic/gabbroic dyke and strikes 030 degrees. The vein contains a near massive lense of pyrrhotite. Samples are reported to assay trace gold, 51 grams per tonne silver (Minister of Mines Annual Report 1924, p. 51) and trace gold and silver, 0.25 per cent nickel (Minister of Mines Annual Report 1927, p. 70).

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EMPR OF 1986-2
EMPR PF (*Marshall Creek Copper Co. Ltd. Annual Reports 1965;
*Marshall Creek Copper, Geology Map, 1967)
EMR MP CORPFILE (Marshall Creek Copper Co. Ltd.)
GSC MAP 307A; 315A; 1385A
GSC MEM 175, p. 82

DATE CODED: 1989/02/26
DATE REVISED: / /

CODED BY: PSF
REVISED BY:

FIELD CHECK: N
FIELD CHECK:

MINFILE NUMBER: **103P 158**

NATIONAL MINERAL INVENTORY: 103P11 Zn4

NAME(S): **IXL**, WAR DANCE

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P11W
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 33 03 N
LONGITUDE: 129 24 01 W
ELEVATION: 396 Metres

NORTHING: 6156163
EASTING: 474747

LOCATION ACCURACY: Within 500M

COMMENTS: Location of War Dance claim (Minister of Mines Annual Report 1919 p. 56).

COMMODITIES: Gold Silver Copper

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Sphalerite Galena

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Concordant
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I02 Intrusion-related Au pyrrhotite veins

105 Polymetallic veins Ag-Pb-Zn±Au
STRIKE/DIP: 150/37E TREND/PLUNGE:

DIMENSION:
COMMENTS: Series of parallel quartz veins striking 150 degrees and dipping 35 to 40 degrees to the east.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Upper Triassic	Stuhini	Undefined Formation	

LITHOLOGY: Argillite
Slate

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Boundary Ranges

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

COMMENTS: Situated at the south end of the Stewart Complex.

INVENTORY

ORE ZONE: VEIN

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1919

SAMPLE TYPE: Chip

COMMODITY

GRADE

Silver

34.0000

Grams per tonne

Gold

7.3000

Grams per tonne

Copper

1.4000

Per cent

COMMENTS: Chip sample taken across 0.61 metre wide quartz vein.

REFERENCE: Minister of Mines Annual Report 1919, page 57.

CAPSULE GEOLOGY

The IXL showing is located on the north bank of the Dak River, 9.0 kilometres northeast of Alice Arm. The area was investigated for base and precious metals in the early 1900's.

The region is underlain by an assemblage of volcanics and sediments comprising the Upper Triassic Stuhini Group, the Lower Jurassic Hazelton Group and the Middle Jurassic Spatsizi Group. This assemblage has been folded into a north-northwest trending anticline (Mt. McGuire anticline) and regionally metamorphosed to greenschist facies.

The showing comprises a series of parallel quartz veins developed in argillite of the lower sedimentary unit of the Stuhini Group. The veins, up to 0.61 metres wide, are developed along the bedding of the argillite, striking 150 degrees and dipping 35 to 40 degrees east. A sample taken across a 0.61 metre wide quartz vein assayed 7.30 grams per tonne gold, 34 grams per tonne silver and 1.4 per cent copper (Minister of Mines Annual Report 1919, p. 57).

BIBLIOGRAPHY

EMPR AR *1919-56,57; 1927-74

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1204
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR BULL 63
EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
EMPR OF 1986-2
GSC MAP 307A; 315A; 1385A
GSC MEM 175, pp. 68,85

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/27

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 159**

NATIONAL MINERAL INVENTORY: 103P11 Zn3

NAME(S): **SILVER CHORD**, SILVER BAR

MINING DIVISION: Skeena

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 103P11W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 32 28 N
LONGITUDE: 129 24 12 W
ELEVATION: 424 Metres

NORTHING: 6155082
EASTING: 474548

LOCATION ACCURACY: Within 1 KM

COMMENTS: Location of upper adit (Minister of Mines Annual Report 1927 pp. 74, 71).

COMMODITIES: Zinc Silver Lead

MINERALS

SIGNIFICANT: Sphalerite Pyrite Galena

ASSOCIATED: Quartz Calcite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Breccia
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

DIMENSION: 0150 x 0007 Metres STRIKE/DIP:

COMMENTS: Vein and quartzose zone, 7.6 metres wide, strike north and dip vertically and steeply west, respectively.

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Upper Triassic	Stuhini	Undefined Formation	

LITHOLOGY: Argillite
Argillaceous Quartzite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Stikine

PHYSIOGRAPHIC AREA: Boundary Ranges

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

COMMENTS: At the south end of the Stewart Complex (Island Arc Assemblage).

CAPSULE GEOLOGY

The Silver Chord showing is located on the Dak River, about 8.5 kilometres northeast of Alice Arm. The area was sporadically but extensively investigated for zinc between 1919 and 1967.

The region is underlain by an assemblage of volcanics and sediments comprising the Upper Triassic Stuhini Group, the Lower Jurassic Hazelton Group and the Middle Jurassic Spatsizi Group. This assemblage has been folded into a north-northwest trending anticline (Mt. McGuire anticline) and regionally metamorphosed to greenschist facies.

The showing, consisting of one quartz vein and one quartzose zone/vein, is hosted in north striking Stuhini Group argillite and argillaceous quartzite crosscut by narrow lamprophyre dykes.

The vein strikes north, dips vertically and is of variable width. On the surface, a 1.0 metre wide, 10 metre long shoot of sphalerite mineralization is exposed. The vein displays variable sulphide mineralization in a short adit.

The quartzose zone/vein, about 100 metres west, strikes north and dips steeply west. The zone is at least 150 metres long and occurs as a zone of quartz and calcite veins and stringers in brecciated country rock. The zone, 0.3 to 7.6 metres wide, is associated with a narrow lamprophyre dyke. At its widest point the zone consists of 80 per cent country rock and 20 per cent vein material. As the zone narrows, the vein content increases as the individual veins and stringers coalesce, resulting in a distinct vein free of wallrock in the narrower portions of the zone. Mineralization comprises variable amounts of sphalerite and minor pyrite and galena. Narrow streaks in this vein/zone are reported to contain high silver values (Minister of Mines Annual Report 1927, p. 73).

BIBLIOGRAPHY

EMPR AR 1919-57; 1922-62; 1923-61; *1927-73,74; 1928-89; 1966-47,48;

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RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1206
REPORT: RGEN0100

BIBLIOGRAPHY

1967-43
EMPR BULL 63
EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
EMPR OF 1986-2
GSC MAP 307A; 315A; 1385A
GSC MEM *175, p. 78
GSC SUM RPT 1928A, p. 39

DATE CODED: 1985/07/24
DATE REVISED: 1989/03/02

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 160**

NATIONAL MINERAL INVENTORY: 103P11 Cu4

NAME(S): **RED BLUFF**, TOTAL

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P11W
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 33 14 N
LONGITUDE: 129 26 53 W
ELEVATION: 872 Metres

NORTHING: 6156522
EASTING: 471735

LOCATION ACCURACY: Within 500M

COMMENTS: Location of adit as shown on Figure 3, Assessment Report 9295.

COMMODITIES: Silver Copper Gold

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite
COMMENTS: Occur as disseminations and along fractures.
ALTERATION: Sericite Carbonate Clay Quartz
ALTERATION TYPE: Sericitic Carbonate Argillic Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I02 Intrusion-related Au pyrrhotite veins L01 Subvolcanic Cu-Ag-Au (As-Sb)
COMMENTS: Showing hosted in a northwest trending 4 by 0.7 kilometre body of volcanic rock.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Feldspar Porphyritic Dacite
Feldspar Porphyritic Andesite
Andesitic Dike

HOSTROCK COMMENTS: Host rock consists of a pyritic, fractured, feldspar to feldspar-hornblende porphyritic dacitic to andesitic volcanic.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Boundary Ranges
TERRANE: Stikine
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist
COMMENTS: At the south end of the Stewart Complex (Island Arc Assemblage).

INVENTORY

ORE ZONE: ADIT REPORT ON: N

CATEGORY: Assay/analysis YEAR: 1967
SAMPLE TYPE: Chip
COMMODITY GRADE
Silver 27.0000 Grams per tonne
Copper 0.4000 Per cent

COMMENTS: A 1.8 metre chip sample taken at adit entrance, trace gold.
REFERENCE: Minister of Mines Annual Report 1967, page 42.

CAPSULE GEOLOGY

The Red Bluff showing is located between Gumas and Washout creeks, 8.0 kilometres northeast of Alice Arm. The area has been investigated extensively for copper and molybdenum. The region is underlain by an assemblage of volcanics and sediments comprising the Upper Triassic Stuhini Group, the Lower Jurassic Hazelton Group and the Middle Jurassic Spatsizi Group. This assemblage has been folded into a north-northwest trending anticline (Mt. McGuire anticline) and regionally metamorphosed to greenschist facies. The showing consists of a unit of pyritized feldspar to feldspar hornblende porphyritic andesitic to dacitic volcanic, informally called the Copper Belt. This unit, of the Hazelton Group, is 0.7 by 4.0 kilometres in size and trends northwest. It is bounded to the east and west by north to northwest striking, moderately to steeply dipping beds of argillite, siltstone, greywacke and conglomerate. The porphyritic volcanic has been subjected to sericitization, silicification and carbonate and argillic alteration. It occurs in a

CAPSULE GEOLOGY

zone of intense fracturing and shearing accompanied by numerous north to northeast striking andesitic dykes.

The mineralogy is characterized by disseminations, veins and fracture coatings of pyrite that comprises up to 15 per cent of the volcanic. Minor chalcopyrite occurs locally along fractures and as disseminations. A chip sample taken across 1.8 metres at the entrance of a short adit in the iron oxide stained bluffs above Gumas Creek, assayed trace gold, 27 grams per tonne silver and 0.40 per cent copper (Minister of Mines Annual Report 1967, p. 42). Minor scheelite is reported to have been found just east of here. The mineralization of this occurrence is similar to that of other occurrences in the Copper Belt of the upper Kitsault Valley.

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EMPR AR 1916-70; 1922-61,62; 1929-88; *1967-42,48,49
EMPR ASS RPT 1194, 1242, *9295
EMPR BULL 10, p. 56; 63
EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp. 235-243
EMPR GEM 1971-123,124
EMPR MAP 8
EMPR OF 1986-2
EMR MP CORPFILE (Nadina Explorations Ltd.; Northlodge Copper Mines Ltd.)
GSC MAP 307A; 315A; 1385A
GSC MEM 32, p. 92; 175, p. 75

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/27

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 161**

NATIONAL MINERAL INVENTORY: 103P11 Cu4

NAME(S): **FOX**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P11W
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 32 45 N
LONGITUDE: 129 26 09 W
ELEVATION: 515 Metres

NORTHING: 6155620
EASTING: 472500

LOCATION ACCURACY: Within 500M

COMMENTS: Location based on description of showing given in Minister of Mines Annual Report 1929, page 89. Location somewhat uncertain.

COMMODITIES: Zinc Silver Gold Lead

MINERALS

SIGNIFICANT: Sphalerite Pyrite Galena

COMMENTS: Disseminated, trace gold and lead.

ASSOCIATED: Quartz Barite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated

CLASSIFICATION: Hydrothermal Epigenetic

TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au 110 Vein barite

COMMENTS: Quartz-barite vein strikes west for at least 180 metres.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Porphyritic Andesite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

PHYSIOGRAPHIC AREA: Boundary Ranges

TERRANE: Stikine

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

COMMENTS: At the south end of the Stewart Complex (Island Arc Assemblage).

INVENTORY

ORE ZONE: VEIN

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1929

SAMPLE TYPE: Chip

COMMODITY

GRADE

Silver

6.8000

Grams per tonne

Zinc

5.1000

Per cent

COMMENTS: A 0.61 metre chip sample taken across vein, trace gold and lead.

REFERENCE: Minister of Mines Annual Report 1929, page 89.

CAPSULE GEOLOGY

The Fox showing is located between Gumas and Washout Creeks, about 11.0 kilometres northeast of Alice Arm.

The region is underlain by an assemblage of volcanics and sediments comprising the Upper Triassic Stuhini Group, the Lower Jurassic Hazelton Group and the Middle Jurassic Spatsizi Group. This assemblage has been folded into a north-northwest trending anticline (Mt. McGuire anticline) and regionally metamorphosed to greenschist facies.

The showing consists of a quartz-barite vein which has been traced west for about 180 metres in Hazelton Group porphyritic andesite. The vein is reported to contain irregular disseminations of sphalerite, pyrite and minor galena. A chip sample taken across 0.61 metres of the vein assayed trace gold, 6.8 grams per tonne silver, nil copper, trace lead and 5.1 per cent zinc (Minister of Mines Annual Report 1929, p.89).

BIBLIOGRAPHY

EMPR AR *1929-89
EMPR ASS RPT 1194, 1242, 9295
EMPR BULL 63
EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8

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GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1210
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR OF 1986-2
EMR MP CORPFILE (Nadina Explorations Ltd.; Northlodge Copper Mines
Ltd.)
GSC MAP 307A; 315A; 1385A
GSC MEM 175, p. 65
WWW http://www.infomine.com/index/properties/FH_CLAIMS.html

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/27

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 162**

NATIONAL MINERAL INVENTORY: 103P11 Cu4

NAME(S): **OBSERVER**, RED BLUFF

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P11W
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 34 15 N
LONGITUDE: 129 26 22 W
ELEVATION: 853 Metres

NORTHING: 6158404
EASTING: 472290

LOCATION ACCURACY: Within 1 KM

COMMENTS: Location of vein (Minister of Mines Annual Report 1929 p.89).

COMMODITIES: Silver Zinc Lead Copper Gold

MINERALS

SIGNIFICANT: Pyrite Sphalerite Chalcopyrite Galena Arsenopyrite
COMMENTS: Trace gold.
ASSOCIATED: Quartz Barite Carbonate
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Breccia
CLASSIFICATION: Hydrothermal Epigenetic Replacement
TYPE: I02 Intrusion-related Au pyrrhotite veins I05 Polymetallic veins Ag-Pb-Zn±Au
I10 Vein barite
DIMENSION:
COMMENTS: Attitude of siliceous replacement zone. STRIKE/DIP: 063/40W TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Augite Porphyritic Andesite
Tuff
Greywacke

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Boundary Ranges
TERRANE: Stikine
METAMORPHIC TYPE: Regional RELATIONSHIP:
COMMENTS: At the south end of the Stewart Complex (Island Arc Assemblage). GRADE: Greenschist

INVENTORY

ORE ZONE: VEIN REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1929
SAMPLE TYPE: Grab
COMMODITY GRADE
Silver 110.0000 Grams per tonne
Zinc 8.7000 Per cent

COMMENTS: Sample from brecciated quartz vein, trace gold.
REFERENCE: Minister of Mines Annual Report 1929, page 89.

CAPSULE GEOLOGY

The Observer showing is located between Gumas and Washout Creeks, about 10.0 kilometres northeast of Alice Arm. Various showings in this area have been prospected for base and precious metals.

The region is underlain by an assemblage of volcanics and sediments comprising the Upper Triassic Stuhini Group, the Lower Jurassic Hazelton Group and the Middle Jurassic Spatsizi Group. This assemblage has been folded into a north-northwest trending anticline (Mt. McGuire anticline) and regionally metamorphosed to greenschist facies.

The showing comprises a number of quartz, quartz-carbonate, quartz-barite and barite veins, breccias and a silicious replacement zone. The country rock consists of Hazelton Group augite porphyritic andesite, greywacke and tuff.

A quartz vein, 0.55 metres wide, occurs at 853 metres elevation on the west bank of Washout Creek. The vein is mineralized with pyrite, chalcopyrite, arsenopyrite and sphalerite. A sample from this vein assayed trace gold, 27 grams per tonne silver and 1.1 per cent copper over 0.55 metres (Minister of Mines Annual Report 1929,

CAPSULE GEOLOGY

p. 89).

A quartz-barite vein, similar to the Fox showing (103P 161), occurs 230 metres to the southwest at 968 metres elevation. Mineralization consists of chalcopyrite and pyrite. A sample assayed trace gold, trace silver and 0.2 per cent copper (Minister of Mines Annual Report 1929, p. 89).

A silicious replacement zone, 2.0 metres wide, strikes 063 degrees and dips 40 degrees west at 975 metres elevation. Veinlets and disseminations of chalcopyrite and pyrite occur in bluish quartz. A 2.0 metre chip sample assayed trace gold, 3.4 grams per tonne silver and 0.9 per cent copper (Minister of Mines Annual Report 1929, p. 89).

A brecciated quartz vein, 1.2 metres wide, strikes 168 degrees for up to 100 metres and dips 45 degrees east between 1067 and 1173 metres elevation. The vein is mineralized, along the hangingwall, with sphalerite, pyrite and galena over widths of 0.20 to 0.51 metres. A grab sample assayed trace gold, 110 grams per tonne silver and 8.7 per cent zinc (Minister of Mines Annual Report 1929, p. 89).

At 1128 metres elevation, a barite breccia zone contains sphalerite, galena and minor chalcopyrite. A sample assayed trace gold, 30.8 grams per tonne silver, 0.04 per cent copper, 0.6 per cent lead and 2.9 per cent zinc over 3.0 metres (Minister of Mines Annual Report 1967, p. 49).

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EMPR AR *1929-89; *1967-49
EMPR ASS RPT 1194, 1242, 9295
EMPR BULL 63
EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
EMPR OF 1986-2
EMR MP CORPFILE (Nadina Explorations Ltd.; Northlodge Copper Mines Ltd.)
GSC MAP 307A; 315A; 1385A
GSC MEM 175, p. 75

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/27

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 163**

NATIONAL MINERAL INVENTORY: 103P11 Mo1

NAME(S): **LE ROY**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P11W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 35 13 N
LONGITUDE: 129 23 48 W
ELEVATION: 732 Metres

NORTHING: 6160181
EASTING: 474998

LOCATION ACCURACY: Within 1 KM

COMMENTS: Center of large vein, somewhat uncertain (Minister of Mines Annual Report 1927, p. 74).

COMMODITIES: Zinc Lead Gold Silver Molybdenum
Copper

MINERALS

SIGNIFICANT: Pyrite Sphalerite Galena Tetrahedrite Molybdenite

ASSOCIATED: Chalcopyrite

ALTERATION: Quartz

ALTERATION TYPE: Skarn Epidote Garnet Albite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein

CLASSIFICATION: Hydrothermal Epigenetic Skarn

TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au K02 Pb-Zn skarn
K04 Au skarn

COMMENTS: Mineralized quartz vein is flat-lying.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Upper Triassic Stuhini Undefined Formation

LITHOLOGY: Altered Sediment/Sedimentary
Quartz Monzonite
Skarn

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

PHYSIOGRAPHIC AREA: Boundary Ranges

TERRANE: Stikine

METAMORPHIC TYPE: Contact

RELATIONSHIP:

GRADE: Hornfels

COMMENTS: At the south end of the Stewart Complex (Island Arc Assemblage).

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1926

SAMPLE TYPE: Grab

COMMODITY

GRADE

Zinc

50.8700

Per cent

COMMENTS: Grab is zinc equivalent for gold, silver, lead and zinc.

REFERENCE: Minister of Mines Annual Report 1926, page 81.

CAPSULE GEOLOGY

The Le Roy showing is located on the east slope of Mt. McGuire about 11.0 kilometres north-northeast of Alice Arm.

The showing consists of a flat lying vein developed in skarn altered Upper Triassic Stuhini Group sediments. The quartz-albite-epidote-garnet skarn alteration is the result of the intrusion of four small, closely spaced, quartz monzonite stocks just west of the showing. These stocks host the Ajax molybdenum deposit (103P 223). The quartz vein is mineralized with pyrite, sphalerite, galena and tetrahedrite. A grab sample assayed from 23.37 per cent to 50.87 per cent zinc equivalent for gold, silver, lead and zinc (Minister of Mines Annual Report 1926, p. 81). In the vicinity, numerous small flat lying quartz veins and veinlets contain variable quantities of molybdenite, pyrite, pyrrhotite and rare chalcopyrite.

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EMPR BULL 63

RUN DATE: 26-Jun-2003
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GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1214
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp.
235-243
EMPR MAP 8
EMPR OF 1986-2
EMPR PF (Newmont, Geology Maps)
GSC MAP 307A; 315A; 1385A
GSC MEM 175, p. 70

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/10

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 164**

NATIONAL MINERAL INVENTORY: 103P11 Mo1

NAME(S): **IDA**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P11W
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 35 11 N
LONGITUDE: 129 24 49 W
ELEVATION: 1338 Metres

NORTHING: 6160125
EASTING: 473929

LOCATION ACCURACY: Within 500M

COMMENTS: Location determined from Minister of Mines Annual Report 1919 p. 56.

COMMODITIES: Zinc Lead

MINERALS

SIGNIFICANT: Sphalerite Galena

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
COMMENTS: Mineralized quartz vein is flat-lying.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Upper Triassic	Stuhini	Undefined Formation	

LITHOLOGY: Biotite Hornfels
Quartz Monzonite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Stikine

PHYSIOGRAPHIC AREA: Boundary Ranges

METAMORPHIC TYPE: Contact

RELATIONSHIP: Syn-mineralization

GRADE: Hornfels

COMMENTS: At the south end of the Stewart Complex (Island Arc Assemblage).

CAPSULE GEOLOGY

The Ida showing is located on the northeast slope of Mt. McGuire, about 11.0 kilometres northeast of Alice Arm.

The showing consists of an outcrop containing a persistent flat lying 5 to 30 centimetre wide quartz vein. The vein is developed in biotite hornfelsed sediments of the Upper Triassic Stuhini Group. Contact metamorphism of the sediments is a result of the intrusion of four small, closely spaced, quartz monzonite stocks just east of the Ida showing. These stocks host the Ajax molybdenum deposit (103P 223). The vein is mineralized with sphalerite and traces of disseminated galena.

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EMPR AR 1916-71; *1919-56
EMPR BULL 63
EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp. 235-243
EMPR OF 1986-2
EMPR PF (Newmont, Geology Map)
GSC MAP 307A; 315A; 1385A
GSC MEM 175, p. 68

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/10

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 165**

NATIONAL MINERAL INVENTORY: 103P12 Cu3

NAME(S): **IRON-KITSAULT**, IRON, PORCUPINE FRACTION,
LUCKY STRIKE

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P12E
BC MAP:
LATITUDE: 55 44 15 N
LONGITUDE: 129 35 02 W
ELEVATION: 1082 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Location of claim and showing (Minister of Mines Annual Report
1922, page 57).

MINING DIVISION: Skeena
UTM ZONE: 09 (NAD 83)
NORTHING: 6177019
EASTING: 463338

COMMODITIES: Silver Gold Copper

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Galena Sphalerite
ASSOCIATED: Quartz Calcite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I02 Intrusion-related Au pyrrhotite veins L01 Subvolcanic Cu-Ag-Au (As-Sb)
DIMENSION: 0004 Metres STRIKE/DIP: 070/90 TREND/PLUNGE:
COMMENTS: Shear zone 3.7 metres wide.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Plagioclase Hornblende Porphyritic Andesite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Boundary Ranges
TERRANE: Stikine
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist
COMMENTS: At the western margin of the Stewart Complex (Island Arc Assemblage).

INVENTORY

ORE ZONE: SHEAR REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1922
SAMPLE TYPE: Grab
COMMODITY GRADE
Silver 295.0000 Grams per tonne
Gold 3.9800 Grams per tonne
Copper 2.0000 Per cent
COMMENTS: Grab sample of well mineralized quartz from shear zone.
REFERENCE: Minister of Mines Annual Report 1922, page 57.

CAPSULE GEOLOGY

The Iron-Kitsault showing is located 1.25 kilometres northeast of the West Kitsault River, 29.5 kilometres north-northwest of the town of Alice Arm.

The showing consists of several shear zones hosted in plagioclase hornblende porphyritic andesite of the Lower Jurassic Hazelton Group. One 3.7 metre wide shear zone contains abundant pyrite and chalcopyrite. A second 3.7 metre wide shear zone, 76 metres to the east, strikes 070 degrees and dips 90 degrees. This zone is mineralized with pyrite and chalcopyrite and minor galena and sphalerite in a gangue of quartz and calcite. A grab sample of well mineralized quartz from this shear zone assayed 3.98 grams per tonne gold, 295 grams per tonne silver and 2.0 per cent copper (Minister of Mines Annual Report 1922, p. 57).

BIBLIOGRAPHY

EM EXPL 2001-1-9
EMPR AR *1922-57; 1926-82; 1929-87
EMPR ASS RPT 8166, 9076, 16034, 18657
EMPR BULL 63
EMPR EXPL 1980-409,410; 1987-C364

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
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BIBLIOGRAPHY

EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
EMPR OF 1986-2
EMPR PF (Cambria Resources Ltd. Prospectus, 1987)
GSC MAP 307A; 315A; 1385A
GSC MEM 175, p. 71

DATE CODED: 1989/05/13
DATE REVISED: / /

CODED BY: PSF
REVISED BY:

FIELD CHECK: N
FIELD CHECK:

MINFILE NUMBER: **103P 166**

NATIONAL MINERAL INVENTORY: 103P11 Zn2

NAME(S): **RIVERSIDE**, ZINC PROPERTY

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P11W
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 34 32 N
LONGITUDE: 129 29 41 W
ELEVATION: 107 Metres

NORTHING: 6158953
EASTING: 468808

LOCATION ACCURACY: Within 500M

COMMENTS: Location centered on an adit on Kitsault No. 1 (Minister of Mines Annual Report 1916, pp. 56, 64).

COMMODITIES: Gold Silver Zinc Copper Lead

MINERALS

SIGNIFICANT: Sphalerite Chalcopyrite Galena Pyrite

ASSOCIATED: Quartz Calcite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Breccia

CLASSIFICATION: Hydrothermal Epigenetic

TYPE: I02 Intrusion-related Au pyrrhotite veins I05 Polymetallic veins Ag-Pb-Zn±Au

L01 Subvolcanic Cu-Ag-Au (As-Sb)

DIMENSION: 0009 Metres STRIKE/DIP:

TREND/PLUNGE:

COMMENTS: Quartz-calcite vein strikes 053 degrees for at least 9 metres and averages 0.3 metres in width.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Upper Triassic
Lower Jurassic

GROUP

Stuhini
Hazelton

FORMATION

Undefined Formation
Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Argillite
Slate

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

PHYSIOGRAPHIC AREA: Boundary Ranges

TERRANE: Stikine

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

COMMENTS: At the south end of the Stewart Complex (Island Arc Assemblage).

INVENTORY

ORE ZONE: LENS

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1916

SAMPLE TYPE: Grab

COMMODITY

GRADE

Silver

274.0000

Grams per tonne

Gold

10.0000

Grams per tonne

COMMENTS: Grab sample from quartz lens.

REFERENCE: Minister of Mines Annual Report 1916, page 64.

CAPSULE GEOLOGY

The Riverside showing is located on the east bank of the Kitsault River, 10.5 kilometres due north of Alice Arm. The area was investigated in 1916.

The area is underlain by volcanics and sediments of the Upper Triassic Stuhini Group and the Lower Jurassic Hazelton Group which are deformed into northwest trending folds.

The showing comprises two main occurrences. The first consists of a vein, traced by an adit for 9 metres, hosted in Stuhini Group argillite. The vein strikes 053 degrees, averages 0.3 metres in width and contains sphalerite and minor chalcopyrite, galena and pyrite in a gangue of quartz, calcite and brecciated slate.

The second occurrence comprises a series of quartz lenses up to 0.9 metres in width hosted in Hazelton Group rocks. A sample from one of these lenses assayed 10 grams per tonne gold and 274 grams per tonne silver (Minister of Mines Annual Report 1916, p. 64).

BIBLIOGRAPHY

EMPR AR *1916-56,64

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1219
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR BULL 63
EMPR FIELDWORK 1985, pp. 214-219; 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
EMPR OF 1986-2
EMR MP COMM FILE (MR-ZN-301.00)
GSC MAP 207A; 315A; 1385A
GSC MEM 175, p. 76

DATE CODED: 1985/07/24
DATE REVISED: 1989/03/28

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 167**

NATIONAL MINERAL INVENTORY: 103P12 Pb6

NAME(S): **SILVER WING**, B.J.

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P12E
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 32 00 N
LONGITUDE: 129 32 13 W
ELEVATION: 823 Metres

NORTHING: 6154274
EASTING: 466110

LOCATION ACCURACY: Within 500M

COMMENTS: Location centered on showing in Jones Creek (Minister of Mines Annual Report 1916, pp. 56, 63).

COMMODITIES: Silver Lead Zinc Copper

MINERALS

SIGNIFICANT: Galena Sphalerite Chalcopyrite Pyrite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Breccia Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

DIMENSION: 0023

Metres

STRIKE/DIP:

TREND/PLUNGE:

COMMENTS: Breccia zone strikes 148 degrees for 23 metres.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Middle Jurassic

GROUP

Spatsizi

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Brecciated Argillite
Brecciated Slate

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Stikine

METAMORPHIC TYPE: Regional

COMMENTS: Within the Bowser Lake sedimentary overlap on Stikinia Terrane.

PHYSIOGRAPHIC AREA: Boundary Ranges

Bowser Lake

RELATIONSHIP:

GRADE: Greenschist

INVENTORY

ORE ZONE: BRECCIA

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1916

SAMPLE TYPE: Chip

COMMODITY

GRADE

Silver

1264.0000 Grams per tonne

COMMENTS: A 1.2 metre chip sample across the breccia zone, grade is silver equivalent.

REFERENCE: Minister of Mines Annual Report 1916, page 63.

CAPSULE GEOLOGY

The Silver Wing showing is located on Jones Creek, 6.5 kilometres north-northwest of Alice Arm. The area was investigated for precious metals in 1916.

The region is underlain by an assemblage of volcanics and sediments comprising the Upper Triassic Stuhini Group, the Lower Jurassic Hazelton Group and the Middle Jurassic Spatsizi Group. This assemblage is folded into a north-northwest trending anticline-syncline pair.

The showing consists of quartz stringers in a breccia zone that strikes 148 degrees in Spatsizi Group argillite. The zone has been traced along Jones Creek for 23 metres. The quartz stringers contain minor galena, sphalerite, chalcopyrite and pyrite. A 1.2 metre chip sample taken across the breccia zone assayed 1264 grams per tonne silver equivalent (Minister of Mines Annual Report 1916, p. 63).

BIBLIOGRAPHY

EMPR AR *1916-56,63

EMPR ASS RPT 10803, 10951, 21141

EMPR BULL 63

EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp. 235-243

EMPR MAP 8

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1221
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR OF 1986-2
GSC MAP 307A; 315A; 1385A
GSC MEM 175, p. 80

DATE CODED: 1985/07/24
DATE REVISED: 1989/03/28

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 168**

NATIONAL MINERAL INVENTORY: 103P12 Au2

NAME(S): **CAPE NOME (L.939)**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P12E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 32 38 N
LONGITUDE: 129 30 25 W
ELEVATION: 107 Metres

NORTHING: 6155434
EASTING: 468012

LOCATION ACCURACY: Within 500M

COMMENTS: Center of tunnel on L. 939 (Minister of Mines Annual Report 1918 p. 57).

COMMODITIES: Gold Zinc

MINERALS

SIGNIFICANT: Pyrite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
DIMENSION: STRIKE/DIP: 315/50E
COMMENTS: Parallel quartz veins strike northwest, dip 50 degrees northeast.

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Upper Triassic	Stuhini	Undefined Formation	

LITHOLOGY: Black Siltstone
Argillite
Slate

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine
METAMORPHIC TYPE: Regional
COMMENTS: At the south end of the Stewart Complex (Island Arc Assemblage).

PHYSIOGRAPHIC AREA: Boundary Ranges
GRADE: Greenschist

CAPSULE GEOLOGY

The Cape Nome showing is located on the west side of the Kitsault River, 7.0 kilometres north of Alice Arm on Lot 939. The area was explored in 1918 and 1919 for precious metals.

The region is underlain by an assemblage of volcanics and sediments comprising the Upper Triassic Stuhini Group, the Lower Jurassic Hazelton Group and the Middle Jurassic Spatsizi Group. This assemblage is folded into a north to northwest trending anticline-syncline pair.

The showing consists of a 1.8 metre wide zone, in Stuhini Group black siltstone, that contains a series of parallel quartz veins. The veins, mineralized with pyrite, strike northwest and dip 50 degrees northeast. Good gold values are reported from the quartz veins (Minister of Mines Annual Report 1919, p. 52). A zinc showing is reported to have been found just west of here.

BIBLIOGRAPHY

EMPR AR *1918-57; 1919-52; 1926-446
EMPR ASS RPT 10803, 10951
EMPR BULL 63
EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
EMPR OF 1986-2
GSC MAP 307A; 315A; 1385A
GSC MEM 175, p. 57

DATE CODED: 1985/07/24
DATE REVISED: 1989/03/23

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 169**

NATIONAL MINERAL INVENTORY: 103P11 Ag9

NAME(S): **TITRITE SILVER CLIFF**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P11W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 32 58 N
LONGITUDE: 129 15 29 W
ELEVATION: 1158 Metres

NORTHING: 6155966
EASTING: 483719

LOCATION ACCURACY: Within 1 KM

COMMENTS: Location of quartz vein (Minister of Mines Annual Report 1918 p.73).

COMMODITIES: Silver Copper Gold

MINERALS

SIGNIFICANT:	Sphalerite	Galena	Chalcopyrite	Arsenopyrite	Argentite
ASSOCIATED:	Quartz	Calcite	Barite		
ALTERATION:	Quartz	Pyrite			
ALTERATION TYPE:	Silicific'n		Pyrite		
MINERALIZATION AGE:	Unknown				

DEPOSIT

CHARACTER: Vein Breccia
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
DIMENSION:
COMMENTS: Attitude of 0.61 metre wide quartz vein. STRIKE/DIP: 168/70N TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Lower Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Calcareous Tuff
Breccia

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Boundary Ranges
TERRANE: Stikine
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist
COMMENTS: At the eastern boundary of the Stewart Complex (Island Arc Assemblage)

INVENTORY

ORE ZONE: VEIN REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1918
SAMPLE TYPE: Grab
COMMODITY GRADE
Silver 206.0000 Grams per tonne
Copper 0.6000 Per cent
COMMENTS: Grab sample from 0.20 metre wide quartz vein, trace gold.
REFERENCE: Minister of Mines Annual Report 1918, page 73.

CAPSULE GEOLOGY

The Titrite showing is located east of the Illiance River, about 16.5 kilometres northeast of Alice Arm. Various showings in this area have been explored for gold, silver and copper since 1918. The region is underlain by Lower Jurassic Hazelton Group volcanics and sediments situated on the east limb of the north-northwest trending Mt. McGuire anticline. These rocks have been regionally metamorphosed to greenschist facies. The showing comprises various occurrences hosted in interbedded calcareous tuff and breccia. The occurrences consist of quartz, quartz-calcite and barite veins varying from 0.20 to 1.8 metres wide. The veins contain variable amounts of sphalerite and galena with minor chalcopyrite, arsenopyrite and/or argentite. A 0.61 metre wide quartz vein strikes 168 degrees and dips 70 degrees northeast, and a 0.30 metre wide quartz-calcite vein strikes 098 degrees and dips 60 degrees south. A sample of a 0.20 metre wide quartz vein with chalcopyrite and trace argentite assayed trace gold, 206 grams per tonne silver and 0.6 per cent copper (Minister of Mines Annual Report 1918, p. 73). A sample of a brecciated quartz vein with sparse pyrite and galena, assayed trace gold and 54.9 grams per tonne silver (Minister of Mines Annual Report 1931, p. 39).

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

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CAPSULE GEOLOGY

Several showings occur in a shear zone containing quartz and calcite stringers mineralized with pyrite and sphalerite. A 1.8 metre wide pyritized and silicified breccia zone containing minor chalcopyrite is reported to lie among the various vein showings.

BIBLIOGRAPHY

EMPR AR *1918-73; *1930-90; *1931-39
EMPR ASS RPT 10115, 19459
EMPR BULL 63
EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
EMPR OF 1986-2
GSC MAP 307A; 315A; 1385A
GSC MEM 175, pp. 78,83

DATE CODED: 1989/03/15
DATE REVISED: 1989/11/15

CODED BY: PSF
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 170**

NATIONAL MINERAL INVENTORY: 103P12 Ag16

NAME(S): **LA ROSE**, BRITANNIA

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 103P12E
BC MAP:

Underground

MINING DIVISION: Skeena

LATITUDE: 55 33 57 N
LONGITUDE: 129 32 05 W
ELEVATION: 625 Metres

UTM ZONE: 09 (NAD 83)

NORTHING: 6157890
EASTING: 466278

LOCATION ACCURACY: Within 500M

COMMENTS: Location of shaft on vein (Assessment Report 10408 - Map).

COMMODITIES: Silver Gold Zinc Lead

MINERALS

SIGNIFICANT: Pyrite Pyrrhotite Arsenopyrite Galena Sphalerite
 Tetrahedrite Ruby Silver Argentite Silver

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Breccia Concordant

CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

102 Intrusion-related Au pyrrhotite veins
STRIKE/DIP: 360/75E TREND/PLUNGE:

DIMENSION:
COMMENTS: Attitude of vein and shear zone at surface.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Upper Triassic

GROUP

Stuhini

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Black Siltstone
Greywacke

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

PHYSIOGRAPHIC AREA: Boundary Ranges

TERRANE: Stikine

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

COMMENTS: At the south end of the Stewart Complex (Island Arc Assemblage).

INVENTORY

ORE ZONE: VEIN

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1928

SAMPLE TYPE: Chip

COMMODITY

GRADE

Silver

8364.0000

Grams per tonne

Gold

2.0600

Grams per tonne

COMMENTS: A 0.61 metre chip sample across vein.

REFERENCE: Minister of Mines Annual Report 1928, page 84.

CAPSULE GEOLOGY

The La Rose deposit is located on the east flank of Tsimstol Mountain west of the Kitsault River, 9.75 kilometres north-northwest of Alice Arm. A few small shipments of high grade ore were made from this deposit between 1918 and 1927.

The region is underlain by an assemblage of volcanics and sediments comprising the Upper Triassic Stuhini Group, the Lower Jurassic Hazelton Group and the Middle Jurassic Spatsizi Group. These are folded into a north to northwest trending anticline-syncline pair.

The showing consists of a quartz-breccia vein which follows a shear zone in thinly laminated dark grey to black siltstones and locally interbedded massive reddish brown greywackes of the Stuhini Group. These rocks strike northwest and dip to the northeast. The vein and shear zone strike north and dip 75 degrees east at surface, at 46 metres depth the strike is northwest and the dip is 60 degrees east. The shear zone parallels bedding and has been traced south for about 800 metres onto the Speculator #2 claim (Lot 886). The vein, 0.3 to 0.9 metres wide, occurs sporadically along the shear zone.

Mineralization consists of pyrite, pyrrhotite, arsenopyrite, galena, sphalerite, tetrahedrite, ruby silver, argentite and native silver in a gangue of milky white quartz commonly containing breccia-

CAPSULE GEOLOGY

ted siltstone fragments. A 0.61 metre chip sample assayed 2.06 grams per tonne gold and 8364 grams per tonne silver (Minister of Mines Annual Report 1928, p. 84).

Between 1918 and 1927, 72 tonnes of hand sorted ore with an average grade of 6.47 grams per tonne gold, 6908.75 grams per tonne silver, 3.21 per cent lead and 4.27 per cent zinc were mined and shipped from this deposit.

BIBLIOGRAPHY

EMPR AR *1916-63,64; 1917-46; 1918-56,57; 1919-50,51; 1920-47;
1922-56; 1923-57; 1925-74,75; 1926-79; *1928-84,85; 1929-85;
1931-39; *1968-60,61
EMPR ASS RPT 2202, *10408
EMPR BULL 63
EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp. 235-243
EMPR GEM 1969-63,64
EMPR MAP 8
EMPR OF 1986-2
EMR MP CORPFILE (Alice Arm - La Rose Mining Co. Ltd.)
GSC MAP 307A; 315A; 1385A
GSC MEM *175, p. 69
GSC SUM RPT 1928, p. 38A
WWW <http://www.infomine.com/index/properties/LAROSE.html>

DATE CODED: 1985/07/24
DATE REVISED: 1989/03/28

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 171**

NATIONAL MINERAL INVENTORY: 103P6 Ag5

NAME(S): **WATERFRONT (L.3639)**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P05E 103P06W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 28 01 N
LONGITUDE: 129 30 09 W
ELEVATION: 137 Metres

NORTHING: 6146869
EASTING: 468230

LOCATION ACCURACY: Within 500M

COMMENTS: Location based on approximate centre of Waterfront claim (Lot 3639).

COMMODITIES: Lead Zinc

MINERALS

SIGNIFICANT: Pyrite Galena Sphalerite

COMMENTS: Sparse disseminations.

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein

CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

DIMENSION: 0002 Metres

STRIKE/DIP:

TREND/PLUNGE:

COMMENTS: Quartz vein trends northwest and is 1.8 metres wide.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Middle Jurassic

GROUP

Spatsizi

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Sediment/Sedimentary

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Stikine

Bowser Lake

PHYSIOGRAPHIC AREA: Boundary Ranges

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

COMMENTS: In the Bowser Lake sedimentary overlap on Stikinia Terrane.

CAPSULE GEOLOGY

The Waterfront showing is located on the Waterfront claim (Lot 3639) on the shore of Alice Arm, 1.75 kilometres southwest of the Alice Arm townsite. The claim was crown granted in 1917.

The area is underlain by Middle Jurassic Spatsizi Group sediments. These dip moderately to steeply southwest and northeast as a result of being deformed into closely spaced northwest trending folds.

The showing consists of a 1.8 metre wide quartz vein that outcrops near the shore and is reported to have been traced northwest across Lot 3639. The vein is sparsely mineralized with disseminations of pyrite, galena and sphalerite.

BIBLIOGRAPHY

EMPR AR 1916-75; 1917-F451
EMPR BULL 63
EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
EMPR OF 1986-2
GSC MAP 307A; 1385A
GSC MEM 32, p. 94

DATE CODED: 1989/03/23
DATE REVISED: 1990/01/11

CODED BY: PSF
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 172**

NATIONAL MINERAL INVENTORY: 103P12,11 Pb3

NAME(S): **SUMMIT**, YUKON, NO NAME

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P12E
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 44 31 N
LONGITUDE: 129 30 37 W
ELEVATION: 942 Metres

NORTHING: 6177477
EASTING: 467964

LOCATION ACCURACY: Within 500M

COMMENTS: Location of southern (longest) adit (Minister of Mines Annual Report 1951, Figure 1).

COMMODITIES: Zinc Lead Gold Silver

MINERALS

SIGNIFICANT: Pyrite Galena Sphalerite
ASSOCIATED: Quartz Carbonate Chlorite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Breccia
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
DIMENSION: 0002 Metres
COMMENTS: Mineralized fracture zones up to 1.8 metres wide.

STRIKE/DIP: 040/60W TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE: Lower Jurassic
GROUP: Hazelton
FORMATION: Undefined Formation
IGNEOUS/METAMORPHIC/OTHER:

LITHOLOGY: Porphyritic Andesitic Tuff
Porphyritic Andesitic Breccia
Andesite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine
METAMORPHIC TYPE: Regional
COMMENTS: Situated in the Stewart Complex (Island Arc Assemblage).

PHYSIOGRAPHIC AREA: Boundary Ranges

RELATIONSHIP: GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1930
SAMPLE TYPE: Chip
COMMODITY GRADE
Silver 41.0000 Grams per tonne
Gold 0.3400 Grams per tonne
Lead 1.1000 Per cent
Zinc 3.6000 Per cent

COMMENTS: A 1.7 metre chip sample.
REFERENCE: Minister of Mines Annual Report 1930, page 98.

CAPSULE GEOLOGY

The Summit showing is located 2.0 kilometres east of the Kit-sault River, 29.5 kilometres due north of Alice Arm. The showing was investigated by trenching and tunnelling between 1921 and 1934.

The showing is hosted in porphyritic andesitic tuffs and breccias of the Lower Jurassic Hazelton Group. The showing consists of stringers of quartz, carbonate, and chlorite mineralized with pyrite, and minor galena and sphalerite. The stringers are up to 10 centimetres wide in zones, up to 1.8 metres wide, of fractured andesite that generally strike 040 degrees and dip 60 degrees west. Shear zones, up to 3.7 metres wide, striking 010 degrees in andesite contain similar mineralization.

The mineralization is best developed in a fine-grained tuff bed within a sequence of coarse breccias. A 1.7 metre chip sample assayed 0.34 grams per tonne gold, 41 grams per tonne silver, 1.1 per cent lead and 3.6 per cent zinc (Minister of Mines Annual Report 1930, p. 98).

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RUN TIME: 12:06:33

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BIBLIOGRAPHY

EMPR AR 1921-52; 1923-58,59; *1930-97,98; 1931-39; 1932-56; 1933-50;
1934-B17; *1951-91
EMPR ASS RPT 9564, 15126
EMPR BULL 63
EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
EMPR OF 1986-2
GSC MAP 307A; 315A; 1385A
GSC MEM 175, pp. 74,80,87

DATE CODED: 1989/04/30
DATE REVISED: / /

CODED BY: PSF
REVISED BY:

FIELD CHECK: N
FIELD CHECK:

MINFILE NUMBER: **103P 173**

NATIONAL MINERAL INVENTORY: 103P12 Pb4

NAME(S): **BUNKER HILL**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P12E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 33 07 N
LONGITUDE: 129 32 24 W
ELEVATION: 610 Metres

NORTHING: 6156346
EASTING: 465933

LOCATION ACCURACY: Within 500M

COMMENTS: Location of short adit 9 metres above creek (Geology, Exploration and Mining in B. C. 1969 p.63).

COMMODITIES: Gold Silver Lead Zinc Copper

MINERALS

SIGNIFICANT: Pyrite Galena Sphalerite Chalcopyrite

COMMENTS: Disseminated to near massive lenses.

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Breccia
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

DIMENSION: 0061 Metres STRIKE/DIP:
COMMENTS: Vein, 0.10 to 0.38 metres wide, along northwest striking and steeply east dipping fault has been traced for 61 metres.

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Upper Triassic Stuhini Undefined Formation

LITHOLOGY: Black Siltstone
Greywacke
Conglomerate

HOSTROCK COMMENTS: Interbedded siltstone, greywacke and pebble conglomerate.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Stikine

PHYSIOGRAPHIC AREA: Boundary Ranges

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

COMMENTS: At the south end of the Stewart Complex (Island Arc Assemblage).

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N

CATEGORY: Assay/analysis YEAR: 1923
SAMPLE TYPE: Chip
COMMODITY GRADE
Silver 240.0000 Grams per tonne
Gold 11.0000 Grams per tonne
Lead 2.0000 Per cent

COMMENTS: A 0.61 metre chip sample across massive sulphides.

REFERENCE: Minister of Mines Annual Report 1923, page 57.

CAPSULE GEOLOGY

The Bunker Hill showing is located west of the Kitsault River on the north side of La Rose Creek, 8.5 kilometres north-northwest of Alice Arm. A sulphide-rich quartz vein was explored by trenching and tunnelling between 1923 and 1925.

The region is underlain by an assemblage of volcanics and sediments comprising the Upper Triassic Stuhini Group, the Lower Jurassic Hazelton Group and the Middle Jurassic Spatsizi Group. These are folded into a north to northwest trending anticline-syncline pair.

The showing consists of a quartz-breccia vein that follows a northwest striking, steeply east dipping fault zone in interbedded black siltstone, greywacke and pebble conglomerate of the Stuhini Group. These rocks are cut by a few northeast striking lamprophyre dykes. The vein, from 0.10 to 0.38 metres wide, has been traced for 61 metres by a short adit and a series of trenches.

Mineralization comprises disseminations to near massive lenses

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CAPSULE GEOLOGY

of pyrite, galena, sphalerite and chalcopyrite in a gangue of quartz.
A 0.61 metre chip sample taken across massive sulphides contained
11.0 grams per tonne gold, 240 grams per tonne silver and 2.0 per
cent lead (Minister of Mines Annual Report 1923, p. 57).

BIBLIOGRAPHY

EMPR AR *1923-56,57; 1924-53; 1925-75; 1934-B17; 1968-60,61
EMPR ASS RPT 10803
EMPR BULL 63
EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp. 235-243
EMPR GEM *1969-63
EMPR MAP 8
EMPR OF 1986-2
GSC MAP 307A; 315A; 1385A
GSC MEM 175, p. 56

DATE CODED: 1985/07/24
DATE REVISED: 1989/03/28

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 174**

NATIONAL MINERAL INVENTORY: 103P12 Pyr1

NAME(S): **EAGLE**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P12E
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 34 23 N
LONGITUDE: 129 30 56 W
ELEVATION: 457 Metres

NORTHING: 6158684
EASTING: 467493

LOCATION ACCURACY: Within 500M

COMMENTS: Location of quartz vein outcrop (Geological Survey of Canada Memoir 175, p. 62 and Map 315A).

COMMODITIES: Gold Silver

MINERALS

SIGNIFICANT: Pyrite
ASSOCIATED: Quartz Calcite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Breccia
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
DIMENSION: 0914 x 0003 Metres STRIKE/DIP: 315/50E TREND/PLUNGE:
COMMENTS: Vein strikes northwest for at least 914 metres, dips 50 degrees northeast and varies from 1.2 to 3.0 metres wide.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Upper Triassic	Stuhini	Undefined Formation	

LITHOLOGY: Black Siltstone
Argillite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Boundary Ranges
TERRANE: Stikine
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist
COMMENTS: At the south end of the Stewart Complex (Island Arc Assemblage).

CAPSULE GEOLOGY

The Eagle showing is located west of the Kitsault River, about 600 metres northeast of Klayduc Creek and 10.5 kilometres north-northwest of Alice Arm. The showing was explored in 1926 and 1928 by trenching and tunnelling.

The region is underlain by an assemblage of volcanics and sediments comprising the Upper Triassic Stuhini Group, the Lower Jurassic Hazelton Group and the Middle Jurassic Spatsizi Group. These are folded into a north to northwest trending anticline-syncline pair.

The showing consists of a quartz-calcite vein, from 1.2 to 3.0 metres wide, extending for at least 914 metres in black siltstone of the Stuhini Group. The vein strikes northwest, dips 50 degrees northeast and locally contains zones of brecciated siltstone of up to 1.5 metres in width.

The vein is mineralized with sparse pyrite and good values in precious metals are reported from samples (Minister of Mines Annual Report 1926, p. 81).

BIBLIOGRAPHY

EMPR AR *1926-79-81; 1927-73; 1928-89
EMPR BULL 63
EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
EMPR OF 1986-2
EMR MP CORPFILE (Kitsault Mines Ltd.)
GSC MAP 307A; 315A; 1385A
GSC MEM 175, p. 62

DATE CODED: 1985/07/24
DATE REVISED: 1989/03/28

CODED BY: GSB
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FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 175**

NATIONAL MINERAL INVENTORY:

NAME(S): **HENDERSONS**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P11W 103P12E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 36 26 N
LONGITUDE: 129 29 56 W
ELEVATION: 244 Metres

NORTHING: 6162479
EASTING: 468571

LOCATION ACCURACY: Within 500M

COMMENTS: Location of claims (Minister of Mines Annual Report 1916 p.52).

COMMODITIES: Silver

MINERALS

SIGNIFICANT: Pyrite
ASSOCIATED: Quartz Calcite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Breccia
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Upper Triassic	Stuhini	Undefined Formation	

LITHOLOGY: Black Siltstone
Argillite
Slate
Dioritic Dike

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine
METAMORPHIC TYPE: Regional
COMMENTS: At the south end of the Stewart Complex (Island Arc Assemblage).

PHYSIOGRAPHIC AREA: Boundary Ranges
RELATIONSHIP:
GRADE: Greenschist

CAPSULE GEOLOGY

The Hendersons showing is located on the west side of the Kitsault River, 14.0 kilometres due north of Alice Arm. The region is underlain by Upper Triassic Stuhini Group and Lower Jurassic Hazelton Group volcanics and sediments. These are folded into a northwest trending anticline. The showing consists of a quartz-breccia vein and a zone of pyritic quartz-calcite veinlets. The vein occurs along a dioritic dyke and is 0.3 metres wide. The veinlets occur in a 15 metre wide zone and are hosted in Stuhini Group black siltstone. A sample of good grade silver ore is reported to have come from the vicinity of these showings (Minister of Mines Annual Report 1919, p. 52).

BIBLIOGRAPHY

EMPR AR *1919-52
EMPR ASS RPT 10803, 10951
EMPR BULL 63
EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
EMPR OF 1986-2
GSC MAP 307A; 315A; 1385A
GSC MEM 175, p. 66

DATE CODED: 1985/07/24
DATE REVISED: 1989/03/29

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 176**

NATIONAL MINERAL INVENTORY: 103P12 Cu9

NAME(S): **ZORKA**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P11W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 38 10 N
LONGITUDE: 129 29 59 W
ELEVATION: 183 Metres

NORTHING: 6165694
EASTING: 468541

LOCATION ACCURACY: Within 500M

COMMENTS: Location of adit portal (Assessment Report 10803 Map 1).

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite

ASSOCIATED: Quartz Calcite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

STRIKE/DIP: 028/

TREND/PLUNGE:

DIMENSION:
COMMENTS: Quartz vein strikes northeast, dips northwest.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Upper Triassic

GROUP

Stuhini

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Argillite
Siltstone
Tuffaceous Wacke

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

PHYSIOGRAPHIC AREA: Boundary Ranges

TERRANE: Stikine

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

COMMENTS: At the south end of the Stewart Complex (Island Arc Assemblage).

CAPSULE GEOLOGY

The Zorka showings occur on the west bank of the Kitsault River, 17.5 kilometres due north of Alice Arm.

The region is underlain by a volcanic/sedimentary sequence of Upper Triassic Stuhini Group and Lower Jurassic Hazelton Group rocks. These are folded into a northwest trending anticline/syncline pair.

The showing consists of several occurrences exposed in two adits. In the upper adit a northwest dipping 0.3 metre wide quartz vein is exposed in argillite, siltstone and tuffaceous wacke of the Stuhini Group. The vein and host rocks, striking 028 degrees and dipping 75 degrees northwest, are cut by several hornblende porphyritic dykes from 0.6 to 1.5 metres wide. Mineralization consists of pyrite and trace chalcopyrite in quartz gangue.

The lower adit exposes calcite stringers mineralized with chalcopyrite. A vein, outcropping in the vicinity of this adit, contains a 0.3 metre wide section heavily mineralized with pyrite and chalcopyrite.

BIBLIOGRAPHY

EMPR AR *1926-81
EMPR ASS RPT *10803, 10951
EMPR BULL 63
EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
EMPR OF 1986-2
GSC MAP 307A; 315A; 1385A
GSC MEM 175, p. 87

DATE CODED: 1985/07/24
DATE REVISED: 1989/03/29

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 177**

NATIONAL MINERAL INVENTORY: 103P11 Cu1

NAME(S): **CANYON**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P12E 103P11W
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 39 44 N
LONGITUDE: 129 30 15 W
ELEVATION: 335 Metres

NORTHING: 6168602
EASTING: 468283

LOCATION ACCURACY: Within 500M

COMMENTS: Location of adit (Minister of Mines Annual Report 1924 p.54).

COMMODITIES: Silver Copper Lead

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Galena

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

DIMENSION:
COMMENTS: Attitude of shear zone.

STRIKE/DIP: 070/37N

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Lower Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Andesite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Stikine

METAMORPHIC TYPE: Regional

COMMENTS: At the south end of the Stewart Complex (Island Arc Assemblage).

RELATIONSHIP:

PHYSIOGRAPHIC AREA: Boundary Ranges

GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1924

SAMPLE TYPE: Grab

COMMODITY

GRADE

Silver

4285.0000 Grams per tonne

COMMENTS: Highest assay from grab samples.

REFERENCE: Minister of Mines Annual Report 1924, page 54.

CAPSULE GEOLOGY

The Canyon showing is located 20.5 kilometres north of Alice Arm on the east bank of the Kitsault River. The area was explored in 1924 for silver and base metals.

The region is underlain by an assemblage of volcanics and sediments comprising the Upper Triassic Stuhini Group, the Lower Jurassic Hazelton Group and the Middle Jurassic Spatsizi Group. These are folded into a doubly plunging north-northwest trending syncline and have been regionally metamorphosed to greenschist facies.

The showing comprises quartz veins in a shear zone, up to 2.4 metres wide, hosted in Hazelton Group andesite. The zone strikes 070 degrees and dips 35 to 40 degrees northwest. The veins are sporadically mineralized with pyrite, chalcopyrite and traces of galena. Grab samples have assayed up to 4285 grams per tonne silver (Minister of Mines Annual Report 1924, p. 54).

BIBLIOGRAPHY

EMPR AR *1924-54,56
EMPR BULL 63
EMPR FIELDWORK 1985, pp. 219-224,327-330; 1988, pp. 233-240; 1990, pp.
EMPR MAP 8
EMPR OF 1986-2
GSC MAP 307A; 315A; 1385A

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BIBLIOGRAPHY

GSC MEM 175, p. 57

DATE CODED: 1985/07/24
DATE REVISED: 1989/04/15

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 178**

NATIONAL MINERAL INVENTORY: 103P11 Ag1

NAME(S): **SILVER KING**, EAGLE

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P11W 103P12E
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 38 58 N
LONGITUDE: 129 29 51 W
ELEVATION: 427 Metres

NORTHING: 6167177
EASTING: 468692

LOCATION ACCURACY: Within 500M

COMMENTS: Location of claims (Minister of Mines Annual Report 1921 p.54).

COMMODITIES: Silver Gold Lead Zinc

MINERALS

SIGNIFICANT: Pyrite Galena Sphalerite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
DIMENSION: 0015 Metres
COMMENTS: Attitude of shear zone, 15 metres wide.

STRIKE/DIP: 013/70E

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Lower Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Andesite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Stikine

METAMORPHIC TYPE: Regional

COMMENTS: At the south end of the Stewart Complex (Island Arc Assemblage)

RELATIONSHIP:

PHYSIOGRAPHIC AREA: Boundary Ranges

GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N

CATEGORY: Assay/analysis YEAR: 1921

SAMPLE TYPE: Grab

<u>COMMODITY</u>	<u>GRADE</u>
Silver	576.0000 Grams per tonne

COMMENTS: Assays given in silver equivalent (combined gold and silver).
Highest assay from samples.

REFERENCE: Minister of Mines Annual Report 1921, page 54.

CAPSULE GEOLOGY

The Silver King showing is located 1 kilometre east of the Kitsault River, 19 kilometres due north of Alice Arm. The area was investigated for precious metals in 1921.

The region is underlain by an assemblage of volcanics and sediments comprising the Upper Triassic Stuhini Group, the Lower Jurassic Hazelton Group and the Middle Jurassic Spatsizi Group. These are folded into a doubly plunging north-northwest trending syncline and have been regionally metamorphosed to greenschist facies.

The showing consists of quartz stringers and veins in a shear zone, up to 15 metres wide, that cuts Hazelton Group andesite. The zone generally strikes 013 degrees and dips 70 degrees east. The stringers and veins are up to 1.0 metre wide and parallel the shear zone. Mineralization consists of pyrite and minor galena and sphalerite. Grab samples of the veins are reported to assay from 461 to 576 grams per tonne silver equivalent (Minister of Mines Annual Report 1921, page 54).

BIBLIOGRAPHY

EMPR AR *1921-54
EMPR ASS RPT 15371
EMPR BULL 63
EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp. 235-243

RUN DATE: 26-Jun-2003
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BIBLIOGRAPHY

EMPR MAP 8
EMPR OF 1986-2
GSC MAP 307A; 315A; 1385A
GSC MEM 175, p. 79

DATE CODED: 1985/07/24
DATE REVISED: 1989/04/16

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REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 179**

NATIONAL MINERAL INVENTORY: 103P11 Cu1

NAME(S): **HOMEGUARD**, BOULDER, CENTRAL

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P12E
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 39 14 N
LONGITUDE: 129 30 26 W
ELEVATION: 274 Metres

NORTHING: 6167676
EASTING: 468084

LOCATION ACCURACY: Within 500M

COMMENTS: Location of adit (Geology, Exploration and Mining in B.C. 1970 p. 88 Fig. 7).

COMMODITIES: Copper Zinc Silver Gold Lead

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Galena Sphalerite Tetrahedrite

ASSOCIATED: Quartz Calcite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Breccia Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb) I05 Polymetallic veins Ag-Pb-Zn±Au
I02 Intrusion-related Au pyrrhotite veins

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic Hazelton Undefined Formation

LITHOLOGY: Brecciated Andesite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Stikine

METAMORPHIC TYPE: Regional

COMMENTS: At the south end of the Stewart Complex (Island Arc Assemblage).

PHYSIOGRAPHIC AREA: Boundary Ranges

GRADE: Greenschist

RELATIONSHIP:

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N

CATEGORY: Assay/analysis	YEAR: 1970
SAMPLE TYPE: Chip	
<u>COMMODITY</u>	<u>GRADE</u>
Silver	110.0000 Grams per tonne
Gold	34.2800 Grams per tonne
Copper	0.0200 Per cent
Lead	2.0000 Per cent
Zinc	2.9000 Per cent

COMMENTS: A 2.44 metre chip sample taken adjacent to adit in boulder.

REFERENCE: Property File - Silver Butte Mines Ltd. 1970 Annual Report, page 6.

CAPSULE GEOLOGY

The Homeguard showing is located 19.5 kilometres north of Alice Arm on the east bank of the Kitsault River. The area was extensively explored in 1916 for the source of mineralized boulders.

The region is underlain by an assemblage of volcanics and sediments comprising the Upper Triassic Stuhini Group, the Lower Jurassic Hazelton Group and the Middle Jurassic Spatsizi Group. These are folded into a doubly plunging north-northwest trending syncline and have been regionally metamorphosed to greenschist facies.

The showing is characterized by boulders, up to 10 metres in diameter, of brecciated Hazelton Group andesite containing calcite stringers and quartz breccia veins. The stringers are mineralized sporadically with pyrite and chalcopyrite and the veins, up to 2.13 metres wide, contain pyrite and chalcopyrite with minor galena, sphalerite and tetrahedrite. A 2.44 metre chip sample taken adjacent to an adit developed in one of these boulders assayed 34.28 grams per tonne gold, 110 grams per tonne silver, 2.9 per cent zinc, 2.0 per cent lead and 0.02 per cent copper (Property File - Silver Butte Mines Ltd. Annual Report, 1970 p.6).

A narrow vein with similar mineralization, but not as pervasive

CAPSULE GEOLOGY

as that shown in the boulders, was discovered in 1924 uphill from the boulders.

BIBLIOGRAPHY

EMPR AR 1916-84; *1919-52; 1920-47; 1922-61; 1923-61; 1924-54;
1928-85; 1929-85; 1955-20; 1956-21
EMPR ASS RPT 15371
EMPR BULL 63
EMPR FIELDWORK 1985, pp. 219-224,327-330; 1988, pp. 233-240; 1990,
pp. 235-243
EMPR GEM *1970-89,90; 1971-124
EMPR MAP 8
EMPR OF 1986-2
EMPR PF (*Silver Butte Mines Ltd. Annual Report, 1970; Sirmac Mines,
Information Circular, 1972)
EMR MP CORPFILE (Torbrit Silver Mines Ltd.; Consolidated Silver Butte
Mines Ltd.; Homeguard Mines Ltd.)
GSC MAP 307A; 315A; 1385A
GSC MEM 175, p. 67
GSC SUM RPT 1922, p. 46A

DATE CODED: 1985/07/24
DATE REVISED: 1989/04/17

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 180**

NATIONAL MINERAL INVENTORY: 103P12 Ag15

NAME(S): **REX**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P12E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 40 11 N
LONGITUDE: 129 30 31 W
ELEVATION: 351 Metres

NORTHING: 6169439
EASTING: 468009

LOCATION ACCURACY: Within 1 KM

COMMENTS: Location of trench (Minister of Mines Annual Report 1924 p.53).

COMMODITIES: Gold Silver

MINERALS

SIGNIFICANT: Pyrite
COMMENTS: Fine pyrite occurs in sericitic inclusions within quartz vein.
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb) I05 Polymetallic veins Ag-Pb-Zn±Au
I02 Intrusion-related Au pyrrhotite veins
DIMENSION:
COMMENTS: Attitude of vein. STRIKE/DIP: 120/50S TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Volcanic

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Boundary Ranges
TERRANE: Stikine
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist
COMMENTS: At the south end of the Stewart Complex (Island Arc Assemblage).

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1924
SAMPLE TYPE: Grab
COMMODITY GRADE
Silver 20.6000 Grams per tonne
Gold 2.6500 Grams per tonne
REFERENCE: Minister of Mines Annual Report 1924, page 53.

CAPSULE GEOLOGY

The Rex showing is located on the west bank of the Kitsault River, 21.0 kilometres north of Alice Arm. A quartz vein was explored in 1924 for precious metals in this area.

The region is underlain by an assemblage of volcanics and sediments comprising the Upper Triassic Stuhini Group, the Lower Jurassic Hazelton Group and the Middle Jurassic Spatsizi Group. These are folded into a doubly plunging north-northwest trending syncline and have been regionally metamorphosed to greenschist facies.

The showing consists of a quartz vein, up to 1.0 metre wide, striking 120 degrees and dipping 50 degrees southwest. The vein, hosted in Hazelton Group volcanics, contains soft, grey sericitic inclusions impregnated with fine pyrite. A grab sample assayed 2.65 grams per tonne gold and 20.6 grams per tonne silver (Minister of Mines Annual Report 1924, p. 53).

BIBLIOGRAPHY

EMPR AR *1924-53,54
EMPR ASS RPT 15371
EMPR BULL 63
EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1242
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR OF 1986-2
GSC MAP 307A; 315A; 1385A
GSC MEM 175, p. 76

DATE CODED: 1985/07/24
DATE REVISED: 1989/04/17

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

CAPSULE GEOLOGY

The area is underlain by volcanics and sediments of the Upper Triassic Stuhini Group and the Lower Jurassic Hazelton Group. The sediments are situated on the eastern limb of the north to northwest trending Mt. McGuire anticline and have been regionally metamorphosed to greenschist facies.

The showing consists of several breccia/shear zones contained in an east dipping sequence of interbedded shale, argillite, siltstone, sandstone, conglomerate, limestone, volcanic breccia and massive to pillowed, aphanitic to porphyritic flows of the Stuhini Group.

A shear zone, 2 to 8 metres wide, has been traced by a series of trenches and pits for 200 metres. The zone strikes north-northeast, dips steeply east and is hosted in argillite, shale, siltstone and sandstone. The zone is mineralized with disseminations, blebs and veinlets of pyrite, chalcopyrite and tetrahedrite with sporadic malachite and azurite in a gangue of grey quartz and calcite. A 1.8 metre chip sample assayed trace gold, 137 grams per tonne silver and 2.2 per cent copper (Minister of Mines Annual Report 1924, p. 54).

Northeast, about 600 metres, a quartz-calcite breccia zone has been traced for 16.8 metres in a trench and a 4.0 metre long adit. The zone strikes northwest, dips gently northeast and is 1.0 metre wide. A sequence of feldspar porphyritic volcanic, argillite and sandstone form the footwall. Mineralization consists of disseminations and veinlets of pyrite, chalcopyrite, tetrahedrite and arsenopyrite in a gangue of quartz, calcite and brecciated wall rock. A 1.0 metre long, 0.15 metre thick lense of massive tetrahedrite and arsenopyrite occurs on the hangingwall. A 40.6 centimetre chip sample from the east wall of the adit assayed 6479 grams per tonne silver and 16.7 per cent copper (Property File - Tribble, G.B. (1964) p.6).

BIBLIOGRAPHY

- EM EXPL 1990, pp. 169-173
EMPR AR *1924-54; 1930-442; 1931-39; 1964-45; 1965-65
EMPR ASS RPT 680, *12489, 20611, 21134
EMPR BULL 63
EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
EMPR OF 1986-2
EMPR PF (*Tribble, G.B. (1964) Report; Maps of old Workings and Sample Sites)
EMR MP CORPFILE (Sirmac Mines Ltd.; Silver Basin Mines Ltd.)
GSC MAP 307A; 315A; 1385A
GSC MEM *175, p. 53
GSC SUM RPT *1928, p. 46A
Gale, R.E., 1957: Geology of Kinskuch Lake Area, British Columbia, University of British Columbia M.Sc. Thesis

DATE CODED: 1985/07/24
DATE REVISED: 1989/03/30

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 182**

NATIONAL MINERAL INVENTORY: 103P12,13 Cu2

NAME(S): **BLUE RIBBON**, BLUE RIBBON GROUP

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P13E
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 45 18 N
LONGITUDE: 129 37 01 W
ELEVATION: 1394 Metres

NORTHING: 6178985
EASTING: 461280

LOCATION ACCURACY: Within 500M

COMMENTS: Location based on description of showing in Minister of Mines
Annual Report 1921, page 50.

COMMODITIES: Copper Silver Gold Lead

MINERALS

SIGNIFICANT: Chalcopyrite Galena Gold

ASSOCIATED: Calcite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stockwork

CLASSIFICATION: Hydrothermal Epigenetic

TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb) 102 Intrusion-related Au pyrrhotite veins

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Upper Triassic	Stuhini	Undefined Formation	

LITHOLOGY: Argillite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

PHYSIOGRAPHIC AREA: Boundary Ranges

TERRANE: Stikine

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

COMMENTS: At the western margin of the Stewart Complex (Island Arc Assemblage).

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1921

SAMPLE TYPE: Grab

COMMODITY

GRADE

Gold

3.3000

Grams per tonne

Copper

34.0000

Per cent

COMMENTS: Sample of pure chalcopyrite.

REFERENCE: Minister of Mines Annual Report 1921, page 51.

CAPSULE GEOLOGY

The Blue Ribbon showing is located 3.0 kilometres east of Homestake Creek and 32 kilometres north-northwest of Alice Arm. The area was explored in the early 1920's.

Calcite, mineralized with chalcopyrite, minor galena, and free gold occurs as infillings in fractured and crushed Upper Triassic Stuhini Group argillite.

Samples of pure chalcopyrite assayed 34 per cent copper and 3.3 grams per tonne gold, and a calcite sample assayed trace gold and silver and 1.8 per cent copper (Minister of Mines Annual Report 1921, p. 51).

BIBLIOGRAPHY

EMPR AR *1921-50,51; 1922-58; 1923-57; 1925-75

EMPR BULL 63

EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp. 235-243

EMPR MAP 8

EMPR OF 1986-2

GSC MAP 307A; 315A; 1385A

GSC MEM 175, p. 56

DATE CODED: 1989/04/30
DATE REVISED: / /

CODED BY: PSF
REVISED BY:

FIELD CHECK: N
FIELD CHECK:

CAPSULE GEOLOGY

110 degrees and dips 45 degrees northeast. The zones are mineralized over widths of up to 1.8 metres.

Mineralization comprises disseminations, blebs and stringers of pyrite and chalcopyrite commonly with irregular lenses, stringers and blebs of quartz.

One of the fracture zones contains a 0.9 metre wide quartz vein mineralized with chalcopyrite, sphalerite and galena. Chalcopyrite stringers, 1 to 2 centimetres wide, occur along the margins of the vein. A 0.66 metre chip sample across the vein assayed trace gold, 75.4 grams per tonne silver, 3.32 per cent copper, 0.21 per cent lead and 3.78 per cent zinc (Geology, Exploration and Mining in British Columbia 1971, p. 125).

BIBLIOGRAPHY

EMPR AR 1916-83,84; *1918-67,68; 1919-56; 1921-49; 1922-56; 1927-74,
75; 1930-93; 1931-39; *1932-56; 1934-B17
EMPR ASS RPT 7098, 15371
EMPR BULL 63
EMPR EXPL 1976-166,167
EMPR FIELDWORK 1985, pp. 219-224,327-330; 1988, pp. 233-240; 1990,
pp. 235-243
EMPR GEM *1970-87,89; *1971-124,125
EMPR MAP 8
EMPR OF 1986-2
EMPR PF (Field notes, map of workings, 1971)
GSC MAP 307A; 315A; 1385A
GSC MEM 175, p. 86
GSC SUM RPT 1921, p. 20A

DATE CODED: 1985/07/24
DATE REVISED: 1989/04/17

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 184**

NATIONAL MINERAL INVENTORY: 103P13 Au6

NAME(S): **GLORY EXTENSION**, CARDOZO, WOOD 5

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P13W
BC MAP:

Underground

MINING DIVISION: Skeena

LATITUDE: 55 48 37 N
LONGITUDE: 129 59 49 W
ELEVATION: 762 Metres

UTM ZONE: 09 (NAD 83)

NORTHING: 6185414
EASTING: 437520

LOCATION ACCURACY: Within 500M

COMMENTS: Location of adit (Assessment Report 11082, Figure 3).

COMMODITIES: Gold Silver Zinc Lead

MINERALS

SIGNIFICANT: Galena Sphalerite Pyrite Arsenopyrite
ASSOCIATED: Quartz
ALTERATION: Quartz
ALTERATION TYPE: Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Stockwork
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
DIMENSION: Metres
COMMENTS: Quartz vein/silicified zone up to 0.6 metre wide.

102 Intrusion-related Au pyrrhotite veins
STRIKE/DIP: 148/35S TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic	Hazelton	Unuk River	
Jurassic			Bulldog Creek Pluton

ISOTOPIC AGE: 181 +/- 8 Ma
DATING METHOD: Potassium/Argon
MATERIAL DATED: Hornblende

LITHOLOGY: Hornfels
Argillite
Tuff
Greenstone
Granodiorite

HOSTROCK COMMENTS: Isotopic age from GSC OF 2996.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Plutonic Rocks
METAMORPHIC TYPE: Contact
COMMENTS: In the Georgia River roof pendant within the Coast Plutonic Complex.

PHYSIOGRAPHIC AREA: Boundary Ranges
RELATIONSHIP:
GRADE: Hornfels

INVENTORY

ORE ZONE: VEIN REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1928
SAMPLE TYPE: Chip
COMMODITY GRADE
Silver 86.0000 Grams per tonne
Gold 89.0000 Grams per tonne

COMMENTS: A 0.3-metre chip sample across quartz vein.
REFERENCE: Minister of Mines Annual Report 1928, page 92.

CAPSULE GEOLOGY

The Gloria Extension showing is located 14.5 kilometres south of Stewart, just east of the north end of Glory Lake. The various showings of this occurrence were explored in the late 1920's.

The occurrence consists of a few showings developed in hornfelsed argillite, tuff, greenstone and granodiorite. The showings occur in the vicinity of the contact between the Lower Jurassic Unuk River Formation (Hazelton Group) and the Eocene Hyder Pluton of the Coast Plutonic Complex.

A north striking, steeply dipping fracture zone contains sparse galena, sphalerite, pyrite and arsenopyrite locally occurring as massive bodies up to 5.0 centimetres in width. A 0.6-metre chip sample assayed 1.37 grams per tonne gold, 54.8 grams per tonne

CAPSULE GEOLOGY

silver, 2.8 per cent lead and 5.0 per cent zinc (Minister of Mines Annual Report 1928, p. 92).

A 0.15 to 0.3-metre wide quartz vein, striking 175 degrees and dipping steeply east, occurs in the vicinity. A 0.3-metre chip sample assayed 89 grams per tonne gold and 86 grams per tonne silver (Minister of Mines Annual Report 1928, p. 92).

A quartz vein or silicified zone up to 0.6 metre wide, striking 148 degrees and dipping 35 to 60 degrees southwest, hosted in granodiorite occurs to the east at 1250 metres elevation. The vein/zone is reported to contain fair gold values (Minister of Mines Annual Report 1927, p. 81).

Various other quartz veins are also reported to occur in the area. See Gloria (103P 011) and Glory Extension 2 (1030 006).

BIBLIOGRAPHY

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EMPR ASS RPT 10300, 11082
EMPR BULL 58; 63
EMPR FIELDWORK 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
EMPR OF 1986-2
GSC MAP 307A; 315A; 1385A
GSC MEM 175, p. 93
GSC OF 2996

DATE CODED: 1989/05/14
DATE REVISED: 1999/06/17

CODED BY: PSF
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 185**

NATIONAL MINERAL INVENTORY: 103P12 Ag14

NAME(S): **DAVID COPPERFIELD (L.3520), SURPRISE**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P12E
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 40 22 N
LONGITUDE: 129 30 22 W
ELEVATION: 283 Metres

NORTHING: 6169778
EASTING: 468169

LOCATION ACCURACY: Within 500M

COMMENTS: Location of adit on Lot 3520 (Minister of Mines Annual Report 1919, page 52.)

COMMODITIES: Silver Lead Zinc

MINERALS

SIGNIFICANT: Pyrite Galena Sphalerite

ASSOCIATED: Quartz Barite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated

CLASSIFICATION: Hydrothermal Epigenetic

TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

DIMENSION: 0300 x 0005 Metres

STRIKE/DIP: 118/50N

TREND/PLUNGE:

COMMENTS: Dimension and attitude of vein.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Lower Jurassic

GROUP

Hazelton

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Andesitic Crystal Tuff
Andesitic Lithic Tuff
Andesitic Lithic Breccia

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Stikine

METAMORPHIC TYPE: Regional

COMMENTS: At the south end of the Stewart Complex (Island Arc Assemblage).

PHYSIOGRAPHIC AREA: Boundary Ranges

GRADE: Greenschist

RELATIONSHIP:

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1916

SAMPLE TYPE: Grab

COMMODITY

GRADE

Silver

267.0000

Grams per tonne

COMMENTS: Highest assay value from four grab samples.

REFERENCE: Minister of Mines Annual Report 1916, page 79.

CAPSULE GEOLOGY

The David Copperfield showing is located on the Kitsault River, 21.5 kilometres north of Alice Arm. A quartz-barite vein in this area was periodically investigated between 1916 and 1954.

The region is underlain by an assemblage of volcanics and sediments comprising the Upper Triassic Stuhini Group, the Lower Jurassic Hazelton Group and the Middle Jurassic Spatsizi Group. These are folded into a doubly plunging north-northwest trending syncline and have been regionally metamorphosed to greenschist facies.

The showing consists of a quartz-barite vein, 1.5 to 4.9 metres wide, hosted in Hazelton Group andesitic crystal-lithic tuffs and breccias situated on the west bank of the Kitsault River. The vein strikes 118 degrees, dips 50 degrees north and extends for 300 metres eastward from the David Copperfield claim (Lot 3520) across the Kitsault River onto the Surprise claim (Lot 4335), where it splits into a number of quartz-barite stringers. The vein is sparsely mineralized with disseminated pyrite, galena and sphalerite. Assays from four grab samples range between 6.9 and 267 grams per tonne silver (Minister of Mines Annual Report 1916, p. 79).

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RUN TIME: 12:06:33

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BIBLIOGRAPHY

EMPR AR *1916-79; 1917-46; *1919-52,53; 1920-349; 1924-367; 1954-84
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EMPR FIELDWORK 1985, pp. 219-224,327-330; 1988, pp. 233-240; 1990,
pp. 235-243
EMPR GEM 1970-88
EMPR MAP 8
GSC MAP 307A; 315A; 1385A
GSC MEM 175, pp. 60,81
GSC SUM RPT *1921, pp. 18A,19A

DATE CODED: 1985/07/24
DATE REVISED: 1989/04/17

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 186**

NATIONAL MINERAL INVENTORY: 103P12 Ag18

NAME(S): **ROYAL**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P12E
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 40 15 N
LONGITUDE: 129 30 50 W
ELEVATION: 483 Metres

NORTHING: 6169565
EASTING: 467678

LOCATION ACCURACY: Within 500M

COMMENTS: Location of old trenches and pits (Geology, Exploration and Mining in British Columbia 1970, page 87).

COMMODITIES: Silver Gold

MINERALS

SIGNIFICANT: Pyrite
COMMENTS: Abundant disseminated pyrite.
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb) 102 Intrusion-related Au pyrrhotite veins
I05 Polymetallic veins Ag-Pb-Zn±Au
COMMENTS: Shears strike northwest, dip steeply north.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Schistose Andesitic Crystal Tuff
Schistose Andesitic Lithic Tuff

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine
METAMORPHIC TYPE: Regional
COMMENTS: At the south end of the Stewart Complex (Island Arc Assemblage).

PHYSIOGRAPHIC AREA: Boundary Ranges
RELATIONSHIP:
GRADE: Greenschist

INVENTORY

ORE ZONE: SHEAR REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1969
SAMPLE TYPE: Grab
COMMODITY GRADE
Silver 70.3000 Grams per tonne
Gold 0.3000 Grams per tonne
COMMENTS: Grab sample from shear zone.
REFERENCE: Property File Silver Butte Mines Ltd. 1969 Annual Report.

CAPSULE GEOLOGY

The Royal showing is located 0.5 kilometres west of the Kitsault River, 21.5 kilometres north of Alice Arm. A shear zone on the property was explored for precious metals in 1969 and 1970. In 1980, the property was re-evaluated for deposits similar to the Dolly Varden deposit (103P 188) just to the north.

The region is underlain by an assemblage of volcanics and sediments comprising the Upper Triassic Stuhini Group, the Lower Jurassic Hazelton Group and the Middle Jurassic Spatsizi Group. These are folded into a doubly plunging north-northwest trending syncline and have been regionally metamorphosed to greenschist facies.

The main showings comprise a series of closely spaced northwest trending, steeply north dipping shears. The shears occur in a 1.5 metre wide zone near the intersection of north-northeast and northwest trending fault zones. The shears are developed in pyritic and schistose andesitic crystal-lithic tuffs of the Hazelton Group. The shears contain some slightly sulphidic quartz stringers. A grab sample assayed 0.3 grams per tonne gold and 70.3 grams per tonne silver (Property File - Silver Butte Mines Annual Report, 1969).

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1253
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR ASS RPT 9064, 15371
EMPR BULL 63
EMPR EXPL 1980-408,409
EMPR FIELDWORK 1985, pp. 219-224,327-330; 1988, pp. 233-240; 1990,
pp. 235-243
EMPR GEM *1970-87
EMPR MAP 8
EMPR OF 1986-2
EMPR PF (*Silver Butte Mines Ltd. Annual Report, 1969)
EMR MP CORPFILE (Consolidated Silver Butte Mines Ltd.)
GSC MAP 1385A

DATE CODED: 1985/07/24
DATE REVISED: 1989/04/17

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 187**

NATIONAL MINERAL INVENTORY: 103P12 Ag13

NAME(S): **SILVER TIP**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P12E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 40 58 N
LONGITUDE: 129 31 27 W
ELEVATION: 594 Metres

NORTHING: 6170899
EASTING: 467042

LOCATION ACCURACY: Within 500M

COMMENTS: Location of two small trenches on Lot 3823 (Minister of Mines Annual Report 1916, page 78).

COMMODITIES: Silver Lead Zinc

MINERALS

SIGNIFICANT: Galena Sphalerite
COMMENTS: As sparse disseminations.
ASSOCIATED: Quartz Barite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Lower Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Andesite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine
METAMORPHIC TYPE: Regional
COMMENTS: At the south end of the Stewart Complex (Island Arc Assemblage).

PHYSIOGRAPHIC AREA: Boundary Ranges
RELATIONSHIP:
GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1916
SAMPLE TYPE: Grab
COMMODITY GRADE
Silver 68.0000 Grams per tonne
COMMENTS: Upper limit of average for a number of samples.
REFERENCE: Minister of Mines Annual Report 1916, page 78.

CAPSULE GEOLOGY

The Silver Tip showing is located 1.25 kilometres west of the Kitsault River, 22.5 kilometres north of Alice Arm. The area was explored for silver in 1916.

The region is underlain by an assemblage of volcanics and sediments comprising the Upper Triassic Stuhini Group, the Lower Jurassic Hazelton Group and the Middle Jurassic Spatsizi Group. These are folded into a doubly plunging north-northwest trending syncline and have been regionally metamorphosed to greenschist facies.

Several open cuts expose quartz-barite stringers hosted in andesite of the Hazelton Group. The stringers contain sparse disseminations of galena and sphalerite. Assays of grab samples are reported to average between 34 and 68 grams per tonne silver (Minister of Mines Annual Report 1916, p. 78).

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EMPR BULL 63
EMPR FIELDWORK 1985, pp. 219-224,327-330; 1988, pp. 233-240; 1990, pp.
EMPR MAP 8
EMPR OF 1986-2
GSC MAP 307A; 315A; 1385A

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

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PAGE: 1255
REPORT: RGEN0100

BIBLIOGRAPHY

GSC MEM 175, p. 79

DATE CODED: 1985/07/24
DATE REVISED: 1989/04/17

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 188**

NATIONAL MINERAL INVENTORY: 103P12 Ag13

NAME(S): **DOLLY VARDEN**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 103P12E
BC MAP:

Open Pit Underground

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 40 54 N
LONGITUDE: 129 30 38 W
ELEVATION: 549 Metres

NORTHING: 6170769
EASTING: 467897

LOCATION ACCURACY: Within 500M

COMMENTS: The number 1 glory hole, 300 metres west of the Kitsault River, 22.5 kilometres north of Alice Arm (Property File - Map of surface and underground workings).

COMMODITIES: Silver Zinc Lead Copper Gold

MINERALS

SIGNIFICANT: Sphalerite Galena Pyrite Chalcopyrite Tetrahedrite
Silver Pyrargyrite Argentite
ASSOCIATED: Calcite Quartz Siderite Barite Sericite
ALTERATION: Sericite Quartz Chlorite Epidote
ALTERATION TYPE: Sericitic Silicific'n Propylitic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratiform Massive Disseminated
CLASSIFICATION: Volcanogenic Exhalative
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn
SHAPE: Tabular
MODIFIER: Faulted
DIMENSION: 790 x 650 x 9 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: Dolly Varden East orebody strikes east to northeast; Dolly Varden West orebody strikes west-northwest; dips vary from 40 to 60 degrees north. Dimensions of entire deposit.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Jurassic Hazelton Undefined Formation

LITHOLOGY: Andesitic Ash Tuff
Andesitic Crystal Vitric Tuff

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Boundary Ranges
TERRANE: Stikine
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist
COMMENTS: Situated in the Stewart Complex (Island Arc Assemblage).

INVENTORY

ORE ZONE: DOLLY VARDEN REPORT ON: Y
CATEGORY: Combined YEAR: 1989
QUANTITY: 42633 Tonnes
COMMODITY GRADE
Silver 754.1000 Grams per tonne
COMMENTS: Proven, probable reserves.
REFERENCE: George Cross News Letter May 25, 1989.

CAPSULE GEOLOGY

The Dolly Varden mine is located 0.3 kilometres west of the Kitsault River, 22.5 kilometres north of Alice Arm. The mine produced high-grade silver ore periodically between 1919 and 1940. The region is underlain by an assemblage of volcanics and sediments comprising the Upper Triassic Stuhini Group, the Lower-Middle Jurassic Hazelton Group and the Middle-Upper Jurassic Bowser Lake Group. These are folded into a doubly plunging north-northwest trending syncline and have been regionally metamorphosed to greenschist facies. The orebody consists of a stratiform volcanogenic silver-zinc-lead barite exhalative horizon which is underlain by andesitic crystal vitric (shard) tuff and overlain by andesitic ash tuff of the Hazelton Group. These units have undergone sericitization, silicification and propylitization due to regional metamorphism and

CAPSULE GEOLOGY

hydrothermal alteration.

The deposit lies on the steeply dipping west limb of the Kitsault River syncline. The deposit has been segmented by a series of north to northeast striking reverse and normal faults into at least 13 minor blocks, 9 to 52 metres in length, which make up 4 major fault blocks. These faults dip 30 to 60 degrees west and horizontal displacements vary from 15 to 50 metres.

The deposit is divided into two main segments, the Dolly Varden East, containing the two eastern major blocks, and the Dolly Varden West, which contains the two major western blocks. The Dolly Varden East orebody strikes east to northeast for 200 metres and the Dolly Varden West orebody strikes west-northwest for 450 metres. The total strike length of the entire deposit is 650 metres. The deposit, 1 to 9 metres in width, dips 40 to 60 degrees north and extends down dip for at least 790 metres.

Mineralization in the Dolly Varden East deposit consists of disseminated to massive pyrite, minor chalcopyrite and traces of argentite, pyrargyrite and native silver in a gangue of milky white quartz and minor sericite. This quartz-sulphide exhalite is commonly found interbedded with hanging wall tuffs. The mineralization is reported to average 865 grams per tonne silver (Devlin, 1987).

The Dolly Varden West ore body consists of layers, disseminations and stringers of sphalerite and galena and minor pyrite, chalcopyrite and tetrahedrite and trace of native silver in a gangue of calcite, quartz, siderite and barite. This carbonate-sulphate-sulphide exhalite is reported to average 15 grams per tonne silver (Devlin, 1987).

Combined (proven, probable) reserves at Dolly Varden are 42,633 tonnes grading 754.1 grams per tonne silver (George Cross News Letter May 25, 1989).

Between 1919 and 1940, 33,434 tonnes of ore with an average grade of 1269.69 grams per tonne silver, 0.09455 per cent copper and 0.4599 per cent lead were mined from the Dolly Varden East orebody.

See Torbrit (103P 191) for more details.

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1930-93,94; 1935-B29; *1936-B33-B39; 1937-B42; 1940-78; *1951-
105-107; 1961-10; 1962-9,10; 1963-12; 1967-41
EMPR ASS RPT 7098, 9064, 20033, 20900, 21562
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GSC MAP 307A; 315A; 1385A
GSC MEM 175, pp. 60-62
GSC SUM RPT 1921, pp. 16A-18A
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CIM Trans. Vol. 25, pp. 212-220, 1922; Vol. 45, pp. 401-414, 1942
GCNL #147, 1970; Sept.15, 1972; Sept.21, 1973; #135, 1980; #14,#99,
1987; #153(Aug.10), 1989
N MINER Jul. 1980
W MINER Aug. 1970, pp. 39-42; Jun. 1981, pp. 25,26
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Camp, Alice Arm Area, Northwestern British Columbia, University
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DATE CODED: 1985/07/24
DATE REVISED: 1989/04/30

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 189**

NATIONAL MINERAL INVENTORY: 103P12 Ag12

NAME(S): **NORTH STAR**, NORTHSTAR

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 103P12E
BC MAP:

Underground

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 41 05 N
LONGITUDE: 129 30 36 W
ELEVATION: 450 Metres

NORTHING: 6171109
EASTING: 467934

LOCATION ACCURACY: Within 500M

COMMENTS: Adit portal, on the west bank of the Kitsault River, 23 kilometres north of the town of Alice Arm (Devlin, 1987).

COMMODITIES: Silver Zinc Lead Copper Gold

MINERALS

SIGNIFICANT: Sphalerite Galena Pyrite Chalcopyrite Tetrahedrite

 Silver Pyrargyrite

ASSOCIATED: Calcite Quartz Siderite Barite

ALTERATION TYPE: Sericitic Silicific'n Propylitic

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratiform Massive Disseminated

CLASSIFICATION: Volcanogenic Exhalative

TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn

SHAPE: Tabular

MODIFIER: Faulted

DIMENSION: 107 x 107 x 9 Metres STRIKE/DIP:

COMMENTS: Northstar deposit strikes northeast and dips 45 degrees northwest; 1 to 24 metres wide. TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Jurassic

GROUP

Hazelton

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Andesitic Ash Tuff
Andesitic Crystal Vitric Tuff

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

PHYSIOGRAPHIC AREA: Boundary Ranges

TERRANE: Stikine

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

COMMENTS: Situated in the Stewart Complex (Island Arc Assemblage).

INVENTORY

ORE ZONE: NORTH STAR

REPORT ON: Y

CATEGORY: Combined
QUANTITY: 127901 Tonnes

YEAR: 1987

COMMODITY: Silver GRADE: 401.4000 Grams per tonne

COMMENTS: Proven, probable reserves.

REFERENCE: George Cross News Letter May 25, 1987.

CAPSULE GEOLOGY

The North Star mine is situated on the west bank of the Kitsault River, 23 kilometres north of the town of Alice Arm. Between 1919 and 1921 a small tonnage of silver ore was mined from this deposit.

The area is underlain by a sequence of volcanics and sediments of the Upper Triassic Stuhini Group, the Lower-Middle Jurassic Hazelton Group and the Middle-Upper Jurassic Bowser Lake Group. The sequence is folded into the doubly plunging, north-northwest trending Kitsault River syncline. This sequence has been regionally metamorphosed to greenschist facies.

The North Star occurrence comprises a stratiform, volcanogenic silver-zinc-lead barite exhalative deposit that is likely the same ore horizon as the Dolly Varden deposit (103P 188) to the south. As with the Dolly Varden this deposit is underlain by Hazelton Group andesitic crystal vitric (shard) tuff and overlain by andesitic ash tuff that have undergone sericitization, silicification and propylitization due to regional metamorphism and hydrothermal alteration.

CAPSULE GEOLOGY

The North Star deposit occurs on the steeply dipping west limb of the Kitsault River syncline. It is cut by a number of steeply dipping northwest striking faults and numerous northeast striking near vertical mafic dykes. The deposit strikes northeast, dips 45 degrees northwest and varies from 1 to 24 metres in width. The deposit contains a lens-shaped zone of higher silver grades that extends 107 metres along strike, 107 metres downdip and varies from 1.5 to 9.8 metres in width.

The mineralogy of the North Star deposit is similar to that of the Dolly Varden West orebody (103P 188), consisting of layers, disseminations and stringers of sphalerite and galena with minor pyrite, chalcopyrite and tetrahedrite and a trace of native silver and pyrargyrite in a gangue of calcite, quartz, siderite and barite. This carbonate-sulphate-sulphide exhalite exhibits pronounced layering and vertical mineral zonation, with a pyrite-rich base and a sphalerite-galena-rich top.

The North Star deposit has seen very limited production from underground workings. In 1919, Alice Arm Silver Mines Co. sent a trial shipment of 24.5 tonnes of unsorted ore grading 1229 grams per tonne silver to the copper smelter at Anyox. In 1921, 77 tonnes of hand-sorted ore grading 754 grams per tonne silver were shipped to the Anyox Smelter.

Combined (proven, probable) reserves at North Star are 127,901 tonnes grading 401.4 grams per tonne silver (George Cross News Letter May 25, 1987).

See Torbrit (103P 191) for more details.

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1959-8; 1962-10; 1963-12; 1966-42; 1967-41
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EMPR BULL 63
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GSC MAP 307A; 315A; 1385A
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CMJ Mar.8, 1969, p. 221
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N MINER Jul.24, Nov.13, 1980; Oct.23, 1989
W MINER Aug. 1970, pp. 39-42; Jun. 1981, pp. 25,26
Devlin, B.D. (1987): *Geology and Genesis of the Dolly Varden Silver
Camp, Alice Arm Area, Northwestern British Columbia, University
of British Columbia M.Sc. Thesis

DATE CODED: 1985/07/24
DATE REVISED: 1989/04/30

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 190**

NATIONAL MINERAL INVENTORY: 103P11 Pyr1

NAME(S): **RUBY**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P12E 103P11W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 41 03 N
LONGITUDE: 129 30 22 W
ELEVATION: 293 Metres

NORTHING: 6171045
EASTING: 468178

LOCATION ACCURACY: Within 500M

COMMENTS: Adit portal on east bank of the Kitsault River (Devlin, B.D. (1987), Figure 3.1).

COMMODITIES: Lead

MINERALS

SIGNIFICANT: Pyrite Galena

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein

CLASSIFICATION: Hydrothermal Epigenetic

TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

DIMENSION: 0107 x 0002

Metres

STRIKE/DIP:

G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn

TREND/PLUNGE:

COMMENTS: Vein strikes northwest and dips northeast, has been traced for 107 metres and is 1.2 to 2.4 metres wide.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Lower Jurassic

GROUP

Hazelton

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Andesitic Breccia
Greenstone
Andesite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Stikine

METAMORPHIC TYPE: Regional

COMMENTS: Situated in the Stewart Complex (Island Arc Assemblage).

PHYSIOGRAPHIC AREA: Boundary Ranges

GRADE: Greenschist

CAPSULE GEOLOGY

The Ruby occurrence is located 33 kilometres north of the town of Alice Arm, on the east bank of the Kitsault River. A pyritic quartz vein was explored here between 1919 and 1921.

The area is underlain by a sequence of volcanics and sediments of the Upper Triassic Stuhini Group, the Lower Jurassic Hazelton Group, and the Middle Jurassic Spatsizi Group. The sequence is folded into the doubly plunging, north-northwest trending Kitsault River Syncline. This sequence has been regionally metamorphosed to greenschist facies.

The Ruby showing consists of a quartz vein in sheared andesitic breccia and greenstone (andesite) of the Hazelton Group. The vein is 1.2 to 2.4 metres wide and has been traced by trenching for 107 metres. The vein is concordant to the enclosing rocks, which strike northwest and dip southwest on the east limb of the Kitsault River Syncline. Mineralization consists of sparse pyrite with a trace of galena.

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WWW http://www.infomine.com/RUBY_&_MOOSE_CLAIMS.html

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1261
REPORT: RGEN0100

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DATE CODED: 1985/07/24
DATE REVISED: 1989/04/29

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 191**

NATIONAL MINERAL INVENTORY: 103P12 Ag11

NAME(S): **TORBRIT**, TORIC

STATUS: Past Producer
 REGIONS: British Columbia
 NTS MAP: 103P12E
 BC MAP:

Open Pit Underground

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 41 13 N
 LONGITUDE: 129 30 27 W
 ELEVATION: 319 Metres

NORTHING: 6171355
 EASTING: 468093

LOCATION ACCURACY: Within 500M

COMMENTS: The mine is on the east bank of the Kitsault River, 23.5 kilometres north of the town of Alice Arm (Devlin, 1987).

COMMODITIES: Silver Lead Zinc Gold Copper

MINERALS

SIGNIFICANT: Pyrite Sphalerite Galena Chalcopyrite Pyrargyrite

ASSOCIATED: Argentite Tetrahedrite
 Quartz Calcite Barite Hematite Jasper
 Siderite Magnetite Chlorite

ALTERATION: Chlorite Epidote Quartz Carbonate
 ALTERATION TYPE: Propylitic Silicific'n Carbonate
 MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratiform Massive
 CLASSIFICATION: Volcanogenic Exhalative
 TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn
 SHAPE: Bladed
 MODIFIER: Faulted
 DIMENSION: 490 x 24 Metres STRIKE/DIP: 050/45N TREND/PLUNGE:
 COMMENTS: Attitude of exhalite horizon; dimension of pod-shaped ore shoot.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Andesitic Lapilli Ash Tuff
 Andesitic Crystal Vitric Tuff

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Boundary Ranges
 TERRANE: Stikine
 METAMORPHIC TYPE: Regional RELATIONSHIP:
 COMMENTS: Situated in the Stewart Complex (Island Arc Assemblage). GRADE: Greenschist

INVENTORY

ORE ZONE: TORBRIT REPORT ON: Y

CATEGORY: Combined	YEAR: 1971
QUANTITY: 786285 Tonnes	
COMMODITY	GRADE
Silver	311.9000 Grams per tonne
Lead	0.4200 Per cent
Zinc	0.5000 Per cent

COMMENTS: Proven, probable and possible reserves.
 REFERENCE: Dolly Varden Mining Ltd. Annual Report 1971.

CAPSULE GEOLOGY

The Torbrit mine occurs on the east bank of the Kitsault River, 23.5 kilometres north of the town of Alice Arm. Between 1949 and 1959 Torbrit Silver Mines Ltd. produced 1,249,942 tonnes of ore containing silver, lead, zinc and gold.

The area is underlain by a sequence of volcanics and sediments of the Upper Triassic Stuhini Group, the Lower-Middle Jurassic Hazelton Group and the Middle-Upper Jurassic Bowser Lake Group. The sequence is folded into the doubly plunging, north-northwest trending Kitsault River syncline. This sequence has been regionally metamorphosed to greenschist facies.

The Torbrit orebody is comprised of a stratiform volcanogenic silver-zinc-barite exhalative horizon developed in a section of Hazelton Group andesitic pyroclastics on the east limb of the Kitsault River Syncline. This horizon is enclosed in an overlying

CAPSULE GEOLOGY

plagioclase porphyritic andesitic-lapilli-ash tuff and an underlying andesitic crystal vitric (shard) tuff that have been variably propylitized, silicified and carbonatized at least 30 metres outward from the horizon.

The exhalite horizon strikes approximately 050 degrees for at least 300 metres and dips 45 degrees northwest. The deposit is up to 60 metres thick. Within the east end of this horizon lies a pod-shaped ore shoot up to 24 metres thick that plunges 30 degrees for at least 490 metres towards 295 degrees.

Faulting occurs along the footwall of the deposit with dip slip movement. The deposit is also cut by a later set of faults, with right-hand displacement of up to 15 metres, that strikes northwards between 030 and 135 degrees and dips between 65 and 80 degrees. Later horizontal faults displace the deposit up to 43 metres. It is cut by a series of lamprophyre dykes from a few centimetres to 3 metres wide, striking north-northeast and dipping steeply northwest.

Mineralization consists of pyrite, sphalerite and galena with minor chalcopyrite and traces of pyrargyrite, argentite and tetrahedrite interlaminated with quartz, calcite, barite, hematite, jasper, siderite, magnetite and chlorite. This well-layered exhalite horizon exhibits local brecciation.

Between 1928 and 1959 1,251,339 tonnes grading 463.47 grams per tonne silver, 0.00538 grams per tonne gold, 0.389 per cent lead and 0.0441 per cent zinc were produced from the Torbrit mine.

Combined (proven, probable, possible) reserves are 786,285 tonnes grading 311.9 grams per tonne silver, 0.42 per cent lead and 0.50 per cent zinc (Dolly Varden Mining Ltd. Annual Report 1971).

A fluid inclusion study coupled with geological and geochemical data suggests that the silver rich deposits (103P 188,191,189, and 233) in the Kitseault River be related to each other and that they may be silver rich analogues to Eskay Creek. The Kitseault River deposits all formed near or at surface or at shallow depth in the waning stages of Hazelton arc volcanism. Their mineralization varies from multiepisodic and irregularly laminated to bedded. Colloform, crustiform, and comb textures clearly indicate high level deposition of quartz that formed under low temperatures in low saline environments such as a hot spring setting.

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- EMPR MAP 8; *64; 65 (1989)
- EMPR OF 1986-2; 1992-1; 1998-10
- EMPR PF (Torbrit Silver Mines Ltd., Cross Section and Plan of Underground workings; Dolly Varden Mines Ltd. Prospectus and Annual Reports; Skerl, A.C. (1963) Geology Reports; Mitchell, M.A. (1973) Report; *Pearson, W.N. (1986) Report)
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- EMR MP CORPFILE (Toric Mines Co. Ltd.; Torbrit Mining Co. Ltd.; The Mining Corp. of Canada Ltd.; Torbrit Silver Mines Ltd.; Dolly Varden Resources Ltd.)
- EMR MP FILE MR-AG-301.00 BC
- EMR MP RESFILE (Torbrit)
- GSC MAP 307A; 315A; 1385A
- GSC MEM 175, p. 83
- GSC SUM RPT 1921, p. 15A; 1928, pp. 44A,45A
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- CIM BULL Vol.44, No.470, 1951 p. 399
- EG *Vol.54, 1959, pp. 1461-1495
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- N MINER Jul.24,Nov.13, 1980
- W MINER Aug. 1970, pp. 39-42; Jun. 1981, pp. 25,26
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MINFILE NUMBER: **103P 192**

NATIONAL MINERAL INVENTORY:

NAME(S): **FISHER**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P12E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 42 25 N
LONGITUDE: 129 32 29 W
ELEVATION: 917 Metres

NORTHING: 6173597
EASTING: 465980

LOCATION ACCURACY: Within 500M

COMMENTS: Location centered on showing (Assessment Report 2887, Map 5).

COMMODITIES: Silver Copper

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite
ASSOCIATED: Quartz Chlorite
ALTERATION: Pyrite Quartz Sericite
ALTERATION TYPE: Pyrite Silicific'n Sericitic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb)

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Lower Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Plagioclase Hornblende Porphyritic Andesite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Boundary Ranges
TERRANE: Stikine
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist
COMMENTS: Situated in the Stewart Complex (Island Arc Assemblage).

INVENTORY

ORE ZONE: SAMPLE	REPORT ON: N	
CATEGORY: Assay/analysis	YEAR: 1970	
SAMPLE TYPE: Chip		
<u>COMMODITY</u>	<u>GRADE</u>	
Silver	83.0000	Grams per tonne
Copper	0.8900	Per cent
COMMENTS: A 1.2 metre chip sample.		
REFERENCE: Assessment Report 2887, page 12.		

CAPSULE GEOLOGY

The Fisher showing is located 2.5 kilometres west of the Kitsault River, 25.5 kilometres north of the town of Alice Arm. The showing was rediscovered in 1970 after being investigated sometime earlier this century.

The area is underlain by a sequence of volcanics and sediments of the Upper Triassic Stuhini Group, the Lower Jurassic Hazelton Group, and the Middle Jurassic Spatsizi Group. The sequence is folded into the doubly plunging, north-northwest trending Kitsault River Syncline. This sequence has been regionally metamorphosed to greenschist facies.

The Fisher showing occurs in the western margin of the "Copper Belt", a 10 kilometre long northwest trending gossanous body of Hazelton Group plagioclase-hornblende porphyritic andesite that has been extensively pyritized with variable silicification and sericitization along its length.

This showing consists of a quartz vein with inclusions of chlorite that is developed near the intersection of three faults striking 030, 000 and 120 degrees. The vein is mineralized with pyrite and chalcopyrite. A 1.2 metre chip sample assayed 83.0 grams per tonne silver and 0.89 per cent copper (Assessment Report 2887, page 12).

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1265
REPORT: RGEN0100

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pp. 235-243
EMPR MAP 8
EMPR OF 1986-2
EMR MP CORPFILE (Dolly Varden Mines Ltd.)
GSC MAP 307A

DATE CODED: 1989/04/29
DATE REVISED: / /

CODED BY: PSF
REVISED BY:

FIELD CHECK: N
FIELD CHECK:

MINFILE NUMBER: **103P 193**

NATIONAL MINERAL INVENTORY:

NAME(S): **MITCHELL**, MUSKATEER

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P12E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 42 08 N
LONGITUDE: 129 30 54 W
ELEVATION: 484 Metres

NORTHING: 6173059
EASTING: 467634

LOCATION ACCURACY: Within 500M

COMMENTS: Location centered on outcrop of quartz-pyrite-galena vein (Devlin, B.D. (1987), Figure 3.1).

COMMODITIES: Silver Lead Zinc

MINERALS

SIGNIFICANT: Pyrite Galena Sphalerite
ASSOCIATED: Quartz Carbonate
ALTERATION: Chlorite Epidote
ALTERATION TYPE: Propylitic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
SHAPE: Tabular
MODIFIER: Faulted
DIMENSION: 0244 x 0002 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: Vein strikes west-northwest has been traced for 244 metres and is 0.3 to 2.3 metres wide.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic Hazelton Undefined Formation

LITHOLOGY: Andesitic Tuff

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Boundary Ranges
TERRANE: Stikine
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist
COMMENTS: Situated in the Stewart Complex (Island Arc Assemblage).

INVENTORY

ORE ZONE: VEIN REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1971
SAMPLE TYPE: Grab
COMMODITY GRADE
Silver 79.5000 Grams per tonne
Lead 11.0000 Per cent
Zinc 4.4000 Per cent
COMMENTS: Grab sample from eastern extension of Mitchell vein.
REFERENCE: Assessment Report 7098, page 28.

CAPSULE GEOLOGY

The Mitchell vein is located 0.4 kilometres east of the Kitsault River, 25 kilometres north of the town of Alice Arm. A soil sample survey carried out by Dolly Varden Mines led to the discovery of this silver bearing vein in 1971.

The area is underlain by a sequence of volcanics and sediments of the Upper Triassic Stuhini Group, the Lower Jurassic Hazelton Group, and the Middle Jurassic Spatsizi Group. The sequence is folded into the doubly plunging, north-northwest trending Kitsault River Syncline. This sequence has been regionally metamorphosed to greenschist facies.

The Mitchell showing is comprised of a west-northwest trending quartz-carbonate vein that has been traced for 244 metres in propylitized andesitic tuff of the Hazelton Group. In surface exposures it varies from 0.3 to 2.3 metres in width. Its eastern extension has been segmented by a series of faults displaying dextral movement. Mineralization comprises pyrite, galena and sphalerite in

CAPSULE GEOLOGY

a gangue of quartz and carbonate. A grab sample from the eastern extension of the vein assayed 79.5 grams per tonne silver, 11.0 per cent lead, 4.40 per cent zinc (Assessment Report 7098, page 28).

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GSC MAP 307A; 1385A
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DATE CODED: 1989/04/29
DATE REVISED: / /

CODED BY: PSF
REVISED BY:

FIELD CHECK: N
FIELD CHECK:

MINFILE NUMBER: **103P 194**

NATIONAL MINERAL INVENTORY: 103P12 Ag10

NAME(S): **TIGER**

MINING DIVISION: Skeena

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 103P12E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 41 28 N
LONGITUDE: 129 30 20 W
ELEVATION: 550 Metres

NORTHING: 6171818
EASTING: 468219

LOCATION ACCURACY: Within 500M

COMMENTS: Portal of Number 1 adit (northernmost adit) (Devlin, B.D. (1987), Figure 3.1).

COMMODITIES: Silver Lead

MINERALS

SIGNIFICANT: Pyrite Marcasite Galena Pyrargyrite Argentite

Silver

ASSOCIATED: Quartz

ALTERATION: Quartz

Carbonate Pyrite

ALTERATION TYPE: Silicific'n
MINERALIZATION AGE: Unknown

Carbonate Pyrite

DEPOSIT

CHARACTER: Vein

CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

SHAPE: Bladed

MODIFIER: Faulted

DIMENSION: 0400 x 0110 x 0006 Metres STRIKE/DIP: 010/80W

COMMENTS: Vein strikes between 000 and 020 degrees; dips steeply to the west. TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Lower Jurassic

GROUP

Hazelton

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Plagioclase Porphyritic Andesite
Andesitic Crystal Vitric Tuff

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

PHYSIOGRAPHIC AREA: Boundary Ranges

TERRANE: Stikine

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

COMMENTS: Situated in the Stewart Complex (Island Arc Assemblage).

INVENTORY

ORE ZONE: VEIN

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1968

SAMPLE TYPE: Chip

COMMODITY

GRADE

Silver

243.0000 Grams per tonne

COMMENTS: Average grade for a 36.6 by 2.8 metre section of the vein.

REFERENCE: Property File (Silver Butte Mines 1968 Annual Report, page 1).

CAPSULE GEOLOGY

The Tiger vein occurs 0.4 kilometres east of the Kitsault River, 24 kilometres due north of the town of Alice Arm. This prospect has been extensively explored since 1916 for silver.

The area is underlain by a sequence of volcanics and sediments of the Upper Triassic Stuhini Group, the Lower Jurassic Hazelton Group, and the Middle Jurassic Spatsizi Group. The sequence is folded into the doubly plunging, north-northwest trending Kitsault River Syncline. This sequence has been regionally metamorphosed to greenschist facies.

This prospect consists of quartz vein developed in plagioclase porphyritic andesite and andesitic crystal vitric (shard) tuff of the Hazelton Group. These rocks have been silicified, carbonatized and pyritized in the vicinity of the vein.

The vein has been segmented into four sections varying from 3 to 73 metres in length by a series of steeply dipping faults striking approximately 050 degrees. The vein has a total strike length of 110 metres. It strikes between 000 and 020 degrees and dips steeply to

CAPSULE GEOLOGY

the west. Widths vary from a metre to 5.7 metres. It has been traced downdip for at least 400 metres.

Mineralization consists of pyrite, marcasite, galena, pyrargyrite, argentite, and silver in a gangue of quartz. The northern most 36.6 metres of the vein is reported to average 243 grams per tonne silver over an average width of 2.8 metres (Property File - Silver Butte Mines 1968 Annual Report, page 1).

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*1927-76; *1928-87,88; 1929-86,87,431; 1930-96; *1951-101,102;
1958-7; 1968-59
EMPR ASS RPT 33
EMPR BULL 63
EMPR FIELDWORK 1985, pp. 219-224,327-330; 1988, pp. 233-240; 1990,
pp. 235-243
EMPR GEM *1969-60-62; 1970-86
EMPR MAP 8
EMPR OF 1986-2
EMPR PF (*Roscoe, R.L. (1968) Geological Report; Wilson, E.M. (1969)
Report; Various maps of Surface outcrops and adits; *Silver Butte
Mines Ltd. Annual Reports 1968-1972; Various assay certificates;
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EMR MP CORPFILE (Utility Mines (Number One) Ltd.; Torbrit Silver
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GSC MEM 175, p. 82
GSC SUM RPT 1921, p. 18A; 1928, pp. 46A,47a
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Placer Dome File

DATE CODED: 1985/07/24
DATE REVISED: 1989/04/29

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 195**

NATIONAL MINERAL INVENTORY: 103P12 Ag9

NAME(S): **NORTH MUSKETEER**, MUSKETEER

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P12E
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 41 53 N
LONGITUDE: 129 30 59 W
ELEVATION: 366 Metres

NORTHING: 6172596
EASTING: 467543

LOCATION ACCURACY: Within 500M

COMMENTS: Adit portal (Minister of Mines Annual Report 1951, Figure 1).

COMMODITIES: Silver Lead Copper Zinc

MINERALS

SIGNIFICANT: Pyrite Marcasite Galena Chalcopyrite Sphalerite

 Pyrargyrite Silver Hematite

ASSOCIATED: Quartz Carbonate Barite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein

CLASSIFICATION: Hydrothermal Epigenetic

 TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

DIMENSION:

STRIKE/DIP: 120/90

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Lower Jurassic

GROUP

Hazelton

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Andesitic Tuff

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Stikine

METAMORPHIC TYPE: Regional

COMMENTS: Situated in the Stewart Complex (Island Arc Assemblage).

RELATIONSHIP:

PHYSIOGRAPHIC AREA: Boundary Ranges

GRADE: Greenschist

INVENTORY

ORE ZONE: DRILLHOLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1972

SAMPLE TYPE: Drill Core

COMMODITY

Silver

GRADE

514.0000

Grams per tonne

COMMENTS: A 2.4 metre intersection.

REFERENCE: Geology, Exploration and Mining in B.C. 1972, page 509.

CAPSULE GEOLOGY

The North Musketeer occurrence is located on the east bank of the Kitsault River, 24.5 kilometres north of the town of Alice Arm. Two silver-bearing veins were periodically explored here between 1916 and 1972.

The area is underlain by a sequence of volcanics and sediments of the Upper Triassic Stuhini Group, the Lower Jurassic Hazelton Group, and the Middle Jurassic Spatsizi Group. The sequence is folded into the doubly plunging, north-northwest trending Kitsault River Syncline. This sequence has been regionally metamorphosed to greenschist facies.

The North Musketeer comprises two veins developed in Hazelton Group andesitic tuffs. The more significant vein has been traced for 76 metres in an adit and a series of trenches. It is up to at least 4.6 metres, strikes 120 degrees and dips vertically. Mineralization consists of pyrite, marcasite, galena, chalcopyrite and sphalerite in a gangue of quartz, carbonate, barite and hematite. A 2.4 metre long drill hole intersection 61 metres below the adit containing traces of pyrargyrite and native silver assayed 514 grams per tonne silver (Geology, Exploration and Mining In British Columbia 1972, page 509).

Sixty metres south a north trending vein of similar mineralogy has been defined.

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RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1271
REPORT: RGEN0100

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EMPR MAP 8
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DATE CODED: 1985/07/24
DATE REVISED: 1989/04/29

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 196**

NATIONAL MINERAL INVENTORY: 103P12 Cu7

NAME(S): **RED POINT**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P12E
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 41 27 N
LONGITUDE: 129 31 20 W
ELEVATION: 520 Metres

NORTHING: 6171795
EASTING: 467171

LOCATION ACCURACY: Within 500M

COMMENTS: Portal of the northeastern most adit of a pair of closely-spaced parallel adits (Devlin, B.D. (1987), Figure 3.1).

COMMODITIES: Gold Silver Copper Lead

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Galena
COMMENTS: Disseminated to massive in quartz veins and siliceous zones.

ASSOCIATED: Quartz
COMMENTS: In veins and silicified zones.

ALTERATION: Quartz Pyrite Sericite

ALTERATION TYPE: Silicific'n Pyrite Sericitic

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated Vein Massive

CLASSIFICATION: Hydrothermal Epigenetic

TYPE: I02 Intrusion-related Au pyrrhotite veins L01 Subvolcanic Cu-Ag-Au (As-Sb)

COMMENTS: A 6.0 metre wide zone trending 175 degrees contains steeply dipping quartz veins.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Plagioclase Hornblende Porphyritic Andesite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

PHYSIOGRAPHIC AREA: Boundary Ranges

TERRANE: Stikine

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

COMMENTS: Situated in the Stewart Complex (Island Arc Assemblage).

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1986

SAMPLE TYPE: Channel

COMMODITY

GRADE

Gold

15.5000

Grams per tonne

COMMENTS: A 1.95 metre long channel sample.

REFERENCE: Northern Miner, November 3, 1986.

CAPSULE GEOLOGY

The Red Point showing is located on the north bank of Evindsen Creek, 0.6 kilometres west of the Kitsault River, 24 kilometres north of the town of Alice Arm. This occurrence, first staked in 1913, has been explored extensively for copper and gold.

The area is underlain by a sequence of volcanics and sediments of the Upper Triassic Stuhini Group, the Lower Jurassic Hazelton Group, and the Middle Jurassic Spatsizi Group. The sequence is folded into the doubly plunging, north-northwest trending Kitsault River Syncline. This sequence has been regionally metamorphosed to greenschist facies.

The Red Point prospect lies near the south end of the "Copper Belt", a 10.0 kilometre long northwest trending gossanous body of plagioclase-hornblende porphyritic andesite of the Hazelton Group. The andesite has been extensively pyritized with variable silicification and sericitization along its length.

The showing is comprised of a 6.0 metre wide zone, trending 175 degrees, consisting of steeply dipping quartz veins up to 1.2 metres wide and silicified zones of greater width. Mineralization consists of disseminated pyrite and chalcopyrite, with traces of galena and

CAPSULE GEOLOGY

Pods of massive chalcopyrite up to 0.6 metres in width and 1.5 metres in length. Three horizontal diamond-drill holes 23 metres below the outcrop intersected a zone of disseminated pyrite with minor disseminated chalcopyrite.

Channel sampling in 1986 resulted in gold assays averaging 5.66 grams per tonne over a width of 4.57 metres and a length of 38.1 metres (Northern Miner, Nov.3, 1986).

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EMPR GEM *1970-81-85; 1972-507,508; 1973-489,490
EMPR MAP 8
EMPR OF 1986-2
EMPR PF (Forbes, D.G. (1913) Report; Dolly Varden Mines Ltd. Annual Reports for 1970,1972; Pearson, W.N. (1986) Report)
EMR MP CORPFILE (Dolly Varden Mines Ltd.)
GSC MAP 307A; 315A; 1385A
GSC MEM *175, p. 76
GSC SUM RPT 1921, p. 20A
GCNL #147, 1970; #14,#99, 1987; #64, 1989
N MINER *Nov.3, 1986; Jan.30, 1989
W MINER Aug. 1970, pp. 39-42
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DATE CODED: 1985/07/24
DATE REVISED: 1989/04/29

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 197**

NATIONAL MINERAL INVENTORY: 103P12 Cu7

NAME(S): **COMBINATION**, COMBINE

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P12E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 41 51 N
LONGITUDE: 129 31 40 W
ELEVATION: 671 Metres

NORTHING: 6172539
EASTING: 466827

LOCATION ACCURACY: Within 500M

COMMENTS: Portal of adit in Combination vein (Assessment Report 2887, Map 5).

COMMODITIES: Gold Silver Copper

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Galena Arsenopyrite
COMMENTS: As massive pods, stringers and blebs.
ASSOCIATED: Quartz Barite
ALTERATION: Pyrite Quartz Sericite Chlorite Carbonate
ALTERATION TYPE: Pyrite Silicific'n Sericitic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I02 Intrusion-related Au pyrrhotite veins L01 Subvolcanic Cu-Ag-Au (As-Sb)
DIMENSION: 0049 x 0004 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: Vein in shear zone strikes 105 degrees for 49 metres and is 0.9 to 3.7 metres wide.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic Hazelton Undefined Formation

LITHOLOGY: Feldspar Hornblende Porphyritic Andesite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Boundary Ranges
TERRANE: Stikine
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist
COMMENTS: Situated in the Stewart Complex (Island Arc Assemblage).

INVENTORY

ORE ZONE: DUMP REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1930
SAMPLE TYPE: Grab
COMMODITY GRADE
Silver 75.4000 Grams per tonne
Gold 7.5400 Grams per tonne
Copper 2.1000 Per cent
COMMENTS: Grab sample from adit dump.
REFERENCE: Minister of Mines Annual Report 1930, page 96.

CAPSULE GEOLOGY

The Combination showing is located 0.5 kilometres southwest of the Kitsault River, 24.5 kilometres north of the town of Alice Arm. A vein has been periodically explored here for copper and precious metals since 1913.

The area is underlain by a sequence of volcanics and sediments of the Upper Triassic Stuhini Group, the Lower Jurassic Hazelton Group, and the Middle Jurassic Spatsizi Group. The sequence is folded into the doubly plunging, north-northwest trending Kitsault River Syncline and has been regionally metamorphosed to greenschist facies.

The showing occurs in a 10.0 kilometre long northwest trending body of gossanous Hazelton Group feldspar-hornblende porphyritic andesite. The andesite, informally called the Copper Belt, has been extensively pyritized and is variably silicified and sericitized along its length.

The showing comprises a quartz-barite vein developed in a shear zone, striking 105 degrees for 49 metres. The vein varies in width from 0.9 to 3.7 metres. The vein is mineralized with massive

CAPSULE GEOLOGY

Pods, stringers and blebs of pyrite and chalcopyrite with traces of galena and arsenopyrite. A grab sample from an adit dump assayed 7.54 grams per tonne gold, 75.4 grams per tonne silver and 2.1 per cent copper (Minister of Mines Annual Report 1930, page 96).

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1951-98,99
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EMPR BULL 63
EMPR FIELDWORK 1985, pp. 219-224,327-330; 1988, pp. 233-240; 1990,
pp. 235-243
EMPR GEM *1970-81-85
EMPR MAP 8
EMPR OF 1986-2
EMPR PF (Dolly Varden Mines Ltd. Annual Report, 1972)
GSC MAP 307A; 315A; 1385A
GSC MEM 175, p. 59
GSC SUM RPT 1921, p. 20A
Devlin, B.D. (1987): Geology and Genesis of the Dolly Varden Silver
Camp, Alice Arm Area, Northwestern British Columbia, University
of British Columbia M.Sc. Thesis

DATE CODED: 1985/07/24
DATE REVISED: 1989/04/23

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 198**

NATIONAL MINERAL INVENTORY: 103P12 Ag7

NAME(S): **WOLF**

STATUS: Developed Prospect
 REGIONS: British Columbia
 NTS MAP: 103P12E
 BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 42 26 N
 LONGITUDE: 129 31 07 W
 ELEVATION: 357 Metres

NORTHING: 6173617
 EASTING: 467411

LOCATION ACCURACY: Within 500M

COMMENTS: Lowermost portal, on the east side of the Kitsault River, 25.5 kilometres north of the town of Alice Arm (Devlin, 1987).

COMMODITIES: Silver Zinc Lead Copper

MINERALS

SIGNIFICANT: Pyrite Sphalerite Galena Chalcopyrite Tetrahedrite
 Pyrrargyrite Silver
 ASSOCIATED: Quartz Carbonate Barite Jasper
 ALTERATION: Quartz Pyrite Chlorite Carbonate Epidote
 ALTERATION TYPE: Silicific'n Pyrite Propylitic
 MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
 CLASSIFICATION: Epithermal Hydrothermal Epigenetic
 TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au H05 Epithermal Au-Ag: low sulphidation
 SHAPE: Tabular
 MODIFIER: Faulted
 DIMENSION:
 COMMENTS: Number 2 and 3 veins. STRIKE/DIP: 020/90 TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Andesitic Tuff

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Boundary Ranges
 TERRANE: Stikine
 METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist
 COMMENTS: Situated in the Stewart Complex (Island Arc Assemblage).

INVENTORY

ORE ZONE: WOLF REPORT ON: Y

CATEGORY: Combined	YEAR: 1971
QUANTITY: 485270 Tonnes	
<u>COMMODITY</u>	<u>GRADE</u>
Silver	335.6000 Grams per tonne
Lead	0.5900 Per cent
Zinc	0.1200 Per cent

COMMENTS: Proven, probable and possible reserves.
 REFERENCE: Dolly Varden Mining Ltd. Annual Reports 1971, 1973.

CAPSULE GEOLOGY

The Wolf occurrence is located on the east side of the Kitsault River, 25.5 kilometres north of the town of Alice Arm. Extensive diamond drilling and underground development between 1960 and 1980 by various operators has defined moderate sized reserves of low grade silver-lead-zinc ore.

The area is underlain by a sequence of volcanics and sediments of the Upper Triassic Stuhini Group, the Lower-Middle Jurassic Hazelton Group and the Middle-Upper Jurassic Bowser Lake Group. The sequence is folded into the doubly plunging, north-northwest trending Kitsault River syncline. This sequence has been regionally metamorphosed to greenschist facies.

The Wolf prospect comprises three epithermal quartz-carbonate veins numbered 1 to 3 from east to west in an eastward dipping sequence of Hazelton Group andesitic dust tuffs. These rocks have undergone extensive propylitization and are intensely silicified and pyritized in the vicinity of the veins.

CAPSULE GEOLOGY

The number 1 vein strikes 070 degrees for at least 100 metres, dips steeply northwest and varies in width from 5 to 16 metres. The number 2 and 3 veins strike 020 degrees and dip near vertical. The number 2 vein extends for 250 metres with widths of 2 to 8 metres, while the number 3 vein has been traced for 210 metres.

Steeply dipping faults with dextral displacement parallel the hanging wall and footwall of all three veins. Younger moderately dipping normal faults striking approximately 060 degrees offset the veins with sinistral displacement.

The three veins contain pyrite with minor sphalerite, galena, chalcopyrite and traces of tetrahedrite, pyrargyrite and native silver in a banded to brecciated gangue of quartz and carbonate with local concentrations of barite and jasper.

Combined (proven, probable and possible) reserves at Wolf are 485,270 tonnes grading 335.6 grams per tonne silver, 0.59 per cent lead and 0.12 per cent zinc (Dolly Varden Mining Ltd. Annual Reports 1971, 1973).

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EMPR ASS RPT 2887, 7098, *10042
EMPR BULL 63
EMPR ENG INSP (Mine Plans: #61793, Nov. 1968)
EMPR EXPL 1978-238,239; 1980-409
EMPR FIELDWORK 1985, pp. 219-224,327-330; 1988, pp. 233-240; 1990, pp. 235-243; 2000, pp. 313-326
EMPR GEM 1969-60
EMPR MAP 8; 65 (1989)
EMPR OF 1986-2; 1992-1; 1998-10
EMPR PF (Dolly Varden Mines Ltd., Cross Sections and Drill Hole Plans, 1962; Skerl, A.C. (1963) Geology Reports; Buckland, F.C. (1964) Report; Dolly Varden Mines Prospectus and Annual Reports, 1969, 1971; Mitchell, M.A. (1973) Report; Pearson, W.N. (1986) Geology Report)
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1998-10

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DATE REVISED: 1989/04/23

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 199**

NATIONAL MINERAL INVENTORY: 103P12 Cu6

NAME(S): **SURPRISE** VELVET, OVRAY,
CARPENTER

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P12E
BC MAP:
LATITUDE: 55 42 23 N
LONGITUDE: 129 31 38 W
ELEVATION: 461 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Location centered on trench (Devlin, B.D. (1987), Figure 3.1).

MINING DIVISION: Skeena
UTM ZONE: 09 (NAD 83)
NORTHING: 6173528
EASTING: 466870

COMMODITIES: Gold Silver Copper

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Galena Sphalerite Silver
COMMENTS: As blebs and stringers.
ASSOCIATED: Quartz Calcite Barite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I02 Intrusion-related Au pyrrhotite veins L01 Subvolcanic Cu-Ag-Au (As-Sb)
DIMENSION: 0004 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: Zone of veins and lenses 3.7 metres wide, strikes northeast.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Andesite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Boundary Ranges
TERRANE: Stikine
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist
COMMENTS: Situated in the Stewart Complex (Island Arc Assemblage).

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1970
SAMPLE TYPE: Chip
COMMODITY GRADE
Silver 120.0000 Grams per tonne
Gold 13.7000 Grams per tonne
Copper 2.2500 Per cent
COMMENTS: A 1.5 metre chip sample.
REFERENCE: Western Miner, August 1970, page 41.

CAPSULE GEOLOGY

The Surprise showing is located 0.5 kilometres west of the Kitsault River, 25.5 kilometres north of the town of Alice Arm. This showing was extensively explored by Dolly Varden Mines in the early 1970's for copper and precious metals.

The area is underlain by a sequence of volcanics and sediments of the Upper Triassic Stuhini Group, the Lower Jurassic Hazelton Group, and the Middle Jurassic Spatsizi Group. The sequence is folded into the doubly plunging, north-northwest trending Kitsault River Syncline. This sequence has been regionally metamorphosed to greenschist facies.

The Surprise occurrence is hosted in an altered pyritic andesite of the Hazelton Group similar to that of the "Copper Belt" to the west. The andesite is overlain by Spatsizi Group argillite, siltstone and wacke to the north and east.

This showing consists of a 3.7 metre wide northeast striking zone containing quartz-calcite-barite veins and lenses up to 6.0 metres wide mineralized with blebs and stringers of pyrite, chalcopyrite, galena and sphalerite with traces of native silver. Most of the mineralization is contained in two veins, one striking 060 degrees for 73 metres and a second striking 020 degrees for 76

CAPSULE GEOLOGY

metres. A 1.5 metre chip sample assayed 13.7 grams per tonne gold, 120 grams per tonne silver and 2.25 per cent copper (Western Miner Aug., 1970, page 41).

BIBLIOGRAPHY

EMPR AR 1916-78; 1918-67; 1926-81,82; 1935-B24,B25; 1951-98; 1954-84
EMPR ASS RPT *2887, 7098
EMPR BULL 63
EMPR ENG INSP (Mine Plans *61646, 1953)
EMPR FIELDWORK 1985, pp. 219-224,327-330; 1988, pp. 233-240; 1990, pp. 235-243
EMPR GEM *1970-81-86; 1971-125; 1972-508
EMPR MAP 8
EMPR OF 1986-2
EMPR PF (Dolly Varden Mines Ltd. Annual Reports 1970,1972; Mitchell, M.A. (1973) Report; Pearson, W.N. (1986) Report)
EMR MP CORPFILE (Dolly Varden Mines Ltd.)
GSC MAP 307A; 315A; 1385A
GSC MEM 175, p. 75
GCNL #147, 1970; #10, 1971
W MINER Aug. 1970, pp. 39-42
Devlin, B.D. (1987): Geology and Genesis of the Dolly Varden Silver Camp, Alice Arm Area, Northwestern British Columbia, University of British Columbia M.Sc. Thesis

DATE CODED: 1985/07/24
DATE REVISED: 1989/04/22

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 200**

NATIONAL MINERAL INVENTORY: 103P12 Cu7

NAME(S): **RACE HORSE** DAN PATCH, NANCY HANKS

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P12E
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 41 58 N
LONGITUDE: 129 32 17 W
ELEVATION: 920 Metres

NORTHING: 6172761
EASTING: 466183

LOCATION ACCURACY: Within 500M

COMMENTS: Location centered on westernmost trench (Devlin, B.D. (1987), Figure 3.1).

COMMODITIES: Copper Gold Silver

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated

CLASSIFICATION: Hydrothermal Epigenetic

TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb)

DIMENSION: 0090 Metres

COMMENTS: Vein traced for 90 metres, is developed along a fault striking 120 degrees.

102 Intrusion-related Au pyrrhotite veins
TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Feldspar Hornblende Porphyritic Andesite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

PHYSIOGRAPHIC AREA: Boundary Ranges

TERRANE: Stikine

METAMORPHIC TYPE: Regional

RELATIONSHIP: Pre-mineralization

GRADE: Greenschist

COMMENTS: Situated in the south end of Stewart Complex (Island Arc Assemblage).

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1913

SAMPLE TYPE: Grab

COMMODITY

GRADE

Silver 69.0000 Grams per tonne

Gold 1.3300 Grams per tonne

Copper 0.9000 Per cent

REFERENCE: Minister of Mines Annual Report 1913, page 82.

CAPSULE GEOLOGY

The Race Horse showing is located 1.0 kilometre to the west of the Kitsault River, 25.0 kilometres to the north of the town of Alice Arm. A copper bearing vein has been periodically explored since 1913.

The area is underlain by a sequence of volcanics and sediments of the Upper Triassic Stuhini Group, the Lower Jurassic Hazelton Group, and the Middle Jurassic Spatsizi Group. The sequence is folded into the doubly plunging, north-northwest trending Kitsault River Syncline. This sequence has been regionally metamorphosed to greenschist facies.

The Race Horse showing lies at the western margin of a 10 kilometre long northwest trending body of gossanous Hazelton Group feldspar-hornblende porphyritic andesite. The andesite, informally known as the Copper Belt, is extensively pyritized with variable silicification and sericitization along its length.

The showing consists of a northwest trending quartz vein that has been traced in a series of trenches for 90 metres. It is developed along the east side of a fault trending 120 degrees. The vein is mineralized with pyrite and minor chalcopyrite. A sample of the vein assayed 1.33 grams per tonne gold, 69 grams per tonne silver and 0.9 per cent copper (Minister of Mines Annual Report 1913, page

CAPSULE GEOLOGY

82).

BIBLIOGRAPHY

EMPR AR *1913-82; 1916-81,82; 1921-345; 1951-76-81,98,99
EMPR ASS RPT *2887, 15371
EMPR BULL 63
EMPR FIELDWORK 1985, pp. 219-224,327-330; 1988, pp. 233-240; 1990,
pp. 235-243
EMPR GEM 1970-81-85
EMPR MAP 8
EMPR OF 1986-2
EMR MP CORPFILE (Dolly Varden Mines Ltd.)
GSC MAP 307A; 315A; 1385A
GSC MEM 175, p. 75
GCNL #147, 1970
W MINER Aug. 1970, pp. 39-42
Devlin, B.D. (1987): *Geology & Genesis of the Dolly Varden Silver
Camp, Alice Arm Area, Northwestern British Columbia, University
of British Columbia M.Sc. Thesis

DATE CODED: 1985/07/24
DATE REVISED: 1989/04/21

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 201**

NATIONAL MINERAL INVENTORY: 103P12 Ag8

NAME(S): **STAR LIGHT**, VANCOUVER

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P12E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 42 27 N
LONGITUDE: 129 32 56 W
ELEVATION: 1062 Metres

NORTHING: 6173662
EASTING: 465509

LOCATION ACCURACY: Within 500M

COMMENTS: Location of surface trace of vein (Assessment Report 2887, Map 5).

COMMODITIES: Zinc Copper Gold Silver Lead

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Sphalerite Galena

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Breccia
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

SHAPE: Tabular

MODIFIER: Faulted

DIMENSION: 0240 Metres STRIKE/DIP: 140/

TREND/PLUNGE:

COMMENTS: Zone, 240 metres long, of quartz breccia veins and stringers along fault striking 140 degrees.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic Hazelton Undefined Formation

LITHOLOGY: Black Siltstone
Greywacke
Feldspar Hornblende Porphyritic Andesite

HOSTROCK COMMENTS: Hosted in sediments within the "Copper Belt" andesite.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Stikine

PHYSIOGRAPHIC AREA: Boundary Ranges

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

COMMENTS: Situated in the Stewart Complex (Island Arc Assemblage).

INVENTORY

ORE ZONE: VEIN

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1970

SAMPLE TYPE: Chip

COMMODITY

GRADE

Silver	3.4000	Grams per tonne
Gold	0.6900	Grams per tonne
Copper	0.1300	Per cent
Lead	0.0250	Per cent
Zinc	0.5400	Per cent

COMMENTS: A 1.5 metre chip sample across quartz breccia vein containing pyrite and chalcopyrite stringers.

REFERENCE: Geology, Exploration and Mining in B.C. 1970, page 86.

CAPSULE GEOLOGY

The Star Light showing occurs 1.5 kilometres to the west of the Kitsault River, 25.5 kilometres to the north of the town of Alice Arm. It has been prospected for precious and base metals since 1913.

The area is underlain by a sequence of volcanics and sediments of the Upper Triassic Stuhini Group, the Lower Jurassic Hazelton Group and the Middle Jurassic Spatsizi Group. The sequence is folded into the doubly plunging, north-northwest trending Kitsault River Syncline and has been regionally metamorphosed to greenschist facies.

The Star Light showing comprises a series of quartz stringers and quartz breccia veins in shear zones within a fault striking 140 degrees. These are hosted in a narrow northwest trending body of Hazelton Group greywacke and black siltstone set in the western margin of the "Copper Belt" pyritic feldspar-hornblende porphyritic

CAPSULE GEOLOGY

andesite. This zone of veins and stringers is exposed over a strike length of 240 metres.

Mineralization consists of stringers, blebs and disseminations of pyrite, chalcopyrite, sphalerite and galena within the quartz breccia veins and quartz stringers. A chip sample across a 1.5 metre wide quartz-breccia vein with pyrite and chalcopyrite stringers assayed 0.69 grams per tonne gold, 3.4 grams per tonne silver, 0.13 per cent copper, 0.025 per cent lead and 0.54 per cent zinc (Geology, Exploration and Mining in B. C. 1970, page 86).

BIBLIOGRAPHY

EMPR AR 1913-82; 1916-82; 1951-96
EMPR ASS RPT *2887, 15371
EMPR BULL 63
EMPR FIELDWORK 1985, pp. 219-224,327-330; 1988, pp. 233-240; 1990, pp. 235-243
EMPR GEM *1970-81-86
EMPR MAP 8
EMPR OF 1986-2
EMR MP CORPFILE (Dolly Varden Mines Ltd.)
GSC MAP 307A; 315A; 1385A
GSC MEM 175, p. 80
GCNL #147, 1970
W MINER Aug. 1970, pp. 39-42
Devlin, B.D. (1987): Geology and Genesis of the Dolly Varden Silver Camp, Alice Arm Area, Northwestern British Columbia, University of British Columbia M.Sc. Thesis

DATE CODED: 1985/07/24
DATE REVISED: 1989/04/21

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 202**

NATIONAL MINERAL INVENTORY: 103P12 Cu5

NAME(S): **COPPER CLIFF**, GASH CREEK

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P12E
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 42 44 N
LONGITUDE: 129 32 24 W
ELEVATION: 747 Metres

NORTHING: 6174184
EASTING: 466072

LOCATION ACCURACY: Within 500M

COMMENTS: Location of adit in vein on Gash Creek (Assessment Report 2887, Map 5).

COMMODITIES: Gold Copper Silver Lead

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite
COMMENTS: Stringers and disseminations.
ASSOCIATED: Quartz
ALTERATION: Quartz
ALTERATION TYPE: Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I02 Intrusion-related Au pyrrhotite veins L01 Subvolcanic Cu-Ag-Au (As-Sb)

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Feldspar Hornblende Porphyritic Andesite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Boundary Ranges
TERRANE: Stikine
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist
COMMENTS: Situated in the Stewart Complex (Island Arc Assemblage).

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1970
SAMPLE TYPE: Chip
COMMODITY GRADE
Gold 0.3400 Grams per tonne
Copper 0.0300 Per cent
COMMENTS: A 9.1 metre chip sample, trace silver and lead.
REFERENCE: Geology, Exploration and Mining in B.C. 1970, page 86.

CAPSULE GEOLOGY

The Copper Cliff showing lies 0.8 kilometres west of the Kitsault River, 26 kilometres north of the town of Alice Arm. This showing was extensively prospected for copper earlier this century. The area is underlain by a sequence of volcanics and sediments of the Upper Triassic Stuhini Group, the Lower Jurassic Hazelton Group and the Middle Jurassic Spatsizi Group. The sequence is folded into the doubly plunging, north-northwest trending Kitsault River Syncline and has been regionally metamorphosed to greenschist facies. The Copper Cliff showing is situated in the gossanous feldspar-hornblende porphyritic "Copper Belt" andesite of the Hazelton Group adjacent to the eastern contact with overlying Spatsizi Group greywackes and argillite. This showing is comprised of a silicified zone in pyritic andesite displaying quartz lenses and veinlets and disseminations of pyrite with minor chalcopyrite. A 9.1 metre chip sample assayed 0.34 grams per tonne gold, trace silver, 0.03 per cent copper and trace lead (Geology, Exploration and Mining In B. C. 1970, p.86).

BIBLIOGRAPHY

EMPR AR 1913-82,83; 1916-80,82; 1918-66,67; 1926-82; 1927-77,396; 1951-96

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1285
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR ASS RPT *2887, 7098
EMPR BULL 63
EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp.
235-243
EMPR GEM *1970-81-86
EMPR MAP 8
EMPR OF 1986-2
EMR MP CORPFILE (Dolly Varden Mines Ltd.)
GSC MAP 307A; 315A; 1385A
GSC MEM 175, p. 59
GSC SUM RPT 1921, p. 20A
GCNL #147, 1970
W MINER Aug. 1970, pp. 39-42
Devlin, B.D. (1987): Geology and Genesis of the Dolly Varden Silver
Camp, Alice Arm Area, Northwestern British Columbia, University
of British Columbia M.Sc. Thesis

DATE CODED: 1985/07/24
DATE REVISED: 1989/04/23

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 203**

NATIONAL MINERAL INVENTORY: 103P12 Ag6

NAME(S): **SILVER HORDE**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P12E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 42 51 N
LONGITUDE: 129 31 07 W
ELEVATION: 564 Metres

NORTHING: 6174390
EASTING: 467417

LOCATION ACCURACY: Within 500M

COMMENTS: Location of adit (Minister of Mines Annual Report 1951, Fig.1).

COMMODITIES: Silver Lead Zinc Copper

MINERALS

SIGNIFICANT: Pyrite Marcasite Galena Sphalerite Chalcopyrite
ASSOCIATED: Quartz
ALTERATION: Quartz
ALTERATION TYPE: Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Breccia
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
SHAPE: Tabular
MODIFIER: Faulted
DIMENSION: 0030 x 0003 Metres STRIKE/DIP: 040/67E TREND/PLUNGE:
COMMENTS: Attitude and dimensions of quartz breccia vein.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic Hazelton Undefined Formation

LITHOLOGY: Andesitic Tuff

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Boundary Ranges
TERRANE: Stikine
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist
COMMENTS: Situated in the Stewart Complex (Island Arc Assemblage).

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1951
SAMPLE TYPE: Chip
COMMODITY GRADE
Silver 209.0000 Grams per tonne
Lead 0.9000 Per cent

COMMENTS: A 1.5 metre chip sample, trace gold.
REFERENCE: Minister of Mines Annual Report 1951, page 97.

CAPSULE GEOLOGY

The Silver Horde occurrence is situated 0.5 kilometres east of the Kitsault River, 26 kilometres north of the town of Alice Arm. This showing was extensively prospected for its silver-lead-zinc mineralization between 1916 and 1930. The area is underlain by a sequence of volcanics and sediments of the Upper Triassic Stuhini Group, the Lower Jurassic Hazelton Group and the Middle Jurassic Spatsizi Group. The sequence is folded into the doubly plunging, north-northwest trending Kitsault River Syncline and has been regionally metamorphosed to greenschist facies. The Silver Horde occurrence is comprised of a silicified zone and a quartz breccia vein developed in andesitic tuffs of the Hazelton Group. The silicified zone strikes 020 degrees and is at least 1 metre wide. It is mineralized with spherules of marcasite and galena. The quartz breccia vein, situated 160 metres northeast of the silicified zone, strikes 040 degrees and dips 65 to 70 degrees southeast. It varies from 0.6 to 3.0 metres wide and has been traced for 30 metres. A 30 metre long adit, 9 metres below the outcrop encountered several faults only, indicating the vein is terminated at shallow depths by a fault. The vein is mineralized with pyrite,

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

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CAPSULE GEOLOGY

marcasite, galena, sphalerite and chalcopyrite in a gangue of quartz and fragments of country rock. A 1.5 metre chip sample assayed trace gold, 209 grams per tonne silver and 0.9 per cent lead (Minister of Mines Annual Report 1951, p. 97).

BIBLIOGRAPHY

EMPR AR 1916-79; 1918-61; 1922-60; 1924-55; 1926-84; *1930-96,97;
*1951-96,97
EMPR ASS RPT 7098
EMPR BULL 63
EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
EMPR OF 1986-2
EMR MP CORPFILE (Kitsault Silver Mines Ltd.; Bush Mines Ltd.)
GSC MAP 307A; 315A; 1385A
GSC MEM 175, pp. 78,79
GSC SUM RPT *1928, pp. 43A,44A

DATE CODED: 1985/07/24
DATE REVISED: 1989/04/22

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 204**

NATIONAL MINERAL INVENTORY: 103P5 Cu8

NAME(S): **HOMESTAKE (ANYOX)**, HOMESTAKE, REDLIGHT

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P05W
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 24 12 N
LONGITUDE: 129 50 30 W
ELEVATION: 0140 Metres

NORTHING: 6139998
EASTING: 446702

LOCATION ACCURACY: Within 500M

COMMENTS: Location of Homestake Number 1 claim (L. 1529) (NTS Map 103P/05).

COMMODITIES: Copper Gold Silver Zinc

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Pyrrhotite Sphalerite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: G04 Besshi massive sulphide Cu-Zn

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

Jurassic
Upper Triassic

GROUP

Hazelton
Kunga

FORMATION

Undefined Formation
Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Mafic Dike
Argillite

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline

PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)

TERRANE: Stikine

Wrangell

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

COMMENTS: Situated in the Anyox roof pendant within the Coast Plutonic Complex.

CAPSULE GEOLOGY

The Homestake-Anyox showing is situated 0.5 kilometres west of Granby Bay, about 2.5 kilometres southwest of Anyox on Observatory Inlet. Three claims were staked in 1910 and crown granted in 1915 (Lots 1528-1530) after boulders of massive sulphides up to 0.6 metre in diameter were found in a creek.

The boulders consisted of greenstone and the claims are underlain by argillite of the Lower Jurassic Hazelton or the Upper Triassic Kunga Group. Stripping uncovered mafic dykes intruding the argillite and sparsely mineralized with pyrite and occasionally chalcopyrite, pyrrhotite and sphalerite. A sample of this mineralization assayed trace gold, trace silver and nil copper.

BIBLIOGRAPHY

EMPR AR 1927-C67; 1931-A37; 1932-A52,A53
EMPR BULL 63
EMPR FIELDWORK 1985, pp. 211-216; 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
EMPR PF (Alldrick, D. (1986) Anyox Map; Taiga Consultants Ltd. (1992): Geological, Geochemical and Geophysical Report on the Anyox Area in 103P 021)
GSC MAP 307A; 315A; 1385A
GSC MEM 175, p. 99

DATE CODED: 1989/01/31
DATE REVISED: 1997/04/07

CODED BY: PSF
REVISED BY: DA

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **103P 205**

NATIONAL MINERAL INVENTORY: 103P12 Ag5

NAME(S): **MOOSE-CLIMAX**

STATUS: Developed Prospect

MINING DIVISION: Skeena

REGIONS: British Columbia

NTS MAP: 103P12E

UTM ZONE: 09 (NAD 83)

BC MAP:

LATITUDE: 55 42 54 N

LONGITUDE: 129 31 03 W

ELEVATION: 735 Metres

NORTHING: 6174482

EASTING: 467488

LOCATION ACCURACY: Within 500M

COMMENTS: Location of portal of westernmost adit (Assessment Report 2887 Map 5).

COMMODITIES: Silver

Lead

MINERALS

SIGNIFICANT: Pyrite Marcasite Galena Tetrahedrite Argentite

Pyrargyrite

ASSOCIATED: Quartz Barite Carbonate Jasper Hematite

COMMENTS: Colliform banded.

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein

Breccia

CLASSIFICATION: Hydrothermal

Epigenetic

TYPE: I05

Polymetallic veins Ag-Pb-Zn±Au

I10

Vein barite

SHAPE: Bladed

MODIFIER: Faulted

DIMENSION: 0240 x 0100 x 0004 Metres

STRIKE/DIP: 180/85N

TREND/PLUNGE:

COMMENTS: Vein, 1 to 3.7 metres wide, strikes east and dips steeply north.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Lower Jurassic

GROUP

Hazelton

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Andesitic Breccia

Andesitic Tuff

Andesite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

PHYSIOGRAPHIC AREA: Boundary Ranges

TERRANE: Stikine

METAMORPHIC TYPE: Regional

RELATIONSHIP: Post-mineralization

GRADE: Greenschist

COMMENTS: Situated in the Stewart Complex (Island Arc Assemblage).

INVENTORY

ORE ZONE: MOOSE-CLIMAX

REPORT ON: Y

CATEGORY: Unclassified

YEAR: 1981

QUANTITY: 90000 Tonnes

COMMODITY

GRADE

Silver

257.0000

Grams per tonne

COMMENTS: For a block with dimensions of 200 by 100 by 2 metres.

REFERENCE: Assessment Report 9564, page 18.

CAPSULE GEOLOGY

The Moose-Climax occurrence is situated 0.5 kilometres east of the Kitsault River, 26.5 kilometres north of the town of Alice Arm. This vein has been extensively explored since 1916 for its silver-lead-zinc mineralization.

The area is underlain by a sequence of volcanics and sediments of the Upper Triassic Stuhini Group, the Lower Jurassic Hazelton Group and the Middle Jurassic Spatsizi Group. The sequence is folded into the doubly plunging, north-northwest trending Kitsault River Syncline and has been regionally metamorphosed to greenschist facies.

The Moose-Climax prospect consists of a quartz-barite-carbonate breccia vein developed in a west dipping sequence of andesitic tuff and breccia of the Hazelton Group. The vein strikes east for 240 metres and dips steeply to the north. It has been traced downdip for 100 metres and varies in width from one metre to 3.7 metres. The vein has been segmented by a number of north to northeast trending faults.

Mineralization consists of pyrite, marcasite, galena and tetrahedrite with traces of argentite and pyrargyrite in a gangue of

CAPSULE GEOLOGY

colliform banded quartz, barite, carbonate, jasper and hematite.
Reserves initially defined for an 82 metre long, 46 metre deep, 2.6 metre wide block were estimated at 27,000 tonnes grading 309 grams per tonne silver (Assessment Report 6112, page 13). A later estimate of 90,000 tonnes grading 257 grams per tonne silver was calculated for a 200 metre long, 100 metre deep block with an average width of 2 metres (Assessment Report 9564, page 18).

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EMPR AR 1916-79; 1918-61,62; 1919-55,56; 1920-49; 1921-52,53;
1922-60,61; 1923-59,60; 1925-76; 1926-83; 1929-88; 1930-96,97;
1931-38; 1932-56; *1951-94-96; *1964-44,45; 1967-41,42
EMPR ASS RPT 2887, *6112, *9564
EMPR BULL 63
EMPR EXPL 1976-155; 1980-408
EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp.
235-243
EMPR MAP 8
EMPR OF 1986-2
EMPR PF (Tribble, G.B. (1964) Report; Various Cross-sections and
Drill Hole Plans; Silver Butte Mines Ltd. Annual Reports and
News Releases for 1966,1967; Silver Butte Resources Ltd., State-
ment of Material Facts, Oct. 1989)
EMR MP CORPFILE (Moose Group Mining Co. Ltd.; Utility Mines
(Number One) Ltd.; Dolly Varden Mines Ltd.; Silver Butte Mines
GSC MAP 307A; 315A; 1385A
GSC MEM 175, pp. 58,73
GSC SUM RPT 1921, pp. 18A,19A; 1928, p. 43A
Ltd.; Bush Mines Ltd.)
GCNL Jul.9, 1976; #126, 1980
N MINER Sept.14,21, 1978
EMPR OF 1998-10

DATE CODED: 1985/07/24
DATE REVISED: 1989/04/22

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 206**

NATIONAL MINERAL INVENTORY: 103P12 Ag4

NAME(S): **VICTORY**, LAST CHANCE, CHANCE

STATUS: Developed Prospect

MINING DIVISION: Skeena

REGIONS: British Columbia

NTS MAP: 103P12E

UTM ZONE: 09 (NAD 83)

BC MAP:

LATITUDE: 55 43 31 N

NORTHING: 6175625

LONGITUDE: 129 30 54 W

EASTING: 467653

ELEVATION: 637 Metres

LOCATION ACCURACY: Within 500M

COMMENTS: Adit portal, 1.25 kilometres east of the Kitsault River, 27.5 kilometres north of the town of Alice Arm (Minister of Mines Annual Report 1951).

COMMODITIES: Silver Lead Zinc

MINERALS

SIGNIFICANT: Pyrite Galena Sphalerite Tetrahedrite Argentite

Pyrargyrite Silver Carbonate Barite Jasper

ASSOCIATED: Quartz Epidote

ALTERATION: Chlorite

ALTERATION TYPE: Propylitic

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Breccia
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au 110 Vein barite

SHAPE: Bladed

MODIFIER: Faulted

DIMENSION: 230 x 30 x 4 Metres

STRIKE/DIP: 070/77N

TREND/PLUNGE:

COMMENTS: Vein

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Jurassic

GROUP

Hazelton

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Andesitic Tuff
Andesitic Breccia
Andesite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Stikine

PHYSIOGRAPHIC AREA: Boundary Ranges

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

COMMENTS: At the western margin of the Stewart Complex (Island Arc Assemblage).

INVENTORY

ORE ZONE: VICTORY

REPORT ON: Y

CATEGORY: Indicated
QUANTITY: 66218 Tonnes

YEAR: 1975

COMMODITY

GRADE

Silver

393.1000

Grams per tonne

COMMENTS: In two zones.

REFERENCE: SMF July 14, 1975 - Northern Homestake Mining Ltd., E.M. Wilson.

CAPSULE GEOLOGY

The Victory occurrence is located 1.25 kilometres east of the Kitsault River, 27.5 kilometres north of the town of Alice Arm. Drilling between 1963 and 1975 has outlined moderate sized reserves of ore for this silver-bearing vein.

The area is underlain by a sequence of volcanics and sediments of the Upper Triassic Stuhini Group, the Lower-Middle Jurassic Hazelton Group and the Middle-Upper Jurassic Bowser Lake Group. The sequence is folded into the doubly plunging, north-northwest trending Kitsault River syncline and has been regionally metamorphosed to greenschist facies.

The Victory occurrence consists of a quartz-carbonate barite breccia vein developed in andesitic tuffs and breccias of the Hazelton Group that have undergone propylitic alteration in the vicinity of the vein.

This vein strikes 070 degrees for 230 metres, and dips between

CAPSULE GEOLOGY

70 to 85 degrees north. The vein averages 4.3 metres in width. It has been segmented into two main blocks by a north striking, east dipping fault with left-hand displacement.

The vein is comprised of pyrite, galena, sphalerite and tetrahedrite, with traces of argentite, pyrargyrite and native silver in a gangue of quartz, carbonate, barite and jasper.

Indicated reserves at Victory (in 2 zones) are 66,230 tonnes grading 393 grams per tonne silver (Statement of Material Facts July 14, 1975 - Northern Mining Ltd., E.M. Wilson).

BIBLIOGRAPHY

EMPR AR 1918-62; 1919-56; 1920-49; 1921-52; 1922-61; *1923-59;
1930-97; 1932-56; *1951-93,94; 1963-12; *1964-43,44; 1967-42
EMPR ASS RPT *5883, *6112, *9564
EMPR BULL 63
EMPR EXPL 1976-166; 1980-408
EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp.
235-243
EMPR MAP 8; 65 (1989)
EMPR OF 1986-2; 1992-1
EMPR PF (Sirmac Mines Ltd. Prospectus, 1963; Various Drill Hole
Plans and Cross sections; Tribble, G.B. (1964) Geology Report)
EMR MIN BULL MR 223 B.C. 312
EMR MP CORPFILE (Sirmac Mines Ltd.; Northern Homestake Mines Ltd.)
EMR MP RESFILE (Victory-Ore Zones A and B)
GSC MAP 307A; 315A; 1385A
GSC MEM *175, pp. 57,58
GSC SUM RPT 1921, p. 19A; 1928, p. 42A
GCNL #126, 1980; #76, 1981
N MINER Jul.24, 1975
EMPR OF 1998-10

DATE CODED: 1985/07/24
DATE REVISED: 1989/04/30

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 207**

NATIONAL MINERAL INVENTORY: 103P12 Ag4

NAME(S): **QUEEN**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P12E 103P11W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 43 52 N
LONGITUDE: 129 30 26 W
ELEVATION: 792 Metres

NORTHING: 6176270
EASTING: 468147

LOCATION ACCURACY: Within 1 KM

COMMENTS: Location of trenches (Minister of Mines Annual Report 1923, p.59).

COMMODITIES: Silver Lead

MINERALS

SIGNIFICANT: Galena
ASSOCIATED: Quartz
ALTERATION: Quartz
ALTERATION TYPE: Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Lower Jurassic

GROUP

Hazelton

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Andesite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine
METAMORPHIC TYPE: Regional
COMMENTS: Situated in the Stewart Complex (Island Arc Assemblage).

PHYSIOGRAPHIC AREA: Boundary Ranges

RELATIONSHIP: GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1913

SAMPLE TYPE: Grab

COMMODITY

GRADE

Silver

223.0000

Grams per tonne

Lead

12.0000

Per cent

COMMENTS: Trace gold.

REFERENCE: Minister of Mines Annual Report 1913, page 50.

CAPSULE GEOLOGY

The Queen showing is located just northeast of Trout Creek, 28 kilometres north of the town of Alice Arm. This showing was prospected in 1923 for lead and silver.

A trench has exposed a 0.6 metre wide silicified zone in andesite of the Lower Jurassic Hazelton Group well mineralized with fine-grained galena. A grab sample assayed trace gold, 223 grams per tonne silver and 12 per cent lead (Minister of Mines Annual Report 1923, page 50).

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EMPR AR *1923-59
EMPR ASS RPT 9564
EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp. 235-243
EMPR OF 1986-2
EMPR BULL 63
EMPR MAP 8
GSC MAP 307A; 315A; 1385A
GSC MEM 175, p. 75

DATE CODED: 1989/04/22
DATE REVISED: / /

CODED BY: PSF
REVISED BY:

FIELD CHECK: N
FIELD CHECK:

MINFILE NUMBER: **103P 208**

NATIONAL MINERAL INVENTORY: 103P12 Ag3

NAME(S): **ROBIN ACE - GALENA, GALENA,
TYEE, HIGHLAND, BLUE BIRD,
CAMALACHIE**

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 103P12E
BC MAP:
LATITUDE: 55 44 08 N
LONGITUDE: 129 31 12 W
ELEVATION: 838 Metres
LOCATION ACCURACY: Within 1 KM
COMMENTS: Location of approximate centre of surface trace of southern segment of the Blue Bird vein adjacent to diamond drill hole 68-4-10 (Minister of Mines Annual Report 1968, Fig. 10 p. 57).

MINING DIVISION: Skeena
UTM ZONE: 09 (NAD 83)
NORTHING: 6176771
EASTING: 467348

COMMODITIES: Silver Lead Copper

MINERALS

SIGNIFICANT: Galena Pyrite Silver Tetrahedrite
ASSOCIATED: Quartz Carbonate Sericite
ALTERATION: Pyrite Quartz Carbonate Sericite
ALTERATION TYPE: Pyrite Silicific'n Carbonate Sericitic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Breccia
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn J01 Polymetallic manto Ag-Pb-Zn
I05 Polymetallic veins Ag-Pb-Zn±Au
DIMENSION: 0150 x 0004 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: Mineralized zone, up to 4.3 metres wide, strikes northeast along the footwall of the Blue Bird vein.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Andesitic Tuff
Andesitic Breccia
Andesite
Argillite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Boundary Ranges
TERRANE: Stikine
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist
COMMENTS: At the western margin of the Stewart Complex (Island Arc Assemblage).

INVENTORY

ORE ZONE: SHEAR REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1951
SAMPLE TYPE: Chip
COMMODITY: Silver 1920.0000 Grams per tonne
Lead 10.0000 Per cent
COMMENTS: A 1.17 metre chip sample.
REFERENCE: Minister of Mines Annual Report 1951, page 93.

CAPSULE GEOLOGY

The Robin occurrence is located along Blue Bird Creek in the Upper Kitsault Valley, 28.5 kilometres north of the town of Alice Arm. Zones containing argentiferous galena have been extensively explored by trenching and diamond drilling since 1918. The area is underlain by a sequence of volcanics and sediments of the Upper Triassic Stuhini Group, the Lower Jurassic Hazelton Group and the Middle Jurassic Spatsizi Group. This sequence has been regionally metamorphosed to greenschist facies. The Robin occurrence lies within bedded to massive andesitic tuffs and breccias, with minor argillite, of the Hazelton Group that dip about 40 degrees northwest. A quartz-breccia vein, the Blue Bird vein, is developed in a fault that extends from the Kitsault River

CAPSULE GEOLOGY

northeast to Kitsault Lake for 4 kilometres. The vein strikes for at least 840 metres and possibly an additional 780 metres northeast along Blue Bird Creek, which follows a portion of the fault. The vein dips between 20 and 63 degrees northwest and roughly parallels the bedded rocks. The vein is generally between 7.6 and 12.2 metres wide but is locally up to 21.3 metres wide. It contains angular tuff fragments set in a quartz matrix sparsely mineralized with pyrite and galena.

The more significant mineralization is contained in a northeast trending zone that lies within 15 metres of the footwall of the Blue Bird vein on the south bank of Blue Bird Creek. The zone is exposed in a series of trenches between elevations of 700 and 800 metres. The trenches trace the vein, up to 4.3 metres wide, for a strike length of 150 metres. This zone contains stringers of galena and pyrite with small flakes of native silver, up to 2 centimetres wide, in a pyritic bleached tuff that has undergone quartz-carbonate-sericite alteration. A 1.17 metre chip sample from a trench assayed 1920 grams per tonne silver and 10.0 per cent lead (Minister of Mines Annual Report 1951, page 93). An 8.8 metre drill hole intersection averaged 210 grams per tonne silver (Property File - Silver Butte Mines Annual Report 1968).

Southwest of this zone, about 240 metres, at an elevation of 655 metres, lies a zone of narrow vertical to steeply dipping shear zones. The north trending zone is 110 metres long, 1.2 metres wide and occurs in pyritic, bleached, quartz-carbonate-sericite altered tuff. The shear zones contain minor pyrite, galena and tetrahedrite. A 1.2 metre chip sample across the full width of the zone assayed trace gold, 1179 grams per tonne silver, 0.18 per cent copper, 0.32 per cent lead and 0.06 per cent zinc (Minister of Mines Annual Report 1968, page 58).

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EMPR AR 1918-62; 1929-87; 1930-98; 1931-38; 1932-56; *1933-48-50;
1934-B17; 1948-75,76; 1950-80; *1951-91-93; 1963-12; 1964-45;
1967-42; *1968-56-58
EMPR EXPL 1976-166; 1980-408
EMPR ASS RPT *6112, 9564
EMPR PF (Diamond Drill Hole Plans; *Silver Butte Mine Ltd. News
Release 1967 and Annual Report 1968)
EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp.
235-243
EMPR OF 1986-2
EMPR BULL 63
EMPR MAP 8
GSC MAP 307A; 315A; 1385A
GSC MEM 175, pp. 57,84
GSC P 91-2, pp. 181-185
EMR MP CORPFILE (Consolidated Silver Butte Mines Ltd.)
GCNL #126, 1980; #76, 1981

DATE CODED: 1985/07/24
DATE REVISED: 1989/04/30

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 209**

NATIONAL MINERAL INVENTORY: 103P12 Ag2

NAME(S): **SYNDICATE** SECOND THOUGHT, CASEY

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P12E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 44 02 N
LONGITUDE: 129 32 10 W
ELEVATION: 396 Metres

NORTHING: 6176593
EASTING: 466335

LOCATION ACCURACY: Within 500M

COMMENTS: Location of adit (Minister of Mines Annual Report 1951, Fig.1).

COMMODITIES: Silver Gold

MINERALS

SIGNIFICANT: Pyrite Argentite Pyrrargyrite Silver Gold

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Breccia
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

DIMENSION: 0002 Metres

STRIKE/DIP: 030/62W

TREND/PLUNGE:

COMMENTS: Attitude of main vein, 1.2 to 1.8 metres wide.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Middle Jurassic
Lower Jurassic

GROUP

Spatsizi
Hazelton

FORMATION

Undefined Formation
Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Argillite
Andesite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Stikine

METAMORPHIC TYPE: Regional

COMMENTS: Situated in Bowser Lake sedimentary overlap on the Stikinia Terrane.

PHYSIOGRAPHIC AREA: Boundary Ranges

Bowser Lake

RELATIONSHIP:

GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1918

SAMPLE TYPE: Chip

COMMODITY

GRADE

Silver

326.0000

Grams per tonne

COMMENTS: A 1.8 metre chip sample across southern exposure of the main vein.

REFERENCE: Minister of Mines Annual Report 1918, page 64.

CAPSULE GEOLOGY

The Syndicate occurrence is located on the east bank of the Kitsault River, 28.5 kilometres north of the town of Alice Arm. Several quartz veins were investigated for silver, by trenching and tunnelling, between 1918 and 1925.

The Syndicate showing is comprised of several quartz-breccia veins developed in Middle Jurassic Spatsizi Group argillite just west of an outcrop of underlying Lower Jurassic Hazelton Group andesitic pyroclastic rocks. These rocks generally strike north and dip moderately west.

A quartz-breccia vein striking 030 degrees and dipping between 62 to 65 degrees west is exposed in two outcrops 30 metres apart. The vein, 1.2 to 1.8 metres wide, parallels the bedding of the argillite. An adit under the northern exposure intersected 1.2 metres of banded quartz and argillite. Surface outcrops contain numerous argillite fragments in quartz. Mineralization consists of pyrite, argentite, pyrrargyrite with some native silver and trace native gold. A 1.8 metre chip sample across the southern exposure assayed 326 grams per tonne silver (Minister of Mines Annual Report 1918, p. 64).

A second vein, striking 018 degrees and dipping 35 to 38 degrees southwest, lies about 150 metres to the east. The vein, 0.6 metres wide, occurs along the contact between argillite and andesite, with

CAPSULE GEOLOGY

the andesite forming the footwall. It is reported to contain silver sulphides in a gangue of quartz and brecciated argillite fragments.

BIBLIOGRAPHY

EMPR AR *1918-63,64; 1921-51,52; 1922-59; 1924-55; 1925-76; 1930-99;
*1951-90,91
EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp.
235-243
EMPR OF 1986-2
EMPR BULL 63
EMPR MAP 8
GSC MAP 307A; 315A; 1385A
GSC SUM RPT 1921, p. 21A
GSC MEM 175, p. 77

DATE CODED: 1985/07/24
DATE REVISED: 1989/04/30

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 210**

NATIONAL MINERAL INVENTORY: 103P12 Cu4

NAME(S): **VANGUARD COPPER**, VANGUARD

STATUS: Developed Prospect

MINING DIVISION: Skeena

REGIONS: British Columbia

NTS MAP: 103P12E

UTM ZONE: 09 (NAD 83)

BC MAP:

LATITUDE: 55 44 08 N

NORTHING: 6176789

LONGITUDE: 129 33 30 W

EASTING: 464941

ELEVATION: 823 Metres

LOCATION ACCURACY: Within 500M

COMMENTS: Portal of main adit (Assessment Report 9400, Fig. 4).

COMMODITIES: Copper Silver Gold

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite
ASSOCIATED: Quartz Chlorite Barite
ALTERATION: Pyrite Quartz Sericite
ALTERATION TYPE: Pyrite Silicific'n Sericitic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated Massive
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I02 Intrusion-related Au pyrrhotite veins L01 Subvolcanic Cu-Ag-Au (As-Sb)
SHAPE: Tabular
DIMENSION: 0060 x 0046 x 0002 Metres STRIKE/DIP: 120/90 TREND/PLUNGE:
COMMENTS: Zone strikes 120 degrees, dips steeply northeast to southwest.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE Lower Jurassic GROUP Hazelton FORMATION Undefined Formation IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Plagioclase Hornblende Porphyritic Andesite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Boundary Ranges
TERRANE: Stikine
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist
COMMENTS: At the western margin of the Stewart Complex (Island Arc Assemblage).

INVENTORY

ORE ZONE: VANGUARD COPPER REPORT ON: Y
CATEGORY: Unclassified YEAR: 1973
QUANTITY: 11800 Tonnes
COMMODITY GRADE
Silver 141.0000 Grams per tonne
Gold 2.4000 Grams per tonne
Copper 8.6000 Per cent

REFERENCE: Property File - Sevensma, 1973, page 7.

CAPSULE GEOLOGY

The Vanguard prospect is located 500 metres southwest of Homestake Creek in the Upper Kitsault Valley, about 29 kilometres north of Alice Arm. A zone of copper mineralization has been extensively investigated, since 1916, by trenching and tunnelling. The area is underlain by a sequence of volcanics and sediments of the Upper Triassic Stuhini Group, the Lower Jurassic Hazelton Group and the Middle Jurassic Spatsizi Group. This sequence has been regionally metamorphosed to greenschist facies. The Vanguard occurrence lies at the eastern margin of a 10 kilometre long northwest trending body of gossanous plagioclase-hornblende porphyritic andesite of the Hazelton Group informally called the Copper Belt. The andesite has been extensively pyritized and variably silicified and sericitized along its length. Argillites of the overlying Hazelton or Spatsizi Group outcrop a hundred metres to the northeast. The Vanguard prospect consists of a mineralized zone which strikes 120 degrees for at least 46 metres and dips steeply northeast on the surface to southwest underground. The zone is up to 4.6 metres wide, averaging 2.4 metres, extends downdip for at least 60 metres.

CAPSULE GEOLOGY

Mineralization is associated with veins of quartz and carbonate that cut pyritic andesite. In the underground workings, pyrite and chalcopyrite occur as disseminations and blebs within the veins and as lenticular masses between the veins. On the surface, massive pyrite and chalcopyrite with minor quartz and barite occur in lenses, up to 0.6 metres wide, within northwest trending fault zones.

This zone is estimated to contain 11,800 tonnes grading 2.4 grams per tonne gold, 141 grams per tonne silver and 8.6 per cent copper (Property File - Sevensma, P.H.(1973) p. 7).

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EM EXPL 2001-1-9
EMPR AR 1916-83; *1918-65,66; 1919-56; 1920-50; 1921-50; 1922-57;
1923-57; 1926-83; 1927-77; *1928-88; 1929-87; 1930-100; 1931-38;
*1951-88,89; 1966-42; 1968-58
EMPR ASS RPT 956, *9400
EMPR BULL 63
EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp.
235-243
EMPR MAP 8
EMPR OF 1986-2
EMPR PF (Canex Aerial Exploration, Maps of Adits, 1966; Carter, N.C.
(1969) Report; *Sevensma, P.H. (1973) Reports; Lisle, T.E. (1981)
Report; Cambria Resources Ltd. Prospectus, 1987)
EMR MIN BULL MR 223 B.C. 311
EMR MP CORPFILE (Caulfield Resources Ltd.)
GSC MAP 307A; 315A; 1385A
GSC MEM 175, pp. 84,85
GSC SUM RPT *1928A, pp. 48,49
GCNL #166, 1980
EMPR OF 1998-10

DATE CODED: 1985/07/24
DATE REVISED: 1989/04/30

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 211**

NATIONAL MINERAL INVENTORY: 103P12 Cu3

NAME(S): **CASCADE FALLS**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P12E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 44 06 N
LONGITUDE: 129 34 42 W
ELEVATION: 1009 Metres

NORTHING: 6176738
EASTING: 463684

LOCATION ACCURACY: Within 500M

COMMENTS: Location of surface trace of mineralized zone (Minister of Mines Annual Report 1951, Fig.1)

COMMODITIES: Silver Gold Zinc Copper Lead

MINERALS

SIGNIFICANT: Sphalerite Chalcopyrite Pyrite Galena Tetrahedrite
ASSOCIATED: Quartz Carbonate
ALTERATION: Quartz
ALTERATION TYPE: Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au I02 Intrusion-related Au pyrrhotite veins
COMMENTS: A 1.5 metre wide quartz vein strikes northwest, dips northeast.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Plagioclase Hornblende Porphyritic Andesite
Black Siltstone
Black Argillite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Boundary Ranges
TERRANE: Stikine
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist
COMMENTS: At the western margin of the Stewart Complex (Island Arc Assemblage).

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1951
SAMPLE TYPE: Chip
COMMODITY GRADE
Silver 178.0000 Grams per tonne
Gold 3.4000 Grams per tonne
Copper 1.2000 Per cent
Lead 0.8000 Per cent
Zinc 4.6000 Per cent

COMMENTS: A 0.864 metre chip sample across zone of quartz and carbonate veins.

REFERENCE: Minister of Mines Annual Report 1951, page 88.

CAPSULE GEOLOGY

The Cascade Falls showing is located 1.0 kilometre northeast of the West Kitsault River, 29.5 kilometres north-northwest of Alice Arm.

The occurrence is comprised of various showings situated in plagioclase-hornblende porphyritic andesite with minor interbedded black siltstone/argillite of the Lower Jurassic Hazelton Group, informally called the Copper Belt.

A quartz vein, striking northwest and dipping north, is hosted in argillite. The vein is 1.5 metres wide and the hangingwall is partially replaced by quartz 1.5 metres out from the vein. The vein and silicified hangingwall contain disseminated galena, sphalerite, chalcopyrite and tetrahedrite. A 3.0 metre chip sample assayed trace gold, 31 grams per tonne silver, 1.31 per cent copper, 0.05 per cent zinc and 0.05 per cent lead (Minister of Mines Annual Report 1966, page 66).

CAPSULE GEOLOGY

A a steeply dipping west-southwest striking mineralized zone occurs in andesite. Two zones of quartz and carbonate veinlets, 0.86 and 0.61 metres wide, are separated by 0.71 metres of andesite. The veinlets contain pyrite, sphalerite, chalcopyrite and galena. A 0.864 metre chip sample assayed 3.4 grams per tonne gold, 178 grams per tonne silver, 0.8 per cent lead, 4.6 per cent zinc and 1.2 per cent copper (Minister of Mines Annual Report 1951, page 88).

BIBLIOGRAPHY

EMPR AR 1922-58; *1951-88; *1966-65,66
EMPR ASS RPT 6049, 8166, 9076, 16034, 18657
EMPR BULL 63
EMPR EXPL 1976-166,167; 1980-409,410; 1987-C364
EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp.
235-243
EMPR MAP 8
EMPR OF 1986-2
EMPR PF (Carter, N.C. Core Logs and Geological Map; Cambria
Resources Ltd. Prospectus, 1987)
GSC MAP 307A; 1385A

DATE CODED: 1985/07/24
DATE REVISED: 1989/05/13

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 212**

NATIONAL MINERAL INVENTORY:

NAME(S): **ROYAL 2**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P12E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 40 34 N
LONGITUDE: 129 31 26 W
ELEVATION: 548 Metres

NORTHING: 6170157
EASTING: 467054

LOCATION ACCURACY: Within 500M

COMMENTS: Location of sample site VK100 (Assessment Report 15371, Fig. 5a).

COMMODITIES: Silver Lead

MINERALS

SIGNIFICANT: Galena
COMMENTS: Assumed.
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Hydrothermal
TYPE: 105 Polymetallic veins Ag-Pb-Zn±Au
DIMENSION:
COMMENTS: Attitude of shear zone.

STRIKE/DIP: 127/90

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Lower Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Feldspar Porphyritic Andesite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine
METAMORPHIC TYPE: Regional
COMMENTS: At the south end of the Stewart Complex (Island Arc Assemblage).

PHYSIOGRAPHIC AREA: Boundary Ranges

RELATIONSHIP:
GRADE: Greenschist

INVENTORY

ORE ZONE: SHEAR

REPORT ON: N

CATEGORY: Assay/analysis	YEAR: 1986
SAMPLE TYPE: Chip	
<u>COMMODITY</u>	<u>GRADE</u>
Silver	20.8000 Grams per tonne
Lead	0.1690 Per cent

COMMENTS: A 2.0 metre chip sample across shear zone.
REFERENCE: Assessment Report 15371, page 22.

CAPSULE GEOLOGY

The Royal Number 2 showing is situated 1.25 kilometres west of the Kitsault River, 22 kilometres north of Alice Arm. The area is underlain by a sequence of volcanics and sediments of the Upper Triassic Stuhini Group, the Lower Jurassic Hazelton Group and the Middle Jurassic Spatsizi Group. The sequence is folded into the doubly plunging, north-northwest trending Kitsault River Syncline and has been regionally metamorphosed to greenschist facies. The showing consists of a shear zone, striking 127 degrees and dipping vertically, in feldspar porphyritic andesite of the Hazelton Group. A 2.0 metre chip sample across this zone assayed 20.8 grams per tonne silver and 0.1690 per cent lead (Assessment Report 15371, p. 22).

BIBLIOGRAPHY

EMPR GEM 1970-87
EMPR EXPL 1980-408,409
EMPR ASS RPT 9064, *15371
EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp. 235-243
EMPR OF 1986-2
EMPR BULL 63
EMPR MAP 8
GSC MAP 1385A

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

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BIBLIOGRAPHY

EMR MP CORPFILE (Consolidated Silver Butte Mines Ltd.)

DATE CODED: 1989/04/17
DATE REVISED: / /

CODED BY: PSF
REVISED BY:

FIELD CHECK: N
FIELD CHECK:

MINFILE NUMBER: **103P 213**

NATIONAL MINERAL INVENTORY: 103P12,13 Cu2

NAME(S): **GOLD REEF**, GOLD LEAF, CAMBRIA

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P12E
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 44 56 N
LONGITUDE: 129 35 24 W
ELEVATION: 1290 Metres

NORTHING: 6178290
EASTING: 462965

LOCATION ACCURACY: Within 500M

COMMENTS: Location of channel sample 8972D (Assessment Report 16034, Fig.5).

COMMODITIES: Gold Silver Copper Lead

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Galena Sphalerite

ASSOCIATED: Quartz Carbonate

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I02 Intrusion-related Au pyrrhotite veins
COMMENTS: Veins, 0.3 metres wide, strike west.

L01 Subvolcanic Cu-Ag-Au (As-Sb)

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Plagioclase Hornblende Porphyritic Andesite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

PHYSIOGRAPHIC AREA: Boundary Ranges

TERRANE: Stikine

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

COMMENTS: At the western margin of the Stewart Complex (Island Arc Assemblage).

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1934

SAMPLE TYPE: Channel

COMMODITY

GRADE

Silver

4.5000

Grams per tonne

Gold

31.7000

Grams per tonne

COMMENTS: A 0.40 metre long channel sample.

REFERENCE: Assessment Report 16034, Figure 5.

CAPSULE GEOLOGY

The Gold Reef showing is located 1.5 kilometres to the southwest of Homestake Creek, 30 kilometres north-northwest of Alice Arm.

The showing consists of a series of west striking quartz-carbonate veins, 0.3 metres wide. The veins are hosted in altered plagioclase-hornblende porphyritic andesite (informally called the Copper Belt) of the Lower Jurassic Hazelton Group. The veins are mineralized with pyrite and minor chalcopyrite, galena and sphalerite. A 0.40 metre long channel sample assayed 31.7 grams per tonne gold and 4.5 grams per tonne silver (Assessment Report 16034, Figure 5).

BIBLIOGRAPHY

EMPR AR 1934-B15; 1935-B26; *1951-86,87

EMPR ASS RPT *16034, 18657

EMPR BULL 63

EMPR EXPL 1987-C364

EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp.

235-243

EMPR MAP 8

EMPR OF 1986-2

EMPR PF (Cambria Resources Ltd. Prospectus, 1987)

GSC MAP 307A; 1385A

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1305
REPORT: RGEN0100

BIBLIOGRAPHY

WWW <http://www.infomine.com/index/>

DATE CODED: 1985/07/24
DATE REVISED: 1989/05/11

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 214**

NATIONAL MINERAL INVENTORY: 103P12 Cu3

NAME(S): **LUCKY STRIKE**, WILBERFORCE, CAMBRIA

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P12E
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 44 32 N
LONGITUDE: 129 35 22 W
ELEVATION: 1135 Metres

NORTHING: 6177548
EASTING: 462994

LOCATION ACCURACY: Within 500M

COMMENTS: Location of surface trace of mineralized zone (Minister of Mines Annual Report 1951, Fig. 1).

COMMODITIES: Zinc Silver Copper Lead Gold

MINERALS

SIGNIFICANT: Sphalerite Pyrite Chalcopyrite Tetrahedrite Galena

ASSOCIATED: Quartz Carbonate

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Breccia
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au L01 Subvolcanic Cu-Ag-Au (As-Sb)

COMMENTS: The breccia vein, up to 6 metres wide, strikes northwest and dips steeply.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE: Lower Jurassic
GROUP: Hazelton
FORMATION: Undefined Formation
IGNEOUS/METAMORPHIC/OTHER:

LITHOLOGY: Plagioclase Hornblende Porphyritic Andesite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

PHYSIOGRAPHIC AREA: Boundary Ranges

TERRANE: Stikine

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

COMMENTS: At the western margin of the Stewart Complex (Island Arc Assemblage).

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1951

SAMPLE TYPE: Chip

COMMODITY

GRADE

Silver	295.0000	Grams per tonne
Gold	0.6900	Grams per tonne
Copper	0.7000	Per cent
Lead	0.8000	Per cent
Zinc	6.6000	Per cent

COMMENTS: A 0.69 metre chip sample.

REFERENCE: Minister of Mines Annual Report 1951, page 88.

CAPSULE GEOLOGY

The Lucky Strike showing is located 1.0 kilometre northwest of the West Kitsault River, 30 kilometres north-northwest of Alice Arm.

The showing consists of quartz-carbonate breccia vein, up to 6 metres wide, in plagioclase-hornblende porphyritic andesite. This Lower Jurassic Hazelton Group andesite unit is informally known as the Copper Belt. The vein, strikes northwest, dips steeply and is mineralized with abundant sphalerite and minor pyrite, chalcopyrite, tetrahedrite and galena. A 0.69 metre chip sample assayed 0.69 grams per tonne gold, 295 grams per tonne silver, 0.7 per cent copper, 0.8 per cent lead and 6.6 per cent zinc (Minister of Mines Annual Report 1951, page 88).

BIBLIOGRAPHY

EM EXPL 2001-1-9
EMPR AR 1922-57,58; 1923-57; 1926-82; 1929-87; 1930-99; 1931-38;
1932-56; 1934-B17; *1951-87,88; *1965-65,66
EMPR ASS RPT 8166, 9076, *16034, 18657
EMPR BULL 63
EMPR EXPL 1976-166,167; 1980-409,410; 1987-C364

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

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GEOLOGICAL SURVEY BRANCH
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PAGE: 1307
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp.
235-243
EMPR MAP 8
EMPR OF 1986-2
EMPR PF (Cambria Resources Ltd. Prospectus, 1987)
GSC MAP 307A; 315A; 1385A
GSC MEM 175, p. 71

DATE CODED: 1985/07/24
DATE REVISED: 1989/05/13

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 215**

NATIONAL MINERAL INVENTORY: 103P13 Au7

NAME(S): **TIP TOP**, GOLD REEF

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P13E 103P12E
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 45 04 N
LONGITUDE: 129 34 56 W
ELEVATION: 995 Metres

NORTHING: 6178533
EASTING: 463455

LOCATION ACCURACY: Within 500M

COMMENTS: Location of centre of Tip Top claim (L. 3981) (Assessment Report 16034 Fig.5).

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite

COMMENTS: Disseminated.

ALTERATION: Pyrite Quartz Sericite

ALTERATION TYPE: Pyrite Silicific'n Sericitic

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated

CLASSIFICATION: Hydrothermal Epigenetic

TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb) I02 Intrusion-related Au pyrrhotite veins

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Lower Jurassic

GROUP

Hazelton

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Plagioclase Porphyritic Andesite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

PHYSIOGRAPHIC AREA: Boundary Ranges

TERRANE: Stikine

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

COMMENTS: At the western margin of the Stewart Complex (Island Arc Assemblage).

CAPSULE GEOLOGY

The Tip Top showing is located 1.0 kilometre southwest of Homestake Creek, 31 kilometres north-northwest of Alice Arm.

The showing occurs at the eastern margin of a 10 kilometre long northwest trending body of plagioclase-hornblende porphyritic andesite of the Lower Jurassic Hazelton Group. The andesite, informally called the Copper Belt, has been extensively pyritized and variably silicified and sericitized.

Disseminated pyrite and minor chalcopyrite occur in andesite cut by numerous quartz veins.

BIBLIOGRAPHY

EMPR AR 1918-65; 1934-B15

EMPR ASS RPT 16034, 18657

EMPR BULL 63

EMPR EXPL 1987-C364

EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp. 235-243

EMPR MAP 8

EMPR OF 1986-2

EMR MP CORPFILE (Kitsault River Mining & Development Co. Ltd.)

GSC MAP 307A; 315A; 1385A

GSC MEM 175, p. 83

DATE CODED: 1985/07/24
DATE REVISED: 1989/05/10

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 216**

NATIONAL MINERAL INVENTORY: 103P13 Au7

NAME(S): **HOMESTAKE**, BEVIL - MCKERN

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 103P13E
BC MAP:

MINING DIVISION: Skeena

LATITUDE: 55 45 31 N
LONGITUDE: 129 35 21 W
ELEVATION: 1015 Metres

UTM ZONE: 09 (NAD 83)

NORTHING: 6179371
EASTING: 463027

LOCATION ACCURACY: Within 500M

COMMENTS: Location of portal of Gerardi adit (Assessment Report 16034, Fig.5).

COMMODITIES: Gold Copper Silver Zinc Lead

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Sphalerite Galena
COMMENTS: Disseminated to massive lenses.
ASSOCIATED: Quartz Carbonate Barite
ALTERATION: Pyrite Quartz Sericite
ALTERATION TYPE: Pyrite Silicific'n Sericitic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated Massive
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I02 Intrusion-related Au pyrrhotite veins L01 Subvolcanic Cu-Ag-Au (As-Sb)
 I05 Polymetallic veins Ag-Pb-Zn±Au
SHAPE: Tabular
MODIFIER: Faulted
DIMENSION:
COMMENTS: Zone strikes northwest and dips 50 to 80 degrees northeast. STRIKE/DIP: 315/65E TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic Hazelton Undefined Formation

LITHOLOGY: Plagioclase Hornblende Porphyritic Andesite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Boundary Ranges
TERRANE: Stikine
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist
COMMENTS: At the western margin of the Stewart Complex (Island Arc Assemblage).

INVENTORY

ORE ZONE: STOCKPILE REPORT ON: N

CATEGORY: Assay/analysis	YEAR: 1951
SAMPLE TYPE: Bulk Sample	
<u>COMMODITY</u>	<u>GRADE</u>
Silver	203.0000 Grams per tonne
Gold	140.0000 Grams per tonne
Copper	7.5000 Per cent
Lead	0.7950 Per cent
Zinc	3.8000 Per cent

COMMENTS: A 7.98 tonne bulk sample of sorted ore containing lenticular bodies of pyrite and chalcopyrite over 4.6 metres.

REFERENCE: Minister of Mines Annual Report 1951, page 14.

CAPSULE GEOLOGY

The Homestake prospect is located 1.5 kilometres west of Homestake Creek in the Upper Kitsault Valley, 32 kilometres north of Alice Arm. The prospect has been extensively explored since 1916.

The area is underlain by a sequence of volcanics and sediments of the Upper Triassic Stuhini Group, the Lower Jurassic Hazelton Group and the Middle Jurassic Spatsizi Group. The sequence is folded into the doubly plunging, north-northwest trending Kitsault River Syncline and has been regionally metamorphosed to greenschist facies.

The prospect is situated at the northern end of a 10 kilometre long northwest trending body of gossanous plagioclase-hornblende porphyritic andesite. This Lower Jurassic Hazelton Group unit, informally called the Copper Belt, has been extensively pyritized and variably silicified and sericitized along its length.

CAPSULE GEOLOGY

Mineralization occurs as disseminations and massive lenses, up to 1 metre wide, in veins and pockets of quartz, carbonate and barite. These occur within a zone which contains several subparallel faults. This zone strikes northwest for at least 270 metres, dips 50 to 80 degrees northeast and is 4.6 to 12 metres wide, with widths commonly around 6 metres. The southern 49 metres of this zone has been displaced 60 metres to the east by an east-northeast trending fault. Mineralization consists of pyrite, minor chalcopyrite and traces of sphalerite and galena.

A 7.98 tonne sample of sorted ore, displaying lenticular bodies of pyrite and chalcopyrite over a width of 4.6 metres, averaged 140 grams per tonne gold, 203 grams per tonne silver, 7.5 per cent copper, 0.795 per cent lead and 3.80 per cent zinc (Minister of Mines Annual Report 1951, page 14). The gold appears to be associated with chalcopyrite. Gold values from underground workings tend to be lower and quite erratic.

A second zone, possibly a branch of the main zone, lies just to the north. It strikes 095 degrees, dips 75 degrees north, has been traced for 90 metres and is 3 to 4 metres wide. The zone contains pyrite with sparse chalcopyrite, galena and sphalerite in a gangue of silicified andesite with some calcite.

BIBLIOGRAPHY

- EMPR AR 1916-82,83; *1918-64,65; 1919-56; 1920-49; 1921-51; 1922-58;
1923-58; 1926-83; 1927-77; 1930-99; 1933-50; *1934-B15-B17;
*1938-B7-B12; 1939-67; 1947-95; *1951-83-86
EMPR ASS RPT *16034, 18657
EMPR BULL 63
EMPR EXPL 1987-C364
EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp.
235-243; 2000, pp. 313-326
EMPR MAP 8
EMPR OF 1986-2
EMPR PF (Maps of Surface and underground Workings; Cambria Resources
Prospectus, 1987)
EMR MP CORPFILE (Toric Mines Ltd.)
GSC MAP 307A; 315A; 1385A
GSC MEM 175, p. 67
GSC SUM RPT 1921, p. 20A
GCNL #99, 1989

DATE CODED: 1985/07/24
DATE REVISED: 1989/04/30

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 217**

NATIONAL MINERAL INVENTORY: 103P12,13 Cu2

NAME(S): **BLUE RIBBON - SILVER TIP**, BLUE RIBBON

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P13E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 45 25 N
LONGITUDE: 129 36 06 W
ELEVATION: 1219 Metres

NORTHING: 6179193
EASTING: 462240

LOCATION ACCURACY: Within 500M

COMMENTS: Location of open cut (Minister of Mines Annual Report 1921 p.50).

COMMODITIES: Silver Gold Zinc Lead

MINERALS

SIGNIFICANT: Pyrite Sphalerite Galena

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I02 Intrusion-related Au pyrrhotite veins
COMMENTS: Vein strikes northwest.

I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Andesite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

PHYSIOGRAPHIC AREA: Boundary Ranges

TERRANE: Stikine

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

COMMENTS: At the western margin of the Stewart Complex (Island Arc Assemblage).

CAPSULE GEOLOGY

The Blue Ribbon-Silver Tip showing is located on the south side of the western fork of the Kitsault Glacier, 31.5 kilometres north-northwest of Alice Arm. It was prospected in the early 1920's for polymetallic mineralization.

A 3.7 metre wide, northwest trending, quartz vein is located thirty metres above the western fork of the Kitsault Glacier. The vein, hosted in Lower Jurassic Hazelton Group andesite, is mineralized with pyrite, sphalerite and galena. Assays reveal low silver values and trace gold (Minister of Mines Annual Report 1921, page 50).

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EMPR AR *1921-50,51; 1922-58; 1923-57; 1925-75
EMPR ASS RPT 16034, 18657
EMPR BULL 63
EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
EMPR OF 1986-2
GSC MAP 307A; 315A; 1385A
GSC MEM 175, p. 56

DATE CODED: 1985/07/24
DATE REVISED: 1989/04/30

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 218**

NATIONAL MINERAL INVENTORY: 103P12 Ag1

NAME(S): **BLACK DIAMOND**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P12E
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 44 45 N
LONGITUDE: 129 32 34 W
ELEVATION: 561 Metres

NORTHING: 6177926
EASTING: 465926

LOCATION ACCURACY: Within 500M

COMMENTS: Location of adit (Minister of Mines Annual Report 1951 fig.1).

COMMODITIES: Silver

MINERALS

SIGNIFICANT: Argentite
COMMENTS: As specks in quartz stringers.
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Breccia
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

DIMENSION: STRIKE/DIP: 130/85W

TREND/PLUNGE:

COMMENTS: Vein, 4.9 metres wide, strikes 130 degrees and dips steeply west.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Middle Jurassic	Spatsizi	Undefined Formation	

LITHOLOGY: Argillite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

PHYSIOGRAPHIC AREA: Boundary Ranges

TERRANE: Stikine

Bowser Lake

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

COMMENTS: In Bowser Lake foredeep clastic wedge on Stikinia Terrane.

INVENTORY

ORE ZONE: ADIT

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1922

SAMPLE TYPE: Grab

COMMODITY

GRADE

Silver

2057.0000 Grams per tonne

COMMENTS: Sample of a quartz stringer from adit.

REFERENCE: Minister of Mines Annual Report 1922, page 58.

CAPSULE GEOLOGY

The Black Diamond showing is located on Jacob's Creek, 30 kilometres north of Alice Arm. A sparsely mineralized quartz vein was explored by trenching and tunnelling in 1918 and 1922.

The showing consists of a quartz-breccia vein, up to 4.9 metres wide, striking 130 degrees and dipping steeply to the west. The vein is hosted in flat lying, northwest striking Middle Jurassic Spatsizi Group argillite. The footwall contains 3.0 to 3.7 metres of quartz and brecciated argillite and the hangingwall is composed of banded quartz and argillite. Quartz stringers, exposed in an adit just below the outcrop, displayed specks of argentite. One of these stringers reportedly assayed up to 2057 grams per tonne silver (Minister of Mines Annual Report 1922, page 58).

BIBLIOGRAPHY

EMPR AR 1918-64; 1919-56; *1922-58; *1951-90
EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp. 235-243
EMPR OF 1986-2
EMPR BULL 63
EMPR MAP 8
GSC MAP 307A; 315A; 1385A

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

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PAGE: 1313
REPORT: RGEN0100

BIBLIOGRAPHY

GSC MEM 175, p. 56

DATE CODED: 1985/07/24
DATE REVISED: 1989/04/30

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 219**

NATIONAL MINERAL INVENTORY: 103P13 Au8

NAME(S): **COLUMBIA**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P13E
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 45 24 N
LONGITUDE: 129 31 50 W
ELEVATION: 786 Metres

NORTHING: 6179125
EASTING: 466703

LOCATION ACCURACY: Within 500M

COMMENTS: Location of adit (Minister of Mines Annual Report 1951, Fig.1.)

COMMODITIES: Gold Copper

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Breccia
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
DIMENSION: 0003 Metres
COMMENTS: Vein is 1.8 to 4.6 metres wide.

Discordant

STRIKE/DIP: 102 135/70N Intrusion-related Au pyrrhotite veins
TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE: Middle Jurassic
GROUP: Spatsizi

FORMATION: Undefined Formation

IGNEOUS/METAMORPHIC/OTHER:

LITHOLOGY: Argillite
Slate

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Stikine

METAMORPHIC TYPE: Regional

COMMENTS: In the Bowser Lake clastic wedge on the Stikinia Terrane.

Bowser Lake

RELATIONSHIP:

PHYSIOGRAPHIC AREA: Boundary Ranges

GRADE: Greenschist

INVENTORY

ORE ZONE: ADIT

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1921

SAMPLE TYPE: Grab

COMMODITY

GRADE

Gold

9.2900

Grams per tonne

COMMENTS: Sample from adit.

REFERENCE: Minister of Mines Annual Report 1921, page 52.

CAPSULE GEOLOGY

The Columbia showing is located 1.6 kilometres west of the dam on the Kitsault River in the Upper Kitsault Valley, 31 kilometres north of Alice Arm. A largely barren quartz vein was investigated for precious metal mineralization between 1918 and 1922.

The showing consists of a quartz-breccia vein, 1.8 to 4.6 metres wide, striking 135 degrees and dipping 70 degrees northeast. The vein occurs in Middle Jurassic Spatsizi Group argillite which strikes 035 degrees and dips 31 degrees northwest. The vein varies from being a network of quartz stringers in numerous brecciated argillite fragments to essentially pure quartz with no argillite fragments. The quartz contains sparse pyrite with a trace of chalcopyrite. A sample of the vein from an adit driven underneath the outcrop assayed 9.29 grams per tonne gold (Minister of Mines Annual Report 1921, page 52).

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EMPR OF 1986-2
EMPR BULL 63
EMPR MAP 8

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1315
REPORT: RGEN0100

BIBLIOGRAPHY

GSC MAP 307A; 315A; 1385A
GSC SUM RPT 1921, p. 21A
GSC MEM 175, p. 59

DATE CODED: 1985/07/24
DATE REVISED: 1989/04/30

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 220**

NATIONAL MINERAL INVENTORY: 103P13 Mo2

NAME(S): **MCADAM POINT, MOS2, JACK,
JACKIE, HROTHGAR, WRATH,
RED MOUNTAIN**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P13E
BC MAP:
LATITUDE: 55 56 53 N
LONGITUDE: 129 43 19 W
ELEVATION: 1500 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Approximate location of centre of stock (Assessment Report 7152).

MINING DIVISION: Skeena
UTM ZONE: 09 (NAD 83)
NORTHING: 6200534
EASTING: 454914

COMMODITIES: Molybdenum Lead Silver Gold Zinc

MINERALS

SIGNIFICANT: Pyrite Molybdenite Gold Galena Sphalerite
 Tetrahedrite Apatite
ASSOCIATED: Quartz Feldspar
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Stockwork Breccia
CLASSIFICATION: Porphyry Hydrothermal Epigenetic
 TYPE: L05 Porphyry Mo (Low F- type) I05 Polymetallic veins Ag-Pb-Zn±Au
SHAPE: Irregular
MODIFIER: Folded Fractured

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

Jurassic
Tertiary

GROUP

Bowser Lake

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Coast Plutonic Complex

LITHOLOGY: Granodiorite
 Quartzite
 Siltstone
 Tuff

HOSTROCK COMMENTS: Bowser Lake Group is Middle to Upper Jurassic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine
METAMORPHIC TYPE: Contact

PHYSIOGRAPHIC AREA: Boundary Ranges
Bowser Lake
RELATIONSHIP: Syn-mineralization GRADE: Hornfels

INVENTORY

ORE ZONE: SHEAR

REPORT ON: N

CATEGORY: Assay/analysis YEAR: 1967
SAMPLE TYPE: Channel
COMMODITY GRADE
Gold 8.5700 Grams per tonne
Molybdenum 0.2300 Per cent

COMMENTS: A 8.5 metre sample (channel?) from a pyritic shear zone. Re-sampling of granodiorite drill core in 1977 assayed 0.001%.

REFERENCE: Assessment Reports 1588 and 6580.

CAPSULE GEOLOGY

The McAdam showing is located 16 kilometres east of Stewart near the southeastern margin of the Bromley Glacier. The showing was first discovered in 1965 and the area is presently being investigated for gold mineralization. The Red Mountain discovery (103P 086) is located approximately 1.5 kilometres to the northeast.

The region is underlain by sedimentary rocks of the Middle to Upper Jurassic Bowser Lake Group intruded by granitic Coast Plutonic Complex rocks.

The showing is underlain by thinly laminated variably schistose and broken quartzites, crystal tuffs and siltstones which have been intruded by a coarse grained granodiorite stock. The distorted bedding trends northwest and aplitic to pegmatitic offshoot dykes are common. Evidence suggests that these rocks lie on the steep overturned east limb of a regional anticlinal structure which trends and plunges northward.

CAPSULE GEOLOGY

The stock is mineralized with pyrite and molybdenite as irregular fracture or grain boundary fillings and molybdenite as well shaped randomly disseminated rosettes. Pyrite and molybdenite also occur in irregular veins or lenses along several vertical north trending shear zones which transect the stock and hornfelsed sediments. The offshoot dykes contain scattered mineralization and quartzites contain minor pyrite, molybdenite and apatite. Apatite occurs as a major constituent in lenses within impure quartzites, which exhibit well preserved primary structures. The contact zone around the stock contains pink feldspar and mineralized quartz veins. Portions of the contact zone are well mineralized with molybdenite and grades are generally higher than in the stock itself. Gold is reported to be present in significant amounts in large quartz veins in the peripheral mineralized zone and in pyrite veins (103P 086). The veins also contain galena, sphalerite, pyrite, and tetrahedrite.

The stock may extend under the ice to Lost Mountain (103P 007) where several outcrops of similar granodiorite with molybdenite mineralization have been located. The Bromley Glacier is receding quite rapidly, 107 metres from 1960 to 1967, exposing more of the stock. It is possible that the granodiorite extends to the Goldslide Creek (103P 221) area and if so the stock would be 137 metres below surface. It is speculated that the porphyry and granodiorite are related.

A 8.5 metre sample from a pyritic shear zone averaged 0.23 per cent molybdenite and 8.57 grams per tonne gold (Assessment Report 1588 p.7). Re-sampling of core from drill hole N-5 in the granodiorite averaged 0.001 per cent molybdenite (Assessment Report 6580 p.4).

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EMPR MAP 8
EMR MP CORPFILE (Hurley River Mines Ltd., Erin Explorations Ltd.,
Laura Mines Ltd.)
GSC MAP 307A; 1385A
GCNL #148, 1977
N MINER May 29, 2000 (Gold & Precious Metal Insert)
Falconbridge File

DATE CODED: 1985/07/24
DATE REVISED: 1989/12/19

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 221**

NATIONAL MINERAL INVENTORY: 103P13 Mo3

NAME(S): **GOLDSLIDE CREEK, MOS2, JACK,
JACKIE, HROTHGAR, WRATH,
RED MOUNTAIN**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P13E

UTM ZONE: 09 (NAD 83)

BC MAP:
LATITUDE: 55 57 24 N
LONGITUDE: 129 42 53 W
ELEVATION: 1432 Metres

NORTHING: 6201487
EASTING: 455375

LOCATION ACCURACY: Within 1 KM

COMMENTS: Location of sampled area in upper cirque of Goldslide Creek (Assessment Report 7152).

COMMODITIES: Molybdenum Copper

MINERALS

SIGNIFICANT:	Pyrite	Apatite	Molybdenite	Chalcopyrite
ASSOCIATED:	Quartz			
ALTERATION:	Sericite	Epidote	Chlorite	Carbonate
ALTERATION TYPE:	Propylitic			
MINERALIZATION AGE:	Unknown			

DEPOSIT

CHARACTER: Vein Stockwork Disseminated
CLASSIFICATION: Hydrothermal Porphyry Epigenetic
TYPE: L05 Porphyry Mo (Low F- type)
SHAPE: Irregular
MODIFIER: Fractured
DIMENSION:
COMMENTS: Attitude of zones or veins. STRIKE/DIP: 025/90 TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Plutonic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Jurassic	Bowser Lake	Undefined Formation	
Middle Jurassic			Coast Plutonic Complex

LITHOLOGY: Quartz Hornblende Diorite Porphyry
Siliceous Siltstone
Siliceous Argillite
Meta Quartzite
Chert

HOSTROCK COMMENTS: Intrusives are Middle Jurassic and possibly younger in age. Bowser Lake Group is Middle to Upper Jurassic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Boundary Ranges
TERRANE: Stikine Bowser Lake

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N

CATEGORY: Assay/analysis	YEAR: 1978
SAMPLE TYPE: Grab	
<u>COMMODITY</u>	<u>GRADE</u>
Copper	0.0300 Per cent
Molybdenum	0.0260 Per cent

COMMENTS: Best assay from sampling program, also trace gold.
REFERENCE: Assessment Report 7152.

CAPSULE GEOLOGY

The Goldslide Creek showing is located 16 kilometres east of Stewart in the upper cirque of the creek. The area was investigated during the 1960's for molybdenite mineralization. The Red Mountain discovery (103P 253) is located approximately 750 metres up the creek from this showing.

The area is underlain by sediments of the Middle to Upper Jurassic Bowser Lake Group intruded by Middle Jurassic and possibly younger stocks and dykes of the Coast Plutonic Complex.

The showing is underlain by a sequence of thinly laminated and bedded siliceous siltstone, argillite and metaquartzite. The sediments grade from dominantly quartzite to poorly banded, near

CAPSULE GEOLOGY

homogeneous, chert. The sediments strike northwest and dip steeply south. Quartz hornblende diorite porphyry occurs along the contact between chert and siliceous sediments. Pyritic zones or veins, striking 025 degrees and dipping vertically, cut variably fractured porphyry and locally extend into the country rock. Quartz veining, propylitic alteration and replacement are widespread. Mineralization consists of molybdenite, pyrite and chalcopyrite. Pyrite and apatite are ubiquitous but are concentrated in mafic phases. The best assay from this area was 0.026 per cent molybdenum, 0.03 per cent copper and trace gold (Assessment Report 7152).

It is possible that the granodiorite at McAdam Point (103P 220) extends to this area and if so the stock would be 137 metres below surface, it is speculated that the porphyry and granodiorite are related.

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EMPR MAP 8
GSC MAP 1385A
GCNL #148, 1977
N MINER May 29, 2000 (Gold & Precious Metal Insert)
Falconbridge File

DATE CODED: 1985/07/24
DATE REVISED: 1989/12/04

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 222**

NATIONAL MINERAL INVENTORY: 103P5 Cu7

NAME(S): **HILLSIDE**, CD,CU

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P05W
BC MAP:

MINING DIVISION: Skeena
UTM ZONE: 09 (NAD 83)

LATITUDE: 55 26 33 N
LONGITUDE: 129 50 13 W
ELEVATION: 290 Metres

NORTHING: 6144353
EASTING: 447053

LOCATION ACCURACY: Within 500M

COMMENTS: Location of gossanous cliff (Property File - Alldrick, D., 1986 Anyox Map).

COMMODITIES: Copper Lead

MINERALS

SIGNIFICANT: Pyrrhotite Pyrite Chalcopyrite Galena

ASSOCIATED: Quartz Biotite

COMMENTS: Quartz-biotite schist zones.

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Massive Disseminated

CLASSIFICATION: Unknown

TYPE: G04 Besshi massive sulphide Cu-Zn

DIMENSION: 0244 Metres

STRIKE/DIP:

TREND/PLUNGE:

COMMENTS: The Hillside showing dips steeply and strikes east for at least 244 metres.

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE

Jurassic
Upper Triassic

GROUP

Hazelton
Vancouver

FORMATION

Undefined Formation
Karmutsen

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Quartz Biotite Schist
Pillow Andesite
Greenstone

HOSTROCK COMMENTS: Host rocks are correlative with either the Hazelton Group or the Karmutsen Formation.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline

TERRANE: Stikine

METAMORPHIC TYPE: Regional

COMMENTS: Situated in a roof pendant within the Coast Plutonic Complex.

PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)

Wrangell

RELATIONSHIP:

GRADE: Greenschist

CAPSULE GEOLOGY

The Hillside showing is located about 1.0 kilometre east of the main dam on Anyox/Falls Creek, about 3.0 kilometres northwest of Anyox. The area has been explored for copper in the past.

The area is underlain by the western margin of a 14.4 by 9.6 kilometre roof pendant within the Coast Plutonic Complex. These rocks have been correlated with the Jurassic Hazelton Group (Grove, T., 1986), but have also been correlated with the Upper Triassic Kunga Group sediments and Karmutsen Formation (Vancouver Group) volcanics (Sharp, R.J., 1980, M.Sc. Thesis).

The volcanics consist of mafic, massive and pillowed flows with minor tuffs variably altered to greenstone. The overlying sediments consist of argillite, siltstone and sandstone with minor limestone and chert. These rocks have been deformed by two phases of folding, a north-northeast trending phase, and an east-northeast trending phase.

The occurrence comprises two individual showings. The Hillside showing consists of steep, east trending, lens-like bodies in altered andesitic pillow flows and pillow breccias. The mineralization consists of massive to disseminated pyrrhotite, pyrite and chalcopyrite contained mainly in altered quartz-biotite schist zones within the volcanics. The mineralization can be traced for at least 244 metres.

South of the Hillside showing, at an elevation of 351 metres, galena mineralization is found in a steeply dipping leached quartzose zone trending 080 degrees within altered pillow flows.

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1321
REPORT: RGEN0100

BIBLIOGRAPHY

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235-243
EMPR GEM 1969-59; 1970-81; 1972-504
EMPR OF 1999-2
EMPR PF (*Alldrick, D. (1986) Anyox Map)
EMPR MAP 8
GSC MAP 1385A

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/31

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 223**

NATIONAL MINERAL INVENTORY: 103P11 Mo1

NAME(S): **AJAX**, LE ROY

STATUS: Developed Prospect
REGIONS: British Columbia
NTS MAP: 103P11W
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 35 24 N
LONGITUDE: 129 24 05 W
ELEVATION: 888 Metres

NORTHING: 6160522
EASTING: 474702

LOCATION ACCURACY: Within 500M

COMMENTS: Location of trench with molybdenite, on the east slope of Mount McGuire, approximately 13 kilometres northeast of the town of Alice Arm (Property File - Newmont maps).

COMMODITIES: Molybdenum Zinc Lead Copper Silver

MINERALS

SIGNIFICANT: Molybdenite Pyrrhotite Sphalerite Pyrite Galena
Chalcopyrite
ASSOCIATED: Quartz
ALTERATION: Sericite Quartz Albite Epidote Garnet
ALTERATION TYPE: Sericitic Silicific'n Skarn
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stockwork Disseminated Vein
CLASSIFICATION: Porphyry Hydrothermal Epigenetic
TYPE: L05 Porphyry Mo (Low F- type) 105 Polymetallic veins Ag-Pb-Zn±Au
SHAPE: Regular
MODIFIER: Folded
DIMENSION: 900 x 750 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: Mineralization in four elongate stocks covering an area 900 by 750 metres.

HOST ROCK

DOMINANT HOSTROCK: Plutonic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Upper Triassic	Stuhini	Undefined Formation	
Eocene			Alice Arm Intrusion

ISOTOPIC AGE: 54.5 Ma
DATING METHOD: Potassium/Argon
MATERIAL DATED: Biotite

LITHOLOGY: Quartz Porphyritic Quartz Monzonite
Biotite Quartz Monzonite
Argillite
Siltstone
Greywacke
Augite Andesite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Boundary Ranges

TERRANE: Bowser Lake

METAMORPHIC TYPE: Contact

RELATIONSHIP:

GRADE: Hornfels

COMMENTS: Stocks occur within the Stewart Complex (Island Arc Assemblage).

INVENTORY

ORE ZONE: AJAX

REPORT ON: Y

CATEGORY: Combined YEAR: 1967
QUANTITY: 178540000 Tonnes
COMMODITY: Molybdenum GRADE: 0.0700 Per cent

COMMENTS: Measured and indicated reserves at a very high stripping ratio. Grade given was 0.121% MoS₂, conversion to Mo using a factor of 1.6681.

REFERENCE: CIM Special Volume 15 (1976), Table 3, page 422.

CAPSULE GEOLOGY

The Ajax occurrence is located on the east slope of Mount McGuire, about 13 kilometres northeast of the town of Alice Arm. Newmont Exploration defined considerable reserves of molybdenum from extensive drilling carried out during the 1960's.

The deposit is a result of the intrusion of four closely-spaced stocks into a folded sequence of Upper Triassic Stuhini Group

CAPSULE GEOLOGY

sediments. The area is underlain by argillite, siltstone and greywacke with a few augite andesite flows up to a metre thick. These rocks occur on the steeply dipping east limb of the northwest trending Mount McGuire anticline. They have been contact metamorphosed in a north-northwest trending 2100 by 1500 metre zone centred on the four stocks. The inner part of this zone consists of quartz-albite-epidote-garnet skarn alteration, while the outer portion consists of biotite hornfels.

The stocks are small, elongate quartz monzonite bodies of the Eocene Alice Arm Intrusion covering a 900 by 750 metre area. The southern stock trends northwest with dimensions of 460 by 300 metres, the other three stocks trend east-northeast with dimensions of about 300 by 150 metres. The two southern stocks are quartz-feldspar porphyritic quartz monzonite and the two northern stocks are essentially a network of closely-spaced east-northeast and north-northwest trending dykes of biotite-rich quartz monzonite.

Alteration is most common in the two southern stocks and consists of the sericitization of plagioclase phenocrysts and the alteration of biotite to muscovite. Silicification occurs adjacent to quartz veinlets.

Mineralization occurs within the stocks and in the adjacent contact metamorphosed rocks as randomly orientated fractures filled with quartz and pyrrhotite and coatings and bands of molybdenite. Disseminated molybdenite also occurs in a stockwork of 3 to 6 millimetre diameter quartz veinlets and in silicified zones deeper within the stocks.

Four stages of mineralization are evident in the Ajax deposit. An initial stage of quartz-pyrrhotite mineralization is followed by two stages of quartz-molybdenite-pyrrhotite mineralization. These are followed by a final stage of coarse-grained quartz veins, up to 7 centimetres wide, containing sphalerite and lesser amounts of pyrite, galena and chalcopyrite. The Le Roy occurrence (103P 163) is one of the largest of these veins.

Combined (measured and indicated) reserves at Ajax are 178,540,000 tonnes grading 0.07 per cent molybdenum; grade given was 0.121 per cent MoS₂, conversion to Mo using a factor of 1.6681; total reserves of 417.3 million tonnes grading 0.09 per cent MoS₂ (or 0.05 percent Mo) (CIM Special Volume 15 (1976), Table 3, page 422).

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- EMPR OF 1986-2; 1992-1
- EMPR PF (*Newmont, Maps and Various Drill Core Logs, 1967; *Woodcock, J.R., Carter, N.C. (1976) Paper 46)
- EMR MIN BULL MR 223 B.C. 307
- EMR MP CORPFILE (Kitsault Mines Ltd.)
- GSC MAP 307A; 315A; 1385A
- GSC MEM 175, p. 70
- CIM Spec. Vol.*15, pp. 467-469
- WWW <http://www.infomine.com/>

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/09

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 224**

NATIONAL MINERAL INVENTORY: 103P13 Ag11

NAME(S): **BLUE GROUSE** BLUE RIBBON

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 103P13W
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 57 19 N
LONGITUDE: 129 51 37 W
ELEVATION: 1497 Metres

NORTHING: 6201436
EASTING: 446285

LOCATION ACCURACY: Within 500M

COMMENTS: Portal of adit (Minister of Mines Annual Report 1938, p.B22).

COMMODITIES: Silver Zinc Lead Gold Copper
 Antimony Cadmium

MINERALS

SIGNIFICANT: Sphalerite Boulangerite Pyrite Galena Arsenopyrite

 Pyrrhotite Chalcopyrite

COMMENTS: Massive to disseminated.

ASSOCIATED: Quartz Calcite Siderite Ankerite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Massive Disseminated

CLASSIFICATION: Hydrothermal Epigenetic

TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

SHAPE: Tabular

MODIFIER: Faulted

DIMENSION: 91 Metres STRIKE/DIP: 035/50N

TREND/PLUNGE:

COMMENTS: Vein, 0.10 to 0.30 metres wide has been traced for 91 metres, strikes 020 to 056 degrees and dips 50 to 75 degrees northwest.

HOST ROCK

DOMINANT HOSTROCK: Plutonic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Middle Jurassic Tertiary	Hazelton	Salmon River	Coast Plutonic Complex

LITHOLOGY: Augite Diorite
 Argillite
 Greywacke
 Limestone

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

PHYSIOGRAPHIC AREA: Boundary Ranges

TERRANE: Stikine

COMMENTS: Situated at the western margin of the Stewart Complex.

INVENTORY

ORE ZONE: DUMP

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1938

SAMPLE TYPE: Bulk Sample

COMMODITY

GRADE

Silver	2982.0000	Grams per tonne
Gold	0.6900	Grams per tonne
Copper	0.4000	Per cent
Lead	6.8000	Per cent
Antimony	0.1000	Per cent
Zinc	19.5000	Per cent

COMMENTS: A 15.5 kilogram bulk sample of sorted ore.

REFERENCE: Minister of Mines Annual Report 1938, page B23.

CAPSULE GEOLOGY

The Blue Grouse deposit is located just west of the Cambria Icefield at headwaters of Glacier Creek, 8.5 kilometres east-northeast of Stewart. Several shipments of high grade lead-zinc-silver ore were produced from a vein discovered in 1937.

The deposit occurs at the southeastern margin of a 3.0 kilometre long, 2.0 kilometre wide Tertiary augite diorite stock which intrudes argillite, greywacke and limestone of the Middle Jurassic Salmon River Formation.

The deposit consists of 0.10 to 0.30 metre wide vein, striking 020 to 056 degrees and dipping 50 to 75 degrees northwest, within a

CAPSULE GEOLOGY

shear zone. The vein has been traced underground along strike for 91 metres and is displaced 5 metres by a dextral strike slip fault which strikes 156 degrees and dips 70 degrees southwest.

Mineralization consists of massive to disseminated sphalerite, boulangerite, pyrite, galena, arsenopyrite, with minor pyrrhotite and chalcopyrite in a gangue of quartz, calcite, siderite and ankerite. A 15.5 kilogram sample of sorted ore assayed 0.69 grams per tonne gold, 2982 grams per tonne silver, 0.4 per cent copper, 6.8 per cent lead, 19.5 per cent zinc and 0.1 per cent antimony (Minister of Mines Annual Report 1938, page B23). A series of chip samples indicated that the vein averages 1988 grams per tonne silver over an approximate width of 0.3 metres and a strike length of 30 metres (Property File - Chisholm, E.O. (1973) p. 6).

In 1968 and 1973, a total of 11 tonnes of sorted ore with an average grade of 4125 grams per tonne silver, 17.6 per cent lead and 19.9 per cent zinc were produced.

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- EMPR FIELDWORK 1983, pp. 149-163; 1984, pp. 316-341; 1985, pp. 217,218; 1986, pp. 81-102; 1988, pp. 233-240; 1990, pp. 235-243
- EMPR BULL 58; 63
- EMPR MAP 8
- GSC MAP 307A; 315A; 1385A

DATE CODED: 1985/07/24
DATE REVISED: 1989/06/03

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 225**

NATIONAL MINERAL INVENTORY: 103P3 Mo3

NAME(S): **KAY**, LAVA

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P03W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 08 17 N
LONGITUDE: 129 20 06 W
ELEVATION: 133 Metres

NORTHING: 6110206
EASTING: 478644

LOCATION ACCURACY: Within 1 KM

COMMENTS: Located on south side of Nass River, 23 kilometres southwest of Aiyansh (Assessment Report 6853).

COMMODITIES: Molybdenum

MINERALS

SIGNIFICANT: Pyrite Molybdenite Arsenopyrite
ASSOCIATED: Quartz Pyrite
ALTERATION: Chlorite Muscovite Epidote Albite Sericite
Powellite
ALTERATION TYPE: Propylitic Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Hydrothermal Porphyry
TYPE: L05 Porphyry Mo (Low F- type)
SHAPE: Irregular
MODIFIER: Fractured
DIMENSION:
COMMENTS: Quartz veins occupying northeast trending joints host mineralization.
STRIKE/DIP:
TREND/PLUNGE: 045/

HOST ROCK

DOMINANT HOSTROCK: Plutonic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Jurassic Tertiary	Bowser Lake	Undefined Formation	Coast Plutonic Complex

LITHOLOGY: Quartz Monzonite Porphyry
Quartz Feldspar Porphyry
Hornfels
Argillite
Greywacke
Alaskite Dike
Aplite Dike

HOSTROCK COMMENTS: Molybdenum showings occur on northern margin of Ponder Pluton. Bowser Lake Group is Middle to Upper Jurassic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Plutonic Rocks
METAMORPHIC TYPE: Contact
Bowser Lake
PHYSIOGRAPHIC AREA: Nass Depression
RELATIONSHIP: Syn-mineralization
GRADE: Hornfels

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1978
SAMPLE TYPE: Grab
COMMODITY: Molybdenum GRADE: 0.0700 Per cent
COMMENTS: Grab sample B from zone 2. Commodity is MoS2.
REFERENCE: Assessment Report 6853.

CAPSULE GEOLOGY

The Kay showing is located on the south side of the Nass River between Kwinyarh and Ansedagan creeks. The area has been investigated for porphyry molybdenum deposits periodically from 1966 to 1978.

The area is underlain by Middle to Upper Jurassic Bowser Lake Group argillite and greywacke intruded by granitic rocks of the Tertiary Coast Plutonic Complex. Several molybdenum showings occur along the northern limit of the Ponder Pluton and the Kay is one of these.

A quartz monzonite porphyry stock, trending northwest and

CAPSULE GEOLOGY

plunging west, is cut by later aplite and alaskite dykes. Visible molybdenite has been observed in northeast trending fracture filling quartz veins which also cut the stock. The stock is elliptical in shape and is 1200 by 600 metres in size. Two sets of conjugate joints are present and mineralization appears to be controlled by the northeast trending set. Propylitic alteration is evidenced by the presence of chlorite, muscovite and epidote in the hornfels and by albite and sericite in the stock.

Molybdenite occurs as rosettes in the stock, in quartz veins in the stock and rarely in hornfels. Fine grained disseminated molybdenite occurs in the dykes and rarely in the stock or on fractures. The quartz veins are generally irregular, short and widely spaced. Pyrite appears to be associated with the molybdenite mineralization and arsenopyrite occurs near the eastern extent of the stock. Powellite is frequently present on exposed surfaces of the stock.

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EMPR BULL 63; 64
EMPR FIELDWORK 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
EMR MP CORPFILE (MADSEN RED LAKE GOLD MINES LTD., NASS RIVER MINES)
GSC MAP 1385A

DATE CODED: 1985/07/24
DATE REVISED: 1989/12/12

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 226**

NATIONAL MINERAL INVENTORY: 103P5 Sia5

NAME(S): **RAMBLER**, RAMBLER QUARTZ

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 103P05W
BC MAP:

Open Pit Underground

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 24 28 N
LONGITUDE: 129 50 48 W
ELEVATION: 0198 Metres

NORTHING: 6140496
EASTING: 446391

LOCATION ACCURACY: Within 500M

COMMENTS: Location of open pit (Property File - Alldrick, D., Anyox Map 1986).

COMMODITIES: Silica Gold Silver

MINERALS

SIGNIFICANT: Quartz Pyrite Pyrrhotite Sphalerite

COMMENTS: Rare sphalerite.

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Stratiform
CLASSIFICATION: Hydrothermal Epigenetic Industrial Min.

TYPE: 107 Silica veins

DIMENSION: 0250 x 0010 Metres STRIKE/DIP: 034/50N

TREND/PLUNGE:

COMMENTS: Vein strikes for at least 250 metres with a thickness of 10 metres.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Jurassic
Upper Triassic

GROUP

Hazelton
Kunga

FORMATION

Undefined Formation
Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Argillite
Wacke
Grit
Volcanic

HOSTROCK COMMENTS: Host rocks belong to either the Hazelton Group or the Kunga Group.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline

PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)

TERRANE: Stikine

Wrangell

METAMORPHIC TYPE: Regional

RELATIONSHIP: Syn-mineralization

GRADE: Greenschist

COMMENTS: Situated in a roof pendant within the Coast Plutonic Complex.

CAPSULE GEOLOGY

The Rambler Quartz mine is located about 1.0 kilometre west of Granby Bay on Observatory Inlet, 2.5 kilometres southwest of Anyox. Quartz was mined between 1920 and 1924 as a source of silica flux for the copper smelter at Anyox.

The area is underlain by the western margin of a 14.4 by 9.6 kilometre roof pendant within the Coast Plutonic Complex. These rocks have been correlated with the Lower Jurassic Hazelton Group (Grove, T., 1986), but have also been correlated with the Upper Triassic Kunga Group sediments and the Karmutsen Formation (Vancouver Group) volcanics (Sharp, R.J., 1980, M.Sc. Thesis).

Volcanics consist of massive and pillow andesitic to basaltic flows with minor mafic tuffs, that have been altered to greenstone in places as a result of regional greenschist metamorphism. The overlying sedimentary sequence contains argillite, siltstone and sandstone with minor limestone and chert. Deformation consists of north-northeast trending folds with later east-northeast trending folds.

The Rambler quartz vein is developed along a bedding plane in a steeply dipping sequence of argillite and wacke (grit). The vein strikes 034 degrees for at least 250 metres and dips 50 degrees northwest with a true width of 10 metres. The vein consists of milky white quartz mineralized with traces of pyrite, pyrrhotite and rare sphalerite. The most intensely mineralized portion of the vein assayed trace gold and silver (Property File - Bancroft, J.A. (1918) p. 53).

The Rambler vein produced 107,712 tonnes of silica between 1920 and 1924. The quartz was reported to be barren of precious metals.

BIBLIOGRAPHY

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EMPR PF (*Bancroft, J.A. (1918) Report; Pell, J. (1982): Silica
Prospects in the Anyox Area, B.C.; Alldrick, D., (1986) Anyox
Map)
EMPR OF 1987-15, p. 35
EMPR BULL 63
EMPR MAP 8
GSC MAP 307A; 1385A
Sharp, R.J. (1908): The Geology, Geochemistry & Sulphur Isotopes of
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Thesis

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/29

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 227**

NATIONAL MINERAL INVENTORY: 103P5 Sia3

NAME(S): **LARCOM ISLAND**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P05E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 27 41 N
LONGITUDE: 129 44 55 W
ELEVATION: Metres

NORTHING: 6146391
EASTING: 452664

LOCATION ACCURACY: Within 500M

COMMENTS: Location of trench (Minister of Mines Annual Report 1947 p.96).

COMMODITIES: Silver Gold Silica

MINERALS

SIGNIFICANT: Pyrite Sphalerite Galena
ASSOCIATED: Quartz
ALTERATION: Quartz
ALTERATION TYPE: Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Stockwork
CLASSIFICATION: Hydrothermal Epigenetic Industrial Min.
TYPE: I07 Silica veins I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Jurassic	Hazelton	Undefined Formation	
Upper Triassic	Kunga	Undefined Formation	

LITHOLOGY: Dike
Argillite

HOSTROCK COMMENTS: Sediments are correlative to either the Hazelton Group or the Kunga Group. Mineralized dyke of unknown affinity.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)
TERRANE: Stikine Bowser Lake
METAMORPHIC TYPE: Regional RELATIONSHIP: Syn-mineralization GRADE: Greenschist
COMMENTS: Situated in Bowser Lake clastic wedge on the Stikinia Terrane.

CAPSULE GEOLOGY

The Larcom Island showing is located on the north end of Larcom Island in the Hastings Arm of Observatory Inlet. Silica was reported to have been shipped from here to the copper smelter at Anyox for flux.

The area is underlain by the western margin of a 14.4 by 9.6 kilometre roof pendant within the Coast Plutonic Complex. These rocks have been correlated with the Jurassic Hazelton Group (Grove, T., 1986), but have also been correlated with the Upper Triassic Kunga Group sediments and the Karmutsen Formation (Vancouver Group) volcanics (Sharp, R.J., 1980, M.Sc. Thesis).

Volcanics consist of variably chloritized mafic flows and tuffs overlain by a sequence of sediments containing argillite, siltstone and sandstone with minor limestone and chert. These rocks have been regionally metamorphosed to greenschist grade and have been subjected to a north-northeast trending phase and a later east-northeast trending phase of folding.

The Larcom Island occurrence consists of a pyritic, silicified and shattered dyke cutting argillite. The dyke, exposed in a 9.0 metre long trench on the beach, contains veinlets and lenses of white and blue quartz. The quartz itself contains some pyrite, sphalerite and galena. A sample assayed trace gold and 37.7 grams per tonne silver.

Seven thousand tonnes were reported to have been removed from this property to the Anyox Copper Smelter for silica flux.

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EMPR AR *1947-A96
EMPR PF (Alldrick, D. (1986) Anyox Map)
EMPR FIELDWORK 1985, pp. 211-216; 1988, pp. 233-240; 1990, pp. 235-243

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1331
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR BULL 63
EMPR MAP 8
GSC MAP 307A; 1385A

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/31

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 228**

NATIONAL MINERAL INVENTORY: 103P5 Mo3

NAME(S): **MOLY MAY**, MOLLY MACK, MOLY MAY EAST,
MOLY MAY WEST, MOLY MAY SOUTH

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 103P05W
BC MAP:
LATITUDE: 55 21 29 N
LONGITUDE: 129 47 36 W
ELEVATION: Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Location of Molly Mack showing (Assessment Report 10898, Fig. 3).

MINING DIVISION: Skeena
UTM ZONE: 09 (NAD 83)
NORTHING: 6134923
EASTING: 449705

COMMODITIES: Molybdenum Gold Silver

MINERALS

SIGNIFICANT: Molybdenite Pyrite
COMMENTS: Disseminations and blebs.
ASSOCIATED: Quartz
ALTERATION: Kaolinite Sericite Quartz
ALTERATION TYPE: Argillic Sericitic Silicific'n
MINERALIZATION AGE: Eocene
ISOTOPIC AGE: 48.3 +/- 1.9 Ma DATING METHOD: Potassium/Argon MATERIAL DATED: Biotite

DEPOSIT

CHARACTER: Disseminated Stockwork Vein
CLASSIFICATION: Porphyry Hydrothermal Epigenetic
TYPE: L05 Porphyry Mo (Low F- type)
DIMENSION: 8000 x 0500 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: Four zones occur in semi-circular 8000 by 500 metre area.

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Eocene			Alice Arm Intrusion

ISOTOPIC AGE: 48.3 +/- 1.9 Ma
DATING METHOD: Potassium/Argon
MATERIAL DATED: Biotite

LITHOLOGY: Quartz Monzonite
Alaskite
Pegmatite
Biotite Granite

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)
TERRANE: Plutonic Rocks
COMMENTS: Adjacent to the Anyox roof pendant within the Coast Plutonic Complex.

INVENTORY

ORE ZONE: EAST REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1981
SAMPLE TYPE: Chip
COMMODITY GRADE
Molybdenum 0.2540 Per cent
COMMENTS: Composite chip sample over 5 metres.
REFERENCE: Assessment Report 10120, page 16.

CAPSULE GEOLOGY

The Molly Mack prospect is located on the west side of Observatory Inlet about 7 kilometres south of Anyox. It has been examined recently for porphyry related molybdenum/gold mineralization.
The deposit is situated in an Eocene, northeast trending, 2.5 by 1.0 kilometre quartz monzonite stock (The Moly May stock) that has intruded Jurassic Hazelton Group(?) sediments and volcanics. A sequence of argillite, siltstone and greywacke underlie Granby and Bocking Peninsulas north of the Moly May stock. Granodiorite of the Coast Plutonic Complex borders on the Moly May stock to the west. The Moly May stock is similar to other Alice Arm Intrusions, which generally form small porphyritic molybdenum bearing bodies of quartz monzonite.
The deposit consists of four zones of molybdenite mineralization

CAPSULE GEOLOGY

developed in a semicircular 8000 metre long, 500 metre wide zone of altered and quartz stockwork veined quartz monzonite (alaskite). The zones occur along the northern and western margins of the Moly May stock, peripheral to a core of unaltered quartz monzonite (alaskite). In this zone plagioclase and orthoclase are altered to kaolinite and sericite. Quartz vein stockworks are best developed near the mineralized zones.

The East zone, near the shore of Observatory Inlet, was discovered first. It consists of 5 major showings including the Molly Mack showing on the shoreline. Mineralization consists of disseminated pyrite in quartz veined aplitic pegmatite and associated biotite rich granite. Mineralization occurs within a 300 by 100 metre zone of alteration in quartz monzonite. The pegmatite is likely a late stage of intrusion of the Moly May stock. Composite samples of rock chips have assayed between 14 parts per million and 0.254 per cent molybdenum (Assessment Report 10120, page 16). Gold values have ranged from 0.069 to 59.99 grams per tonne and silver values have ranged from 0.34 to 50.73 grams per tonne (Property File - Burton, A. 1987). Three drill holes encountered largely unaltered quartz monzonite with minor sulphides.

The West zone consists of 12 showings in a 200 by 250 metre zone of altered, quartz veined and molybdenum-iron oxide stained sericitic quartz monzonite. The West zone occurs about 700 metres west of the East zone. Mineralization consists of disseminations and blebs of molybdenite and pyrite in the altered quartz monzonite. Assays of composite samples of rock chips have ranged from 5 parts per million to 0.262 per cent molybdenum (Assessment Report 10120, page 11).

The South zone, 1.5 kilometres southwest of the West zone, consists of four showings containing up to 10 per cent disseminated molybdenite in heavily altered and silicified quartz monzonite. The molybdenite has been observed to replace biotite.

The Southwest zone, south of the South zone, was discovered and diamond drilled in 1988. Similar molybdenite mineralization containing significant gold values was encountered (Personal Communication - Burton, A. 1989).

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EMPR FIELDWORK 1985, pp. 211-216; 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
EMPR PF (Enfield Resources Annual Report 1982; Notes and Maps; Alldrick, D. (1986) Anyox Map; Woodcock, J.W., Carter N.C. (1986) Geology and Geochemistry of the Alice Arm Molybdenum Deposits; Burton, A. (1987) Report in Prospectors Airways Co. Ltd. Prospectus; In 103P 022 - Fox, J.S. (1988): First Summary of Field Work; Hajek, J.H (1988): Moly May Property, An Orientation Survey and Appendices, Zelon Mineral Exploration Group; Abdel-Rahman, A. et al (1988): Geological Prospecting Report; Taiga Consultants Ltd. (1992): Geological, Geochemical and Geophysical Report on the Anyox Area in 103P 021)
GSC MAP 1385A
GCNL #152,#196,#212, 1982; #4,#28, 1989
IPDM May/June 1982
N MINER Jun.3, 1982; Jul.4, 1988

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/31

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 229**

NATIONAL MINERAL INVENTORY: 103P12 Ag17

NAME(S): **DOLLAR BILL**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P12E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 34 29 N
LONGITUDE: 129 33 24 W
ELEVATION: 1158 Metres

NORTHING: 6158890
EASTING: 464902

LOCATION ACCURACY: Within 1 KM

COMMENTS: Location centered on showing (Minister of Mines Annual Report 1968 p.59).

COMMODITIES: Silver Lead Zinc Copper

MINERALS

SIGNIFICANT: Pyrite Arsenopyrite Galena Sphalerite

COMMENTS: As near massive lenses in vein.

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein

CLASSIFICATION: Hydrothermal Epigenetic

TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

DIMENSION: 0100 x 0001 Metres

STRIKE/DIP:

TREND/PLUNGE:

COMMENTS: Vein strikes northwest, dips 45 degrees southwest.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Upper Triassic	Stuhini	Undefined Formation	

LITHOLOGY: Black Siltstone
Conglomerate
Biotite Lamprophyre Dike

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

PHYSIOGRAPHIC AREA: Boundary Ranges

TERRANE: Stikine

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

COMMENTS: At the southern end of the Stewart Complex (Island Arc Assemblage).

INVENTORY

ORE ZONE: VEIN

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1968

SAMPLE TYPE: Chip

COMMODITY

GRADE

COMMODITY	GRADE	Units
Silver	13.7000	Grams per tonne
Copper	0.0500	Per cent
Lead	0.3700	Per cent
Zinc	0.1500	Per cent

COMMENTS: A 0.9 metre chip sample across vein, trace gold.

REFERENCE: Minister of Mines Annual Report 1968, page 60.

CAPSULE GEOLOGY

The Dollar Bill showing is located west of the Kitsault River on the northeast slope of Tsimstol Mountain, 11.0 kilometres north-northwest of Alice Arm. The area was explored in 1968.

The area is underlain by a sequence of volcanics and sediments of the Upper Triassic Stuhini Group, the Lower Jurassic Hazelton Group and the Middle Jurassic Spatsizi Group. The sequence is folded into the doubly plunging, north-northwest trending Kitsault River Syncline and has been regionally metamorphosed to greenschist facies.

The showing consists of a 0.9 metre wide quartz vein developed along a shear zone in interbedded black siltstones and brown pebble conglomerate of the Stuhini Group. The vein strikes northwest for at least 100 metres and dips 45 degrees southwest.

The vein is largely barren except near its south end where it is cut by a narrow northeast striking biotite lamprophyre dyke. Here, the vein contains near massive lenses of fine-grained pyrite and arsenopyrite with minor galena and sphalerite. A 0.9 metre chip sample across the vein assayed trace gold, 13.7 grams per tonne

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RUN TIME: 12:06:33

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CAPSULE GEOLOGY

silver, 0.05 per cent copper, 0.37 per cent lead and 0.15 per cent zinc (Minister of Mines Annual Report 1968, page 60).

BIBLIOGRAPHY

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EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp. 235-243
EMPR OF 1986-2
EMPR MAP 8
EMPR BULL 63
GSC MAP 307A; 1385A

DATE CODED: 1985/07/24
DATE REVISED: 1989/03/28

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 230**

NATIONAL MINERAL INVENTORY: 103P14 Mo1

NAME(S): **EASTER, THM**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P14W
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 49 12 N
LONGITUDE: 129 24 59 W
ELEVATION: 1434 Metres

NORTHING: 6186125
EASTING: 473910

LOCATION ACCURACY: Within 1 KM

COMMENTS: Location of molybdenite occurrence on south end of THM 2 claim
(Assessment Report 955, Map 1).

COMMODITIES: Molybdenum Lead Zinc

MINERALS

SIGNIFICANT: Molybdenite Pyrite Galena Sphalerite
ASSOCIATED: Quartz
ALTERATION: Sericite
ALTERATION TYPE: Sericitic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated Stockwork
CLASSIFICATION: Porphyry Hydrothermal Epigenetic
TYPE: L05 Porphyry Mo (Low F- type) I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

Middle Jurassic
Tertiary

GROUP

Spatsizi

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Coast Plutonic Complex

LITHOLOGY: Biotite Granodiorite
Pegmatite Dike
Aplite Dike
Argillite
Siltstone
Greywacke

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Boundary Ranges
TERRANE: Stikine Bowser Lake
METAMORPHIC TYPE: Contact RELATIONSHIP: Syn-mineralization GRADE: Hornfels
COMMENTS: Stock intrudes Bowser Lake foredeep clastic wedge on Stikinia Terrane.

CAPSULE GEOLOGY

The Easter showing is located 2.5 kilometres northeast of White Lake, 38.5 kilometres north of Alice Arm. The area has been periodically explored for molybdenite mineralization.

The showing consists of a west trending body of biotite granodiorite, at least 2000 metres long and 240 to 370 metres wide, intruding folded Middle Jurassic Spatsizi Group greywackes and argillite. These sediments, which strike 100 to 110 degrees, are granitized to the south of the intrusion but are only slightly hornfelsed near the contacts. The granodiorite is slightly sericitized near its margins. A series of 15 to 90 metre wide aplite and pegmatite dyke swarms are developed within the intrusive and in the enclosing sediments. They form tight stockworks to the northeast, comprising up to 30 per cent of the rock. Individual dykes are up to 6 metres wide.

Molybdenite occurs as disseminations in the aplite and pegmatite dykes and in quartz veinlets within the granodiorite and sediments. Molybdenite is widespread in small amounts along fractures within the granodiorite. Pyrite, galena and sphalerite occur in a few quartz veins up to 2.5 centimetres wide.

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EMPR ASS RPT *955, 8373, 9635
EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp. 235-243
EMPR OF 1986-2

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

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GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1337
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR BULL 63
EMPR MAP 8
GSC MAP 1385A

DATE CODED: 1985/07/24
DATE REVISED: 1989/05/26

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 231**

NATIONAL MINERAL INVENTORY: 103P3 Mo

NAME(S): **VALLEY, RIDGE, ZOLZAP, HELDAY**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P03W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 09 29 N
LONGITUDE: 129 15 18 W
ELEVATION: 333 Metres

NORTHING: 6112410
EASTING: 483752

LOCATION ACCURACY: Within 1 KM

COMMENTS: Location of Ridge showing, Valley showing slightly west of Ridge (Assessment Report 914).

COMMODITIES: Molybdenum

MINERALS

SIGNIFICANT:	Pyrite	Molybdenite	Pyrrhotite	Chalcopyrite
ASSOCIATED:	Quartz			
ALTERATION:	Silica	Sericite	Ferrimolybdenite	
ALTERATION TYPE:	Silicific'n	Sericitic		Oxidation
MINERALIZATION AGE:	Unknown			

DEPOSIT

CHARACTER:	Vein	Stockwork	Disseminated
CLASSIFICATION:	Hydrothermal	Porphyry	
TYPE:	L05	Porphyry Mo (Low F- type)	
SHAPE:	Irregular		
MODIFIER:	Fractured		

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

Jurassic
Tertiary

GROUP

Bowser Lake

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Coast Plutonic Complex

LITHOLOGY: Quartz Monzonite Porphyry
Alaskite Dike
Hornfels
Granodiorite
Greywacke

HOSTROCK COMMENTS: Bowser Lake Group is Middle to Upper Jurassic in age. Stocks occur near northern margin of Ponder Pluton.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Plutonic Rocks
METAMORPHIC TYPE: Contact

PHYSIOGRAPHIC AREA: Nass Depression
Bowser Lake
RELATIONSHIP: Syn-mineralization
GRADE: Hornfels

INVENTORY

ORE ZONE: DRILLHOLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Drill Core

YEAR: 1966

COMMODITY

Molybdenum

GRADE

0.0900

Per cent

COMMENTS: Drillhole V-11 from 4 to 121 metres. Commodity is MOS2.
REFERENCE: Assessment Report 6232.

CAPSULE GEOLOGY

The Valley and Ridge showings are located on the east bank of the Nass River south of Zolzap Creek. The area has periodically been explored for molybdenite mineralization.

The area is underlain by Middle to Upper Jurassic Bowser Lake Group argillaceous sediments intruded by the Ponder granodiorite pluton of the Tertiary Coast Plutonic Complex. Several molybdenum showings occur along the northern limit of the Ponder Pluton and the Valley and Ridge showings are in this group.

There are several molybdenite showings in this area. Near the north boundary of the Valley and Ridge claims, two small circular stocks of porphyritic quartz monzonite occur 600 metres apart on opposite sides of a lineament (fault?). The stocks intrude granodiorite except along the northern margins where they are in contact with hornfelsed sediments.

CAPSULE GEOLOGY

Molybdenite mineralization is exposed in trenches near the central part of the Valley stock. The mineralization occurs in quartz veinlets and fractures and as disseminations in quartz monzonite porphyry, alaskite dykes and hornfelsed greywacke. Pyrite is common in the intrusives and chalcopyrite is present in trace amounts in quartz veinlets. Ferrimolybdate is occasionally visible on fracture surfaces and iron oxide staining is common. On other claims in the area, shear zones in sedimentary rocks contain pyrite, pyrrhotite and minor chalcopyrite. The intrusives are moderately fractured and, locally, silicified and sericitized. In 1966 samples from drillhole V-11 over the entire length of the hole (from 4 to 121 metres) assayed 0.09 per cent molybdenite (Assessment Report 6232).

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EMPR ASS RPT 913, 914, *6232, 6604, *8350, 8856
EMPR MAP 8
EMPR FIELDWORK 1988, pp. 233-240; 1990, pp. 235-243
EMPR BULL 63; 64
GSC MAP 1385A
GSC SUM RPT 1923, P.32
EMR MP CORPFILE (Madsen Red Lake Gold Mines Ltd., Nass River Mines Ltd.)

DATE CODED: 1985/07/24
DATE REVISED: 1989/12/14

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1341
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR MAP 8
EMPR ASS RPT *794, 8856
EMPR FIELDWORK 1988, pp. 233-240; 1990, pp. 235-243
GSC SUM RPT 1923-32
GSC MAP 1385A
EMR MP CORPFILE (Madsen Lake Gold Mines Ltd., Nass River Mines Ltd.)

DATE CODED: 1985/07/24
DATE REVISED: 1989/12/13

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 233**

NATIONAL MINERAL INVENTORY: 103P14 Ag1

NAME(S): **SAULT, KIT, FROG,
KITSAULT**

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 103P14W 103P11W
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 45 04 N
LONGITUDE: 129 29 24 W
ELEVATION: 815 Metres

NORTHING: 6178488
EASTING: 469244

LOCATION ACCURACY: Within 1 KM

COMMENTS: Location of outcrop on east end of lake (Assessment Report 15126,
Figure 3).

COMMODITIES: Zinc Lead Silver Strontium

MINERALS

SIGNIFICANT: Pyrite Sphalerite Strontianite Galena Arsenopyrite

Greenockite
COMMENTS: Lenses and laminae.

ASSOCIATED: Barite Celestite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratiform Concordant Massive
CLASSIFICATION: Exhalative Syngenetic
TYPE: G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn
DIMENSION: 800 x 8 Metres STRIKE/DIP: 090/29N TREND/PLUNGE:
COMMENTS: Horizon, up to 8 metres thick, displays continuous mineralization for
800 metre strike length. Dip varies from 20 to 38 degrees north.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic Hazelton Undefined Formation

LITHOLOGY: Andesite
Diamictite
Tuffaceous Andesite Breccia
Breccia
Chert
Black Limestone
Andesitic Tuff
Dacitic Tuff
Basaltic Flow

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

PHYSIOGRAPHIC AREA: Boundary Ranges

TERRANE: Stikine

METAMORPHIC TYPE: Regional

RELATIONSHIP: Post-mineralization

GRADE: Greenschist

COMMENTS: Situated in the Stewart Complex (Island Arc Assemblage).

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1989
SAMPLE TYPE: Chip
COMMODITY GRADE
Silver 73.3600 Grams per tonne
Lead 1.3000 Per cent
Zinc 4.6000 Per cent
COMMENTS: Continuous chip sample across 2.35 metres. Results from drilling
were lower.
REFERENCE: George Cross Newsletter #235, Dec. 7, 1989.

INVENTORY

ORE ZONE: WEST

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1966

SAMPLE TYPE: Chip

COMMODITY

GRADE

Silver

1.5000

Grams per tonne

Lead

1.3040

Per cent

Zinc

4.8300

Per cent

COMMENTS: A 1.0 metre chip sample from the West showing.

REFERENCE: Assessment Report 15126, page 13.

CAPSULE GEOLOGY

The Sault showing occurs just south of Kitsault Lake, 30.5 kilometres north of Alice Arm. This zinc showing has been extensively investigated since its discovery in 1966.

The area is underlain by a sequence of volcanic and sedimentary rocks of the Upper Triassic Stuhini Group, the Lower Jurassic Hazelton Group and the Middle Jurassic Spatsizi Group. The sequence is deformed into the north-northwest trending Mt. McGuire anticline, and is regionally metamorphosed to greenschist facies.

The showing consists of a stratabound exhalative sulphate horizon with associated breccia, chert, diamictite and black limestone. The horizon occurs within a section of andesitic to dacitic tuff, lapilli tuff, breccia and basaltic flows of the Hazelton Group. These generally dip 15 to 20 degrees north.

The sulphate horizon extends discontinuously for 6.5 kilometres, but displays relatively continuous mineralization along a 800 metre strike length. The horizon is up to 8 metres thick, strikes 090 degrees and dips 20 to 38 degrees north.

The horizon consists of banded barite-celestite, locally interbedded with limestone and chert, which contains lenses and laminae of pyrite, sphalerite and galena.

A 1989 exploration program resulted in the delineation of a new structurally controlled mineralized system known as the Frog North and Frog South showings which have a minimum 700 metre strike length. A continuous chip sample from the Frog South showing across 2.35 metres assayed 4.6 per cent zinc, 1.3 per cent lead and 73.36 grams per tonne silver (George Cross Newsletter #235, Dec.7, 1989).

See Torbrit (103P 191) for more details.

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EMPR ASS RPT 1001, 13650, *15126, *15364
EMPR BULL 63
EMPR EXPL 1979-262; 1985-C377,C378; 1986-C431; 1987-C363,C364
EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp. 235-243; 2000, pp. 313-326 ; 2001, pp. 177-196
EMPR MAP 8
EMPR OF 1986-2; EMPR GEM 1999-2
EMPR PF (Cominco Exploration, FAME Application, 1987)
GSC MAP 307A; 315A; 1385A
GSC P *91-2, pp. 181-185
GCNL #235, 1989
V STOCKWATCH Dec. 7, 1989

DATE CODED: 1989/05/13
DATE REVISED: 1997/12/18

CODED BY: PSF
REVISED BY: LJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 234**

NATIONAL MINERAL INVENTORY: 103P6 Mo4

NAME(S): **BELL MOLY**, MOLY, BELL MOLYBDENUM

STATUS: Developed Prospect

MINING DIVISION: Skeena

REGIONS: British Columbia

NTS MAP: 103P06W

BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 27 44 N

LONGITUDE: 129 20 06 W

ELEVATION: 722 Metres

NORTHING: 6146280

EASTING: 478818

LOCATION ACCURACY: Within 500M

COMMENTS: Location of drill hole S15 in the main zone, approximately 10 kilometres east of Alice Arm (Property File - Drill hole location map).

COMMODITIES: Molybdenum Lead Zinc Silver

MINERALS

SIGNIFICANT: Molybdenite Pyrite Pyrrhotite Galena Sphalerite

ASSOCIATED: Quartz

ALTERATION: Sericite Carbonate Orthoclase

Chlorite

Chloritic

ALTERATION TYPE: Sericitic

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stockwork

Vein

CLASSIFICATION: Porphyry

Hydrothermal

Epigenetic

TYPE: L05 Porphyry Mo (Low F- type)

I05

Polymetallic veins Ag-Pb-Zn±Au

SHAPE: Cylindrical

MODIFIER: Faulted

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

Jurassic

Eocene

GROUP

Bowser Lake

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Alice Arm Intrusion

ISOTOPIC AGE: 53.3 Ma

DATING METHOD: Potassium/Argon

MATERIAL DATED: Biotite

LITHOLOGY: Porphyritic Quartz Monzonite

Porphyritic Granodiorite

Siltstone

Greywacke

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

PHYSIOGRAPHIC AREA: Boundary Ranges

TERRANE: Bowser Lake

METAMORPHIC TYPE: Contact

RELATIONSHIP:

GRADE: Hornfels

COMMENTS: Stock intrudes the Stewart Complex (Island Arc Assemblage).

INVENTORY

ORE ZONE: BELL MOLY

REPORT ON: Y

CATEGORY: Unclassified

YEAR: 1967

QUANTITY: 32528606 Tonnes

COMMODITY

GRADE

Molybdenum

0.0600

Per cent

COMMENTS: Includes 19,183,350 tonnes grading 0.08% Mo (0.143% MoS₂). Grade given for total tonnage 0.11% MoS₂; conversion to Mo using factor 1.6681.

REFERENCE: Highland-Bell Ltd. Annual Report 1967.

CAPSULE GEOLOGY

The Bell Moly occurrence is located about 10 kilometres east of Alice Arm. Extensive exploration of this deposit in the past has resulted in the definition of considerable molybdenum reserves.

The deposit is contained in a small elongate Eocene stock of the Alice Arm Intrusion. The stock intrudes folded Middle-Upper Jurassic Bowser Lake Group siltstones and greywackes. These sediments are contact metamorphosed to biotite hornfels 335 to 670 metres outward from the stock. They are overlain by olivine basalts of Pleistocene age to the north and south of the stock.

The stock is a 670 by 335 metre, east-northeast trending body of quartz monzonite. The stock consists of three phases. The main phase consists of leucocratic porphyritic quartz monzonite that forms

CAPSULE GEOLOGY

the core. It grades into a porphyritic granodiorite/quartz monzonite at the margins. A later, post-mineralization quartz-eye porphyritic quartz monzonite occurs in the southwestern part of the stock. The stock is cut by 0.3-metre wide dykes of fine-grained alaskite. These rocks are all intruded by northeast striking 0.3 to 0.5-metre wide lamprophyre and basaltic to andesitic dykes. The stock is segmented by several northwest trending faults.

The stock has undergone several forms of alteration. Sericite-carbonate alteration of plagioclase is most common. Plagioclase is also altered to potassium feldspar, especially along margins of quartz veinlets. Potassic alteration is confined largely to the central leucocratic porphyritic quartz monzonite. In the quartz eye quartz monzonite and porphyritic granodiorite/quartz monzonite, biotite is altered to a mixture of chlorite and sericite. Argillic and sericitic alteration is common in fault zones.

Mineralization is developed in the porphyritic quartz monzonite and biotite hornfelsed siltstone and greywacke in two zones, the Main zone at the eastern and northern margins of the stock, and the Southwest zone, about 1370 metres southwest of the Main zone. Molybdenite occurs as selvages in 0.5 to 1.0 centimetre steeply dipping quartz veinlets. Mineralized and barren quartz veining has developed in four stages. An initial stage of barren quartz veining is followed by steeply inclined quartz-molybdenite-pyrite veins. These are locally offset by shallow dipping quartz-molybdenite veins and fractures. Quartz-carbonate veins at least 2 centimetres in diameter, containing variable amounts of pyrite, pyrrhotite, galena and sphalerite form the fourth stage of veining.

Unclassified reserves at Bell Moly are 32,528,606 tonnes grading 0.06 per cent molybdenum; includes 19,183,350 tonnes grading 0.08 per cent molybdenum (or 0.143 per cent MoS₂); grade given for total tonnage was 0.11 per cent MoS₂; conversion to Mo using a factor of 1.6681; tungsten detected in drill cores is of unknown economic significance (Highland-Bell Ltd. Annual Report 1967).

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- EMPR EXPL 1976-165
- EMPR ASS RPT 814, 5949, 6082, 6403, 6447
- EMPR BULL 63; *64, pp. 96-99
- EMPR FIELDWORK 1976, p. 58; 1977, p. 69; 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp. 235-243
- EMPR OF 1986-2; 1992-1
- EMPR PF (*Woodcock, J.R., Carter, N.C. (1976) Paper 46; Bell Molybdenum Mines Ltd. Prospectus, 1967; Bell Molybdenum Mines Annual Report, 1982; *Various maps, sections and core logs)
- EMPR GEOLOGY 1976-119; 1977/81-142,143
- EMPR MAP 8; 65 (1989)
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- EMR MP RESFILE (Moly)
- EMR MIN BULL MR 223 B.C. 304
- CIM Spec. Vol.*15, pp. 465-466
- GCNL #142, 1975; #67, 1976; #88, 1980; #88, 1981; #103, 1982; #114, 1983; #4,#95,#173, 1985; #170, 1986
- N MINER Apr.24, 1980; Oct.4, 1984; Jan.10, 1985
- CMH 72/73, p. 45; 85/86, p. 61

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/13

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 235**

NATIONAL MINERAL INVENTORY:

NAME(S): **DOLLY**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P13W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 58 39 N
LONGITUDE: 129 59 47 W
ELEVATION: 1445 Metres

NORTHING: 6204024
EASTING: 437822

LOCATION ACCURACY: Within 500M

COMMENTS: Surface trace of vein, 4.5 kilometres north-northwest of Stewart on the slope of Mount Dolly (Assessment Report 12620).

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Sulphide
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I02 Intrusion-related Au pyrrhotite veins
DIMENSION:
COMMENTS: Vein

STRIKE/DIP: 090/

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Lower Jurassic	Hazelton	Unuk River	

LITHOLOGY: Siltstone
Argillite
Tuff

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Boundary Ranges

RELATIONSHIP:

GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Grab
COMMODITY

YEAR: 1983

GRADE
8.2600 Grams per tonne

REFERENCE: Assessment Report 12620.

CAPSULE GEOLOGY

The Dolly showing consists of a 0.9 metre wide massive sulphide vein striking 090 degrees. The vein has been traced for 26 metres and is hosted in siltstone/argillite and tuff of the Lower Jurassic Unuk River Formation (Hazelton Group). A grab sample from the vein assayed 8.26 grams per tonne gold (Assessment Report 12620).

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EMPR ASS RPT *12620
EMPR FIELDWORK 1983, pp. 149-163; 1984, pp. 316-341; 1985, pp. 217, 218; 1986, pp. 81-102; 1988, pp. 233-240; 1990, pp. 235-243
EMPR BULL 58; 63
EMPR MAP 8
GSC MAP 215A; 315A; 1385A

DATE CODED: 1989/05/24
DATE REVISED: 1989/12/08

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REVISED BY: GO

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FIELD CHECK: N

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MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1347
REPORT: RGEN0100

MINFILE NUMBER: **103P 236**

NATIONAL MINERAL INVENTORY:

NAME(S): **MT. PRIESTLY**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P07W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 15 05 N
LONGITUDE: 128 52 54 W
ELEVATION: 1800 Metres

NORTHING: 6122773
EASTING: 507522

LOCATION ACCURACY: Within 5 KM

COMMENTS: Located on Mt. Priestly, approximately 7 kilometres east of Aiyansh (#49 on Fig. 19 Energy, Mines and Petroleum Res. Bulletin 64, 1981).

COMMODITIES: Molybdenum

MINERALS

SIGNIFICANT: Molybdenite
COMMENTS: Molybdenite assumed.
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Unknown
TYPE: L05 Porphyry Mo (Low F- type)

HOST ROCK

DOMINANT HOSTROCK: Plutonic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Triassic-Jurassic	Hazelton	Unnamed/Unknown Formation	Coast Plutonic Complex
Tertiary			

LITHOLOGY: Granite
Sediment/Sedimentary

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Plutonic Rocks

Bowser Lake

PHYSIOGRAPHIC AREA: Hazelton Ranges

CAPSULE GEOLOGY

The Mt. Priestly showing is located to the northeast of the Snafu (103P 232) and Kay (103P 225) showings, somewhere on Mt. Priestly.

The area is underlain by Upper Jurassic to Cretaceous sedimentary rocks including part of the upper Hazelton Group and possibly the Bowser Lake Group. These sediments are intruded by a granitic stock of the Tertiary Coast Plutonic Complex.

Molybdenum (assumed molybdenite) is reported to occur in the granitic stock, but no other information is available. The showing is probably similar to the porphyry molybdenum showings in the area.

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EMPR BULL 63; *64
EMPR FIELDWORK 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
GSC MAP 1385A
GSC OF 3668

DATE CODED: 1985/07/24
DATE REVISED: 1989/12/12

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 236**

MINFILE NUMBER: **103P 237**

NATIONAL MINERAL INVENTORY: 103P12 Cu4

NAME(S): **VANGUARD EXTENSION**, VANGUARD

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P12E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 43 37 N
LONGITUDE: 129 33 44 W
ELEVATION: 844 Metres

NORTHING: 6175833
EASTING: 464689

LOCATION ACCURACY: Within 500M

COMMENTS: Location of portal of adit (Assessment Report 956, Map 4).

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite
ASSOCIATED: Quartz
ALTERATION: Pyrite Quartz Sericite
ALTERATION TYPE: Pyrite Silicific'n Sericitic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb) I02 Intrusion-related Au pyrrhotite veins

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Lower Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Andesite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine
METAMORPHIC TYPE: Regional
COMMENTS: At the western margin of the Stewart Complex (Island Arc Assemblage).
PHYSIOGRAPHIC AREA: Boundary Ranges
RELATIONSHIP:
GRADE: Greenschist

CAPSULE GEOLOGY

The Vanguard Extension showing is located 0.5 kilometres northwest of the West Kitsault River, 28.0 kilometres north-northwest of Alice Arm. A zone of copper mineralization was explored by tunnelling between 1928 and 1931.

The showing occurs at the western margin of a 10.0 kilometre long, northwest trending body of gossanous plagioclase-hornblende porphyritic andesite of the Lower Jurassic Hazelton Group. The andesite, informally called the Copper Belt, has been extensively pyritized and is variably silicified and sericitized along its length.

The showing consists of an undefined zone of pyrite and chalcopyrite in silicified andesite. Tunnelling failed to define the size and attitude of this zone.

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EMPR AR 1927-77; 1928-88; 1929-87; 1931-38; 1934-B17
EMPR ASS RPT *956, 9400, 19189
EMPR BULL 63
EMPR FIELDWORK 1985, pp. 219-224; 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
EMPR OF 1986-2
GSC MAP 307A; 315A; 1385A
GSC MEM 1975, p. 85
GSC SUM RPT 1928, p. 49A

DATE CODED: 1989/04/30
DATE REVISED: / /

CODED BY: PSF
REVISED BY:

FIELD CHECK: N
FIELD CHECK:

MINFILE NUMBER: **103P 238**

NATIONAL MINERAL INVENTORY: 103P3 Mo

NAME(S): **LUCKY**, TWIN, ALDER CREEK,
LAVA LAKE

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P03E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 02 41 N
LONGITUDE: 129 02 14 W
ELEVATION: 500 Metres

NORTHING: 6099769
EASTING: 497622

LOCATION ACCURACY: Within 500M
COMMENTS: Located 1 kilometre west of Lava Lake on the north side of Alder Creek
(Assessment Report 6871).

COMMODITIES: Molybdenum Copper

MINERALS

SIGNIFICANT: Pyrite Molybdenite Chalcopyrite Bornite
ASSOCIATED: Quartz
ALTERATION: Chlorite
ALTERATION TYPE: Chloritic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Breccia Disseminated
CLASSIFICATION: Porphyry Hydrothermal
TYPE: L05 Porphyry Mo (Low F- type) L04 Porphyry Cu ± Mo ± Au
SHAPE: Irregular
MODIFIER: Fractured Faulted

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Jurassic	Bowser Lake	Undefined Formation	
Tertiary			Coast Plutonic Complex

LITHOLOGY: Granodiorite Porphyry Dike
Granodiorite Porphyry Sill
Argillite
Greywacke
Siltstone

HOSTROCK COMMENTS: Bowser Lake Group is Middle to Upper Jurassic in age. Best mineralization in intrusives near contact.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline PHYSIOGRAPHIC AREA: Hazelton Ranges
TERRANE: Plutonic Rocks Bowser Lake
METAMORPHIC TYPE: Contact RELATIONSHIP: Syn-mineralization GRADE: Hornfels

CAPSULE GEOLOGY

The Lucky showing is located 1 kilometre west of Lava Lake on the north side of Alder Creek. The showings were discovered in 1971 and investigated again in 1978.

The area is underlain by siltstone, argillite and greywacke of the Middle to Upper Jurassic Bowser Lake Group intruded by Early Tertiary granodiorite porphyry dykes and sills of the Coast Plutonic Complex.

The vicinity of the showings is marked by a gossan formed by the presence of disseminated pyrite in the sediments and intrusives. The sediments have been hornfelsed within the contact aureole and the intrusives are locally brecciated. Molybdenite, chalcopyrite and rare bornite occur in coarse grained drusy quartz veins, in hairline fractures with quartz and in gouge zones representative of post-mineralization faulting. The best mineralization occurs within veins in the intrusives near the contact with hornfelsed sedimentary rocks. Quartz banded gangue zones were found to cut earlier veins and dyke contacts.

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EMPR ASS RPT *6871
EMPR GEM *1971-119
EMPR MAP 8
EMPR FIELDWORK 1988 pp. 233-240; 1990, pp. 235-243
EMPR EXPL 1978-E236

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1350
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR BULL 63; 64
GSC MAP 1385A

DATE CODED: 1985/07/24
DATE REVISED: 1989/12/11

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 239**

NATIONAL MINERAL INVENTORY:

NAME(S): **KIT**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P08E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 21 29 N
LONGITUDE: 128 11 32 W
ELEVATION: 1700 Metres

NORTHING: 6134934
EASTING: 551211

LOCATION ACCURACY: Within 500M

COMMENTS: Centre of claim block, located 4 kilometres west of Kitwanga Lake
(Assessment Report 7925).

COMMODITIES: Molybdenum Copper

MINERALS

SIGNIFICANT: Pyrite Pyrrhotite Molybdenite Chalcopyrite
ASSOCIATED: Quartz
ALTERATION: Silica
ALTERATION TYPE: Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stockwork Vein Disseminated
CLASSIFICATION: Porphyry
TYPE: L05 Porphyry Mo (Low F- type)
SHAPE: Irregular
MODIFIER: Fractured
DIMENSION: 0200 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: Stockwork traced for 200 metres along one ridge. Sediments dip north-west.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Triassic-Jurassic	Hazelton	Undefined Formation	Unnamed/Unknown Informal
Tertiary			

LITHOLOGY: Hornfels
Biotite Feldspar Porphyry
Argillite
Greywacke

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Boundary Ranges
TERRANE: Bowser Lake
METAMORPHIC TYPE: Contact RELATIONSHIP: Syn-mineralization GRADE: Hornfels

CAPSULE GEOLOGY

The Kit showing is located 4 kilometres west of Kitwanga Lake, northwest of Hazelton. The area was investigated for molybdenite mineralization from 1967 to 1979.

The area is underlain by argillite and greywacke of the Lower Jurassic to Upper Triassic Hazelton Group. These dip northwest and have been intruded by Tertiary Coast Plutonic Complex biotite feldspar porphyry sills (and possibly dykes) and younger mafic dykes.

The biotite feldspar intrusive consists of two phases, one contains pyrite, pyrrhotite and locally chalcopyrite and molybdenite. The argillite and greywacke have been hornfelsed for up to 75 metres from the contact with the mineralized phase. Molybdenite occurs as disseminated small flakes in a quartz vein stockwork hosted by porphyry and hornfels. This stockwork is present for over 200 metres along one ridge. The veins are 0.2 to 1.0 centimetres wide and molybdenite is concentrated at certain vein intersections. Molybdenite also occurs, locally, disseminated along fractures. Outcrops containing mineralization are highly silicified and bleaching is sometimes present adjacent to quartz veins.

BIBLIOGRAPHY

EMPR AR 1967-290
EMPR ASS RPT 1036, *7925
EMPR BULL 63; 64
EMPR FIELDWORK 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1352
REPORT: RGEN0100

BIBLIOGRAPHY

GSC MAP 1385A

DATE CODED: 1985/07/24
DATE REVISED: 1989/12/08

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 240**

NATIONAL MINERAL INVENTORY: 103P13 Ag23

NAME(S): **GLACIER GIRL**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P13W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 52 40 N
LONGITUDE: 129 52 42 W
ELEVATION: 1981 Metres

NORTHING: 6192825
EASTING: 445048

LOCATION ACCURACY: Within 1 KM

COMMENTS: Center of showings (Minister of Mines Annual Report 1928 p.94).

COMMODITIES: Silver Gold Copper

MINERALS

SIGNIFICANT: Pyrrhotite
ASSOCIATED: Quartz
ALTERATION: Quartz
ALTERATION TYPE: Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Breccia
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I02 Intrusion-related Au pyrrhotite veins
DIMENSION: 0300 x 0045 Metres
COMMENTS: Silicified zone.

STRIKE/DIP: TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic	Hazelton	Unuk River	

LITHOLOGY: Volcanic

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine
COMMENTS: At the western margin of the Stewart Complex (Island Arc Assemblage).

PHYSIOGRAPHIC AREA: Boundary Ranges

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1928
SAMPLE TYPE: Chip
COMMODITY GRADE
Silver 686.0000 Grams per tonne
Gold 13.7000 Grams per tonne
Copper 0.2000 Per cent
COMMENTS: A 1.5 metre chip sample.
REFERENCE: Minister of Mines Annual Report 1928, page 94.

CAPSULE GEOLOGY

The Glacier Girl showing is located on the east slope of Mount McLeod, 9.5 kilometres southeast of Stewart. Gossanous bluffs were explored for gold and silver in the late 1920's.

The showing consists of a 45 metre wide, 300 metre long silicified zone containing minor pyrrhotite within Lower Jurassic Unuk River Formation (Hazelton Group) volcanics(?). The zone hosts lenticular fracture zones up to 5.0 metres wide that are intensely mineralized with pyrrhotite.

A 1.5 metre chip sample assayed 13.7 grams per tonne gold, 686 grams per tonne silver and 0.2 per cent copper (Minister of Mines Annual Report 1928, page 94).

BIBLIOGRAPHY

EMPR AR *1928-94; 1929-94
EMPR FIELDWORK 1983, pp. 149-164; 1984, pp. 316-341; 1985, pp. 93-102; 1988, pp. 233-240; 1990, pp. 235-243
EMPR BULL 58; 63
EMPR MAP 8
GSC MAP 215A; 307A; 315A; 1385A
GSC MEM 175, p. 119

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1354
REPORT: RGEN0100

BIBLIOGRAPHY

EMR MP CORPFILE (Marmot Metals Mining Co. Ltd.)

DATE CODED: 1989/05/14
DATE REVISED: / /

CODED BY: PSF
REVISED BY:

FIELD CHECK: N
FIELD CHECK:

MINFILE NUMBER: **103P 241**

NATIONAL MINERAL INVENTORY: 103P5 Cu7

NAME(S): **KNOB HILL**, CD,CU

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P05W
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 25 07 N
LONGITUDE: 129 52 00 W
ELEVATION: 0425 Metres

NORTHING: 6141717
EASTING: 445140

LOCATION ACCURACY: Within 500M

COMMENTS: Location of magnetic high over showing at Station 17 North on line A (Assessment Report 3534, Fig. 2).

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Pyrite Pyrrhotite Chalcopyrite

COMMENTS: Disseminated to massive.

MINERALIZATION AGE:

DEPOSIT

CHARACTER: Disseminated Vein Massive
CLASSIFICATION: Volcanogenic Exhalative Syngenetic
TYPE: G04 Besshi massive sulphide Cu-Zn

SHAPE: Tabular

DIMENSION: 150 x 3 Metres STRIKE/DIP: 055/90

TREND/PLUNGE:

COMMENTS: Pyritic zone dimension and attitude. The superimposed foliation strikes 244 degrees and dips 76 degrees northwest.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Lower Jurassic	Hazelton	Undefined Formation	
Middle Jurassic	Bowser Lake	Undefined Formation	

LITHOLOGY: Pillow Basalt
Pyritic Basaltic Lapilli Tuff
Turbidite

HOSTROCK COMMENTS: Bowser Lake Group fossil date reported in Open File 3454 (1997).

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline

PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)

TERRANE: Stikine

Wrangell

METAMORPHIC TYPE: Regional

RELATIONSHIP: Post-mineralization

GRADE: Greenschist

COMMENTS: Situated in roof pendant at eastern margin of Coast Plutonic Complex.

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1998

SAMPLE TYPE: Grab

COMMODITY

GRADE

Copper

0.0018

Per cent

REFERENCE: D.J. Aldrick, B.C. Geological Survey, 1998.

CAPSULE GEOLOGY

The Knob Hill showing is located about 1.0 kilometre east of Anyox/Falls Creek, about 3.5 kilometres east of Anyox. It has been evaluated in the past for copper mineralization.

The region is underlain by a roof pendant, consisting of volcanic and sedimentary rocks, within the Coast Plutonic Complex. These pendant rocks have been correlated with Lower to lower Middle Jurassic Hazelton Group rocks and overlying upper Middle to Upper Jurassic Bowser Lake Group sedimentary rocks (GSC Open File 3454).

The Hazelton rocks consist of variably chloritized pillow and massive andesite and basalt with minor mafic tuffs. The overlying Bowser Lake sediments consist of argillite, siltstone and sandstone with minor chert and limestone.

There are two observable phases of folding in the area, an initial north-northeast trending phase followed by a later east-northeast trending phase.

The showing is described as a disseminated pyrite zone developed in andesite (Assessment Report 3534). Mineralization of a number of deposits on the CD and CU claims (including Knob Hill) is generalized

CAPSULE GEOLOGY

as being massive to disseminated pyrrhotite containing veinlets and dispersed blebs of chalcopyrite and pyrite (Minister of Mines Annual Report 1967, page 40).

D.J. Alldrick (B.C. Geological Survey Branch) reports that the pyritic unit is a mappable volcanic breccia (regolith) that lies between underlying pillow basalts and overlying turbidites. The breccia matrix is composed of fine-grained pyrite and silica and appears to be a pyritic chert or sinter. The unit is 2 to 3 metres thick wherever observed. It has been exposed in a series of old trenches that removed overburden and blasted down into the bedrock. In this area, the contact strikes 055 degrees with a near vertical dip. Breccia clasts are sub-rounded to ovoid and range from 2 to 6 centimetres in length.

Alldrick deems this outcrop exposure significant because it represents a local depositional basin that accumulated and preserved regolith, silica and pyrite along the same horizon that hosts the Hidden Creek (Anyox) orebodies to the north (see MINFILE occurrence 103P 021). Alldrick did not observe copper mineralization at this local and a grab sample he collected yielded only 0.0018 per cent copper.

The area was likely trenched during Cominco's extensive exploration programs in the early 1950s.

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EMPR AR 1967-40
EMPR ASS RPT *3534, 17396
EMPR BULL 63
EMPR FIELDWORK 1985, pp. 211-216; 1988, pp. 233-240; 1990, pp. 235-243
EMPR GEM 1969-59; 1970-81; 1971-121; 1972-504
EMPR MAP 8
EMPR OF 1999-2
EMPR PF (Alldrick, D. (1986) Anyox Map)
GSC MAP 307A; 1385A
GSC OF 3454
Chevron File

DATE CODED: 1985/07/24
DATE REVISED: 1999/01/07

CODED BY: GSB
REVISED BY: DJA

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **103P 242**

NATIONAL MINERAL INVENTORY: 103P5 Cu3

NAME(S): **BLUE BELL (L.571)**, MAPLE BAY

STATUS: Developed Prospect
REGIONS: British Columbia
NTS MAP: 103P05W 103O08E
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 24 38 N
LONGITUDE: 130 00 05 W
ELEVATION: 0536 Metres

NORTHING: 6140935
EASTING: 436600

LOCATION ACCURACY: Within 500M

COMMENTS: Approximate centre of surface trace of Blue Bell vein, 1.46 kilometres southeast of Maple Bay on the east shore of Portland Canal, 55 kilometres south of Stewart, about 12.5 kilometres due west of Anyox (Assessment Report 5550).

COMMODITIES: Copper Silver Gold

MINERALS

SIGNIFICANT: Chalcopyrite Pyrite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb)
DIMENSION:
COMMENTS: Blue Bell vein.

STRIKE/DIP: 010/45E

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE

Lower Jurassic

GROUP

Hazelton

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Greenstone
Chlorite Hornblende Schist

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Stikine
METAMORPHIC TYPE: Regional

Wrangell
RELATIONSHIP:

PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)

GRADE: Greenschist

INVENTORY

ORE ZONE: STOCKPILE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Grab

YEAR: 1906

COMMODITY

	<u>GRADE</u>	
Silver	178.0000	Grams per tonne
Gold	0.6900	Grams per tonne
Copper	11.3000	Per cent

COMMENTS: Sample of high-grade sorted ore.
REFERENCE: Minister of Mines Annual Review 1906, page 64.

CAPSULE GEOLOGY

The area is underlain by the western margin of a 14.4 by 9.6 kilometre roof pendant within the Juro-Cretaceous Coast Plutonic Complex. These rocks have been correlated with the Lower Jurassic Hazelton Group (Grove, T. 1986) but have also been correlated with the Upper Triassic Kunga Group sediments and Karmutsen Formation (Vancouver Group) volcanics (Sharp, R.J. 1980).

The roof pendant in this area comprises a sequence of mafic and intermediate (andesitic-dacitic) volcanics interbedded with felsic tuffs, siltstones, silty argillites and fine-grained sandstones. The sequence strikes 010 to 035 degrees and dips 40 to 85 degrees southeast. The mafic volcanics have been variably foliated and chloritized to greenstone and chlorite-hornblende schist as a result of regional greenschist metamorphism.

The Blue Bell occurrence comprises two veins, the Blue Bell and about 98 to 122 metres to the west, a smaller satellite vein. The Blue Bell vein has been traced along strike for 230 metres and varies from 0.46 to 1.52 metres in width, averaging 0.98 metres. The smaller vein has been traced along strike for 98 metres and varies from 0.30 to 0.91 metres in width. Both veins strike 010 degrees and

CAPSULE GEOLOGY

dip 45 degrees to the east.

Mineralization consists of chalcopyrite and pyrite. High-grade sorted material assayed 11.3 per cent copper, 178 grams per tonne silver and 0.69 grams per tonne gold (Minister of Mines Annual Report 1906). The Blue Bell vein averages 8.44 per cent copper over a length of 180 metres and an average width of 0.98 metres (Assessment Report 5550).

A limited amount of stripping, trenching and tunneling failed to intersect the vein at depth.

BIBLIOGRAPHY

EMPR AR 1904-100; 1905-80; 1906-64; 1918-75
EMPR GEM *1970-77-81
EMPR ASS RPT 5550
EMPR FIELDWORK 1988, pp. 233-240; 1990, pp. 235-243
EMPR MAP 8
EMPR BULL 63
EMPR PF (Sargent, H. (1942): Report; Pentland, A.G. (1969): Report)
GSC MAP 307A; 315A; 1385A
GSC SUM RPT 1922 Part A, pp. 23-25
GSC MEM 175, pp. 100,101

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/22

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 243**

NATIONAL MINERAL INVENTORY: 103P5 Cu7

NAME(S): **DEADWOOD, HANNA, CD,CU,
EMMA, HOMESTAKE**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P05W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 27 24 N
LONGITUDE: 129 50 12 W
ELEVATION: 0236 Metres

NORTHING: 6145929
EASTING: 447090

LOCATION ACCURACY: Within 500M

COMMENTS: Location of trenches (Property File - Alldrick, D., Anyox Map 1986).

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Pyrrhotite Chalcopyrite

COMMENTS: Disseminations and veinlets.

ASSOCIATED: Quartz

COMMENTS: Stringers.

ALTERATION: Chlorite

ALTERATION TYPE: Chloritic

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stockwork Disseminated

CLASSIFICATION: Hydrothermal Epigenetic

TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb)

DIMENSION:

COMMENTS: Main shear zone, dip is approximate.

G04 Besshi massive sulphide Cu-Zn
STRIKE/DIP: 018/45W TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Jurassic	Hazelton	Undefined Formation	
Upper Triassic	Vancouver	Undefined Formation	

LITHOLOGY: Porphyritic Andesite
Greenstone

HOSTROCK COMMENTS: Host rocks are correlative with either the Hazelton Group or the Karmutsen Formation.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline

TERRANE: Stikine

METAMORPHIC TYPE: Regional

COMMENTS: Situated in the Anyox roof pendant within the Coast Plutonic Complex.

PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)

RELATIONSHIP:

GRADE: Greenschist

CAPSULE GEOLOGY

The Deadwood showing is located about 4.0 kilometres west of the Hastings Arm of Observatory Inlet, just west of Hidden Creek. It is situated about 580 metres west of the Hanna (103P 152) occurrence.

The region is underlain by a 14.4 by 9.6 kilometre roof pendant of volcanics and sediments in the Coast Plutonic Complex. These have been correlated with the Lower Jurassic Hazelton Group (Grove, T. 1986) but have also been correlated with the Upper Triassic Kunga Group sediments and the Karmutsen Formation (Vancouver Group) volcanics (Sharp, R.J. 1980).

The volcanics consist of mafic flows and tuffs that have been variably altered to greenstone. The overlying sediments consist of argillite, siltstone and sandstone, with minor chert and limestone. This sequence is deformed by a north-northeast trending phase and a subsequent east-northeast trending phase of folding.

The showing occurs as a silicified shear zone formed in a porphyritic andesite that has been altered to greenstone. The zone outcrops along a ridge at an elevation of 236 metres on the west side of Hidden Creek and has been traced for 460 metres. At the main showing, it is at least 9 metres wide, but narrows to the north. It strikes 018 degrees and dips approximately 45 degrees west.

A second zone is located east of the main zone at an elevation of 229 metres near the bed of Hidden Creek. It strikes 078 degrees, dips 45 degrees to the west and can be traced for 2.4 metres.

The main shear zone occurs in variably mineralized schistose greenstone. Mineralization consists of pyrrhotite and minor chalcopyrite. They occur as veinlets in greenstone, as veinlets in

CAPSULE GEOLOGY

quartz stringers and as sparse disseminations throughout the zone.
The second zone occurs in a siliceous greenstone containing
pyrrhotite and chalcopyrite. The copper mineralization in this
zone is more intense than in the main shear zone.

BIBLIOGRAPHY

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1931-A37; 1967-40
EMPR ASS RPT 10204, 10928, 17396, 23582
EMPR BULL 63
EMPR FIELDWORK 1985, pp. 211-216; 1988, pp. 233-240; 1990, pp.
235-243
EMPR GEM 1969-59; 1971-121; 1972-504
EMPR MAP 8
EMPR PF (*Alldrick, D. (1986) Anyox Map; Taiga Consultants Ltd.
(1992): Geological, Geochemical and Geophysical Report on the
Anyox Area in 103P 021)
GSC MAP 1385A
Chevron File

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/31

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 244**

NATIONAL MINERAL INVENTORY:

NAME(S): **WILSON KETTLE**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P01W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 03 20 N
LONGITUDE: 128 17 23 W
ELEVATION: 325 Metres

NORTHING: 6101204
EASTING: 545372

LOCATION ACCURACY: Within 500M

COMMENTS: Lake in centre of Lot 2618, 1.3 kilometres northwest of the Skeena River, five kilometres northeast of Cedarvale (NTS Map 103P/01).

COMMODITIES: Marl

MINERALS

SIGNIFICANT: Calcite
MINERALIZATION AGE: Quaternary

DEPOSIT

CHARACTER: Unconsolidated Stratiform
CLASSIFICATION: Sedimentary Syngenetic Industrial Min.
TYPE: B07 Bog Fe, Mn, U, Cu, Au
SHAPE: Tabular
DIMENSION: 170 x 100 Metres
COMMENTS: Flat lying marl deposit in dry lake bed.

STRIKE/DIP: TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Quaternary

GROUP

Undefined Group

FORMATION

Unnamed/Unknown Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Marl

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Bowser Lake

PHYSIOGRAPHIC AREA: Hazelton Ranges

CAPSULE GEOLOGY

The Wilson Kettle marl occurrence is located 1.3 kilometres north of the Skeena River, 5 kilometres northeast of Cedarville. The deposit underlies a dry lake bed 170 metres long and 100 metres wide within a depression in the surrounding glacial drift measuring 500 by 300 metres. This depression is probably a kettle formed during the last glacial retreat. The marl is white to light grey to brown, at least 0.5 metres thick and is overlain by 0.5 metres of dark brown to black wet peat in the middle of the northeast end of the deposit. A sample analyzed as follows in per cent (Geological Fieldwork 1989, page 496): CaO 42.68, MgO 0.86, SiO₂ 8.12, Al₂O₃ 1.80, Fe₂O₃ 0.48, MnO 0.03, TiO₂ 0.05, Na₂O 0.55, K₂O 0.11, P₂O₅ 0.05, Sulphur 0.38, L.O.I. 45.34.

BIBLIOGRAPHY

EMPR FIELDWORK 1988, pp. 233-240; *1989, pp. 493-499; 1990, pp. 235-243
EMPR MAP 8
GSC MEM 212
GSC MAP 307A; 1385A

DATE CODED: 1991/03/29
DATE REVISED: / /

CODED BY: PSF
REVISED BY:

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 245**

NATIONAL MINERAL INVENTORY:

NAME(S): **GEE KIDD**, LIME LAKE

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P01W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 03 44 N
LONGITUDE: 128 16 59 W
ELEVATION: 340 Metres

NORTHING: 6101950
EASTING: 545790

LOCATION ACCURACY: Within 500M

COMMENTS: Located 1.5 kilometres northwest of the Skeena River, 6 kilometres northeast of Cedarville (Geological Fieldwork 1989, page 495).

COMMODITIES: Marl

MINERALS

SIGNIFICANT: Calcite
MINERALIZATION AGE: Quaternary

DEPOSIT

CHARACTER: Unconsolidated Stratiform
CLASSIFICATION: Sedimentary Syngenetic Industrial Min.
TYPE: B07 Bog Fe, Mn, U, Cu, Au
SHAPE: Tabular
DIMENSION: 230 x 110 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: Flat lying marl deposit in lake.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Quaternary Undefined Group Unnamed/Unknown Formation

LITHOLOGY: Marl

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Bowser Lake

PHYSIOGRAPHIC AREA: Hazelton Ranges

CAPSULE GEOLOGY

The Gee Kidd marl occurrence is situated 1.5 kilometres northwest of the Skeena River, 6 kilometres northeast of Cedarville. The deposit rests on a 1000 by 250 metre bench blanketed with glacial drift more than a metre in thickness that overlies sediments of the Juro-Cretaceous Bowser Lake Group. The marl has accumulated in a lake measuring 230 by 110 metres. A beaver dam at the lakes outlet has substantially raised the level of the lake making the marl difficult to sample. The deposit was staked in 1936.

BIBLIOGRAPHY

EMPR FIELDWORK 1988, pp. 233-240; *1989, pp. 493-499; 1990, pp. 235-243
EMPR MAP 8
GSC MEM 212
GSC MAP 307A; 1385A

DATE CODED: 1991/03/29
DATE REVISED: / /

CODED BY: PSF
REVISED BY:

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 246**

NATIONAL MINERAL INVENTORY: 103P6 Pb6

NAME(S): **THEDA BARA NICKEL**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P06W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 23 38 N
LONGITUDE: 129 28 53 W
ELEVATION: Metres

NORTHING: 6138730
EASTING: 469509

LOCATION ACCURACY: Within 500M

COMMENTS: Location of vein containing pyrrhotite lens (Property File - Marshall Creek Copper, 1967, Plate 2).

COMMODITIES: Nickel Silver

MINERALS

SIGNIFICANT: Pyrrhotite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Massive
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
DIMENSION: 1 Metres
COMMENTS: The quartz vein is 1.2 to 1.5 metres wide.

STRIKE/DIP: 030/

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Middle Jurassic

GROUP

Spatsizi

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Argillite
Gabbroic Dike
Dioritic Dike

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Stikine

Bowser Lake

PHYSIOGRAPHIC AREA: Boundary Ranges

COMMENTS: Situated in Bowser Lake foredeep clastic wedge on Stikinia Terrane.

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1927

SAMPLE TYPE: Grab

COMMODITY

GRADE

Nickel

0.2500

Per cent

COMMENTS: Sample of quartz vein containing massive pyrrhotite lens. Another sample assayed 51 grams per tonne silver.

REFERENCE: Minister of Mines Annual Report 1927, page 70.

CAPSULE GEOLOGY

The Theda Bara Nickel showing is located about 9.5 kilometres due south of Alice Arm near the headwaters of Roundy Creek. The area was investigated for base and precious metals during the 1920's and again during the 1960's. This showing is 204 metres south of the Theda Bara base-metal vein showing (103P 157).

The region is underlain by Coast Plutonic rocks intruding Middle Jurassic Spatsizi Group argillite, shale, siltstone, greywacke and conglomerate. The sediments have been folded and altered to biotite hornfels.

A 1.2 to 1.5 metre wide quartz vein, 240 metres to the south of the adits, lies along a dioritic/gabbroic dike and strikes 030 degrees. The vein contains a near massive lens of pyrrhotite. Samples are reported to assay trace gold, 51 grams per tonne silver (Minister of Mines Annual Report 1924, p. 51) and trace gold and silver, 0.25 per cent nickel (Minister of Mines Annual Report 1927, p. 70).

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EMPR AR 1923-54; *1924-51,52; *1927-70; 1964-24-30; 1966-50; 1968-65

EMPR BULL 63

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1364
REPORT: RGEN0100

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235-243
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1965; *Marshall Creek Copper, Geology Map, 1967)
EMR MP CORPFILE (Marshall Creek Copper Co. Ltd.)
GSC MAP 307A; 315A; 1385A
GSC MEM 175, p. 82

DATE CODED: 1989/02/26
DATE REVISED: 1993/12/31

CODED BY: PSF
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 247**

NATIONAL MINERAL INVENTORY:

NAME(S): **ASHWOOD, TAT, HAMMER LAKE,
 CAMP LAKE, OUTRAM LAKE**

STATUS: Prospect
 REGIONS: British Columbia
 NTS MAP: 103P12W
 BC MAP:

MINING DIVISION: Skeena
 UTM ZONE: 09 (NAD 83)

LATITUDE: 55 44 36 N
 LONGITUDE: 129 54 07 W
 ELEVATION: 1600 Metres

NORTHING: 6177882
 EASTING: 443376

LOCATION ACCURACY: Within 500M

COMMENTS: Mineralized zone 2 kilometres northeast of Outram Lake and just west of Sutton Glacier, about 21 kilometres south of the community of Stewart (Assessment Report 23217).

COMMODITIES: Copper Zinc Lead Gold Silver

MINERALS

SIGNIFICANT: Pyrite Sphalerite Galena Chalcopyrite
 MINERALIZATION AGE:

DEPOSIT

CHARACTER: Disseminated Podiform Massive
 CLASSIFICATION: Volcanogenic

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Triassic-Jurassic
 Triassic

GROUP

Hazelton
 Stuhini

FORMATION

Unnamed/Unknown Formation
 Unnamed/Unknown Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Greywacke
 Siltstone
 Argillite
 Ash Tuff
 Lapilli Tuff
 Andesitic Dacitic Agglomerate
 Feldspar Porphyry Flow
 Volcanic Conglomerate
 Volcanic Breccia

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
 TERRANE: Stikine
 METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Boundary Ranges

RELATIONSHIP:

GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis
 SAMPLE TYPE: Grab

YEAR: 1993

COMMODITY

Silver
 Gold
 Copper
 Lead
 Zinc

GRADE

65.4000	Grams per tonne
0.4000	Grams per tonne
0.1000	Per cent
0.8800	Per cent
1.6900	Per cent

REFERENCE: Assessment Report 23217, page 18.

CAPSULE GEOLOGY

The Ashwood property is underlain by interbedded volcanics and sediments of the undifferentiated Upper Triassic-Middle Jurassic Hazelton and Stuhini groups. Andesite, diorite and quartz feldspar porphyry dikes intrude the volcano-sedimentary sequence.

The volcanic rocks consist of ash tuff, lapilli tuff and andesitic to dacitic agglomerate. Volcanic conglomerate and breccias occur locally. Feldspar porphyry flows were also observed. Sediments consist of dark grey to black, foliated argillite and siliceous siltstone.

A number of significant fault structures have tilted the lithologies and probably caused some offset.

The predominant style of mineralization in the Tat zone consists of disseminations, lenses or possibly beds of semi-massive polymetallic sulphides consisting of pyrite, sphalerite with minor

CAPSULE GEOLOGY

galena and chalcopyrite. The mineralization generally occurs parallel to bedding in a greywacke-siltstone-argillite sequence. Individual lenses of mineralization vary from 30 to 40 centimetres wide and trend along strike for up to 5 metres. Several of the lenses can occur across stratigraphic intervals of several metres.

The N zone (103P 248) has similar style mineralization and is located 2 kilometres north.

A grab sample of mineralization at the Tat zone analysed 0.10 per cent copper, 1.69 per cent zinc, 0.88 per cent lead, 0.4 gram per tonne gold and 65.4 grams per tonne silver (Assessment Report 23217, page 18).

Three new areas of gold mineralization were discovered in 1994 and have been named the Outram Lake area, Hammer Lake area and Camp Lake area (Assessment Report 23689).

At Outram Lake the mineralization appears to be controlled by a northeast trending brittle fault that varies between 2 and 7 metres wide. Mineralization within the fault zone is hosted in isolated blocks or lenses of strongly altered rocks. Values up to 3.95 grams per tonne gold and 2.77 per cent arsenic in grab samples were obtained from the fault zone. Alteration consists of strong silica flooding, pervasive sericitization and minor clay development.

Mineralization at Camp Lake, located 500 metres northeast of the Outram Lake zone, is controlled by small, brittle-ductile faults less than 2 metres wide. Values up to 1.45 grams per tonne gold were obtained from grab samples. Gold values appear to be intimately related to arsenopyrite mineralization.

Mineralization in the Hammer Lake area, located 1500 metres northeast of the Outram Lake zone, is associated with a north-trending fault intruded by a quartz feldspar porphyry dike and reaches widths up to 15 metres. Gold mineralization is associated with very poorly defined zones of sericite+quartz+carbonate alteration. Values up to 4.05 grams per tonne were obtained from grab samples within the fault zone.

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24914
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24, 1997, pp. 47-71 (in Georgia River file - 1030 013))
GSC MAP 307A; 315A; 1385A
GSC OF 2996

DATE CODED: 1994/12/06
DATE REVISED: 1994/12/06

CODED BY: GO
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 248**

NATIONAL MINERAL INVENTORY:

NAME(S): **N. ASHWOOD, DICKIE,
1100 ZONE, RIDGE, TERMINATOR,
BROWN**

MINING DIVISION: Skeena

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 103P13W

UTM ZONE: 09 (NAD 83)

BC MAP:
LATITUDE: 55 45 36 N
LONGITUDE: 129 55 07 W

NORTHING: 6179751

EASTING: 442355

ELEVATION: 3700 Metres

LOCATION ACCURACY: Within 500M

COMMENTS: Mineralized zone on the easterly slopes of Mount Brown, west of
Sutton Glacier, about 19 kilometres south of the community of Stewart
(Assessment Report 23217).

COMMODITIES: Copper

Zinc

Lead

Gold

Silver

MINERALS

SIGNIFICANT: Pyrite Sphalerite Galena Chalcopyrite

MINERALIZATION AGE:

DEPOSIT

CHARACTER: Disseminated

Podiform

Massive

CLASSIFICATION: Volcanogenic

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Triassic-Jurassic
Triassic

GROUP

Hazelton
Stuhini

FORMATION

Unnamed/Unknown Formation
Unnamed/Unknown Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Greywacke
Siltstone
Argillite
Ash Tuff
Lapilli Tuff
Andesitic Dacitic Agglomerate
Feldspar Porphyry Flow
Volcanic Conglomerate
Volcanic Breccia

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Stikine

METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Boundary Ranges

RELATIONSHIP:

GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1993

SAMPLE TYPE: Grab

COMMODITY

GRADE

Silver

6.2000

Grams per tonne

Gold

0.2900

Grams per tonne

Copper

0.1700

Per cent

Zinc

4.1300

Per cent

REFERENCE: Assessment Report 23217, page 18.

CAPSULE GEOLOGY

The N occurrence is underlain by interbedded volcanics and sediments of the undifferentiated Upper Triassic-Middle Jurassic Hazelton and Stuhini groups. Andesite, diorite and quartz feldspar porphyry dikes intrude the volcano-sedimentary sequence.

The volcanic rocks consist of ash tuff, lapilli tuff and andesitic to dacitic agglomerate. Volcanic conglomerate and breccias occur locally. Feldspar porphyry flows were also observed. Sediments consist of dark grey to black, foliated argillite and siliceous siltstone.

A number of significant fault structures have tilted the lithologies and probably caused some offset.

The predominant style of mineralization in the Tat zone consists of disseminations, lenses or possibly beds of semi-massive polymetallic sulphides consisting of pyrite, sphalerite with minor

CAPSULE GEOLOGY

galena and chalcopyrite. The mineralization generally occurs parallel to bedding in a greywacke-siltstone-argillite sequence. Individual lenses of mineralization vary from 30 to 40 centimetres wide and trend along strike for up to 5 metres. Several of the lenses can occur across stratigraphic intervals of several metres.

The Tat zone (103P 247) has similar style mineralization and is located 2 kilometres south.

A grab sample of mineralization at the N zone analysed 0.17 per cent copper, 4.13 per cent zinc, 0.29 gram per tonne gold and 6.2 grams per tonne silver (Assessment Report 23217, page 18).

Work in 1993 and 1994 outlined the 1100, Ridge and Dickie zones. The Dickie zone is 350 metres west of the N zone, the 1100 zone is 750 metres west-southwest of the N zone, and the Ridge zone is 1250 metres west-southwest of the N zone. A series of parallel faults can be traced over 800 metres from the 1100 zone to the Ridge zone. Rock sampling from the Ridge zone yielded up to 1.87 grams per tonne gold and 104 grams per tonne silver over narrow widths. Diamond drilling on the 1100 zone intersected up to 0.4 gram per tonne gold over 1.52 metres (Assessment Report 23689).

The Ridge zone is a large, gossanous area approximately 150 by 150 metres. The protolith consists of intermediate tuffs, flows and flow breccia. The Ridge zone appears to be a 'shatter' zone of randomly oriented fractures situated in an area of numerous 030 degree trending brittle faults. The faults tend to be very narrow (less than 2 metres) but wider zones of closely-spaced fractures are associated with the faulting. Mineralization is concentrated along fractures and is composed of pyrite, pyrrhotite, arsenopyrite and minor sphalerite and galena. Massive sulphide 'lenses' within the fractures have been mapped and appear to have very limited extent (less than 5 metres) and are typically very narrow (less than 20 centimetres).

The 1100 zone mineralization is possibly very similar to that at the Ridge zone. Drillholes intersected sections of strong alteration with pyrite and pyrrhotite.

The Dickie zone is characterized by massive to semimassive, bedding-parallel lenses and ribbons of pyrite within intermediate tuffs and tuff breccia. The sulphide lenses are typically very small (10 centimetres by 1 metre) and can be traced for over 200 metres. Surface grab samples yielded up to 0.22 gram per tonne gold.

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24, 1997, pp. 47-71 (in Georgia River file - 1030 013))
GSC MAP 307A; 315A; 1385A
GSC OF 2996
WWW <http://www.infomine.com/>

DATE CODED: 1994/12/06
DATE REVISED: 1994/12/06

CODED BY: GO
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 249**

NATIONAL MINERAL INVENTORY:

NAME(S): **RED 32,34**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P13E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 55 53 N
LONGITUDE: 129 37 40 W
ELEVATION: 1905 Metres

NORTHING: 6198621
EASTING: 460778

LOCATION ACCURACY: Within 500M

COMMENTS: Sample locations about 22 kilometres east of the community of Stewart (Assessment Report 23886).

COMMODITIES: Gold Silver Copper

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Bornite
ASSOCIATED: Quartz Calcite
ALTERATION: Sericite Carbonate
ALTERATION TYPE: Sericitic Carbonate
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Vein Stockwork
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I01 Au-quartz veins
DIMENSION: Metres

STRIKE/DIP: TREND/PLUNGE: /

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Unknown	Unnamed/Unknown Group	Unnamed/Unknown Formation	

LITHOLOGY: Volcanic Tuff
Volcanic Flow
Hornblende Porphyry Dike

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

Bowser Lake

PHYSIOGRAPHIC AREA: Boundary Ranges

CAPSULE GEOLOGY

On the Red 32,34 claims, numerous quartz/calcite veins, stringers and stockwork zones are present in platy volcanic tuffs and flows exposed over a roughly 300 by 200 metre area. Sericite altered volcanics form narrow envelopes to the quartz systems. Veining varies from a few centimetres up to 2 metres in width and is generally barren of mineralization. Coarse pyrite occurs as seams, pods and lenses in the quartz, usually in sparse amounts. The veins have two direction patterns: the majority trend 350 degrees while some trend at 280-290 degrees. Dips are variable from 45 to 85 degrees to the south and southeast. The veins pinch and swell over short distances but show continuity over great lengths. Rock samples of the vein mineralization analysed up to 21.6 grams per tonne gold (Assessment Report 23886).

About 300 metres to the west of the quartz veins, chalcopryrite and bornite mineralization occurs in two different locations. The first location consists of blebs of mineralization associated with carbonate alteration along the contact with two hornblende porphyry dikes. The zone is exposed over a strike length of 35 metres and a width of 20 metres. Intrusions consist of dark grey to black, fine grained hornblende-bearing dikes, generally 2-3 metres in thickness. The second occurrence consists of stringers and seams of bornite and chalcopryrite in a poorly exposed quartz/calcite vein. The vein is 1 metre wide, trends 044 degrees and exposed over a strike length of 5 metres. Rock samples analysed up to 7.9 per cent copper and 253.6 grams per tonne silver (Assessment Report 23886).

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EMPR BULL 63
GSC MAP 307A; 1385A

DATE CODED: 1985/07/24
DATE REVISED: 1995/12/11

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 249**

MINFILE NUMBER: **103P 250**

NATIONAL MINERAL INVENTORY:

NAME(S): **KONKIN SILVER**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P14W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 55 25 N
LONGITUDE: 129 28 24 W
ELEVATION: Metres

NORTHING: 6197679
EASTING: 470421

LOCATION ACCURACY: Within 1 KM
COMMENTS:

COMMODITIES: Silver Lead Zinc

MINERALS

SIGNIFICANT: Galena Sphalerite Silver Ruby Silver

ASSOCIATED: Carbonate Quartz Barite

MINERALIZATION AGE:

DEPOSIT

CHARACTER: Podiform Shear
CLASSIFICATION: Replacement

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Lower Jurassic

GROUP

Hazelton

FORMATION

Unnamed/Unknown Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Volcaniclastic
Flow

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Stikine

CAPSULE GEOLOGY

Lower Jurassic Hazelton Group volcanic and volcaniclastic rocks underlie much of the Cambria Icefield area and host Lac Minerals' Red Mountain (103P 086). They occur with similar Triassic and older rocks in a structural culmination outlined by the contact between competent felsic and mafic volcanic rocks of uppermost Hazelton Group and overlying, relatively incompetent late Lower Jurassic and younger westerly derived clastic rocks. The newly recognized mafic-felsic association in upper Hazelton Group has significant exploration and tectonic implications. Plutonic styles suggest the age and exploration potential of plutons be reconsidered. Genesis of the Red Mountain deposit has yet to be firmly established, but the main mineralizing event predated regional deformational events, implying significant stratigraphic control and potential in the area mapped, and areas nearby, for similar deposits.

Property geology and mineralization, carbonate alteration extends over considerable distances in rocks that appear to have been originally maroon volcaniclastics and flows. These altered zones host lenses and pods of predominantly calcite, siderite and quartz. Several zones located carried appreciable amounts of lead and zinc values associated with silver.

The largest zone identified was labelled the Konkin Silver zone, consisting of carbonate, quartz, barite, galena, minor sphalerite and rare ruby and native silver in a bow-shaped occurrence spanning 35 metres. Galena is the primary sulfide and occurs as fine coatings on fractures, as coarse crystalline blebs and as disseminated grains. Maximum thickness of the feature appears to be in excess of 10 metres. The occurrence weathers a pale grey colour with up to 1 centimetre rectangular barite crystals forming radiating clusters up to 4-5 centimetres across. These crystals form raised features in the more recessive carbonate.

The second zone occurs approximately 100 metres to the south of the first zone and consists of a linear feature 2 metres in width and 15 metres in length. Minor streaks of galena and sphalerite occur in the second zone. In addition, narrow shear zones with associated sericite and massive pyrite stringers are present in the vicinity of the silver-bearing area. The shears appear to be 10-20 centimetres in width, strike at 220 degrees and contain 10-15 per cent pyrite overall.

RUN DATE: 26-Jun-2003
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PAGE: 1371
REPORT: RGEN0100

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GSC P 1994-A, p. 45
WWW <http://www.infomine.com/>

DATE CODED: 1996/08/16
DATE REVISED: 1997/04/04

CODED BY: DJA
REVISED BY: LJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 251**

NATIONAL MINERAL INVENTORY:

NAME(S): **CLONE, RED, C-2,
H-1, PORT, C-1,
S-2A, MAIN**

MINING DIVISION: Skeena

STATUS: Prospect
REGIONS: Alice Arm, British Columbia
NTS MAP: 103P13W

UTM ZONE: 09 (NAD 83)

BC MAP:
LATITUDE: 55 48 00 N
LONGITUDE: 129 46 14 W
ELEVATION: 1375 Metres

NORTHING: 6184089
EASTING: 451695

LOCATION ACCURACY: Within 500M

COMMENTS: The Clone property is located 16 kilometres southeast of Stewart.

COMMODITIES: Gold Silver Copper Cobalt

MINERALS

SIGNIFICANT: Specularite Chalcopyrite Magnetite Gold Pyrite
Arsenopyrite Erythrite Glauconite
ALTERATION: Hematite Chlorite Silica Sericite Malachite

MINERALIZATION AGE:

ISOTOPIC AGE: 200.4 +/- 1.3 Ma DATING METHOD: Uranium/Lead MATERIAL DATED: Titanite

DEPOSIT

CHARACTER: Shear Stockwork Vein Breccia
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I01 Au-quartz veins I VEIN, BRECCIA AND STOCKWORK
COMMENTS: A hornblende granodiorite sill that cuts altered rocks near the main shear/veins. EM Fieldwork 2001, pp. 135-149.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Triassic-Jurassic Hazelton Unnamed/Unknown Formation

LITHOLOGY: Breccia
Lapilli Tuff
Andesite
Andesitic Pyroclastic
Argillite
Dacite Porphyry Dike

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Boundary Ranges
TERRANE: Stikine Bowser Lake

INVENTORY

ORE ZONE: DRILLHOLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1996
SAMPLE TYPE: Drill Core
COMMODITY Gold GRADE 61.7000 Grams per tonne
Cobalt 0.3100 Per cent

COMMENTS: From a 5.0 metre interval.
REFERENCE: GCNL #192(Oct.6), 1997.

CAPSULE GEOLOGY

The Clone prospect is located about 20 kilometres southeast of Stewart, at the southern end of the Cambria Icefield. Disseminated native gold and minor amounts of chalcopyrite, galena, pyrite and erythrite are hosted by shear-controlled veins and stockworks. In 1995, with Explore B.C. Program support, Teuton Resources Corporation carried out an integrated grassroots program of prospecting, geological, geochemical and geophysical surveys, trenching and diamond drilling, mostly concentrated on the southwest corner of the large Red property covering the periphery of the southwest Cambria Icefield. This work led to a significant gold discovery on the Clone 1 claim, resulting in an immediate option by Homestake Canada Inc. Teuton Resources Corporation and Minvita Enterprises Ltd. have entered into an agreement with Homestake Canada Inc. and Prime Resources Group Inc. on the Clone property. During 1995, 5.1 line kilometres of magnetic and electromagnetic

CAPSULE GEOLOGY

surveys, 513.8 metres of trenching and 1070 metres of diamond drilling in 13 holes (testing both sulphide-rich and hematite-rich mineralization) were completed and 1542 rock samples were collected and assayed (Explore B.C. Program 95/96 - G165). In 1996, the property was explored by 1312.8 metres of trenching in 141 trenches, ground geophysics and 11,487.1 metres of drilling in 113 holes.

Two types of mineralization have been identified along a strike distance of 1.25 kilometres associated with major northwesterly trending (320 degrees) shear zones (both ductile and brittle styles of deformation; i) hematite-cemented, chlorite +/- silica-rich breccia; and ii) semi to massive sulphide stringer pods/zones. In addition, numerous splays are horsetailed off fault structures.

To date, drilling has tested about a 400 metre strike length of this system; the deepest mineralization section being to 200 metres. The rest of the systems are being sampled by hand-blasted trenches and (planned) drilling. Although some good, high-grade intersections are being reported, it appears the companies are having difficulty correlating between holes (i.e. mineralization is 'dilatational' in nature and may require detailed (e.g. 25 metre centre) drilling to define individual ore shoots). Nonetheless, it appears that the Clone property is indeed a significant gold discovery, with very good potential to develop into a major gold mine. The hematite (+chlorite + silica +/- sericite) cemented zones are steeply dipping and contain specularite, chalcopyrite, magnetite and native gold (high purity > 95 per cent, as determined in the Cominco laboratory). The sulphide-dominated mineralization contains auriferous pyrite +/- arsenopyrite, and locally cobalt-bearing minerals(s) (erythrite bloom). Hematitization appears to be pre-introduction of gold; the specularite-bearing veinlets formed later and contain gold. These zones (H1, H2, and H3; S1 and S2) are an echelon over a major NW trending 'shear' zone for approximately 60 metres in width.

Hostrocks include a mega-breccia (debris flow?) and andesitic pyroclastic rocks to the east and argillaceous sediments to the west. Locally, a fine grained dacite porphyry dike intrudes both the hostrocks and the mineralized zones. In H structures, gold mineralization appears to be directly related to the presence of hematite and/or specularite in the hematite-cemented structures. Individual veins range up to 7 metres in width. Chalcopyrite is commonly associated with the gold-bearing zones. In the sulphide-bearing zones, veins range up to 6 metres in width. Cobalt assays up to 0.71 per cent were reported from trenches. The company is looking at a possible 'elevation' control to dilatational-controlled mineralization, with a corresponding increase in sulphides. Chlorite is present throughout. This 'elevation' control is suspected in drillhole 96-18 where a 30 metre intersection assaying 12.34 grams per tonne gold was obtained. The company routinely stains the rocks for K-spar alteration; it appears that it is an initial (early), very pervasive phase in the altered andesitic rocks (and confirmed by thin section studies).

In 1996, drilling traced the hematite-rich H-1 structure over a strike length of 330 metres and a vertical range of 236 metres. A total of 28 holes were drilled on the southeastern end of the zone. The holes intersected rock with grades ranging from 2.85 to 44.23 grams per tonne gold over drill intercepts of 2.2 to 50.9 metres. Estimated true width is 36 metres. Cobalt values were as high as 0.13 per cent. Seven holes returned no significant mineralization.

The northern extensions of the H-1 and S-2A were tested by 12 holes. Results ranged from 4.1 metres grading 1.13 grams per tonne gold and 0.06 per cent cobalt (hole 66) to 0.49 metres of 30.51 grams per tonne gold (hole 65) (Northern Miner, November 11, 1996). Other zones were also tested. Another intersection (hole 18) was 61.7 grams per tonne gold and 0.31 per cent cobalt over 5 metres (GCNL #192(Oct.6), 1997).

As a result of a 17-hole drill program in 1997, Tenton Resources Corp. and Minvita Enterprises Ltd., conclude that cross structures to the sulphide and hematite shear zones control gold-cobalt mineralization.

The mineralization will predate this 200 Ma date. Given the high closure date for titanite (650 C) and upper crust emplacement of the sill, the date is also the age of crystallization.

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- EMPR ASS RPT 23878, *24376, 25785
- EMPR BULL 63
- EMPR Explore B.C. Program 95/96 - G165
- EMPR INF CIRC 1997-1, pp. 28,29

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1374
REPORT: RGEN0100

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GCNL #174(Sept.10), #179(Sept.17), #192(Oct.6), 1997
N MINER *Nov. 11, 1996
PERS COMM (E. Kruchowski, Teuton Resources Corp., Cordilleran Roundup
1997 Talk)
PR REL Teuton Resources Corp., August 29, 2002
WWW <http://www.teuton.com/stewart.htm/#clone>; <http://www.infomine.com/>

DATE CODED: 1996/11/27
DATE REVISED: 1997/03/25

CODED BY: DEJ
REVISED BY: GP

FIELD CHECK: Y
FIELD CHECK: Y

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1375
REPORT: RGEN0100

MINFILE NUMBER: **103P 252**

NATIONAL MINERAL INVENTORY:

NAME(S): **RESERVE**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 103P05W
BC MAP:
LATITUDE: 55 24 54 N
LONGITUDE: 129 47 38 W
ELEVATION: Metres
LOCATION ACCURACY: Within 500M
COMMENTS:

Underground

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

NORTHING: 6141260
EASTING: 449742

COMMODITIES:

MINERALS

SIGNIFICANT:
MINERALIZATION AGE:

DEPOSIT

CHARACTER:
CLASSIFICATION:

HOST ROCK

DOMINANT HOSTROCK:

LITHOLOGY:

GEOLOGICAL SETTING

TECTONIC BELT:
TERRANE:

BIBLIOGRAPHY

DATE CODED: 1997/04/07
DATE REVISED: / /

CODED BY: DA
REVISED BY:

FIELD CHECK: Y
FIELD CHECK: N

MINFILE NUMBER: **103P 252**

MINFILE NUMBER: **103P 253**

NATIONAL MINERAL INVENTORY:

NAME(S): **APLITE**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P05W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 25 58 N
LONGITUDE: 129 53 45 W
ELEVATION: 550 Metres

NORTHING: 6143317
EASTING: 443314

LOCATION ACCURACY: Within 500M

COMMENTS: Location of sulphide-bearing zone. This deposit description is based on the field notes of B.C. Geological Survey Branch geologist D.J Aldrick.

COMMODITIES: Copper Gold Silver Zinc

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Sphalerite Pyrrhotite
ASSOCIATED: Quartz
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Vein Shear Disseminated Discordant
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I06 Cu±Ag quartz veins
SHAPE: Tabular
DIMENSION: 40 x 1 Metres STRIKE/DIP: 064/67N TREND/PLUNGE:
COMMENTS: Quartz and sulphide mineralized shear zone. Highest sulphide content hosted by narrow quartz veins (163/83 degrees east dip) that cross-cut the main zone which has attitude of 064/67 degrees north.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic	Hazelton	Unnamed/Unknown Formation	
Middle Jurassic	Bowser Lake	Unnamed/Unknown Formation	

DATING METHOD: Fossil
MATERIAL DATED: Ammonites

LITHOLOGY: Pillow Basalt
Aplite Dike

HOSTROCK COMMENTS: Bowser Lake fossil date reported in Open File 3454 (1997).

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)
TERRANE: Stikine Plutonic Rocks
METAMORPHIC TYPE: Regional RELATIONSHIP: Pre-mineralization GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N

CATEGORY:	Assay/analysis	YEAR:
SAMPLE TYPE:	Grab	1998
COMMODITY	GRADE	
Silver	33.0000	Grams per tonne
Gold	0.4470	Grams per tonne
Copper	3.2000	Per cent
Zinc	0.0900	Per cent

REFERENCE: D.J. Aldrick, B.C. Geological Survey, 1998.

CAPSULE GEOLOGY

The region is underlain by a roof pendant, consisting of volcanic and sedimentary rocks, within the Coast Plutonic Complex. These pendant rocks have been correlated with Lower to lower Middle Jurassic Hazelton Group rocks and overlying upper Middle to Upper Jurassic Bowser Lake Group sedimentary rocks (GSC Open File 3454).

The Hazelton rocks consist of variably chloritized pillow and massive andesite and basalt with minor mafic tuffs. The overlying Bowser Lake sediments consist of argillite, siltstone and sandstone with minor chert and limestone.

There are two observable phases of folding in the area, an initial north-northeast trending phase followed by a later east-northeast trending phase.

The Aplite showing is a sulphide-rich silicified zone, trending

CAPSULE GEOLOGY

along a minor scarp face, with an attitude similar to that of a nearby aplite dike. The host rocks are massive to pillowed basalt flows of the upper Hazelton Group. The flow banded, Tertiary aplite dike occurs as a prominent outcrop about 200 metres to the east-southeast.

Where minor, late cross-fractures cut this silicified, sulphide-bearing shear, late sulphide-rich quartz veins have developed, having a maximum width of 20 centimetres. Observed sulphides include pyrite, chalcopyrite, sphalerite and pyrrhotite. A grab sample was collected from one of the crosscutting veins. It yielded 3.2 per cent copper, 0.447 grams per tonne gold, 33 grams per tonne silver, 0.09 per cent zinc, 0.0014 per cent lead and 9.5 per cent iron (D.J. Alldrick, B.C. Geological Survey Branch, unpublished data, 1998).

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EMPR MAP 8
EMPR PF (Alldrick, D. (1986) Anyox Map; Taiga Consultants Ltd. (1992): Geological, Geochemical and Geophysical Report on the Anyox Area in 103P 021)
EMR MIN BULL MR 223 B.C. 298
GSC MAP 307A; 1385A
GSC OF 3454
Sharp, R.J., 1980: The Geology, Geochemistry & Sulphur Isotopes of The Anyox Massive Sulphide Deposits, University of Alberta, M.Sc. Thesis

DATE CODED: 1997/04/07
DATE REVISED: 1999/01/06

CODED BY: DA
REVISED BY: DJA

FIELD CHECK: Y
FIELD CHECK: Y

MINFILE NUMBER: **103P 254**

NATIONAL MINERAL INVENTORY:

NAME(S): **RAINY**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P05W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 25 44 N
LONGITUDE: 129 52 22 W
ELEVATION: 490 Metres

NORTHING: 6142866
EASTING: 444768

LOCATION ACCURACY: Within 500M

COMMENTS: Location of exposed mineralization along the southern and eastern slopes of a prominent rock knob. This deposit description is based on the field notes of B.C. Geological Survey Branch geologist D.J Aldrick.

COMMODITIES: Zinc Copper

MINERALS

SIGNIFICANT: Pyrite Sphalerite Chalcopyrite Pyrrhotite
ASSOCIATED: Quartz
ALTERATION: Sericite
ALTERATION TYPE: Sericitic
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Vein Shear Disseminated Discordant
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I06 Cu±Ag quartz veins
SHAPE: Tabular
DIMENSION: 80 x 10 Metres STRIKE/DIP: 053/65N TREND/PLUNGE:
COMMENTS: Attitude and dimension of mineralized zone.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic	Hazelton	Unnamed/Unknown Formation	
Middle Jurassic	Bowser Lake	Unnamed/Unknown Formation	
DATING METHOD:	Fossil		
MATERIAL DATED:	Ammonites		

LITHOLOGY: Pillow Basalt

HOSTROCK COMMENTS: Bowser Lake fossil date reported in Open File 3454 (1997).

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)
TERRANE: Stikine Plutonic Rocks
METAMORPHIC TYPE: Regional RELATIONSHIP: Pre-mineralization GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1998
SAMPLE TYPE: Grab
COMMODITY GRADE
Copper 0.0119 Per cent
Zinc 0.2238 Per cent

COMMENTS: Sample collected from a narrow quartz-pyrite-sphalerite-chalcopyrite vein exposed in an old trench.

REFERENCE: D.J. Aldrick, B.C. Geological Survey, 1998.

CAPSULE GEOLOGY

The region is underlain by a roof pendant, consisting of volcanic and sedimentary rocks, within the Coast Plutonic Complex. These pendant rocks have been correlated with Lower to lower Middle Jurassic Hazelton Group rocks and overlying upper Middle to Upper Jurassic Bowser Lake Group sedimentary rocks (GSC Open File 3454).

The Hazelton rocks consist of variably chloritized pillow and massive andesite and basalt with minor mafic tuffs. The overlying Bowser Lake sediments consist of argillite, siltstone and sandstone with minor chert and limestone.

There are two observable phases of folding in the area, an initial north-northeast trending phase followed by a later east-northeast trending phase.

The Rainy showing is a 10-metre wide mineralized shear zone that

CAPSULE GEOLOGY

is exposed in a series of pits and cliffs on the southern, southeastern and eastern slopes of a small prominent hill in the area. The remains of an old prospecting/exploration camp probably date back to regional exploration programs of the early 1950s.

The general trend of the mineralized shear is southwest-northeast; measured orientations have an average strike of 053 degrees with a 65 degree northwest dip. The hostrocks are massive to slightly stretched pillow basalts. However, in the area of mineralized shear (within 20 metres) the pillows are more elongate and stretched along the prominent foliation direction. The shear zone averages 10 metres in width and is characterized by strong sericitization and lesser pyrite. There is a large flat area downslope to the northeast with well-exposed bedrock that shows no evidence of the extension of the mineralized shear. This suggests that it may be cut off to the east by a fault.

The most significant sulphide mineralization is exposed in a trench on the south side of the hill, 30 metres east-northeast of a small pond. Here a narrow (10-15 centimetre wide) quartz vein with pyrite, sphalerite, pyrrhotite and traces of chalcopyrite is localized within the wider shear zone. This material was sampled for assay and yielded 0.2238 per cent zinc, 0.0119 per cent copper, 0.0003 per cent lead, 0.003 gram per tonne gold and 0.3 gram per tonne silver (D.J. Alldrick, B.C. Geological Survey, unpublished data, 1998).

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GSC OF 3454
Sharp, R.J., 1980: The Geology, Geochemistry & Sulphur Isotopes of The Anyox Massive Sulphide Deposits, University of Alberta, M.Sc. Thesis

DATE CODED: 1997/04/07
DATE REVISED: 1999/01/06

CODED BY: DA
REVISED BY: DJA

FIELD CHECK: Y
FIELD CHECK: Y

MINFILE NUMBER: **103P 255**

NATIONAL MINERAL INVENTORY:

NAME(S): **LOOKOUT**, KNOB HILL

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P05W
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 25 42 N
LONGITUDE: 129 52 57 W
ELEVATION: 535 Metres

NORTHING: 6142812
EASTING: 444152

LOCATION ACCURACY: Within 500M

COMMENTS: Location of mineralization along ridge top near spot height 535 metres (1:20,000 TRIM map). This deposit description is based on the field notes of B.C. Geological Survey Branch geologist D.J Aldrick.

COMMODITIES: Iron

MINERALS

SIGNIFICANT: Pyrite
ASSOCIATED: Quartz

MINERALIZATION AGE:

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Volcanogenic Exhalative Syngenetic
TYPE: G05 Cyprus massive sulphide Cu (Zn)
SHAPE: Tabular
DIMENSION: 100 x 2 Metres STRIKE/DIP: 100/75N

TREND/PLUNGE:

COMMENTS: This showing consists of disseminated pyrite in a fragmental volcanic unit, bounded by unmineralized pillow lavas. This may represent the distal equivalent of an ore-bearing horizon.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic	Hazelton	Unnamed/Unknown Formation	
Middle Jurassic	Bowser Lake	Unnamed/Unknown Formation	
DATING METHOD:	Fossil		
MATERIAL DATED:	Ammonites		

LITHOLOGY: Pillow Basalt
Basaltic Pyritic Lapilli Tuff

HOSTROCK COMMENTS: Bowser Lake fossil date reported in Open File 3454 (1997).

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Stikine
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)
RELATIONSHIP: Pre-mineralization
GRADE: Greenschist

CAPSULE GEOLOGY

The region is underlain by a roof pendant, consisting of volcanic and sedimentary rocks, within the Coast Plutonic Complex. These pendant rocks have been correlated with Lower to lower Middle Jurassic Hazelton Group rocks and overlying upper Middle to Upper Jurassic Bowser Lake Group sedimentary rocks (GSC Open File 3454). The Hazelton rocks consist of variably chloritized pillow and massive basalt with minor mafic tuffs. The overlying Bowser Lake sediments consist of siltstone and sandstone with minor chert and limestone.

There are two observable phases of folding in the area, an initial north-northeast trending phase followed by a later east-northeast trending phase.

The large flat hilltop location of the Lookout occurrence has well-exposed bedrock; soil and gravel cover appears to have been stripped away decades ago. There is no indication of major trenching work.

Exposed strata are massive pillow lavas on the south part of the hilltop, and pyritic lapilli-rich tuff along the western part of the hilltop, including the highest spine of the hilltop. The string of pyritic outcrop knobs trends 100 degrees and dips 75 degrees north. Pyritic outcrop exposures extend for 100 metres along strike to the west of the spot height (535 metres) where they are cut off to the west by a prominent fault (deep gully). There are a set of prominent fine-grained quartz veins cutting across this pyritic rock with an attitude of strike 073 degrees and 55 degrees north dip. Overall, this pyritic zone resembles a distinct stratigraphic unit that has

CAPSULE GEOLOGY

been subsequently sheared and cut by minor quartz veins.
The pyritic zone is 1 to 2 metres thick over its entire exposed
strike length of 100 metres. This pyritic fragmental unit may
represent the distal equivalent/extension of a mineralized horizon.

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The Anyox Massive Sulphide Deposits, University of Alberta, M.Sc.
Thesis

DATE CODED: 1997/04/07
DATE REVISED: 1999/01/06

CODED BY: DA
REVISED BY: DJA

FIELD CHECK: Y
FIELD CHECK: Y

MINFILE NUMBER: **103P 256**

NATIONAL MINERAL INVENTORY:

NAME(S): **SNYDER**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P05W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 27 34 N
LONGITUDE: 129 53 31 W
ELEVATION: 1615 Metres

NORTHING: 6146282
EASTING: 443598

LOCATION ACCURACY: Within 500M

COMMENTS: Location of vein. This deposit description is based on the field notes of B.C. Geological Survey Branch geologist D.J Alldrick.

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Pyrite Marcasite

COMMENTS: Vein locally contains up to 60 per cent blebs or knots of fine-grained pyrite and marcasite.

ASSOCIATED: Quartz Carbonate

MINERALIZATION AGE:

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic

TYPE: I01 Au-quartz veins

SHAPE: Tabular

COMMENTS: A narrow (30 centimetres wide) vertical vein exposed in a string of outcrops over 50 metres.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Lower Jurassic

Middle Jurassic

GROUP

Hazelton

Bowser Lake

FORMATION

Unnamed/Unknown Formation

Unnamed/Unknown Formation

IGNEOUS/METAMORPHIC/OTHER

DATING METHOD: Fossil

MATERIAL DATED: Ammonites

LITHOLOGY: Pillow Basalt

HOSTROCK COMMENTS: Bowser Lake fossil date reported in Open File 3454 (1997).

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline

TERRANE: Stikine

METAMORPHIC TYPE: Regional

Plutonic Rocks

RELATIONSHIP: Pre-mineralization

PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)

GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

SAMPLE TYPE: Grab

YEAR: 1998

COMMODITY

Gold

GRADE

0.0650

Grams per tonne

REFERENCE: D.J. Alldrick, B.C. Geological Survey, 1998.

CAPSULE GEOLOGY

The region is underlain by a roof pendant, consisting of volcanic and sedimentary rocks, within the Coast Plutonic Complex. These pendant rocks have been correlated with Lower to lower Middle Jurassic Hazelton Group rocks and overlying upper Middle to Upper Jurassic Bowser Lake Group sedimentary rocks (GSC Open File 3454). The Hazelton rocks consist of variably chloritized pillow and massive basalt with minor mafic tuffs. The overlying Bowser Lake sediments consist of siltstone and sandstone with minor chert and limestone.

The Snyder showing a is massive quartz-carbonate vein exposed in scattered outcrop over a 50 metre strike length. The vein dips steeply and averages 30 centimetres in width. Over a small section of its total length, this vein contains up to 60 per cent fine pyrite and marcasite as scattered, blebs or knots within the quartz. The host rock is pillow basalt.

A sample of the material yielded 0.064 gram per tonne gold, 81 ppm copper, 30 ppm zinc, 30 ppm lead and 0.6 gram per tonne silver (D.J. Alldrick, B.C. Geological Survey, unpublished data, 1998).

RUN DATE: 26-Jun-2003
RUN TIME: 12:06:33

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1383
REPORT: RGEN0100

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GSC MAP 307A; 1385A
GSC OF 3454
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The Anyox Massive Sulphide Deposits, University of Alberta, M.Sc.
Thesis

DATE CODED: 1997/04/07
DATE REVISED: 1999/01/06

CODED BY: DA
REVISED BY: DJA

FIELD CHECK: Y
FIELD CHECK: Y

MINFILE NUMBER: **103P 257**

NATIONAL MINERAL INVENTORY:

NAME(S): **ANYOX SLAG HEAP**

STATUS: Producer Open Pit

MINING DIVISION: Skeena

REGIONS: British Columbia

NTS MAP: 103P05W

BC MAP:

LATITUDE: 55 24 43 N

LONGITUDE: 129 49 23 W

ELEVATION: 005 Metres

LOCATION ACCURACY: Within 500M

COMMENTS: Large fan of slag that slopes downhill from the foot of the smelter on the ridge, down into the waters of Granby Bay. This deposit description is based on the field notes of B.C. Geological Survey Branch geologist D.J Alldrick.

UTM ZONE: 09 (NAD 83)

NORTHING: 6140942

EASTING: 447892

COMMODITIES: Slag Silica

MINERALS

SIGNIFICANT: Silica Glass

MINERALIZATION AGE:

DEPOSIT

CHARACTER: Unconsolidated Stratiform Concordant

CLASSIFICATION: Industrial Min.

TYPE: T01 Tailings

SHAPE: Tabular

DIMENSION: 700 x 500 x 50 Metres STRIKE/DIP: 015/10E

TREND/PLUNGE:

COMMENTS: A flat-lying lens of glassy slag (now devitrified). The slag heap was formed between 1914 to 1936 during the smelting of the Hidden Valley (Anyox) mine ore.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic	Hazelton	Unnamed/Unknown Formation	
Middle Jurassic	Bowser Lake	Unnamed/Unknown Formation	

DATING METHOD: Fossil
MATERIAL DATED: Ammonites

LITHOLOGY: Silica
Pillow Basalt

HOSTROCK COMMENTS: Recent flat-lying surfical slag deposit.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline

TERRANE: Stikine

Plutonic Rocks

PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)

INVENTORY

ORE ZONE: QUARRY

REPORT ON: Y

CATEGORY: Unclassified YEAR: 1998

QUANTITY: 20000000 Tonnes

COMMODITY: Silica GRADE: 100.0000 Per cent

COMMENTS: This is a conservative estimate of the quantity of material in the slag heap. The grade or purity of the silica is not known.

REFERENCE: D.J Allrick, B.C. Geological Survey, 1998

CAPSULE GEOLOGY

The region is underlain by a roof pendant, consisting of volcanic and sedimentary rocks, within the Coast Plutonic Complex. These pendant rocks have been correlated with Lower to lower Middle Jurassic Hazelton Group rocks and overlying upper Middle to Upper Jurassic Bowser Lake Group sedimentary rocks (GSC Open File 3454). The Hazelton rocks consist of variably chloritized pillow and massive basalt with minor mafic tuffs. The overlying Bowser Lake sediments consist of siltstone and sandstone with minor chert and limestone.

The slag pile at the Anyox Smelter was originally a single massive sloping slab of glass which resulted from the smelting of the Hidden Creek (Anyox) deposit (103P 021) ore. Sixty years of weathering has devitrified this material into sharply angular coarse to fine glass splinters. The high content of impurities in the silica flux have created a slag with a hardness significantly lower than quartz. This characteristic, combined with the highly angular

CAPSULE GEOLOGY

shape of the glass shards, makes the screened, sorted fine abrasive ideal in an abrasive slurry for sand-blasting.

The angular particle shape strips old paint or other oxidized surface coatings better than rounded sand grains; yet the lower particle hardness removes less underlying metal than conventional quartz sand.

The primary user for this abrasive is the U.S. military. The abrasive was used for the regularly scheduled stripping and repainting of the special sonar-absorbing coating applied to the hulls of the U.S nuclear submarine fleet stationed in Puget Sound.

The quarrying permit was first issued to Tru-Grit Abrasives in July 1990. Primary production season was over the summer months, but extended well into the spring and fall. The quarry was still active in 1998. D.J. Alldrick of the B.C. Geological Survey gives a conservative estimate of 20 million tonnes of slag (1998).

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EMPR MAP 8
EMR MIN BULL MR 223 B.C. 298
GSC MAP 307A; 1385A
GSC OF 3454
Placer Dome File

DATE CODED: 1997/04/07
DATE REVISED: 1999/01/06

CODED BY: DA
REVISED BY: DJA

FIELD CHECK: Y
FIELD CHECK: Y

MINFILE NUMBER: **103P 258**

NATIONAL MINERAL INVENTORY:

NAME(S): **SAX**, MAC, CLASH

MINING DIVISION: Skeena

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 103P05W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 26 00 N
LONGITUDE: 129 53 30 W
ELEVATION: 450 Metres

NORTHING: 6143376
EASTING: 443579

LOCATION ACCURACY: Within 500M

COMMENTS: Location of Sax showing from Assessment Report 23582.

COMMODITIES: Copper Silver Zinc

MINERALS

SIGNIFICANT: Pyrite Pyrrhotite Chalcopyrite Sphalerite
ASSOCIATED: Quartz Chlorite
ALTERATION: Chlorite
ALTERATION TYPE: Chloritic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated Vein Shear
CLASSIFICATION: Volcanogenic Exhalative
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au G05 Cyprus massive sulphide Cu (Zn)

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE

Jurassic
Upper Triassic

GROUP

Hazelton
Vancouver

FORMATION

Undefined Formation
Karmutsen

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Chlorite Schist
Biotite Schist
Quartzite
Basaltic Tuff
Chlorite Pillow Basalt
Chert
Andesite

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Stikine
METAMORPHIC TYPE: Regional

Wrangell
RELATIONSHIP:

PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)

GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Chip

YEAR: 1994

COMMODITY

	<u>GRADE</u>	
Silver	91.0000	Grams per tonne
Copper	5.5000	Per cent
Zinc	0.4600	Per cent

REFERENCE: Assessment Report 23582.

CAPSULE GEOLOGY

The Sax showing is located 2.5 kilometres north of the Double Ed (103P 025).

The region is underlain by a sequence of volcanics and sediments which have been correlated with the Jurassic Hazelton Group, but have also been correlated with the Upper Triassic Kunga Group sediments and the Karmutsen Formation (Vancouver Group) volcanics (Sharp, R.J. (1980), M.Sc. Thesis).

The volcanics consist of massive and pillow andesitic to basaltic flows with minor mafic tuff. These have been altered and chloritized to greenstone as a result of regional greenschist metamorphism. The overlying sediments consist of argillite, siltstone, sandstone, minor limestone and chert. These rocks have been subjected to an initial north-northeast trending phase of folding followed by a later east-northeast trending phase.

Mineralization, consisting of disseminated pyrite, pyrrhotite, chalcopyrite and sphalerite, occurs in chloritized pillow basalts, basaltic pyroclastics and minor pelitic to siliceous sediments. At

CAPSULE GEOLOGY

the Sax showing, over 1 per cent copper occurs in a 1-metre wide bed (Report by Taiga Consultants Ltd., 1992). Followup sampling in 1994 of stringer type copper mineralization in the area returned values up to 5.5 per cent copper, 0.46 per cent zinc and 91 grams per tonne silver (Assessment Report 23582).

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EMPR FIELDWORK 1985, pp. 211-216; 1988, pp. 233-240; 1990, pp. 235-243
EMPR PF (Taiga Consultants Ltd. (1992): Geological, Geochemical and Geophysical Report on the Anyox Property in 103P 021)
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GSC OF 3454
Sharp, R.J. (1980): The Geology, Geochemistry & Sulphur Isotopes of the Anyox Massive Sulphide Deposits, University of Alberta M.Sc. Thesis

DATE CODED: 1998/06/12
DATE REVISED: 1998/06/12

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **103P 259**

NATIONAL MINERAL INVENTORY:

NAME(S): **KITGOLD**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 103P12E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 55 37 16 N
LONGITUDE: 129 31 52 W
ELEVATION: 1200 Metres

NORTHING: 6164040
EASTING: 466553

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Gold Zinc Lead Copper

MINERALS

SIGNIFICANT: Pyrite Sphalerite Chalcopyrite Arsenopyrite
ASSOCIATED: Quartz
ALTERATION: Sericite Limonite
ALTERATION TYPE: Sericitic Oxidation
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Vein Stockwork
CLASSIFICATION: Epigenetic Hydrothermal

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Middle Jurassic	Hazelton	Unnamed/Unknown Formation	
Upper Triassic	Stuhini	Undefined Formation	

LITHOLOGY: Intermediate Volcanic Flow
Andesitic Lapilli Tuff
Tuff Breccia
Siltstone
Porphyritic Flow
Amygdaloidal Flow
Sandstone

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Boundary Ranges
TERRANE: Stikine
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1991
SAMPLE TYPE: Grab
COMMODITY: Gold GRADE Grams per tonne
 Gold 8.6400

COMMENTS: A 20-centimetre wide brecciated quartz vein in intermediate blocky tuff.

REFERENCE: Assessment Report 21173.

CAPSULE GEOLOGY

The Kitgold occurrence is located 16.1 kilometres north of Alice Arm, 2.6 kilometres east of the Kitsault River and 1.9 kilometres south of Lyall Creek at approximately 1200 metres elevation. The region is underlain by an assemblage of volcanic and sedimentary rocks comprising the Upper Triassic Stuhini Group, the Lower-Middle Jurassic Hazelton Group and the Middle-Upper Jurassic Bowser Lake Group.

The Kitgold occurrence is underlain by fine to medium-grained interbedded andesitic lapilli tuff to tuff breccia with intercalated maroon porphyritic and amygdaloidal volcanic rocks, sandstone and siltstone that form a northwest-southeasterly trending anticline. Pillowed basaltic flows, conglomerates and pillow breccia, with small lenses of interbedded siltstones and limestone, lie in the core of the anticline and form a northwest-southeasterly striking band 0.5 kilometre to 1.5 kilometres wide through the centre of the area. Approximately 800 metres to the east of the main anticline, a less prominent sub-parallel syncline occurs.

Faults and shears within the area are predominantly oriented

CAPSULE GEOLOGY

north-south to northeast-southwest. A series of fine to medium-grained sub-volcanic dykes, of intermediate composition, up to 10 metres wide generally trend northwest-southeast parallel to sub-parallel with the fold axis and stratigraphy.

Quartz veining is concentrated along a north-south trending linear zone, 10 to 30 metres wide and 1000 metres long. Veins within the zone may be up to 2 metres thick and several hundred metres in length. These large veins also give rise to ubiquitous veinlets and stringers between individual veins. Cross cutting relationships indicate at least three phases of emplacement, resulting in a high degree of brecciation and silicification associated with a well developed elaborate stockwork. Sericitic and limonitic alteration exists but is localized and weakly developed. The veining occurs within a massive intermediate volcanic flow. Sulphide mineralization occurs mostly as pyrite, up to 20 per cent in veins, and associated wall rock contacts. Rare arsenopyrite and/or chalcopyrite is associated with pyrite.

Rock samples taken from the hanging wall of the main quartz vein system, on the eastern side of the property, in the vicinity of the syncline, yielded 5 samples that assayed greater than 3.4 grams per tonne gold. The main quartz vein system did not yield any significant values (Assessment Report 21173). Approximately 750 metres to the west, an old trench exposes a brecciated quartz vein system hosted within interbedded tuff and siltstone. The quartz vein, which parallels bedding (022 degrees strike and 60 degrees east dip), contains up to 25 per cent reddish brown sphalerite. Approximately 2 kilometres to the southwest a sample taken of from an ankeritic quartz vein cutting andesite assayed 0.62 gram per tonne gold, 0.27 per cent lead and 0.07 per cent zinc (Assessment Report 21173).

BIBLIOGRAPHY

EM ASS RPT *21173
EMPR BULL 63
EMPR FIELDWORK 1985, pp. 219-224, 327-330; 1988, pp. 233-240; 1990, pp. 235-243
EMPR OF 1994-14; 1986-2
GSC MAP 307A; 315A; 1385A
GSC MEM 175
GCNL No. 169(Sept.3), 1991; 168(Aug.3), 1991

DATE CODED: 2000/06/29
DATE REVISED: / /

CODED BY: IW
REVISED BY:

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
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MINFILE PRODUCTION REPORT
GEOLOGICAL SURVEY BRANCH
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MINFILE NUMBER: 103A 001	NAME: LAREDO LIMESTONE	STATUS: Past Producer			
Production Year	Tonnes Mined	Tonnes Milled	Commodity	Grams Recovered	Kilograms Recovered
1952	10,886	10,886	Limestone		10,886,216
SUMMARY TOTALS: 103A 001		NAME: LAREDO LIMESTONE			
		<u>Metric</u>		<u>Imperial</u>	
	Mined:	10,886 tonnes		12,000 tons	
	Milled:	10,886 tonnes		12,000 tons	
Recovery:	Limestone:	10,886,216 kilograms		23,999,991 pounds	

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MINFILE PRODUCTION REPORT
GEOLOGICAL SURVEY BRANCH
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MINFILE NUMBER: 103A 007	NAME: PRINCESS ROYAL ISLAND	STATUS: Past Producer			
Production Year	Tonnes Mined	Tonnes Milled	Commodity	Grams Recovered	Kilograms Recovered
1922	1,609		Limestone		1,608,878
1921	644		Limestone		644,101
1919	2,286		Limestone		2,286,105

SUMMARY TOTALS: 103A 007

NAME: **PRINCESS ROYAL ISLAND**
Metric Imperial

Mined: 4,539 tonnes 5,003 tons
Milled: tonnes tons
Recovery: Limestone: 4,539,084 kilograms 10,006,964 pounds

RUN DATE: 26-Jun-2003
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MINFILE PRODUCTION REPORT
GEOLOGICAL SURVEY BRANCH
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REPORT: RGEN0200

MINFILE NUMBER: 103B 012	NAME: ELLEN	STATUS: Past Producer			
Production Year	Tonnes Mined	Tonnes Milled	Commodity	Grams Recovered	Kilograms Recovered
1919	45		Gold	560	

SUMMARY TOTALS: 103B 012

	NAME: ELLEN	
	<u>Metric</u>	<u>Imperial</u>
	Mined: 45 tonnes	50 tons
	Milled: tonnes	tons
Recovery:	Gold: 560 grams	18 ounces

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MINFILE PRODUCTION REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

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MINFILE NUMBER:	103B 022	NAME:	EAST COPPER ISLAND	STATUS:	Past Producer
Production Year	Tonnes Mined	Tonnes Milled	Commodity	Grams Recovered	Kilograms Recovered
1917	35		Silver	715	
			Copper		4,865
1916	15		Copper		2,268

SUMMARY TOTALS: 103B 022

NAME: **EAST COPPER ISLAND**

		<u>Metric</u>	<u>Imperial</u>
	Mined:	50 tonnes	55 tons
	Milled:		tons
Recovery:	Silver:	715 grams	23 ounces
	Copper:	7,133 kilograms	15,726 pounds
Comments:	1916:	Operated by J. Babington & Jones.	

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MINFILE PRODUCTION REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

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REPORT: RGEN0200

MINFILE NUMBER: 103B 023	NAME: GIGGER	STATUS: Past Producer			
Production Year	Tonnes Mined	Tonnes Milled	Commodity	Grams Recovered	Kilograms Recovered
1918	11		Copper		964
1917	14		Copper		1,361

SUMMARY TOTALS: 103B 023

NAME: **GIGGER**

Metric

25 tonnes
tonnes

Imperial

28 tons
tons

Recovery:

Copper:

2,325 kilograms

5,126 pounds

Comments:

1918: Operated by Campbell & Wilds.

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MINFILE PRODUCTION REPORT
GEOLOGICAL SURVEY BRANCH
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REPORT: RGEN0200

MINFILE NUMBER: **103B 024** NAME: **LUCKY SEVEN** STATUS: Past Producer

<u>Production Year</u>	<u>Tonnes Mined</u>	<u>Tonnes Milled</u>	<u>Commodity</u>	<u>Grams Recovered</u>	<u>Kilograms Recovered</u>
1916	38		Silver	6,780	
			Gold	1,866	
			Copper		3,781

SUMMARY TOTALS: 103B 024

NAME: **LUCKY SEVEN**

	<u>Metric</u>	<u>Imperial</u>
Mined:	38 tonnes	42 tons
Milled:	tonnes	tons
Recovery:		
Silver:	6,780 grams	218 ounces
Gold:	1,866 grams	60 ounces
Copper:	3,781 kilograms	8,336 pounds

Comments: 1916: Operated by A.H. Knowlton.

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
 ENERGY AND MINERALS DIVISION

MINFILE NUMBER:	103B 026	NAME:	JESSIE	STATUS:	Past Producer
<u>Production Year</u>	<u>Tonnes Mined</u>	<u>Tonnes Milled</u>	<u>Commodity</u>	<u>Grams Recovered</u>	<u>Kilograms Recovered</u>
1968	95,546	106,386	Iron		102,139,000
1967	790,474	842,241	Iron		379,069,000
1966	783,171	806,742	Iron		485,516,000
1965	757,709	744,699	Iron		358,739,000
1964	629,502	630,602	Iron		389,399,000
1963	657,049	657,049	Iron		307,543,000
1962	150,983	150,983	Iron		48,548,000

SUMMARY TOTALS: 103B 026

NAME: **JESSIE**

	<u>Metric</u>	<u>Imperial</u>
Mined:	3,864,434 tonnes	4,259,809 tons
Milled:	3,938,702 tonnes	4,341,676 tons

Recovery: Iron: 2,070,953,000 kilograms 4,565,668,545 pounds

Comments:

- 1968: BC Metal figures.
- 1967: BC Metal figures.
- 1966: Includes ore from Rose (103B 029). BC Metal figures.
- 1965: BC Metal figures.
- 1964: Includes ore from Adonis (103B 027). BC Metal figures.
- 1963: BC Metal figures.
- 1962: BC Metal figures. Operated by Jedway Iron Ore Ltd.

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
 ENERGY AND MINERALS DIVISION

MINFILE NUMBER:	103B 028	NAME:	LILY	STATUS:	Past Producer
<u>Production Year</u>	<u>Tonnes Mined</u>	<u>Tonnes Milled</u>	<u>Commodity</u>	<u>Grams Recovered</u>	<u>Kilograms Recovered</u>
1920	128	128	Silver	9,486	
			Gold	840	
			Copper		9,565
1919	137	137	Silver	22,456	
			Gold	1,586	
			Copper		17,685
1918	191	191	Silver	24,727	
			Gold	1,804	
			Copper		28,546
1917	907	907	Silver	55,737	
			Gold	4,759	
			Copper		69,346
1916	962	962	Silver	61,491	
			Gold	4,199	
			Copper		60,030
1915	322	322	Silver	47,556	
			Gold	3,141	
			Copper		51,160
1909	3,865	3,865	Silver	131,130	
			Gold	8,118	
			Copper		60,491
1908	6,285	6,285	Silver	437,899	
			Gold	21,554	
			Copper		222,195
1907	609	609	Silver	71,257	
			Gold	5,132	
			Copper		54,423
1906	4	4	Silver	809	
			Gold	62	
			Copper		614

SUMMARY TOTALS: 103B 028

NAME: **LILY**

	<u>Metric</u>	<u>Imperial</u>
Mined:	13,410 tonnes	14,782 tons
Milled:	13,410 tonnes	14,782 tons
Recovery:		
Silver:	862,548 grams	27,732 ounces
Gold:	51,195 grams	1,646 ounces
Copper:	574,055 kilograms	1,265,574 pounds
Comments:		
1915:	Operated by Ikeda Mines Ltd.	
1906:	Operated by Awaya, Ikeda & Co., Limited.	

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
 ENERGY AND MINERALS DIVISION

MINFILE NUMBER: 103B 044		NAME: WIRELESS		STATUS: Past Producer		
<u>Production Year</u>	<u>Tonnes Mined</u>	<u>Tonnes Milled</u>	<u>Commodity</u>	<u>Grams Recovered</u>	<u>Kilograms Recovered</u>	
1917	10		Silver	218		
			Gold	373		
			Copper		225	
1916	5		Silver	156		
			Gold	62		
			Copper		136	

SUMMARY TOTALS: 103B 044

NAME: **WIRELESS**

	<u>Metric</u>	<u>Imperial</u>
Mined:	15 tonnes	17 tons
Milled:	tonnes	tons
Recovery:	Silver: 374 grams	12 ounces
	Gold: 435 grams	14 ounces
	Copper: 361 kilograms	796 pounds

Comments: 1917: Operated by P.C. Daykin & J. Westerman.
 1916: Operated by P.C. Daykin.

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MINFILE PRODUCTION REPORT
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MINFILE NUMBER: 103B 045	NAME: OCEANIC	STATUS: Past Producer			
Production Year	Tonnes Mined	Tonnes Milled	Commodity	Grams Recovered	Kilograms Recovered
1913	14		Silver Copper	218	534

SUMMARY TOTALS: 103B 045

	NAME: OCEANIC	
	<u>Metric</u>	<u>Imperial</u>
	14 tonnes	15 tons
Mined:		
Milled:		
Recovery:	218 grams	7 ounces
	534 kilograms	1,177 pounds
Copper:		
Comments:		
	1913: Operated by J. Lawson.	

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
 ENERGY AND MINERALS DIVISION

MINFILE NUMBER: 103C 001		NAME: EARLY BIRD		STATUS: Past Producer		
<u>Production Year</u>	<u>Tonnes Mined</u>	<u>Tonnes Milled</u>	<u>Commodity</u>	<u>Grams Recovered</u>	<u>Kilograms Recovered</u>	
1939	14	14	Silver	311		
			Gold	3,950		
1933	91	91	Silver	778		
			Gold	1,648		
1922	5	5	Gold	653		
1917	2	2	Gold	249		
1915	5	5	Silver	31		
			Gold	871		
1914	36	36	Gold	622		
1913	18	11	Silver	124		
			Gold	746		
1908	9	9	Gold	900		
1859			Gold	7,530		

SUMMARY TOTALS: 103C 001

NAME: **EARLY BIRD**

	<u>Metric</u>	<u>Imperial</u>
Mined:	180 tonnes	198 tons
Milled:	173 tonnes	191 tons
Recovery:		
Silver:	1,244 grams	40 ounces
Gold:	17,169 grams	552 ounces

Comments:

1939: Operated by Anne Kidd.
 1933: Operated by Gold Harbour Mines Ltd.
 1913: Operated by J. McLellan.
 1908: Nuba Mining Company, Limited; based on \$/ton yield.
 1859: Major W. Downie; based on \$ recovered; possibly more.

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
 ENERGY AND MINERALS DIVISION

MINFILE NUMBER: 103C 003		NAME: TASU		STATUS: Past Producer		
<u>Production Year</u>	<u>Tonnes Mined</u>	<u>Tonnes Milled</u>	<u>Commodity</u>	<u>Grams Recovered</u>	<u>Kilograms Recovered</u>	
1984			Iron		95,888,000	
1983	906,563	906,563	Silver Gold	3,363,880 79,768	3,782,281	
			Copper Iron		442,406,000	
1982	1,108,162	1,108,162	Silver Gold	2,538,293 67,184	3,029,558	
			Copper Iron		695,690,000	
1981	1,031,909	1,031,909	Silver Gold	2,346,969 62,207	2,394,377	
			Copper Iron		533,313,000	
1980	996,422	996,422	Silver Gold	2,206,506 51,694	2,225,590	
			Copper Iron		581,637,000	
1979	1,009,247	1,009,247	Silver Gold	3,529,716 92,159	3,861,563	
			Copper Iron		589,642,000	
1978	889,933	889,933	Silver Gold	1,198,647 28,397	1,175,609	
			Copper Iron		554,414,000	
1977	1,020,886	1,020,886	Silver Gold	2,509,149 56,515	2,304,298	
			Copper Iron		384,309,000	
1976	1,572,524	1,572,524	Silver Gold	2,406,781 59,002	2,265,207	
			Copper Iron		837,813,000	
1975	1,893,111	1,622,410	Silver Gold	1,720,991 42,238	1,499,933	
			Copper Iron		946,719,000	
1974	1,859,923	1,415,165	Silver Gold	2,120,571 50,760	1,818,730	
			Copper Iron		1,043,196,000	
1973	1,616,031	1,616,031	Silver Gold	3,425,311 93,620	3,395,965	
			Copper Iron		910,038,524	
1972	1,117,976	1,117,976	Silver Gold	2,472,564 55,270	2,347,845	
			Copper Iron		637,200,510	
1971	1,818,664	1,818,664	Silver Gold	5,208,415 145,842	5,589,236	
			Copper Iron		1,056,244,189	
1970	2,064,101	2,064,101	Silver Gold	7,774,475 223,071	8,640,354	
			Copper Iron		1,071,222,638	
1969	1,923,808	2,043,985	Silver Gold	6,044,433 186,618	7,673,790	
			Copper Iron		943,744,797	
1968	1,570,601	1,570,601	Silver Gold	3,309,857 109,483	4,455,901	
			Copper Iron		743,389,558	
1967	892,668	892,668	Silver Gold	602,154 23,389	555,129	
			Copper Iron		282,805,200	
1917	3,043	3,043	Silver Gold	37,013 2,177		

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
 ENERGY AND MINERALS DIVISION

MINFILE NUMBER: 103C 003		NAME: TASU		STATUS: Past Producer		
<u>Production Year</u>	<u>Tonnes Mined</u>	<u>Tonnes Milled</u>	<u>Commodity</u>	<u>Grams Recovered</u>	<u>Kilograms Recovered</u>	
1917	3,043	3,043	Copper		47,953	
1916	626	626	Silver	6,314		
			Gold	435		
			Copper		9,579	
1914	1,030	1,030	Silver	466		
			Gold	311		
			Copper		17,568	

SUMMARY TOTALS: 103C 003

NAME: **TASU**

	<u>Metric</u>		<u>Imperial</u>
Mined:	23,297,228 tonnes		25,680,798 tons
Milled:	22,701,946 tonnes		25,024,612 tons
Recovery:			
Silver:	52,822,505 grams		1,698,281 ounces
Gold:	1,430,140 grams		45,980 ounces
Copper:	57,090,466 kilograms		125,862,897 pounds
Iron:	12,349,672,416 kilograms		27,226,359,501 pounds

Comments:

1984: No milling. Iron concentrates. Last shipment in early 1984.
 1983: Iron conc. 442406t; copper conc. 17214t. Ceased Oct. 5, 1983.
 1973: Conc. contained 65.40% iron
 1972: Conc. contained 65.52% iron
 1971: Conc. contained 65.75% iron
 1970: Conc. contained 66.08% iron
 1969: Conc. contained 65.8% iron
 1968: Conc. contained 65.09% iron
 1967: Conc. contained 65.78% iron

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MINFILE NUMBER: <u>103F 017</u>		NAME: <u>COWGITZ</u>		STATUS: Past Producer	
<u>Production Year</u>	<u>Tonnes Mined</u>	<u>Tonnes Milled</u>	<u>Commodity</u>	<u>Grams Recovered</u>	<u>Kilograms Recovered</u>
1912	32		Coal		32,512
<u>SUMMARY TOTALS: 103F 017</u>		NAME: <u>COWGITZ</u>			
		<u>Metric</u>	<u>Imperial</u>		
	Mined:	32 tonnes	35 tons		
	Milled:	tonnes	tons		
Recovery:	Coal:	32,512 kilograms	71,677 pounds		

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MINFILE NUMBER: 103F 034	NAME: SPECOGNA	STATUS: Developed Prospect			
Production Year	Tonnes Mined	Tonnes Milled	Commodity	Grams Recovered	Kilograms Recovered
1975	6		Silver Gold	529 902	

SUMMARY TOTALS: 103F 034

NAME: **SPECOGNA**

		<u>Metric</u>		<u>Imperial</u>
	Mined:	6 tonnes		7 tons
	Milled:			tons
Recovery:	Silver:	529 grams		17 ounces
	Gold:	902 grams		29 ounces
Comments:	1975:	Operated by E. Specogna.		

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
 ENERGY AND MINERALS DIVISION

MINFILE NUMBER: **103G 004** NAME: **SOUTHEASTER** STATUS: Past Producer

<u>Production Year</u>	<u>Tonnes Mined</u>	<u>Tonnes Milled</u>	<u>Commodity</u>	<u>Grams Recovered</u>	<u>Kilograms Recovered</u>
1936	454	454	Silver	591	
			Gold	622	
			Copper		117
			Lead		302
1915	5		Silver	249	
			Gold	653	

SUMMARY TOTALS: 103G 004

NAME: **SOUTHEASTER**

	<u>Metric</u>	<u>Imperial</u>
Mined:	459 tonnes	506 tons
Milled:	454 tonnes	500 tons
Recovery:		
Silver:	840 grams	27 ounces
Gold:	1,275 grams	41 ounces
Copper:	117 kilograms	258 pounds
Lead:	302 kilograms	666 pounds

Comments: 1915: Approximately 5 tonnes of ore was mined between 1910-1915.

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
 ENERGY AND MINERALS DIVISION

MINFILE NUMBER: 103H 018		NAME: DRUM LUMMON		STATUS: Past Producer		
<u>Production Year</u>	<u>Tonnes Mined</u>	<u>Tonnes Milled</u>	<u>Commodity</u>	<u>Grams Recovered</u>	<u>Kilograms Recovered</u>	
1926	6		Silver	6,158		
			Gold	124		
			Copper			4,072
1921	4		Silver	2,333		
			Gold	218		
			Copper			1,944
1920	907	907	Silver	28,864		
			Gold	1,089		
			Copper			19,100
1919	16		Silver	10,979		
			Gold	311		
			Copper			7,917
1918	5		Silver	684		
			Gold	31		
			Copper			390

SUMMARY TOTALS: 103H 018

NAME: **DRUM LUMMON**

	<u>Metric</u>	<u>Imperial</u>
Mined:	938 tonnes	1,034 tons
Milled:	907 tonnes	1,000 tons
Recovery:		
Silver:	49,018 grams	1,576 ounces
Gold:	1,773 grams	57 ounces
Copper:	33,423 kilograms	73,685 pounds

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MINFILE PRODUCTION REPORT
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MINFILE NUMBER: 103H 019	NAME: GOLDEN CROWN	STATUS: Past Producer			
Production Year	Tonnes Mined	Tonnes Milled	Commodity	Grams Recovered	Kilograms Recovered
1904	5		Gold	93	

SUMMARY TOTALS: 103H 019

	NAME: GOLDEN CROWN	
	<u>Metric</u>	<u>Imperial</u>
	Mined: 5 tonnes	6 tons
	Milled: tonnes	tons
Recovery:	Gold: 93 grams	3 ounces

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MINFILE PRODUCTION REPORT
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REPORT: RGEN0200

MINFILE NUMBER: 103H 022	NAME: OX	STATUS: Past Producer			
Production Year	Tonnes Mined	Tonnes Milled	Commodity	Grams Recovered	Kilograms Recovered
1906	35		Silver	1,306	
			Gold	31	
			Copper		372

SUMMARY TOTALS: 103H 022

	NAME: OX	
	<u>Metric</u>	<u>Imperial</u>
Mined:	35 tonnes	39 tons
Milled:	tonnes	tons
Recovery:		
Silver:	1,306 grams	42 ounces
Gold:	31 grams	1 ounces
Copper:	372 kilograms	820 pounds

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
 ENERGY AND MINERALS DIVISION

MINFILE NUMBER: 103H 027		NAME: SURF INLET		STATUS: Past Producer		
<u>Production Year</u>	<u>Tonnes Mined</u>	<u>Tonnes Milled</u>	<u>Commodity</u>	<u>Grams Recovered</u>	<u>Kilograms Recovered</u>	
1943		169	Silver Gold Copper	5,816 16,205	3,665	
1942	23,692	23,692	Silver Gold Copper	110,727 270,067	73,459	
1941	39,243	35,661	Silver Gold Copper	144,971 409,347	91,787	
1940	35,776	35,776	Silver Gold Copper	171,035 463,528	81,262	
1939	29,775	24,733	Silver Gold Copper	101,645 485,456	66,032	
1938	18,399	15,810	Silver Gold Copper	90,292 212,807	66,599	
1937	13,048	11,278	Silver Gold Copper	29,081 113,526	32,603	
1936	5,026	4,145	Silver Gold Copper	9,518 45,255	5,942	
1935	124	124	Silver Gold Copper	4,417 11,664	5,037	
1934	43	43	Silver Gold Copper	156 591	204	
1926	24,176	24,176	Silver Gold Copper	216,228 337,592	53,732	
1925	71,341	71,341	Silver Gold Copper	661,654 1,091,280	307,272	
1924	78,471	78,471	Silver Gold Copper	490,836 1,075,635	283,602	
1923	80,104	80,104	Silver Gold Copper	544,769 922,515	207,527	
1922	96,135	96,135	Silver Gold Copper	532,048 1,089,072	316,179	
1921	122,079	114,589	Silver Gold Copper	644,019 1,134,513	337,758	
1920	98,050	97,954	Silver Gold Copper	625,295 1,370,118	310,827	
1919	93,182	94,280	Silver Gold Copper	943,012 1,607,527	367,584	
1918	82,367	88,507	Silver Gold Copper	849,921 1,294,445	196,093	
1917	6,550	6,550	Silver Gold Copper	67,431 92,345	19,077	
1905	125	125	Silver Gold Copper	1,026 5,816	322	
1904	270	270	Silver Gold Copper	5,723 23,732	4,039	
1903	61	61	Silver Gold Copper	1,648 7,589	1,020	

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
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MINFILE NUMBER:	<u>103H 027</u>	NAME:	<u>SURF INLET</u>	STATUS:	Past Producer
<u>Production Year</u>	<u>Tonnes Mined</u>	<u>Tonnes Milled</u>	<u>Commodity</u>	<u>Grams Recovered</u>	<u>Kilograms Recovered</u>
1902	91	91	Silver	6,967	
			Gold	14,743	
			Copper		2,839

SUMMARY TOTALS: 103H 027

	NAME:	<u>SURF INLET</u>	
	<u>Metric</u>		<u>Imperial</u>
Mined:	918,128 tonnes	1,012,063 tons	
Milled:	904,085 tonnes	996,583 tons	
Recovery:	Silver: 6,258,235 grams	201,207 ounces	
	Gold: 12,095,368 grams	388,875 ounces	
	Copper: 2,834,461 kilograms	6,248,915 pounds	

Comments:

- 1943: Gold concentrates; clean up.
- 1935: Operated by Surf Inlet Consolidated Gold Mines Ltd.
- 1934: Operated by Princess Royal Gold Mines Ltd.
- 1917: Operated by Belmont Surf Inlet Mines Ltd.
- 1902: Operated by Princess Royal Gold Mines Ltd.

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MINFILE NUMBER: **103H 033** NAME: **WESTERN COPPER** STATUS: Past Producer

<u>Production Year</u>	<u>Tonnes Mined</u>	<u>Tonnes Milled</u>	<u>Commodity</u>	<u>Grams Recovered</u>	<u>Kilograms Recovered</u>
1929	65		Silver	10,731	
			Gold	2,146	
			Copper		8,286
1928	150		Silver	34,462	
			Gold	3,173	
			Copper		22,526

SUMMARY TOTALS: 103H 033

NAME: **WESTERN COPPER**

	<u>Metric</u>	<u>Imperial</u>
Mined:	215 tonnes	237 tons
Milled:	tonnes	tons
Recovery:		
Silver:	45,193 grams	1,453 ounces
Gold:	5,319 grams	171 ounces
Copper:	30,812 kilograms	67,929 pounds

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MINFILE NUMBER:	103H 034	NAME:	HUNTER	STATUS:	Past Producer
Production Year	Tonnes Mined	Tonnes Milled	Commodity	Grams Recovered	Kilograms Recovered
1933	3	3	Silver	373	
			Gold	933	
			Copper		40

SUMMARY TOTALS: 103H 034

NAME: **HUNTER**

	<u>Metric</u>	<u>Imperial</u>
Mined:	3 tonnes	3 tons
Milled:	3 tonnes	3 tons
Recovery:		
Silver:	373 grams	12 ounces
Gold:	933 grams	30 ounces
Copper:	40 kilograms	88 pounds

Comments: 1933: Operated by J.M. Meldrum.

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MINFILE NUMBER: 103I 001	NAME: BUCCANEER OF THE NORTH	STATUS: Past Producer			
Production Year	Tonnes Mined	Tonnes Milled	Commodity	Grams Recovered	Kilograms Recovered
1939	109		Marl		108,862
1936	2		Marl		1,814

SUMMARY TOTALS: 103I 001

	Mined:	NAME: BUCCANEER OF THE NORTH	
	Milled:	<u>Metric</u>	<u>Imperial</u>
		111 tonnes	122 tons
Recovery:	Marl:	110,676 kilograms	243,999 pounds

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MINFILE NUMBER: 103I 009	NAME: A.E. BARR QUARRY	STATUS: Past Producer			
Production Year	Tonnes Mined	Tonnes Milled	Commodity	Grams Recovered	Kilograms Recovered
1956	109		Limestone		109,361
1955	8,499		Limestone		8,499,014
1954	6,847		Limestone		6,847,430
1953	208		Limestone		207,745

SUMMARY TOTALS: 103I 009

NAME: **A.E. BARR QUARRY**

		<u>Metric</u>		<u>Imperial</u>	
	Mined:	15,663 tonnes		17,266 tons	
	Milled:				
Recovery:	Limestone:	15,663,550 kilograms		34,532,207 pounds	

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
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MINFILE NUMBER: <u>103I 019</u>	NAME: <u>KALUM LAKE</u>	STATUS: Past Producer
Production Year	Tonnes Mined	Tonnes Milled
1940	10	
		Commodity
		Silver
		Gold
		Grams Recovered
		560
		375
		Kilograms Recovered

SUMMARY TOTALS: 103I 019

	NAME: <u>KALUM LAKE</u>	
	<u>Metric</u>	<u>Imperial</u>
	Mined: 10 tonnes	11 tons
	Milled: tonnes	tons
Recovery:	Silver: 560 grams	18 ounces
	Gold: 375 grams	12 ounces
Comments:	1940: From Mineral Policy.	

MINFILE PRODUCTION REPORT
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MINFILE NUMBER: 103I 022	NAME: HOPE SILVER	STATUS: Past Producer
Production Year	Tonnes Mined	Tonnes Milled
1966	5	
		Commodity
		Silver
		Copper
		Lead
		Grams Recovered
		7,527
		Kilograms Recovered
		151
		292

SUMMARY TOTALS: 103I 022

	NAME: HOPE SILVER	
	<u>Metric</u>	<u>Imperial</u>
Mined:	5 tonnes	6 tons
Milled:	tonnes	tons
Recovery:		
Silver:	7,527 grams	242 ounces
Copper:	151 kilograms	333 pounds
Lead:	292 kilograms	644 pounds

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MINFILE NUMBER: 103I 030	NAME: BLACK WOLF	STATUS: Past Producer			
Production Year	Tonnes Mined	Tonnes Milled	Commodity	Grams Recovered	Kilograms Recovered
1928	23		Silver	3,577	
			Gold	1,151	
			Lead		1,103
			Zinc		1,905

SUMMARY TOTALS: 103I 030

NAME: **BLACK WOLF**

	<u>Metric</u>	<u>Imperial</u>
Mined:	23 tonnes	25 tons
Milled:	tonnes	tons
Recovery:		
Silver:	3,577 grams	115 ounces
Gold:	1,151 grams	37 ounces
Lead:	1,103 kilograms	2,432 pounds
Zinc:	1,905 kilograms	4,200 pounds

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MINFILE NUMBER: 103I 039		NAME: LUCKY LUKE (L.7424)		STATUS: Past Producer	
<u>Production Year</u>	<u>Tonnes Mined</u>	<u>Tonnes Milled</u>	<u>Commodity</u>	<u>Grams Recovered</u>	<u>Kilograms Recovered</u>
1967	3		Silver	3,359	
			Gold	93	
			Copper		1,158
1938	3		Silver	1,182	
			Gold	62	
			Copper		738
1924	23		Silver	9,829	
			Gold	560	
			Copper		5,063

SUMMARY TOTALS: 103I 039

NAME: **LUCKY LUKE (L.7424)**

	<u>Metric</u>	<u>Imperial</u>
Mined:	29 tonnes	32 tons
Milled:	tonnes	tons
Recovery:		
Silver:	14,370 grams	462 ounces
Gold:	715 grams	23 ounces
Copper:	6,959 kilograms	15,342 pounds

MINFILE PRODUCTION REPORT
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MINFILE NUMBER: 103I 040		NAME: CORDILLERA		STATUS: Past Producer		
<u>Production Year</u>	<u>Tonnes Mined</u>	<u>Tonnes Milled</u>	<u>Commodity</u>	<u>Grams Recovered</u>	<u>Kilograms Recovered</u>	
1922	5		Silver	2,582		
			Gold	653		
			Copper			1,270
1921	38		Silver	3,235		
			Gold	156		
			Copper			11,793
1919	3		Silver	1,058		
			Gold	93		
			Copper			777
1915	27		Gold	249		
			Copper			2,041

SUMMARY TOTALS: 103I 040

NAME: **CORDILLERA**

	<u>Metric</u>	<u>Imperial</u>
Mined:	73 tonnes	80 tons
Milled:	tonnes	tons
Recovery:		
Silver:	6,875 grams	221 ounces
Gold:	1,151 grams	37 ounces
Copper:	15,881 kilograms	35,012 pounds

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MINFILE NUMBER: 103I 041	NAME: DIADEM	STATUS: Showing			
Production Year	Tonnes Mined	Tonnes Milled	Commodity	Grams Recovered	Kilograms Recovered
1928	1		Silver Copper	31	26

SUMMARY TOTALS: 103I 041

	NAME: DIADEM	
	<u>Metric</u>	<u>Imperial</u>
	1 tonnes	1 tons
	Milled: tonnes	tons
Recovery:	Silver: 31 grams	1 ounces
	Copper: 26 kilograms	57 pounds

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MINFILE NUMBER:	103I 042	NAME:	MAC SHANNON	STATUS:	Developed Prospect
Production Year	Tonnes Mined	Tonnes Milled	Commodity	Grams Recovered	Kilograms Recovered
1953	1		Silver Copper	62	59

SUMMARY TOTALS: 103I 042

		NAME:	MAC SHANNON
		<u>Metric</u>	<u>Imperial</u>
	Mined:	1 tonnes	1 tons
	Milled:		tons
Recovery:	Silver:	62 grams	2 ounces
	Copper:	59 kilograms	130 pounds

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MINFILE NUMBER: 103I 044	NAME: DIORITE	STATUS: Past Producer			
Production Year	Tonnes Mined	Tonnes Milled	Commodity	Grams Recovered	Kilograms Recovered
1917	9		Copper		454

SUMMARY TOTALS: 103I 044

	NAME: DIORITE	
	<u>Metric</u>	<u>Imperial</u>
	Mined: 9 tonnes	10 tons
	Milled: tonnes	tons
Recovery:	Copper: 454 kilograms	1,001 pounds
Comments:	1917: Also produced 65 cents/tonne of gold & silver. MMAR 1916, p. 98	

MINFILE PRODUCTION REPORT
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MINFILE NUMBER: 103I 045		NAME: GROTTO		STATUS: Past Producer		
<u>Production Year</u>	<u>Tonnes Mined</u>	<u>Tonnes Milled</u>	<u>Commodity</u>	<u>Grams Recovered</u>	<u>Kilograms Recovered</u>	
1953	29		Silver	17,231		
			Gold	560		
			Copper			765
1938	34		Silver	25,878		
			Gold	684		
			Copper			1,537

SUMMARY TOTALS: 103I 045

NAME: **GROTTO**

	<u>Metric</u>	<u>Imperial</u>
Mined:	63 tonnes	69 tons
Milled:	tonnes	tons
Recovery:		
Silver:	43,109 grams	1,386 ounces
Gold:	1,244 grams	40 ounces
Copper:	2,302 kilograms	5,075 pounds

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
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MINFILE NUMBER: 103I 048		NAME: FIDDLER		STATUS: Past Producer		
<u>Production Year</u>	<u>Tonnes Mined</u>	<u>Tonnes Milled</u>	<u>Commodity</u>	<u>Grams Recovered</u>	<u>Kilograms Recovered</u>	
1952	476		Silver	8,118		
			Gold	3,266		
			Lead			3,137
			Zinc			1,342
1926	88		Silver	14,587		
			Gold	2,519		
			Lead			3,659
			Zinc			843

SUMMARY TOTALS: 103I 048

NAME: **FIDDLER**

	<u>Metric</u>	<u>Imperial</u>
Mined:	564 tonnes	622 tons
Milled:	tonnes	tons
Recovery:		
Silver:	22,705 grams	730 ounces
Gold:	5,785 grams	186 ounces
Lead:	6,796 kilograms	14,983 pounds
Zinc:	2,185 kilograms	4,817 pounds

Comments: 1926: Tonnes mined includes 8 tonnes in 1924.

MINFILE PRODUCTION REPORT
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MINFILE NUMBER: <u>103I 061</u>	NAME: <u>FRISCO</u>	STATUS: Past Producer
<u>Production Year</u>	<u>Tonnes Mined</u>	<u>Tonnes Milled</u>
1917	9	
		<u>Commodity</u>
		Silver
		Copper
		<u>Grams Recovered</u>
		15,552
		<u>Kilograms Recovered</u>
		2,903

SUMMARY TOTALS: 103I 061

	NAME: <u>FRISCO</u>	
	<u>Metric</u>	<u>Imperial</u>
Mined:	9 tonnes	10 tons
Milled:	tonnes	tons
Recovery:	Silver: 15,552 grams	500 ounces
	Copper: 2,903 kilograms	6,400 pounds
Comments:	1917: Mined in 1916 - shipped from dump in 1917 to Granby.	

MINFILE PRODUCTION REPORT
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MINFILE NUMBER: 103I 062		NAME: M & K		STATUS: Past Producer		
<u>Production Year</u>	<u>Tonnes Mined</u>	<u>Tonnes Milled</u>	<u>Commodity</u>	<u>Grams Recovered</u>	<u>Kilograms Recovered</u>	
1921	27		Silver	23,327		
			Copper		5,443	
1919	28		Silver	12,659		
			Copper		4,473	
1917	112		Silver	70,168		
			Copper		20,810	
			Lead		34,144	
1916	45		Silver	38,879		
			Copper		11,340	

SUMMARY TOTALS: 103I 062

NAME: **M & K**

Metric

212 tonnes
 tonnes

Imperial

234 tons
 tons

Recovery:

Silver:
 Copper:
 Lead:

145,033 grams
 42,066 kilograms
 34,144 kilograms

4,663 ounces
 92,740 pounds
 75,275 pounds

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
 ENERGY AND MINERALS DIVISION

MINFILE NUMBER: 103I 077	NAME: COLUMARIO	STATUS: Past Producer
Production Year	Tonnes Mined	Tonnes Milled
		Commodity
		Grams Recovered
		Kilograms Recovered
1935		Silver 16,827
		Gold 6,158
1934		Silver 41,274
		Gold 14,992

SUMMARY TOTALS: 103I 077

NAME: **COLUMARIO**

		<u>Metric</u>		<u>Imperial</u>
	Mined:	tonnes		tons
	Milled:	tonnes		tons
Recovery:	Silver:	58,101 grams		1,868 ounces
	Gold:	21,150 grams		680 ounces

Comments: 1935: Actual tonnes mined was not reported.
 1934: Actual tonnes mined was not reported.

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MINFILE NUMBER: **103I 095** NAME: **GOLDEN NIB** STATUS: Past Producer

<u>Production Year</u>	<u>Tonnes Mined</u>	<u>Tonnes Milled</u>	<u>Commodity</u>	<u>Grams Recovered</u>	<u>Kilograms Recovered</u>
1938	2		Silver	62	
			Gold	124	
1926	27		Silver	1,275	
			Gold	1,493	
			Copper		302

SUMMARY TOTALS: 103I 095

NAME: **GOLDEN NIB**

	<u>Metric</u>	<u>Imperial</u>
Mined:	29 tonnes	32 tons
Milled:	tonnes	tons
Recovery: Silver:	1,337 grams	43 ounces
Gold:	1,617 grams	52 ounces
Copper:	302 kilograms	666 pounds

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MINFILE NUMBER: 1031 099	NAME: LUCKY SEVEN	STATUS: Past Producer			
Production Year	Tonnes Mined	Tonnes Milled	Commodity	Grams Recovered	Kilograms Recovered
1918	91		Gold	6,221	

SUMMARY TOTALS: 1031 099

	NAME: LUCKY SEVEN	
	<u>Metric</u>	<u>Imperial</u>
Mined:	91 tonnes	100 tons
Milled:	tonnes	tons
Recovery:	Gold: 6,221 grams	200 ounces

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
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MINFILE NUMBER: 103I 136	NAME: BLACK BULL	STATUS: Past Producer
Production Year	Tonnes Mined	Tonnes Milled
1942	1	
1940	2	
		Commodity
		Tungsten
		Silver
		Gold
		Grams Recovered
		62
		31
		Kilograms Recovered
		9

SUMMARY TOTALS: 103I 136

NAME: **BLACK BULL**

		<u>Metric</u>		<u>Imperial</u>
	Mined:	3 tonnes		3 tons
	Milled:	tonnes		tons
Recovery:	Silver:	62 grams		2 ounces
	Gold:	31 grams		1 ounces
	Tungsten:	9 kilograms		20 pounds

Comments: 1942: Actual ore mined was not reported.

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
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MINFILE NUMBER: **103I 165** NAME: **TERRACE CALCIUM PRODUCTS** STATUS: Past Producer

<u>Production Year</u>	<u>Tonnes Mined</u>	<u>Tonnes Milled</u>	<u>Commodity</u>	<u>Grams Recovered</u>	<u>Kilograms Recovered</u>
1982	142		Limestone		141,600
1981	147		Limestone		146,719
1980	122		Limestone		122,470
1979	142		Building Stone		2,722
			Limestone		139,480
1978	119		Building Stone		2,268
			Limestone		116,346
1977	99		Building Stone		1,361
			Limestone		97,296
1976	120		Building Stone		7,711
			Limestone		112,491
1975	171		Building Stone		1,814
			Limestone		169,266
1974	175		Limestone		175,087
1973	363		Limestone		132,903
1972	113		Limestone		113,398
1971	363		Limestone		90,718
1970	136		Limestone		136,078
1969	54		Limestone		54,431

SUMMARY TOTALS: 103I 165

NAME: **TERRACE CALCIUM PRODUCTS**

	<u>Metric</u>	<u>Imperial</u>
Mined:	2,266 tonnes	2,498 tons
Milled:		
Recovery:		
Building Stone:	15,876 kilograms	35,001 pounds
Limestone:	1,748,283 kilograms	3,854,303 pounds

Comments: 1973: Geology, Exploration & Mining 1973-550
 1972: Geology, Exploration & Mining 1973-550
 1971: Geology, Exploration & Mining 1971-468
 1969: Geology, Exploration & Mining 1971-468; 1973-550

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MINFILE NUMBER: 103J 012	NAME: SMITH ISLAND	STATUS: Past Producer			
Production Year	Tonnes Mined	Tonnes Milled	Commodity	Grams Recovered	Kilograms Recovered
1952	3,565		Limestone		3,565,236
1951	4,719		Limestone		4,719,175
1950	1,175		Limestone		1,174,804

SUMMARY TOTALS: 103J 012

NAME: **SMITH ISLAND**

	Mined:	9,459 tonnes	Imperial	10,427 tons
Recovery:	Milled:			tons
	Limestone:	9,459,215 kilograms		20,853,993 pounds

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
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MINFILE NUMBER: 103J 015		NAME: EDYE PASS		STATUS: Past Producer		
<u>Production Year</u>	<u>Tonnes Mined</u>	<u>Tonnes Milled</u>	<u>Commodity</u>	<u>Grams Recovered</u>	<u>Kilograms Recovered</u>	
1939	4,238	4,238	Silver	28,646		
			Gold	67,991		
			Copper		1,163	
1938	7,266	3,185	Silver	17,604		
			Gold	58,069		
			Copper		1,079	
1937	15,461	6,477	Silver	30,916		
			Gold	86,124		
			Copper		207	
1936	13,803	6,705	Silver	37,915		
			Gold	104,942		
			Copper		632	
1935	10,989	6,418	Silver	43,544		
			Gold	136,356		
			Copper		751	
1934	7,089	5,133	Silver	42,238		
			Gold	111,442		
			Copper		329	
1933	1,912	1,475	Silver	11,290		
			Gold	39,439		
1931	391	391	Silver	5,319		
			Gold	10,699		
1930	142	142	Silver	964		
			Gold	2,084		
1927	34	34	Silver	373		
			Gold	1,742		
1926	74	74	Silver	3,048		
			Gold	6,905		
1924	13	13	Gold	2,799		
1923	9	9	Silver	622		
			Gold	1,400		
1920	8	8	Silver	529		
			Gold	1,275		
1919	9	9	Silver	560		
			Gold	1,151		

SUMMARY TOTALS: 103J 015

NAME: **EDYE PASS**

	<u>Metric</u>	<u>Imperial</u>
Mined:	61,438 tonnes	67,724 tons
Milled:	34,311 tonnes	37,821 tons
Recovery:		
Silver:	223,568 grams	7,188 ounces
Gold:	632,418 grams	20,333 ounces
Copper:	4,161 kilograms	9,173 pounds

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
 ENERGY AND MINERALS DIVISION

MINFILE NUMBER: 103J 017		NAME: PORCHER ISLAND		STATUS: Past Producer		
<u>Production Year</u>	<u>Tonnes Mined</u>	<u>Tonnes Milled</u>	<u>Commodity</u>	<u>Grams Recovered</u>	<u>Kilograms Recovered</u>	
1937	19	19	Silver	280		
			Gold	840		
1936	102	102	Silver	1,275		
			Gold	3,795		
1935	11	11	Silver	373		
			Gold	1,213		
1934	12	12	Silver	498		
			Gold	1,648		

SUMMARY TOTALS: 103J 017

NAME: **PORCHER ISLAND**

	<u>Metric</u>	<u>Imperial</u>
Mined:	144 tonnes	159 tons
Milled:	144 tonnes	159 tons
Recovery:		
Silver:	2,426 grams	78 ounces
Gold:	7,496 grams	241 ounces

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
 ENERGY AND MINERALS DIVISION

MINFILE NUMBER: <u>103J 028</u>	NAME: <u>JITNEY</u>	STATUS: Past Producer
<u>Production Year</u>	<u>Tonnes Mined</u>	<u>Tonnes Milled</u>
1917	4	
		<u>Commodity</u>
		Silver
		Gold
		Copper
		<u>Grams Recovered</u>
		2,488
		62
		<u>Kilograms Recovered</u>
		726

SUMMARY TOTALS: 103J 028

	NAME: <u>JITNEY</u>	
	<u>Mined:</u>	<u>Imperial</u>
	4 tonnes	4 tons
	<u>Milled:</u>	<u>Metric</u>
	tonnes	4 tonnes
Recovery:	Silver: 2,488 grams	80 ounces
	Gold: 62 grams	2 ounces
	Copper: 726 kilograms	1,601 pounds

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
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MINFILE NUMBER: **1030 013** NAME: **GEORGIA RIVER** STATUS: Past Producer

<u>Production Year</u>	<u>Tonnes Mined</u>	<u>Tonnes Milled</u>	<u>Commodity</u>	<u>Grams Recovered</u>	<u>Kilograms Recovered</u>
1937	454		Silver	12,752	
			Gold	10,233	
			Lead		3,312

SUMMARY TOTALS: 1030 013

NAME: **GEORGIA RIVER**

	<u>Metric</u>	<u>Imperial</u>
Mined:	454 tonnes	500 tons
Milled:	tonnes	tons
Recovery:		
Silver:	12,752 grams	410 ounces
Gold:	10,233 grams	329 ounces
Lead:	3,312 kilograms	7,302 pounds

Comments: 1937: Operated by Gold Leasers Ltd.

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MINFILE NUMBER: **1030 017**

NAME: **SWAMP POINT**

STATUS: Past Producer

<u>Production Year</u>	<u>Tonnes Mined</u>	<u>Tonnes Milled</u>	<u>Commodity</u>	<u>Grams Recovered</u>	<u>Kilograms Recovered</u>
1922	17,358		Limestone		17,358,072
1921	14,274		Limestone		14,273,644
1920	42,809		Limestone		42,809,138
1919	37,200		Limestone		37,200,000
1918	46,100		Limestone		46,100,404
1917	58,608		Limestone		58,607,760
1916	40,967		Limestone		40,967,000

SUMMARY TOTALS: 1030 017

NAME: **SWAMP POINT**

	<u>Metric</u>	<u>Imperial</u>
Mined:	257,316 tonnes	283,642 tons
Milled:		tons
Recovery:		
Limestone:	257,316,018 kilograms	567,284,554 pounds

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
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MINFILE NUMBER:	1030 018	NAME:	OUTSIDER	STATUS:	Past Producer
<u>Production Year</u>	<u>Tonnes Mined</u>	<u>Tonnes Milled</u>	<u>Commodity</u>	<u>Grams Recovered</u>	<u>Kilograms Recovered</u>
1928	2,326	2,326	Silver	23,763	
			Gold	342	
			Copper		50,031
			Silica		11,296,600
1927	12,424	12,424	Silver	128,082	
			Gold	1,711	
			Copper		223,678
1926	31,505	31,505	Copper		548,736
1925	41,364	41,364	Copper		843,557
1924	25,347	25,347	Copper		338,687
1907	8,110	8,110	Copper		251,699
1906	4,890	4,890	Copper		132,410

SUMMARY TOTALS: 1030 018

NAME: **OUTSIDER**

	<u>Metric</u>	<u>Imperial</u>
Mined:	125,966 tonnes	138,854 tons
Milled:	125,966 tonnes	138,854 tons
Recovery:		
Silver:	151,845 grams	4,882 ounces
Gold:	2,053 grams	66 ounces
Copper:	2,388,798 kilograms	5,266,397 pounds
Silica:	11,296,600 kilograms	24,904,733 pounds

Comments:

1928: 1924-1928: 11,296 tonnes of silica was produced for flux.

MINFILE PRODUCTION REPORT
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MINFILE NUMBER: 103P 012	NAME: SADDLE	STATUS: Past Producer
Production Year	Tonnes Mined	Tonnes Milled
1929	3	
		Commodity
		Silver
		Copper
		Lead
		Grams Recovered
		2,613
		Kilograms Recovered
		44
		1,436

SUMMARY TOTALS: 103P 012

	NAME: SADDLE	
	<u>Metric</u>	<u>Imperial</u>
Mined:	3 tonnes	3 tons
Milled:	tonnes	tons
Recovery:		
Silver:	2,613 grams	84 ounces
Copper:	44 kilograms	97 pounds
Lead:	1,436 kilograms	3,166 pounds
Comments:		
1929:	Ore mined is 2.72 tonnes. Operated by Silver Crest Mines Ltd.	

MINFILE PRODUCTION REPORT
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MINFILE NUMBER: 103P 021		NAME: HIDDEN CREEK		STATUS: Past Producer		
<u>Production Year</u>	<u>Tonnes Mined</u>	<u>Tonnes Milled</u>	<u>Commodity</u>	<u>Grams Recovered</u>	<u>Kilograms Recovered</u>	
1936	4,987	4,987	Silver	240,457		
			Gold	5,536		
			Copper		226,872	
1935	1,027,039	1,030,393	Silver	6,389,707		
			Gold	71,039		
			Copper		9,339,405	
1934	1,580,601	1,580,601	Silver	7,404,131		
			Gold	96,357		
			Copper		14,648,278	
1933	1,275,564	1,275,564	Silver	5,537,018		
			Gold	76,171		
			Copper		13,477,266	
1932	1,488,744	1,488,744	Silver	6,966,792		
			Gold	93,713		
			Copper		15,841,376	
1931	1,343,276	1,343,276	Silver	7,698,272		
			Gold	96,575		
			Copper		14,587,106	
1930	1,291,099	1,272,758	Silver	7,410,539		
			Gold	91,256		
			Copper		13,176,002	
1929	1,451,581	1,316,647	Silver	7,503,630		
			Gold	127,522		
			Copper		15,660,005	
1928	1,280,167	1,106,487	Silver	8,203,821		
			Gold	131,690		
			Copper		16,367,055	
1927	1,241,988	957,062	Silver	9,517,736		
			Gold	136,822		
			Copper		17,491,090	
1926	1,094,430	546,136	Silver	12,873,563		
			Gold	227,550		
			Copper		19,158,237	
1925	1,055,284	377,652	Silver	11,754,135		
			Gold	217,628		
			Copper		20,559,626	
1924	950,166	228,517	Silver	12,793,939		
			Gold	192,714		
			Copper		18,370,263	
1923	760,490	760,490	Silver	14,083,003		
			Gold	250,566		
			Copper		16,847,157	
1922	775,379	775,379	Silver	12,646,293		
			Gold	276,848		
			Copper		15,697,729	
1921	813,561	813,561	Silver	10,287,037		
			Gold	238,000		
			Copper		15,472,873	
1920	728,163	728,163	Silver	11,873,321		
			Gold	236,849		
			Copper		14,072,003	
1919	587,368	587,368	Silver	10,836,534		
			Gold	151,285		
			Copper		10,333,650	
1918	778,243	778,243	Silver	11,876,960		
			Gold	184,565		
			Copper		15,413,773	
1917	711,656	711,656	Silver	9,759,748		
			Gold	170,787		
			Copper		14,916,875	
1916	663,109	663,109	Silver	8,995,516		
			Gold	303,223		
			Copper		13,157,536	
1915	586,028	586,028	Silver	7,589,536		
			Gold	307,329		
			Copper		11,230,939	
1914	236,601	236,601	Silver	4,067,246		
			Gold	88,737		
			Copper		5,501,086	

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MINFILE NUMBER: **103P 021**

NAME: **HIDDEN CREEK**

STATUS: Past Producer

SUMMARY TOTALS: 103P 021

NAME: **HIDDEN CREEK**

	<u>Metric</u>	<u>Imperial</u>
Mined:	21,725,524 tonnes	23,948,291 tons
Milled:	19,169,422 tonnes	21,130,670 tons
Recovery:		
Silver:	206,308,934 grams	6,632,977 ounces
Gold:	3,772,762 grams	121,297 ounces
Copper:	321,546,202 kilograms	708,887,831 pounds

Comments: 1936: Ore mined is material from clean-up.

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
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MINFILE NUMBER: 103P 022		NAME: GRANBY POINT		STATUS: Past Producer	
<u>Production Year</u>	<u>Tonnes Mined</u>	<u>Tonnes Milled</u>	<u>Commodity</u>	<u>Grams Recovered</u>	<u>Kilograms Recovered</u>
1938	8		Silver	7,962	
			Gold	93	
			Copper		13
			Lead		8
1937	31		Silver	24,447	
			Gold	467	
			Copper		49
			Lead		332
1936	19		Silver	20,310	
			Gold	249	
			Copper		17
			Lead		89
1935	8,080		Silver	950,228	
			Gold	21,928	
1934	12,653		Silver	1,393,943	
			Gold	42,611	
1933	5,431		Silver	1,255,162	
			Gold	48,645	
1930	603		Silver	76,420	
			Gold	2,364	
1929	6,223		Silver	324,031	
			Gold	8,118	
1920	16,135		Silver	1,805,965	
			Gold	53,342	
			Silica		16,135,000
1919	25,422		Silica		25,422,036
1918	16,934		Silica		16,934,416
1917	23,239		Silver	2,051,772	
			Gold	55,768	
			Silica		4,374,446
1916	28,142		Silica		28,141,776

SUMMARY TOTALS: 103P 022

NAME: **GRANBY POINT**

	<u>Metric</u>	<u>Imperial</u>
Mined:	142,920 tonnes	157,542 tons
Milled:	tonnes	tons
Recovery:		
Silver:	7,910,240 grams	254,320 ounces
Gold:	233,585 grams	7,510 ounces
Copper:	79 kilograms	174 pounds
Lead:	429 kilograms	946 pounds
Silica:	91,007,674 kilograms	200,637,520 pounds

Comments:
 1920: Annual Reports and Mineral Policy Branch.
 1919: Annual Reports and Mineral Policy Branch.
 1918: Annual Reports and Mineral Policy Branch; includes Macy (103P 112).
 1916: Annual Reports and Mineral Policy Branch.

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
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MINFILE NUMBER: 103P 023		NAME: BONANZA		STATUS: Past Producer		
<u>Production Year</u>	<u>Tonnes Mined</u>	<u>Tonnes Milled</u>	<u>Commodity</u>	<u>Grams Recovered</u>	<u>Kilograms Recovered</u>	
1935	59,484	59,484	Silver	699,755		
			Gold	5,941		
			Copper		1,699,187	
1934	121,087	121,087	Silver	1,763,820		
			Gold	14,338		
			Copper		2,713,885	
1933	116,232	116,232	Silver	1,613,748		
			Gold	15,738		
			Copper		2,628,290	
1932	90,021	90,021	Silver	1,412,512		
			Gold	14,338		
			Copper		2,067,340	
1931	87,982	87,982	Silver	1,215,723		
			Gold	13,405		
			Copper		1,883,704	
1930	80,119	80,119	Silver	900,836		
			Gold	11,353		
			Copper		1,344,025	
1929	102,048	100,731	Silver	1,141,138		
			Gold	11,384		
			Copper		1,963,260	
1928			Gold	93		

SUMMARY TOTALS: 103P 023

NAME: **BONANZA**

	<u>Metric</u>	<u>Imperial</u>
Mined:	656,973 tonnes	724,189 tons
Milled:	655,656 tonnes	722,737 tons
Recovery:		
Silver:	8,747,532 grams	281,239 ounces
Gold:	86,590 grams	2,784 ounces
Copper:	14,299,691 kilograms	31,525,413 pounds

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
 ENERGY AND MINERALS DIVISION

MINFILE NUMBER: 103P 027		NAME: MAY		STATUS: Past Producer		
<u>Production Year</u>	<u>Tonnes Mined</u>	<u>Tonnes Milled</u>	<u>Commodity</u>	<u>Grams Recovered</u>	<u>Kilograms Recovered</u>	
1929	2,322		Silver	32,005		
			Gold	5,288		
1928	11,894		Silver	203,880		
			Gold	33,778		
1927	6,145		Silver	127,896		
			Gold	17,231		
1926	5,635		Silver	111,909		
			Gold	17,729		
1925	4,775		Silver	89,919		
			Gold	14,712		
1924	487		Silver	10,699		
			Gold	3,079		
1922	2,203		Silver	33,871		
			Gold	6,283		
1921	8,349		Silver	109,420		
			Gold	29,330		
1920	3,133		Silver	60,962		
			Gold	14,774		
1919	1,089		Silver	38,288		
			Gold	6,221		
1918	138		Silver	3,204		
			Gold	684		
1917	1,676		Silica		1,676,477	

SUMMARY TOTALS: 103P 027

NAME: **MAY**

Metric

Imperial

Mined:
Milled:

47,846 tonnes
tonnes

52,741 tons
tons

Recovery:

Silver:
Gold:
Silica:

822,053 grams
149,109 grams
1,676,477 kilograms

26,430 ounces
4,794 ounces
3,695,998 pounds

Comments:

1917: Total silica production.

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MINFILE NUMBER:	103P 028	NAME:	GOLD LEAF	STATUS:	Past Producer
Production Year	Tonnes Mined	Tonnes Milled	Commodity	Grams Recovered	Kilograms Recovered
1939	4		Silver	93	
			Gold	218	
1938	4		Silver	404	
			Gold	1,151	

SUMMARY TOTALS: 103P 028

NAME: **GOLD LEAF**

		<u>Metric</u>		<u>Imperial</u>	
	Mined:	8 tonnes		9 tons	
	Milled:				
Recovery:	Silver:	497 grams		16 ounces	
	Gold:	1,369 grams		44 ounces	

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
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MINFILE NUMBER: 103P 050		NAME: GOLD CLIFF		STATUS: Past Producer		
<u>Production Year</u>	<u>Tonnes Mined</u>	<u>Tonnes Milled</u>	<u>Commodity</u>	<u>Grams Recovered</u>	<u>Kilograms Recovered</u>	
1936	101		Silver	40,776		
			Gold	156		
			Lead			1,582
1934	53		Silver	96,637		
			Gold	156		
			Lead			9,055
			Zinc			7,674
1925	9		Silver	47,868		
			Gold	31		
			Lead			1,347
			Zinc			1,755

SUMMARY TOTALS: 103P 050

NAME: **GOLD CLIFF**

	<u>Metric</u>	<u>Imperial</u>
Mined:	163 tonnes	180 tons
Milled:	tonnes	tons
Recovery:		
Silver:	185,281 grams	5,957 ounces
Gold:	343 grams	11 ounces
Lead:	11,984 kilograms	26,420 pounds
Zinc:	9,429 kilograms	20,787 pounds

MINFILE PRODUCTION REPORT
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MINFILE NUMBER: 103P 051		NAME: BAYVIEW		STATUS: Past Producer		
<u>Production Year</u>	<u>Tonnes Mined</u>	<u>Tonnes Milled</u>	<u>Commodity</u>	<u>Grams Recovered</u>	<u>Kilograms Recovered</u>	
1984	11	11	Silver	51,587		
			Gold	14		
			Lead		1,800	
			Zinc		1,800	
1983	10	10	Silver	71,227		
			Lead		1,769	
			Zinc		1,671	

SUMMARY TOTALS: 103P 051

NAME: **BAYVIEW**

	<u>Metric</u>	<u>Imperial</u>
Mined:	21 tonnes	23 tons
Milled:	21 tonnes	23 tons
Recovery:		
Silver:	122,814 grams	3,949 ounces
Gold:	14 grams	ounces
Lead:	3,569 kilograms	7,868 pounds
Zinc:	3,471 kilograms	7,652 pounds

Comments:

1984: High grade ore. George Cross Newsletter #175,1984.
 1983: 9.82 tonnes ore sorted by hand-Assessment Report 12620

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
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MINFILE NUMBER:	103P 052	NAME:	DUNWELL	STATUS:	Past Producer
<u>Production Year</u>	<u>Tonnes Mined</u>	<u>Tonnes Milled</u>	<u>Commodity</u>	<u>Grams Recovered</u>	<u>Kilograms Recovered</u>
1937		2,096	Silver	402,566	
			Gold	22,145	
			Copper		2,748
			Lead		23,580
1936		4,159	Silver	1,110,470	
			Gold	30,792	
			Copper		460
			Lead		66,839
1935		6,476	Silver	1,451,266	
			Gold	46,312	
			Copper		1,512
			Lead		17,739
1934		5,282	Silver	2,324,172	
			Gold	30,450	
			Copper		4,121
			Lead		51,518
1933		2,884	Silver	1,347,475	
			Gold	18,880	
			Copper		2,873
			Lead		23,421
			Zinc		14,119
1932		24	Silver	79,188	
			Gold	715	
			Lead		1,184
1930			Silver	10,140	
			Gold	560	
			Lead		2,023
			Zinc		180
1927		24,555	Silver	3,345,999	
			Gold	149,450	
			Lead		620,210
			Zinc		1,071,878
1926		181	Silver	151,689	
			Gold	3,763	
			Lead		30,954
			Zinc		22,681

SUMMARY TOTALS: 103P 052

NAME: **DUNWELL**

	<u>Metric</u>	<u>Imperial</u>
Mined:	tonnes	tons
Milled:	45,657 tonnes	50,328 tons
Recovery:		
Silver:	10,222,965 grams	328,675 ounces
Gold:	303,067 grams	9,744 ounces
Copper:	11,714 kilograms	25,825 pounds
Lead:	837,468 kilograms	1,846,300 pounds
Zinc:	1,108,858 kilograms	2,444,613 pounds

Comments:
 1937: In addition 1074 tons of tailings re-treated.
 1933: Includes 2830 tons estimated.
 1930: 5 tons clean-up.

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MINFILE NUMBER: **103P 053** NAME: **BEN ALI (L.4283)** STATUS: Past Producer

<u>Production Year</u>	<u>Tonnes Mined</u>	<u>Tonnes Milled</u>	<u>Commodity</u>	<u>Grams Recovered</u>	<u>Kilograms Recovered</u>
1941	8		Silver	4,790	
			Gold	249	
			Copper		196
			Lead		572
1940	44		Silver	30,170	
			Gold	3,857	
			Copper		343
			Lead		120

SUMMARY TOTALS: 103P 053

NAME: **BEN ALI (L.4283)**

	<u>Metric</u>	<u>Imperial</u>
Mined:	52 tonnes	57 tons
Milled:	tonnes	tons
Recovery:		
Silver:	34,960 grams	1,124 ounces
Gold:	4,106 grams	132 ounces
Copper:	539 kilograms	1,188 pounds
Lead:	692 kilograms	1,526 pounds

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
 ENERGY AND MINERALS DIVISION

MINFILE NUMBER: 103P 054	NAME: GEORGE E	STATUS: Past Producer
Production Year	Tonnes Mined	Tonnes Milled
1937	12	
		Commodity
		Silver
		Gold
		Lead
		Grams Recovered
		7,776
		124
		Kilograms Recovered
		2,793

SUMMARY TOTALS: 103P 054

	NAME: GEORGE E	
	<u>Metric</u>	<u>Imperial</u>
Mined:	12 tonnes	13 tons
Milled:	tonnes	tons
Recovery:	Silver: 7,776 grams	250 ounces
	Gold: 124 grams	4 ounces
	Lead: 2,793 kilograms	6,158 pounds
Comments:	1937: From Number 1 vein-Mineral Policy Branch	

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
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MINFILE NUMBER: 103P 055		NAME: HANSA		STATUS: Prospect	
<u>Production Year</u>	<u>Tonnes Mined</u>	<u>Tonnes Milled</u>	<u>Commodity</u>	<u>Grams Recovered</u>	<u>Kilograms Recovered</u>
1948	4		Silver	31,228	
			Gold	24	
			Lead		476
			Zinc		422

SUMMARY TOTALS: 103P 055

NAME: **HANSA**

	<u>Metric</u>	<u>Imperial</u>
Mined:	4 tonnes	4 tons
Milled:	tonnes	tons
Recovery:		
Silver:	31,228 grams	1,004 ounces
Gold:	24 grams	1 ounces
Lead:	476 kilograms	1,049 pounds
Zinc:	422 kilograms	930 pounds

Comments: 1948: 4.5 tonnes ore sorted by hand-Annual Report 1948, page 71

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MINFILE NUMBER: 103P 059		NAME: LAKEVIEW		STATUS: Past Producer	
<u>Production Year</u>	<u>Tonnes Mined</u>	<u>Tonnes Milled</u>	<u>Commodity</u>	<u>Grams Recovered</u>	<u>Kilograms Recovered</u>
1936	55		Silver	89,452	
			Gold	218	
			Lead		6,102
1914	2		Silver	22,612	
			Gold	31	
1913	3		Silver	51,973	
			Gold	31	
			Lead		587

SUMMARY TOTALS: 103P 059

NAME: **LAKEVIEW**

	<u>Metric</u>	<u>Imperial</u>
Mined:	60 tonnes	66 tons
Milled:	tonnes	tons
Recovery:		
Silver:	164,037 grams	5,274 ounces
Gold:	280 grams	9 ounces
Lead:	6,689 kilograms	14,747 pounds

RUN DATE: 26-Jun-2003
RUN TIME: 12:14:52

MINFILE PRODUCTION REPORT
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MINFILE NUMBER: 103P 065	NAME: SUNSHINE	STATUS: Prospect			
Production Year	Tonnes Mined	Tonnes Milled	Commodity	Grams Recovered	Kilograms Recovered
1922	2		Silver	23,949	
SUMMARY TOTALS: 103P 065		NAME: SUNSHINE			
		<u>Metric</u>	<u>Imperial</u>		
	Mined:	2 tonnes	2 tons		
	Milled:	tonnes	tons		
Recovery:	Silver:	23,949 grams	770 ounces		

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MINFILE NUMBER: 103P 068		NAME: PORTLAND CANAL		STATUS: Past Producer	
<u>Production Year</u>	<u>Tonnes Mined</u>	<u>Tonnes Milled</u>	<u>Commodity</u>	<u>Grams Recovered</u>	<u>Kilograms Recovered</u>
1912	1,814		Silver	182,512	
			Gold	3,701	
			Lead		18,829
1911	6,350		Silver	622,091	
			Gold	15,334	
			Lead		108,217

SUMMARY TOTALS: 103P 068

NAME: **PORTLAND CANAL**

	<u>Metric</u>	<u>Imperial</u>
Mined:	8,164 tonnes	8,999 tons
Milled:		
Recovery:		
	Silver: 804,603 grams	25,869 ounces
	Gold: 19,035 grams	612 ounces
	Lead: 127,046 kilograms	280,088 pounds

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MINFILE NUMBER: **103P 069** NAME: **MOBILE** STATUS: Past Producer

<u>Production Year</u>	<u>Tonnes Mined</u>	<u>Tonnes Milled</u>	<u>Commodity</u>	<u>Grams Recovered</u>	<u>Kilograms Recovered</u>
1949	7		Silver	47,836	
			Gold	31	
			Lead		541
			Zinc		673
1930	5		Silver	51,133	
			Gold	31	
			Copper		15
			Lead		424

SUMMARY TOTALS: 103P 069

NAME: **MOBILE**

	<u>Metric</u>	<u>Imperial</u>
Mined:	12 tonnes	13 tons
Milled:	tonnes	tons
Recovery:		
Silver:	98,969 grams	3,182 ounces
Gold:	62 grams	2 ounces
Copper:	15 kilograms	33 pounds
Lead:	965 kilograms	2,127 pounds
Zinc:	673 kilograms	1,484 pounds

MINFILE PRODUCTION REPORT
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MINFILE NUMBER: **103P 073** NAME: **COLUMBIA - EVENING SUN** STATUS: Developed Prospect

<u>Production Year</u>	<u>Tonnes Mined</u>	<u>Tonnes Milled</u>	<u>Commodity</u>	<u>Grams Recovered</u>	<u>Kilograms Recovered</u>
1913	6		Silver	33,249	
			Gold	31	
			Copper		61
			Lead		1,037
1910	4		Silver	45,224	
			Lead		769

SUMMARY TOTALS: 103P 073

NAME: **COLUMBIA - EVENING SUN**

	<u>Metric</u>	<u>Imperial</u>
Mined:	10 tonnes	11 tons
Milled:	tonnes	tons
Recovery:	Silver: 78,473 grams	2,523 ounces
	Gold: 31 grams	1 ounces
	Copper: 61 kilograms	134 pounds
	Lead: 1,806 kilograms	3,982 pounds

Comments: 1910: Minister of Mines Annual Report 1910, page 63

MINFILE PRODUCTION REPORT
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MINFILE NUMBER: 103P 076		NAME: L & L		STATUS: Past Producer		
<u>Production Year</u>	<u>Tonnes Mined</u>	<u>Tonnes Milled</u>	<u>Commodity</u>	<u>Grams Recovered</u>	<u>Kilograms Recovered</u>	
1925	60		Silver	369,784		
			Gold	187		
			Lead			8,014
			Zinc			9,568
1924	2		Silver	17,636		
			Gold	6		
			Lead			406
			Zinc			262
1913	1		Silver	8,958		
			Copper			10
			Lead			225

SUMMARY TOTALS: 103P 076

NAME: **L & L**

	<u>Metric</u>	<u>Imperial</u>
Mined:	63 tonnes	69 tons
Milled:	tonnes	tons
Recovery:		
Silver:	396,378 grams	12,744 ounces
Gold:	193 grams	6 ounces
Copper:	10 kilograms	22 pounds
Lead:	8,645 kilograms	19,059 pounds
Zinc:	9,830 kilograms	21,671 pounds

Comments: 1924: Minister of Mines Annual Report 1924, page 68

MINFILE PRODUCTION REPORT
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MINFILE NUMBER: 103P 084		NAME: BLACK HILL		STATUS: Past Producer		
<u>Production Year</u>	<u>Tonnes Mined</u>	<u>Tonnes Milled</u>	<u>Commodity</u>	<u>Grams Recovered</u>	<u>Kilograms Recovered</u>	
1983		9	Silver Lead Zinc	81,864		1,833 1,548
1935	25		Silver Gold Copper Lead	123,354 62		119 3,429
1930	19		Silver Copper Lead	94,678		98 3,256

SUMMARY TOTALS: 103P 084

NAME: **BLACK HILL**

	<u>Metric</u>	<u>Imperial</u>
Mined:	44 tonnes	49 tons
Milled:	9 tonnes	10 tons
Recovery:		
Silver:	299,896 grams	9,642 ounces
Gold:	62 grams	2 ounces
Copper:	217 kilograms	478 pounds
Lead:	8,518 kilograms	18,779 pounds
Zinc:	1,548 kilograms	3,413 pounds

MINFILE PRODUCTION REPORT
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MINFILE NUMBER: 103P 085		NAME: MOLLY B (L.4498)		STATUS: Past Producer	
<u>Production Year</u>	<u>Tonnes Mined</u>	<u>Tonnes Milled</u>	<u>Commodity</u>	<u>Grams Recovered</u>	<u>Kilograms Recovered</u>
1941	172		Silver	2,177	
			Gold	404	
			Copper		1,219
1940	118		Silver	1,306	
			Gold	280	
			Copper		856

SUMMARY TOTALS: 103P 085

NAME: **MOLLY B (L.4498)**

	<u>Metric</u>	<u>Imperial</u>
Mined:	290 tonnes	320 tons
Milled:	tonnes	tons
Recovery: Silver:	3,483 grams	112 ounces
Gold:	684 grams	22 ounces
Copper:	2,075 kilograms	4,575 pounds

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MINFILE NUMBER: 103P 088	NAME: SILVERADO	STATUS: Past Producer			
Production Year	Tonnes Mined	Tonnes Milled	Commodity	Grams Recovered	Kilograms Recovered
1927	13	13	Silver	47,611	

SUMMARY TOTALS: 103P 088

NAME: **SILVERADO**

	<u>Metric</u>	<u>Imperial</u>
Mined:	13 tonnes	14 tons
Milled:	13 tonnes	14 tons
Recovery:		
Silver:	47,611 grams	1,531 ounces
Comments:		
1927:	Combines silver with minor gold & lead-Annual Report 1927	

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
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MINFILE NUMBER: **103P 089** NAME: **PORTER-IDAHO** STATUS: Past Producer

<u>Production Year</u>	<u>Tonnes Mined</u>	<u>Tonnes Milled</u>	<u>Commodity</u>	<u>Grams Recovered</u>	<u>Kilograms Recovered</u>
1981	22	22	Silver	22,647	
			Gold	201	
			Copper		53
			Lead		509
			Zinc		332
1950	25	25	Silver	230,722	
			Gold	62	
			Lead		5,243
			Zinc		4,729
1947	18	18	Silver	53,186	
			Gold	31	
			Lead		1,645
			Zinc		1,265
1939	864	864	Silver	379,332	
			Gold	467	
			Copper		871
			Lead		7,502
1938	1,390	1,390	Silver	617,301	
			Gold	746	
			Copper		1,394
			Lead		10,310
1932	75	75	Silver	518,145	
			Gold	498	
			Copper		654
			Lead		14,543
1931	3,088	3,088	Silver	7,955,090	
			Gold	4,883	
			Copper		7,387
			Lead		204,411
1930	19,759	19,759	Silver	53,612,614	
			Gold	13,748	
			Copper		14,920
			Lead		961,644
1929	1,437	1,437	Silver	3,413,274	
			Gold	995	
			Copper		1,591
			Lead		37,710
1927	126	126	Silver	2,111,178	
			Gold	4,199	
			Copper		87
			Lead		48,235
1926	184	184	Silver	2,690,005	
			Gold	560	
			Lead		62,196
			Zinc		2,753
1925	163	163	Silver	722,088	
			Gold	404	
			Copper		22
			Lead		14,045
1924	133	133	Silver	1,041,391	
			Gold	280	
			Lead		16,556
1922	6	6	Silver	65,005	
			Copper		306

SUMMARY TOTALS: 103P 089

NAME: **PORTER-IDAHO**

	<u>Metric</u>	<u>Imperial</u>
Mined:	27,290 tonnes	30,082 tons
Milled:	27,290 tonnes	30,082 tons
Recovery:		
Silver:	73,431,978 grams	2,360,889 ounces
Gold:	27,074 grams	870 ounces
Copper:	27,285 kilograms	60,153 pounds
Lead:	1,384,549 kilograms	3,052,407 pounds
Zinc:	9,079 kilograms	20,016 pounds

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MINFILE NUMBER: 103P 090	NAME: MELVIN	STATUS: Past Producer			
Production Year	Tonnes Mined	Tonnes Milled	Commodity	Grams Recovered	Kilograms Recovered
1929	4		Silver	24,136	

SUMMARY TOTALS: 103P 090

	NAME: MELVIN	
	<u>Metric</u>	<u>Imperial</u>
	Mined: 4 tonnes	4 tons
	Milled: tonnes	tons
Recovery:	Silver: 24,136 grams	776 ounces

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MINFILE NUMBER: **103P 098** NAME: **NORTH FORK** STATUS: Developed Prospect

<u>Production Year</u>	<u>Tonnes Mined</u>	<u>Tonnes Milled</u>	<u>Commodity</u>	<u>Grams Recovered</u>	<u>Kilograms Recovered</u>
1924	7		Silver Lead	27,993	907
1919	2		Silver Lead Zinc	6,856	400 400

SUMMARY TOTALS: 103P 098

NAME: **NORTH FORK**

	<u>Metric</u>	<u>Imperial</u>
Mined:	9 tonnes	10 tons
Milled:	tonnes	tons
Recovery: Silver:	34,849 grams	1,120 ounces
Lead:	1,307 kilograms	2,881 pounds
Zinc:	400 kilograms	882 pounds

Comments: 1919: Annual Report 1919 p.63.

MINFILE PRODUCTION REPORT
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MINFILE NUMBER: 103P 100		NAME: GOLD DROP		STATUS: Past Producer	
<u>Production Year</u>	<u>Tonnes Mined</u>	<u>Tonnes Milled</u>	<u>Commodity</u>	<u>Grams Recovered</u>	<u>Kilograms Recovered</u>
1936	1		Silver	218	
			Gold	187	
			Copper		3
			Lead		5

SUMMARY TOTALS: 103P 100

		NAME: GOLD DROP	
		<u>Metric</u>	<u>Imperial</u>
Recovery:	Mined:	1 tonnes	1 tons
	Milled:	tonnes	tons
	Silver:	218 grams	7 ounces
	Gold:	187 grams	6 ounces
	Copper:	3 kilograms	7 pounds
	Lead:	5 kilograms	11 pounds

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MINFILE PRODUCTION REPORT
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MINFILE NUMBER: 103P 112	NAME: MACY	STATUS: Past Producer			
Production Year	Tonnes Mined	Tonnes Milled	Commodity	Grams Recovered	Kilograms Recovered
1920	4,257		Silica		4,256,511
1917	17,963		Silica		17,963,164
1916	591		Silica		590,577

SUMMARY TOTALS: 103P 112

	NAME: MACY	
	<u>Metric</u>	<u>Imperial</u>
	22,811 tonnes	25,145 tons
Recovery:	Mined:	
	Milled:	
	Silica:	22,810,252 kilograms
		50,287,983 pounds

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
 ENERGY AND MINERALS DIVISION

MINFILE NUMBER: 103P 120		NAME: KITSAULT		STATUS: Past Producer	
<u>Production Year</u>	<u>Tonnes Mined</u>	<u>Tonnes Milled</u>	<u>Commodity</u>	<u>Grams Recovered</u>	<u>Kilograms Recovered</u>
1982	6,816,600	2,228,831	Molybdenum		2,556,679
1981	8,259,450	1,840,717	Molybdenum		548,929
1972	996,422	473,208	Molybdenum		762,043
1971	4,488,088	2,246,336	Molybdenum		2,177,404
1970	6,230,662	2,443,242	Molybdenum		2,661,384
1969	5,240,818	2,137,782	Molybdenum		2,595,907
1968	6,155,958	1,948,617	Molybdenum		2,263,283
1967	154,952	80,484	Molybdenum		7,370

SUMMARY TOTALS: 103P 120

NAME: **KITSAULT**

	<u>Metric</u>	<u>Imperial</u>
Mined:	38,342,950 tonnes	42,265,867 tons
Milled:	13,399,217 tonnes	14,770,108 tons
Recovery: Molybdenum:	13,572,999 kilograms	29,923,332 pounds

MINFILE PRODUCTION REPORT
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MINFILE NUMBER: 103P 125		NAME: WOLF		STATUS: Past Producer		
<u>Production Year</u>	<u>Tonnes Mined</u>	<u>Tonnes Milled</u>	<u>Commodity</u>	<u>Grams Recovered</u>	<u>Kilograms Recovered</u>	
1953	5		Silver	14,338		
			Gold	31		
			Copper			3
			Lead			54
1927	25		Silver	67,151		
			Gold	124		
			Copper			70
1925	15		Silver	72,408		
			Gold	93		
			Lead			294
			Zinc			329

SUMMARY TOTALS: 103P 125

NAME: **WOLF**

	<u>Metric</u>	<u>Imperial</u>
Mined:	45 tonnes	50 tons
Milled:	tonnes	tons
Recovery:		
Silver:	153,897 grams	4,948 ounces
Gold:	248 grams	8 ounces
Copper:	73 kilograms	161 pounds
Lead:	348 kilograms	767 pounds
Zinc:	329 kilograms	725 pounds

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
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MINFILE NUMBER:	103P 126	NAME:	ESPERANZA	STATUS:	Past Producer
<u>Production Year</u>	<u>Tonnes Mined</u>	<u>Tonnes Milled</u>	<u>Commodity</u>	<u>Grams Recovered</u>	<u>Kilograms Recovered</u>
1948	31		Silver	53,031	
			Gold	311	
			Copper		35
			Lead		60
1938	4		Silver	16,267	
			Gold	31	
1937	2,014		Silver	634,781	
			Gold	1,866	
			Copper		232
			Lead		2,004
1936	1,481		Silver	616,026	
			Gold	1,369	
			Copper		253
			Lead		2,037
1927	56		Silver	211,314	
			Gold	373	
			Lead		318
1926	136		Silver	187,784	
			Gold	307	
			Lead		262
1925	142		Silver	264,749	
			Gold	342	
			Copper		57
			Lead		590
1924	210		Silver	544,334	
			Gold	871	
			Copper		197
			Lead		151
1923	128		Silver	345,461	
			Gold	622	
			Copper		233
			Lead		290
1922	210		Silver	377,217	
			Gold	684	
			Copper		183
			Lead		583
1920	16		Silver	117,818	
			Gold	124	
1918	12		Silver	83,978	
1917	77		Silver	316,318	
			Gold	311	
1916	88		Silver	642,277	
			Gold	871	
1911	56		Silver	227,736	
			Gold	218	

SUMMARY TOTALS: 103P 126

NAME: **ESPERANZA**

	<u>Metric</u>	<u>Imperial</u>
Mined:	4,661 tonnes	5,138 tons
Milled:	tonnes	tons
Recovery:		
Silver:	4,639,091 grams	149,150 ounces
Gold:	8,300 grams	267 ounces
Copper:	1,190 kilograms	2,624 pounds
Lead:	6,295 kilograms	13,878 pounds

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
 ENERGY AND MINERALS DIVISION

MINFILE NUMBER: 103P 129		NAME: MONTANA (L.4974)		STATUS: Past Producer	
<u>Production Year</u>	<u>Tonnes Mined</u>	<u>Tonnes Milled</u>	<u>Commodity</u>	<u>Grams Recovered</u>	<u>Kilograms Recovered</u>
1930	4		Silver	25,162	
			Copper		10
			Lead		161
1915	15		Silver	68,084	
			Gold	62	
			Lead		2,247
			Zinc		2,964
1913	5		Silver	52,564	
			Gold	93	
			Lead		985

SUMMARY TOTALS: 103P 129

NAME: **MONTANA (L.4974)**

	<u>Metric</u>	<u>Imperial</u>
Mined:	24 tonnes	26 tons
Milled:	tonnes	tons
Recovery:		
Silver:	145,810 grams	4,688 ounces
Gold:	155 grams	5 ounces
Copper:	10 kilograms	22 pounds
Lead:	3,393 kilograms	7,480 pounds
Zinc:	2,964 kilograms	6,534 pounds

Comments: 1930: Operated by Marmot Metals Mining Co. Ltd.
 1913: Operated by G. Bruggy & H.C. Magee.

MINFILE PRODUCTION REPORT
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MINFILE NUMBER: 103P 141	NAME: ILLY	STATUS: Past Producer
Production Year	Tonnes Mined	Tonnes Milled
1923	33	
		Commodity
		Silver
		Gold
		Lead
		Grams Recovered
		105,626
		31
		Kilograms Recovered
		3,571

SUMMARY TOTALS: 103P 141

	NAME: ILLY	
	<u>Metric</u>	<u>Imperial</u>
Mined:	33 tonnes	36 tons
Milled:	tonnes	tons
Recovery:		
Silver:	105,626 grams	3,396 ounces
Gold:	31 grams	1 ounces
Lead:	3,571 kilograms	7,873 pounds

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MINFILE NUMBER: **103P 170** NAME: **LA ROSE** STATUS: Past Producer

<u>Production Year</u>	<u>Tonnes Mined</u>	<u>Tonnes Milled</u>	<u>Commodity</u>	<u>Grams Recovered</u>	<u>Kilograms Recovered</u>
1927	4		Silver	25,131	
			Gold	31	
			Lead		167
1926	38		Silver	232,806	
			Gold	311	
			Lead		1,183
			Zinc		1,622
1919	20		Silver	191,501	
			Gold	93	
			Lead		638
1918	10		Silver	47,992	
			Gold	31	

SUMMARY TOTALS: 103P 170

NAME: **LA ROSE**

	<u>Metric</u>	<u>Imperial</u>
Mined:	72 tonnes	79 tons
Milled:	tonnes	tons
Recovery:		
Silver:	497,430 grams	15,993 ounces
Gold:	466 grams	15 ounces
Lead:	1,988 kilograms	4,383 pounds
Zinc:	1,622 kilograms	3,576 pounds

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
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MINFILE NUMBER: 103P 188		NAME: DOLLY VARDEN		STATUS: Past Producer		
<u>Production Year</u>	<u>Tonnes Mined</u>	<u>Tonnes Milled</u>	<u>Commodity</u>	<u>Grams Recovered</u>	<u>Kilograms Recovered</u>	
1940	1	1	Silver	14,929		
1939	15	15	Silver	147,117		
			Copper		15	
			Lead		12	
1938	14	14	Silver	438,615		
			Copper		14	
			Lead		68	
1937	173	173	Silver	1,055,014		
			Gold	31		
			Copper		162	
			Lead		849	
1935	10	10	Silver	322,756		
1921	1,700	1,700	Silver	1,419,790		
1920	25,435	25,435	Silver	25,866,437		
1919	6,086	6,086	Silver	13,186,179		

SUMMARY TOTALS: 103P 188

NAME: **DOLLY VARDEN**

	<u>Metric</u>	<u>Imperial</u>
Mined:	33,434 tonnes	36,855 tons
Milled:	33,434 tonnes	36,855 tons
Recovery:		
Silver:	42,450,837 grams	1,364,824 ounces
Gold:	31 grams	1 ounces
Copper:	191 kilograms	421 pounds
Lead:	929 kilograms	2,048 pounds

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MINFILE NUMBER:	103P 189	NAME:	NORTH STAR	STATUS:	Past Producer
Production Year	Tonnes Mined	Tonnes Milled	Commodity	Grams Recovered	Kilograms Recovered
1921	77	77	Silver	58,163	
1919	24	24	Silver	30,108	

SUMMARY TOTALS: 103P 189

		NAME:	NORTH STAR		
		<u>Metric</u>		<u>Imperial</u>	
	Mined:	101 tonnes		111 tons	
	Milled:	101 tonnes		111 tons	
Recovery:	Silver:	88,271 grams		2,838 ounces	

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
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MINFILE NUMBER:	103P 191	NAME:	TORBRIT	STATUS:	Past Producer
<u>Production Year</u>	<u>Tonnes Mined</u>	<u>Tonnes Milled</u>	<u>Commodity</u>	<u>Grams Recovered</u>	<u>Kilograms Recovered</u>
1959	84,891	84,891	Silver Lead	26,457,052	404,436
1958	123,279	123,279	Silver Lead	41,400,830	683,492
1957	140,086	140,086	Silver Lead	52,071,585	664,993
1956	122,154	122,154	Silver Lead	48,596,478	476,894
1955	137,767	137,767	Silver Lead	56,594,801	512,027
1954	136,290	136,290	Silver Gold Lead Zinc	64,183,840 404	441,009 5,803
1953	65,192	65,192	Silver Gold Lead Zinc	36,600,735 404	235,429 45,368
1952	123,160	123,160	Silver Gold Lead Zinc	72,987,886 1,182	460,412 75,756
1951	108,599	108,599	Silver Gold Lead Zinc	63,798,163 591	378,033 55,607
1950	118,196	118,196	Silver Gold Lead Zinc	71,326,582 684	455,492 86,569
1949	90,328	90,328	Silver Gold Lead Zinc	44,941,502 187	141,390 13,934
1929		48	Silver Lead	352,241	4,129
1928	1,397	1,397	Silver Lead	644,299	10,587

SUMMARY TOTALS: 103P 191

NAME: **TORBRIT**

	<u>Metric</u>	<u>Imperial</u>
Mined:	1,251,339 tonnes	1,379,365 tons
Milled:	1,251,387 tonnes	1,379,418 tons
Recovery:	Silver: 579,955,994 grams	18,645,991 ounces
	Gold: 3,452 grams	111 ounces
	Lead: 4,868,323 kilograms	10,732,812 pounds
	Zinc: 283,037 kilograms	623,990 pounds

Comments: 1929: Concentrates.

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
 ENERGY AND MINERALS DIVISION

MINFILE NUMBER: 103P 224		NAME: BLUE GROUSE		STATUS: Past Producer	
<u>Production Year</u>	<u>Tonnes Mined</u>	<u>Tonnes Milled</u>	<u>Commodity</u>	<u>Grams Recovered</u>	<u>Kilograms Recovered</u>
1973	4		Silver	18,102	
			Lead		1,084
			Zinc		561
1968	7		Silver	27,277	
			Lead		850
			Zinc		1,630

SUMMARY TOTALS: 103P 224

NAME: **BLUE GROUSE**

	<u>Metric</u>	<u>Imperial</u>
Mined:	11 tonnes	12 tons
Milled:	tonnes	tons
Recovery:		
Silver:	45,379 grams	1,459 ounces
Lead:	1,934 kilograms	4,264 pounds
Zinc:	2,191 kilograms	4,830 pounds

RUN DATE: 26-Jun-2003
RUN TIME: 12:14:52

MINFILE PRODUCTION REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

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MINFILE NUMBER: 103P 226	NAME: RAMBLER	STATUS: Past Producer			
Production Year	Tonnes Mined	Tonnes Milled	Commodity	Grams Recovered	Kilograms Recovered
1924	15,247		Silica		15,247,053
1923	23,215		Silica		23,214,584
1922	16,127		Silica		16,127,022
1921	20,659		Silica		20,659,317
1920	32,464		Silica		32,464,511

SUMMARY TOTALS: 103P 226

NAME: **RAMBLER**

		<u>Metric</u>		<u>Imperial</u>	
	Mined:	107,712 tonnes		118,732 tons	
Recovery:	Milled:				
	Silica:	107,712,487 kilograms		237,465,319 pounds	